Cumulative Bio-Bibliography
University of California, Merced

Sung-Mo "Steve" Kang
Chancellor
Professor, School of Engineering

July 1, 2008

EMPLOYMENT HISTORY

2007-present Chancellor, University of California, Merced

2007-present Professor Above-Scale of Engineering, University of California, Merced

2001- 2007 Dean, Baskin School of Engineering, UC Santa Cruz, Santa Cruz

2004- 2007 Professor Above-Scale, Electrical Engineering, UC Santa Cruz

2001-2004 Professor Highest Step, Electrical Engineering, UC Santa Cruz

2003-2005 Chaired Visiting Professor, Korean Advanced Institute of Science and Technology (KAIST)

2006 Honored Visiting Professor, Swiss Federal Institute of Technology at Lausanne (EPFL)

1989-2000 Professor, Electrical and Computer Engineering, Univ. of Illinois at Urbana-Champaign

1989-2000 Research Professor, Coordinated Science Laboratory, Univ. of Illinois at Urbana-Champaign

1990-2000 Professor, Computer Science, Univ. of Illinois at Urbana-Champaign

1990-2000 Research Professor, Beckman Institute, Univ. of Illinois at Urbana-Champaign

1993-1996 Founding Director, Center for ASIC Research and Development, University of Illinois at Urbana-Champaign

1995-2000 Head, Department of ECE, Univ. of Illinois at Urbana-Champaign

1985-1989 Associate Professor, Electrical and Computer Engineering, Univ. of Illinois at Urbana-Champaign

1985-1989 Research Associate Professor, Coordinated Science Laboratory

1989 Visiting Professor, Swiss Federal Institute of Technology at Lausanne

1998 Humboldt Visiting Professor, Technical University of Munchen, Germany, Summer 1998

1997 Humboldt Visiting Professor, University of Karlsruhe, Germany

1977-1982 Member of Technical Staff, AT&T Bell Laboratories, Murray Hill, NJ

1982-1985 Supervisor, AT&T Bell Laboratories, Murray Hill, NJ

1977-1984 Visiting Faculty Member, Rutgers University, Piscataway, NJ

1975-1977 Assistant Professor, Rutgers University, Piscataway, NJ

EDUCATION

1975	Ph.D. Electrical Engineering	Univ. of California at Berkeley
1972	M.S. Electrical Engineering	State Univ. of New York at Buffalo
1970	B.S. Electrical Engineering	Fairleigh Dickinson Univ., Teaneck, NJ (Summa Cum Laude)

HONORS AND AWARDS

Myril B. Reed Best Paper Award, 1979

AT&T Bell Laboratories Exceptional Contribution Award, 1984

Best Paper Award, International Conference on Computer Design, 1987

Listed in Incomplete List of Teachers Ranked as Excellent by Students, Univ. of Illinois, 1987, 1993

IEEE Fellow, 1990

AAAS Fellow, 1997

ACM Fellow, 2000

IEEE Computer Society Meritorious Service Award, 1990

IEEE Computer Society Distinguished Service Award, 1990

Associate in the Center for Advanced Study, UIUC, 1991-1992

Founding Editor-in-Chief, IEEE Transactions on VLSI Systems, February 1992 - December 1994

IEEE Darlington Best Journal Paper Award, May 1993

Republic of China National Science Council Distinguished Lecturer, June 1993

SRC Inventor Recognition Award 1993, 1996, 2002

IEEE Circuits and Systems Society Meritorious Service Award, 1994

IEEE Circuits and Systems Society Distinguished Lecturer, 1994-1997

IEEE LEOS Conference Best Student Paper Award (Senior Author), 1995

University of Illinois Charles Marshall Senior University Scholar, 1995

IEEE Graduate Teaching Technical Field Award (worldwide award), 1996

Humboldt Research Award for Senior U.S. Scientists, 1996

Co-Editor, Series in Advances in Design and Analysis of VLSI Systems, Elsevier Science Publishers B. V.

Foreign Member, National Academy of Engineering of Korea, 1997

IEEE CAS Society Technical Achievement Award, 1997

Korea Broadcasting System (KBS) Compatriot Award, 1998

IEEE CAS Golden Jubilee Medal, 1999

SRC Technical Excellence Award, 1999

22nd EOS/ESD Symposium Best Student Paper Award (Senior Author), 2000

IEEE Millennium Medal, 2000

Distinguished Alumnus Award in Electrical Engineering, UC Berkeley, 2001

Low Power Design Contest Award, International Symposium on Low Power Electronics and Design, 2001

IEEE Solid-State Circuits Society Distinguished Lecturer, 2002-2005

IEEE Circuits and Systems Society Distinguished Lecturer, 2003-2005

Chancellor's Stellar Service Award, UC Santa Cruz, 2003

IEEE Mac E. Van Valkenbur Award, IEEE Circuits and Systems Society, 2005

Chang-Lin Tien Education Leadership Award, 2007

Ghandi, King, Ikeda Community Builder Award, Morehouse College, 2007

Distinguished Yonsei Alumnus Award, 2008

ISQED Quality Award, 2008

Distinguished Korean-American Award, 2008

Listed in Who's Who in America, Who's Who in Technology, Who's Who in Engineering, Who's Who in Midwest, Who's Who in Education, American Men and Women in Science

RECENT GOVERNMENT AND PUBLIC SERVICES

Member, Blue Ribbon Task Force on Nanotechnology (BRTFN) (Chair US Rep. Mike Honda) 2005

Member, International Advisory Board for BK21 Program of Korea 2005

President, Silicon Valley Engineering Council 2002-2003

ASEE (American Society for Engineering Education) Public Policy Committee 2003-2005

State of California Leader for ASEE Engineering Deans Capitol Hill visit 2003, 2004, 2005

Member, Executive Advisory Committee, NSF Engineering Research Center for Biomimetic Microelectronic Systems (USC, UCSC, Caltech) 2003-2005

Member, NSF Review Panel for Science, Technology, Engineering, and Mathematics (STEM) Education 2004

International Reviewer, National Science and Engineering Research Council of Canada 2004

Member, Advisory Committee for California Summer Mathematics and Science Education (COSMOS) 2004-2005

Member, Advisory Committee for California Mathematics Engineering Science Achievement (MESA) 2004-2005

GRANT SUPPORT (partial since 1993)

2008-	Memristor and Memristive Systems (pending)	NSF	$ 54,368
2005-2007	Optimization of Self Reverse Biasing For Leakage Reduction	UC/SMART	$ 67,566
2005-2007	Optimization of Self Reverse Biasing For Leakage Reduction	ZMOS Technology, Inc.	$ 99,672
2004-2006	Electronic Properties of Nanowires	NASA	$127,796
2004-2005	MESA School Program	UCOP	$330,000
2004-2005	Low Power High Performance Static-Dynamic Logic	Intel Corp.	$ 40,000
2004-2005	Low Power High Performance Static-Dynamic Logic	UC/Micro	$ 4,376
2003-2004	Analog/Digital Mixed Design	Inha Univ.	$ 40,000
2004-2005	Yonsei University Program	Yonsei Univ.	$465,740
1999-2005	Physical CAD	NSF	$150,000
2002-2004	Low Power Design of Dynamic Circuits	Intel Corp.	$ 80,000
2003-2008	Developing Effective Engineering Pathways	NSF	$2,000,000
2001-2003	Optoelectronic Modeling and Simulation	DARPA	$150,000
2001-2004	Robust and Scalable Low Power High Performance VLSI	SRC	$360,000
2001-2004	Low Power High Performance Static Dynamic Logic	Intel	$120,000
1997-2000	Temperature-Dependent VLSI Delay Analysis	Intel	$120,000

1998-2001	Computer -Aided Design of Reliable Deep Submicron VLSI Circuits	SRC	$180,000
1998-2001	Low-Power High-Performance Circuits for Sub-1V CMOS	SRC	$180,000
1998-2000	ESD Protection for BiCMOS RF Circuits	Motorola	$100,000
1998-2000	Composite CAD for MEMS	DARPA	$110,000
1998-2000	ESD Protection Circuits	LG Semicon	$100,000
1999-2000	SD-Induced On-Chip Termination Resistor Variation And Its Impact on I/O Circuit Performance Degradation	SRC	$ 50,000
1997-1999	I/O Layout Extraction	TI	$ 80,000
1996-1997	Electrothermal Analysis	Intel	$ 40,000
1997-1998	MPEG4 VLSI Engine	ETRI	$100,000
1996-1997	MPEG VLSI	LG	$100,000
1995-1998	VLSI Research	Hwagoksangsa	$150,000
1995-1998	VLSI Interconnect Reliability	TI	$300,000
1994-1995	Modeling and Simulation for VLSI Reliability	SRC	$ 65,000
1986-1996	Design and Analysis of Optoelectronic System Testbed	NSF ERC	$1M+
1994-1997	Reliability CAD System	AF Rome Lab	$180,000
1995-1996	MPEG VLSI	ETRI	$100,000
1996-1997	Modeling, Simulation and Design Guidelines	SRC	$ 65,000
1996-1997	Computer Simulation of Optical Interconnects	DARPA	$ 55,000
1995-1996	Reliability CAD System	AF Rome	$100,000
1995-1996	Electrothermal Simulation of VLSI	Intel Corp.	$ 40,000
1995-1996	Electrothermal Stress Tolerant Deep Submicron Low Power Circuits	JSEP	$ 60,000
1995-1996	Modeling and Simulation for VLSI Reliability	SRC	$ 65,000
1991-1995	High Level Simulation of VLSI	Samsung Electron Co.	$400,000

1994-1995	Computer Simulation of Optical Interconnects	ARPA	$ 65,000
1995-1996	Computer Simulation of Optical Busses	ARPA	$ 50,000
1995-1996	Design Guidelines for EOS/ESD Reliability	TI	$ 30,000
1995-1996	Computer Simulation of Optical Busses	ARPA	$ 65,000
1995-1996	Design Guidelines for EOS/ESD Reliability	TI	$ 30,000
1994-1995	VLSI Layout Automation	Goldstar Electron Co.	$ 50,000
1994-1995	Electrothermal Simulation of VLSI	Intel Corp.	$ 40,000
1994-1995	CAD for Optoelectronics	ETRI	$100,000
1993-1994	Timing Driven VLSI Layout Automation	Goldstar	$ 50,000
1994-1995	Design Guidelines for ESD/EOS Reliability	TI	$ 30,000
1994-1995	ATM Network Research	AT&T	$ 60,000
1993-1994	Computer Simulation of Optical Busses	ARPA	$ 65,000
1993-1994	ESD/EOS Reliability Analysis	Intel	$ 50,000
1993-1994	ESD/EOS Simulation	ESD/EOS Society	$ 10,000
1993-1994	Design Guidelines for EOS/ESD Reliability	Texas Instruments	$ 40,000
1993-1994	VLSI Layout Synthesis	Motorola	$ 45,000
1993-1994	Modeling and Simulation for VLSI Reliability	SRC	$ 67,000
1993-1994	Computer-Aided Design of High-Performance VLSI Circuits	JSEP	$ 40,000
1993-1994	VLSI Reliability	AMD	$ 50,000

PATENTS

1. U.S. Patent 4,396,994, Data shifting and rotating apparatus, August 2, 1983

2. U.S. Patent 5,404,041, Source contact placement for efficient ESD/EOS protection in grounded-substrate MOS ICs, April 4, 1995

3. U.S. Patent 5,450,267, New ESD/EOS protection circuits for integrated circuits fabricated in advanced n-well CMOS processes, September 12, 1995

4. U.S. Patent 5,610,774, Optical communications and interconnection networks having optoelectronic switches and direct optical routers, March 11, 1997

5. U.S. Patent 5,796,638, Methods, apparatus and computer program products for synthesizing integrated circuits with electrostatic discharge capability and correcting ground rules faults therein, August 18, 1998

6. U.S. Patent, 5,923,656, Scalable broadband input-queued ATM switch including weight driven cell scheduler, July 13, 1999

7. US Patent 6,624,665B2, CMOS Skewed Static Logic and Method of Synthesis, Sept. 23, 2003

8. US Patent 6,759,873, Reverse Biasing Logic Circuit, July 6, 2004

9. US Patent 6,784,694B, CMOS Sequential Logic Configuration for a Double-Edge Triggered Flip-Flop, August 31, 2004

10. US Patent 6,784,707, Delay Locked Loop Clock Generator, August 31, 2004

11. US Patent 6,794,903, CMOS Parallel Dynamic Logic and Speed Enhanced Static Logic, Sept. 21, 2004

12. US Patent 6,900,690, Low Power High Performance Integrated Circuit Architectures and Related Methods

13. US Patent 6,946,901, Low-Power High-Performance Integrated Circuits and Related Methods, Sept. 20, 2005

14. US Patent 6,977,528, Event Driven Dynamic Logic for Reducing Power Consumption, Dec. 20, 2005

15. US Patent 6,861,911, Self-Regulating Voltage-Controlled Oscillator, March 1, 2005

PUBLICATIONS

Books

1. Y. Leblebici and S. M. Kang, Hot-Carrier Reliability of MOS VLSI Circuits, Kluwer Academic Publishers, 1993.

2. S. Sapatnekar and S. M. Kang, Design Automation for Timing-Driven Layout Synthesis, Kluwer Academic Publishers, 1993.

3. M. Sriram and S. M. Kang, Physical Design for Multichip Modules, Kluwer Academic Publishers, 1994.

4. C. H. Diaz, S. M. Kang and C. Duvvury, Modeling of Electrical Overstress in Integrated Circuits, Kluwer Academic Publishers, 1994.

5. S. M. Kang and Y. Leblebici, CMOS Digital Integrated Circuits: Analysis and Design, McGraw-Hill, 1995. (Chinese Translation)

6. J. J. Morikuni and S. M. Kang, Computer-Aided Design of Optoelectronic Integrated Circuits and Systems, Prentice Hall, 1996.

7. S. M. Kang and Y. Leblebici, CMOS Digital Integrated Circuits: Analysis and Design, McGraw-Hill, Taiwan, Second Edition, 1998. (Chinese Translation by Hwang Jung-kwang et al.)

8. Y. K. Cheng, C. H. Tsai, C. C. Teng, and S. M. Kang, Electrothermal Analysis of VLSI Systems, Kluwer Academic Publishers, 2000.

9. S. M. Kang and Yusuf Leblebici, CMOS Digital Integrated Circuits: Analysis and Design, McGraw-Hill, Third Edition, 2003

10. S. M. Kang and Y. Leblebici, CMOS Digital Integrated Circuits: Analysis and Design, Publishing House of Electronics Industry, Beijing (Chinese Translation by Wang Zi-Gong, et al.)

Books Edited or Co-Edited

Co-Editor, Series in Advances in Design and Analysis of VLSI Systems, Elsevier Science Publishers B. V.
Chapter Editor, Computer-Aided Design and Optimization, The Circuits and Filters Handbook, CRC Press, 1995

Chapter Editor, VLSI and ASIC, VLSI Handbook, CRC Press, 1999

Section Editor, The Circuits and Filters Handbook, Section VII, Computer-Aided Design and Optimization, CRC Press, 2003, pp. 1245-1356

Chapters in Books

1. S. M. Kang and H. Y. Chen, "Circuit Optimization for CMOS VLSI," book chapter, *Advances in Computer-Aided Engineering Design*, JAI Press, Inc., pp. 107-157, 1990.

2. P. Gee, M. Y. Wu, I. N. Hajj, S. M. Kang and W. Shu, "Automatic Circuit Synthesis Using Switching Network Logic and Metal-metal Matrix Layout," JAI Press, Inc., pp. 57-106, 1990.

3. S. M. Kang and M. Sriram, "Binary Techniques for Placement and Routing," book chapter, Algorithmic Aspects of VLSI Layout, World Scientific, pp. 25-68, 1994.

4. S. M. Kang and A. Dharchoudhury, “Modeling of Circuit Performances,” book chapter, pp. 1375-1391, The Circuits and Filters Handbook, CRC Press, 1995.

5. C. W. Kim and S. M. Kang, “Low Power Flip-Flop and Clock Network Design Methodologies in High-Performance System-on-Chips (SOCs), Chapter 7, pp. 151-179, *Power Aware Design Methodologies* (M. Pedram, editor), 2002.

6. K. W. Kim, K. H. Baek, and S. M. Kang, “Coupling-Driven Signal Encoding Schemes for Low Power Interface Design, in *Signal Integrity Effects in Custom IC and ASIC Designs*, Ramionderpal Singh (editor), IEEE Press, Piscataway, NJ and Wiley-Interscience, New York, NY, 2002.

Refereed Journals

1. P. Scott and S. M. Kang, "Stability Properties of a Purkinje Fiber Model," *Computers in Biology and Medicine*, vol. 4, pp. 19-25, June 1974.

2. L. O. Chua and S. M. Kang, "Memristive Devices and Systems," *Proceedings of the IEEE*, Vol. 64, No. 2, pp. 209-223, February 1976.

3. S. M. Kang, "Comments on a Method of Obtaining System Functions Using Δ-M," *Proceedings of the IEEE*, Vol. 65, No. 3, pp. 494, March 1977.

4. L. O. Chua and S. M. Kang, "Sectionwise Piecewise-Linear Functions: Canonical Representation Properties and Applications," *Proceedings of the IEEE (Special Issue on Multidimensional Systems)*, Vol. 65, No. 6, pp. 915-929, June 1977.

5. S. M. Kang and L. O. Chua, "A Global Representation of Multidimensional Piecewise-Linear Functions," *IEEE Transactions on Circuits and Systems*, vol. CAS-25, No. 11, pp. 938-940, November 1978.

6. S. M. Kang, Y. Chen, and T. G. Marshall, Jr., "An Optimal Design of Split-Electrode CCD Transversal Filters," *IEEE Transactions on Circuits and Systems*, Vol. CAS-27, No. 6, pp. 445-451, June 1980.

7. S. M. Kang, "An Optimal Design of Large-Scale Communication Networks," *IEEE Transactions on Circuits and Systems*, pp. 1169-1175, December 1980.

8. S. M. Kang, "A Design of CMOS Polycells for LSI Circuits," *IEEE Transactions on Circuits and Systems*, Vol. CAS-28, No. 8, pp. 838-843, August 1981.

9. S. M. Kang, R. H. Krambeck, H. F. Law, and A. D. Lopez, "Gate Matrix Layout of Random Control Logic in a 32-bit CMOS CPU Chip Adaptable to Evolving Logic Design," *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, Vol. CAD-2, No. 1, pp. 18-29, January 1983.

10. S. M. Kang, "Simulation of Power Dissipation in VLSI Circuits," *IEEE Journal of Solid-State Circuits*, vol. SC-21, no. 5, pp. 889-891, October 1986.

11. S. M. Kang, "Domino CMOS Barrel Switch for 32-Bit VLSI Processors," *IEEE Circuits and Devices*, vol. 3, no. 3, pp. 3-8, May 1987.

12. S. M. Kang, "Physical Design of Microprocessors," *IEEE Design and Test of Computers*, vol. 4, no. 3, pp. 10-11, June 1987.

13. S. M. Kang, "Metal-Metal Matrix-N^3 for High-Speed VLSI Layout," *IEEE Transaction on Computer-Aided Design,* vol. CAD-6, no. 5, pp. 886-891, September 1987.

14. T. K. Yu, S. M. Kang, I. N. Hajj and T. N. Trick, "Statistical Performance Modeling and Parametric Yield Estimation of MOS VLSI," *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, vol. CAD-6, no. 6, pp. 1013-1022, November 1987.

15. D. K. Hwang, W. K. Fuchs and S. M. Kang, "An Efficient Approach to Gate Matrix Layout," *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, vol. CAD-6, no. 5, pp. 802-809, December 1987.

16. M. E. Mokari-Bolhassan and S. M. Kang, "Analysis and Correction of VLSI Delay Measurement Errors due to Transmission Line Effects," *IEEE Trans. on Circuits and Systems*, vol. CAS-35, no. 1, pp. 19-25, January 1988.

17. W. Shu, M. Y. Wu, and S. M. Kang, "Improved Net Merging Method for Gate Matrix Layout," *IEEE Transactions on Computer-Aided Design*, vol. CAD-7, no. 9, pp. 947-951, September 1988.

18. W. J. Welch, T. K. Yu, S. M. Kang, and J. Sacks, "Computer Experiments for Quality Control by Parameter Design," *Journal of Quality Technology*, vol. 22, no. 1, pp. 15-22, January 1990.

19. S. M. Kang and H. Y. Chen, "A Global Delay Model for Domino CMOS Circuits," *International Journal on Circuit Theory and Applications*, vol. 18, no. 3, pp. 289-306, May 1990.

20. D. S. Gao, A. T. Yang, and S. M. Kang, "Accurate Modeling and Simulation of Interconnection Delays and Crosstalks in High-Speed Integrated Circuits," *IEEE Transaction on Circuit and Systems*, vol. 37, no. 1, pp. 1-9, January 1990.

21. P. Gee, M. Y. Wu, S. M. Kang, and I. N. Hajj, "A Metal-Metal Cell Generator for Multi-Level Metal MOS Technology, *Integration, the VLSI Journal*, vol. 9, no. 1, pp. 25-47, February 1990.

22. D. S. Gao, S. M. Kang, R. P. Bryan, and J. J. Coleman, "Modeling of Quantum Well Laser for Computer-Aided Analysis of Optoelectronic Integrated Circuits," *IEEE Transaction on Quantum Electronics*, vol. 37, no. 7, pp. 1206-1216, July 1990.

23. P. Gee, M. Y. Wu, S. M. Kang, and I. N. Hajj, "Automatic Synthesis of Metal-Metal Matrix Layout," *Int. J. of Comput.-Aided VLSI Des.*, Vol. 2, no. 1, pp. 83-104, 1990.

24. C. H. Diaz, S. M. Kang and Y. Leblebici, "An Accurate Analytical Delay Model for BiCMOS Driver Circuits," *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, vol. 10, no. 5, P. Gee, M. Y. Wu, I. N. Hajj, S. M. Kang and W. Shu, "Automatic Circuit Synthesis Using Switching Network Logic and Metal-metal Matrix Layout," JAI Press, Inc., pp. 57-106, 1990.

25 A. T. Yang, S. M. Kang, and G. C. Yang, "An Integrated System for Device Model Design, Circuit Simulation, and Parameter Extraction," Advances in Electrical Engineering, *Electrosoft Journal*, (ed. P. P. Silvester), pp. 31-43, Computational Mechanics Publications Springer-Verlag, 1990.

26. D. Zhou, F. P. Preparata, and S. M. Kang, "Interconnection Delay in Very High- Speed VLSI," *IEEE Trans. on Circuits and Systems*, vol. 38, no. 7, pp. 779-790, July 1991. (**IEEE Darlington Paper Award**)

27. P. Duchene, M. Declercq, and S. M. Kang, "A Simple CMOS Transition Accelerator Circuit," *Electronics Letters,* pp. 300-301, February 1991.

28 H. Y. Chen and S. M. Kang, "iCOACH: A Circuit Optimization Aid for CMOS High-Performance Circuits," *Integration, the VLSI Journal*, vol. 10, no. 2, pp. 185-212, January 1991.

29. H. Y. Chen and S. M. Kang, "A New Circuit Optimization Technique for High Performance CMOS Circuits," *IEEE Trans. on Computer-Aided Design*, vol. 10, no. 5, pp. 670-677, May 1991.

30. T. K. Yu, S. M. Kang, W. Welch, and J. Sacks, "Parametric Yield Optimization of CMOS Analog Circuits by Quadratic Statistical of Circuit Performance Models," *International Journal of Circuit Theory and Applications*, vol. 19, pp. 579-592, November 1991.

31. G. M. Tharakan and S. M. Kang, "A New Design of a Fast N-Bit Barrel Switch Network," *IEEE Journal of Solid-State Circuits*, Vol. 27, no. 2, pp. 217-221, February 1992.

32. Y. Leblebici and S. M. Kang, "Modeling of nMOS Transistors for Simulation of Hot-Carrier Induced Device and Circuit Degradation," *IEEE Trans. on Computer-Aided Design*, vol. 11, no. 2, pp. 235-246, February 1992.

33. A. Ketterson, M. Tong, J.-W. Seo, K. Nummila, J. Morikuni, K. Y. Cheng, I. Adesida, and S. M. Kang, "A Submicron Pseudomorphic MODFET-based OEIC Receiver," *IEEE Photonics Technology Letters*, vol. 4, no. 1, pp. 73-76, January 1992.

34. A. Ketterson, M. Tong, J. W. Tong, K. Nummila, J. Morikuni, S. M. Kang, and I. Adesida, "A high-performance AlGaAs/InGaAs/GaAs pseudomorphic MODFET-based monolithic optoelectronic receiver," *IEEE Photonics Tech. Lett4,* p. 73, 1992.

35. A. Ketterson, M. Tong, J. W. Tong, K. Nummila, K. Y. Cheng, J. Morikuni, S. M. Kang and I. Adesida, "Submicron modulation-doped field-effect-transistor/metal-semiconductor-based optoelectronic integrated circuit receiver fabricated by direct-write electron beam lithography," *J. of Vac. Sci. and Tech. B10*, p. 2936, 1992.

36. J. J. Morikuni, D. S. Gao, and S. M. Kang, "Modeling of Optical Logic Gates for Computer Simulation," *IEE Proceedings-J, Optolectronics,* vol. 139, no. 2, pp. 105-116, April 1992.

37. Y. H. Shih and S. M. Kang, "Analytic Transient Solution of General MOS Circuit Primitives," *IEEE Transactions on Computer-Aided Design,* vol. 11, no. 6, pp. 719-731, June 1992.

38. C. H. Diaz and S. M. Kang, "New Algorithms for Circuit Simulation of Device Breakdown," *IEEE Trans. on Computer-Aided Design*, vol. 11, no. 11, pp. 1344-1354, November 1992.

39. R. Thaik, N. Lek, and S. M. Kang, "A New Global Router using Zero-One Linear Integer Programming Techniques for Sea-of-Gates and Custom Logic Arrays," *IEEE Transactions on Computer-Aided Design*, vol. 11, no. 12, pp. 1479-1494, December 1992.

40. J. J. Morikuni and S. M. Kang, "An Analysis of Inductive Peaking in Photoreceiver Design," *IEEE Journal of Lightwave Technology*, vol. 10, no. 10, pp. 1426-1437, October 1992.

41. E. C. Chang and S. M. Kang, "Computationally Efficient Simulation of Lossy Transmission Line by Using Numerical Inverse Laplace Transform," *IEEE Trans. on Circuits and Systems*, (Spec. issue on Simulation, Modeling, and Electrical Design of High-Speed and High-Density Interconnects), vol. 39, no. 22, pp. 861-868, November 1992.

42. M. S. Unlu, Y. Leblebici, S. M. Kang, and H. Morkoc, "Transient Simulation of Resonant Cavity Enhanced heterojunction Photodiodes Under Pulse Illumination," *IEEE Photonics Technology Letters,* vol. 4, no. 12, pp. 1366-1369, December 1992.

43. S. G. Bishop, I. Adesida, J. J. Coleman, T. A. DeTemple, M. Feng, K. Hess, N. Holonyak, Jr., S. M. Kang, G. E. Stillman, and J. T. Verdeyen, "The Engineering Research Center for Compound Semiconductor Microelectronics," *Proc. of the IEEE,* vol. 81, no. 1, pp. 132-151, January 1993.

44. Y. Leblebici, W. Sun, and S. M. Kang, "Parametric Macromodeling of Hot-Carrier Induced Dynamic Degradation in MOS VLSI Circuits," *IEEE Transactions on Electron Devices,* vol. , no. 40, no. 3, pp. 673-676, March 1993.

45. Y. Leblebici and S. M. Kang, "Modeling and Simulation of Hot-Carrier Induced Device Degradation in MOS Circuits," *IEEE Journal of Solid-States Circuits*. vol. 28, no. 5, pp. 585-595, May 1993.

46. Y. H. Shih, Y. Leblebici, and S. M. Kang, "ILLIADS: A Fast Timing and Reliability Simulator for Digital MOS Circuits," *IEEE Trans. on Computer-Aided Design*, vol. 12, no. 9, pp. 1387-1402, November 1993.

47. A. A. Ketterson, J. -W. Seo, M. Tong, K. Nummila, J. J. Morikuni, K.-Y. Cheng, S. M. Kang, and I. Adesida, "A MODFET-Based Optoelectronic Integrated Circuit Receiver for Optical Interconnects," *IEEE Trans. on Electron Devices,* vol. 40, no.8, pp. 1406-1446, August 1993.

48. S. Sapatnekar, V. B. Rao, P. M. Vaidya, and S. M. Kang, "An Transistor Sizing Problem for CMOS Circuits Using Convex Optimization," *IEEE Trans. on Computer-Aided Design,* vol. 12, no. 11, pp. 1621-1634, November 1993.

49. C. H. Diaz, C. Duvvury, S. M. Kang, and L. Wagner, "Electrical Overstress Power Profiles: A Guideline to Qualify EOS Hardness of Semiconductor Devices," *Journal of Electrostatics*, vol. 31, pp. 161-176, November 1993.

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51. C. H. Diaz and S. M. Kang, "Circuit-Level Electro-Thermal Simulation of Electrical Overstress Failures in Advanced MOS I/O Protection Devices," *IEEE Trans. on Computer-Aided Design*, vol. 13, no. 4, pp. 482-493, April 1994.

52. Y. Leblebici and S. M. Kang, "Simulation of Hot Carrier Induced MOS Circuit Degradation for VLSI Reliability Analysis," *IEEE Transactions on Reliability*, vol. 43, no. 2, pp. 197-206, June 1994.

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54. S. S. Sapatnekar, P. M. Vaidya, and S. M. Kang, “Convexity-Based Algorithms for Design Centering,” *IEEE Transactions on Computer-Aided Design,* vol. 13, no. 12, pp. 1536-1549, December 1994.

55 C. H. Diaz, C. Duvvury, and S. M. Kang,”Studies of EOS Susceptibility in 0.6um nMOS ESD I/O Protection Structures,” Journal of Electrostatics, 33, pp. 273-289, 1994.

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265. J.H. Park, A. Shakouri, and S. M. Kang, "Fast Evaluation Transient Hot Spots in VLSI ICs in Packages," 9th International Symposium on Quality Electronic Design (ISQED '08), pp. 600-603, San Jose, March 17, 2008.

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3. S. M. Kang and I. N. Hajj, "VLSI Design for Reliability-Hot Electron," Final Project Report to Rome Laboratory, March 1991.

4. C. Diaz and S. M. Kang, "Modeling and Simulation of EOS Failures in IC and Development of Design Guidelines," 4Q91, 1Q92, 2Q92, 3Q92, 4Q92, Report to Texas Instruments, January 1992- December 1992.

5. S. M. Kang, "Computer-Aided Design of Optoelectronic Subsystem," IEEE Report on Packaging, Interconnects, Optoelectronics for the Design of Parallel Computers Workshop, pp. 19-29, Schaumburg, IL, Mar. 1992.

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7. J. J. Morikuni and S. M. Kang, "An Analysis of Inductive Peaking in Photoreceiver Designs," Technical Report UIUC-BI-VLSI-92-02.

8. M. Sriram and S. M. Kang, "Efficient Approximation of Time Domain Response of Lossy Coupled Transmission Line Trees," Technical Report UIUC-BI-VLSI-91-03.

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10. Ki-Wook Kim, C. L. Liu, and Sung-Mo Kang, "Implication Graph Based Domino Logic Synthesis," CSL Technical Report, UILU-ENG-99-2206 (DAC-72), April 1999.

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2. Engineering a Dream," Santa Cruz Sentinel Newspaper, July 21, 2002.

3. 'Foundation for Greatness: Head of UCSC's Engineering School Aims to Build a Top-Rated Program," Santa Cruz Sentinel Newspaper, July 22, 2002.

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5. "The ILLIADS' ODYSSEY," Illinois Quarterly, Jan/Feb. 1991.

6. iSMILE Program, Licensed to University of Illinois.

7. ILLIADS Program, Highlighted in Illinois Quarterly, Semiconductor International.

8. iEDISON 3.0 Program, Licensed to University of Illinois.

9. iETSIM Program, Licensed to University of Illinois and Semiconductor Research Corp.

10. ILLIADS Program, Licensed to University of Illinois and then to Deutsch Research Incorp.

11. iFROST Program, Licensed to University of Illinois and then to RSoft Inc.

UNIVERSITY SERVICE

Circuits and Signal Processing Committee University of Illinois, 1985-1995 (Chair 1991)

University Senate, University of Illinois, 1986-87, 1992-1994

Graduate Committee, Dept. of ECE, University of Illinois, 1986-1989

Graduate Seminar Committee, Dept. of ECE, University of Illinois, 1986-1990, 1992-1994

Research Thrust Leader, NSF Engineering Research Center, University of Illinois, 1987-1996

Associate Director, NSF Engineering Research Center, University of Illinois, 1987-1995

Chairman, Ph.D. Qualifying Examination Committee, University of Illinois, 1988

Department Advisory Committee, University of Illinois, 1988-1989

CSL (Coordinated Science Laboratory) Policy and Planning Committee, University of Illinois, 1989-1990

ICAP (Illinois Computer Affiliates Program) Co-Chairman, University of Illinois, 1990

Chair, Circuits and Signal Processing Area, University of Illinois, 1991-1995

ICAP, Chairman, University of Illinois, 1991

Thrust Leader, Center for Optoelectronics Science and Technology (COST), 1993-1996

Department Head of Electrical and Computer Engineering, University of Illinois, 1995-2000

Campus Critical Research Initiative Proposal Review Board, University of Illinois, 1995

College Promotion and Tenure Committee, University of Illinois, 1995

Course Director of ECE 382 (Large-Scale Integrated Circuits), University of Illinois, 1985-2000

Course Director of ECE 482 (Physical VLSI Design), University of Illinois, 1986-2000

Chair, Faculty Search Committee, University of Illinois, 1995-2000

Member, Beckman Institute Steering Committee, University of Illinois, 1995-2000

Chair, Tykociner Lecture Committee, University of Illinois, 1996-2000

UC Santa Cruz Dean, Baskin School of Engineering, 2001-2007

UC Santa Cruz Board of Trustees (honorary member), 2001-2007

UC Santa Cruz Provost Advisory Council, 2001-2007

UC Santa Cruz Advisory Committee for Facilities, 2001-2007

UC Santa Cruz MBEST Oversight Committee, 2001-2006

UC Santa Cruz Academic Planning Council, 2001-2006

UC Santa Cruz Academic Instruction and Research Steering Committee, 2003-2007

UC Santa Cruz Communications Advisory Committee, 2002-2007

California Institute for Science and Innovation CITRIS Executive Committee, 2001-2007

California Institute for Science and Innovation QB3 Executive Committee, 2001-2003

UC Santa Cruz, Chancellor's Advisory Committee on Educational Partnership Program Chair, 2003-2007

OUTSIDE PROFESSIONAL ACTIVITIES

IEEE Standards Board Liaison Representative - 1977 to 1980

Editorial Board Member, International Journal of Circuit Theory and Applications-1984 to Present

Editor of Physical Design, IEEE Design and Test of Computers - May 1984 to July 1988

ADCOM Member, IEEE Circuits and Systems Society - January 1985 to December 1987

Associate Editor, IEEE Circuits and Devices Magazine - March 1987 to December 1989

Founding Chairman, Technical Comm. on VLSI Systems and Applications, IEEE Circuits and Systems Society - July 1987 to May 1989, May 1993 to December 1994

Secretary and Treasurer, IEEE Circuits and Systems Society - January 1988 to December 1988

Associate Editor, Circuits, Systems and Signal Processing Journal - January 1989-1992

Associate Editor, IEEE Transactions on Circuits and Systems - June 1989 to May 1991

Administrative Vice President, IEEE Circuits and Systems Society, 1989

President-Elect, IEEE Circuits and Systems Society, 1990

President, IEEE Circuits and Systems Society, 1991

IEEE Circuits and Systems Society Fellow Committee, 1991-2002

Member, Steering Committee, IEEE Multichip Module Conference, 1991-1995

NSF Review Panel, 1992-1995

Member, IEEE Technical Activities Board Administration Council, 1992

Chair, System Implementation Subcommittee, IEEE Multichip Module Conference, 1992-1994

Past President, IEEE Circuits and Systems Society, 1992

Member, IEEE TAB Administration Council, 1992

IEEE Circuits and Systems Society Nominations Committee Chair, 1993

IEEE Computer Society Fellow Committee, 1994

Chair, IEEE Transactions VLSI Systems Best Paper Award Technical Program Committee 1994-1997

Technical Program Chair, IEEE Asia Pacific Conference on Circuits and Systems 1994-1996

Technical Program Chair, IEEE International Symposium on Circuits and Systems 1994-1997

Member, IEEE LEOS Society Engineering Achievement Award Committee 1996

Program Co-Chair, IEEE Great Lakes VLSI Symposium Urbana, IL, 1997

Member Editorial Board, Proc. of the IEEE, 1996 - Present

Member, Steering Committee, International Symposium on Physical Design, 1996

Member, Technical Program Committee International Symposium on Physical Design, 1997

Secretary (President Elect), National EE Department Heads Assoc. (NEEDHA), 2000

ASEE Engineering Deans Council, 2001-2007

AAAS, 1996-present

Member, ASEE Policy Committee, 2003-2007

Chair, IEEE Transactions on VLSI Systems Best Paper Award Committee, 1994-1997

Member, IEEE CAS Meritorious Service Awards Committee 1994-1996

Member, IEEE CAS Education Award Committee 1994-1996

Member Steering Committee, IEEE Multichip Module Conference, 1991-1995

Member, International Steering Committee, IEEE Asia-Pacific Conference on Circuits & Systems, 1991-96

Editorial Board Member, Circuits Systems and Signal Processing, Birkhauser.

Program Committee, Southwest Symp. on Mixed-Signal Des., 1999

Chair, IEEE Circuits and Systems Society Technical Achievement Committee, 1999

Member, Technical Program Committee, IEEE International Symposium on Physical Design, 2002-2003

Member, Technical Program Committee, IEEE International Conf. On Microelectronic Systems Education, 2003

Member, Program Committee, SPIE Conf. on Microelectronics, MEMS, and Nanotechnology, 2003

Founding Member, IEEE-CAS Technical Committee on Nanoelectronics and Giga-Scale Systems, 2003

Member, International advisory committee for SOC Design Conference (SDC), 2003

General Chair, IEEE International Conference on System-On-a-Chip Conference (SOCC), September 2004

Chair, IEEE Circuits and Systems Society Technical Achievements Award Committee, 2004

External Advisory Board Member, Northwestern University, 1997-2000

External Advisory Board Member, Hong Kong University of Science and Technology, 1997-2005

External Review Board Member, Hong Kong Research Grants Council, present

External Review Board, Member, University of Alberta, Canada, 1999

Board Member, NEEDHA (National EE Heads Association) 1999-2000

Member, NSF Board of Visitors, 2000

Member, NSF Career Award Panel, 2002

President, Silicon Valley Engineering Council 2002-2003

State of California Leader for ASEE Engineering Deans Capitol Hill visit 2003, 2004

Member, NSF Review Panel for Science, Technology, Engineering, and Mathematics (STEM) Education, 2004

International Reviewer, National Science and Engineering Research Council of Canada, 2004

Co-General Chair, IEEE International Symposium on Circuits and Systems in 2012, Songdo, Korea, 2007-present

Member, Executive Board, Central Valley Higher Education Consortium, 2007-present

Member, International Review Board, Seoul National University, 2008-present

EDITORSHIP OF JOURNALS

Special Guest Editor, Proc. of the IEEE, On-Chip Thermal Engineering, Aug. 2006

Special Guest Editor, Proc. of the IEEE, Interconnections-Addressing the Next Challenge of IC Technology, Part 1, April 2001

Special Guest Editor, Proc. of the IEEE, Interconnections-Addressing the Next Challenge of IC Technology, Part 2, May 2001

Founding Editor-in-Chief, *IEEE Trans. on VLSI Systems,* 1992-1994

Special Guest Editor, *International Journal on Circuit Theory and Applications*, Nov. 1991 Issue

Special Guest Editor, *International Journal on Circuit Theory and Applications*, jointly with Professor P. DeWilde in The Netherlands, on Fundamental Methods for Computer-Aided Design for the October 1988 issue

Special Guest Editor, *IEEE Design and Test of Computers*, June 1987 issue on Physical Design of 32-bit Microprocessors

Editorial Board Member, *International Journal of Circuit Theory and Applications*, June 1984-present

Editor, Physical Design, *IEEE Design and Test of Computers*, 1984-1988

Editorial Board Member, Circuits, Systems and Signal Processing, 1986-2006

Editor of Digital Electronics, *IEEE Circuits and Devices Magazine*, 1987-1989

Associate Editor, *IEEE Transactions on Circuits and Systems*, June 1989 to May 1991

Associate Editor, *Circuits, Systems, and Signal Processing Journal*, Jan. 1989 to Dec. 1990

Editorial Board Member, Proc. of the IEEE, 1996-2005

International Advisory Board Member, IEICE Trans. On Fundamentals of Electronics, Communications and Computer Sciences, Engineering Sciences Society of Japan, 2000-present

Co-Series Editor, Advances in CAD for VLSI Book Series, Elsevier Science

Reviewer, *IEEE Transactions on Computer-Aided Design of Integrated Circuits*, *IEEE Trans. on Electron Devices, IEEE Transactions on Circuits and Systems, IEEE Journal of Solid-State Circuits, International Journal of Circuit Theory and Applications*, Addison-Wesley Publishing Company, Prentice-Hall, Inc., McGraw-Hill, Springer-Verlag, Princeton Press, NSF

CONSULTING ACTIVITIES

ZMOS Technology Inc., Co-Founder and Chairman, 2002-present

Cadence/Celestry, Chairman, Technical Advisory Board, 2000-2005

Nanno Solutions, Technical Advisor 2006-2007

BTA Technology Inc., Board of Directors, 2000-2003

Rockwell Science Center, Technical Consultant, 2001-2002

Apache Design Automation, Technical Advisory Board, 2001-2004

Avanti Corp. July 1996-1999

Texas Instruments, 1998-1999

Samsung Electron Co., Dec. 1995 to May 1996

Anagram Inc., Board of Directors, Aug. 1993 to July 1996

Teltech, Inc., Aug. 1989-2000

Motorola, Inc. August 1990

MCC, Austin, TX, November 1988

AT&T Bell Laboratories, Allentown, PA, Murray Hill, Holmdel, NJ, Dec. 1988-1990

RESEARCH AREAS

Low Power Digital Integrated Circuits

Application Specific Integrated Circuits (ASICs)

Wafer-level VLSI Reliability

Computer-Aided Design of VLSI Circuits and Systems

Computer-Aided Design of OEICs

OEIC Systems and Optical Interconnects

Fully Optical Networks

Nanoelectronics

GRADUATE THESES COMPLETED UNDER DIRECT SUPERVISION (Since 1998):

(a) **M.S. Degrees Granted:** 40 (partial list)

J. Moorman	1998
M. Bossardt	1998 Swiss Federal Institute of Technology at Lausanne (**Best Thesis Award**)
S. Dixon	1998
D. Chen	1999
V. Nishar	1999
J. Katzenstein	2000
G. Yang	2003 UCSC
Q. Wang	2003 UCSC
A. Barangan	2003 UCSC

Z. Wang	2004 UCSC
P. Holm	2005 UCSC
W. Li	2005 UCSC

(b) **Ph.D. Degrees Granted (list of last 5 years)** 54

J. S. Lee	2001
C. W. Kim	2001
S. M. Yoo	2001
K. H. Baek	2002
S. O. Jung	2002
G. Yang	2004 UCSC
S. Wu	2005 UCSC
W. Li	2007 UCSC
Y.S. Kim	2008 UCSC
J. Hu	2008 UCSC

(c) **Ph.D. Thesis Students Supervised at UCSC:** 1

J. H. Park

POST DOCTORAL RESEARCHERS AND VISITORS HOSTED

J. M. Lee, 1991-1992, Korea, Kwandong University

D. Y. Han, 1992-1993, Korea, Kunkook University

Y. Leblebici, 1990-1993, Turkey, Technical University of Istanbul

E. Conforti, 1992-1994, Brazil, University of San Paolo

Y. Leblebici, 1994, 1997, Turkey, Technical University of Istanbul

C. Goknar, 1995-1998, Turkey, Technical University of Istanbul

M. K. Lee, 1996-1997, Yonsei University, Korea

Y. J. Huh, 1997-1998 LG Semicon, Korea

J. Lockwood, 1993-1999, UIUC

I. C. Hwang, 2000-2001, Korea University

H. B. Kim, 2000, Samsung Electron Company

S. W. Kim, 2001-2002, Korea University

S. Kim, 2001-2002, Korea University

J. H. Choi, 2001, Samsung Electron Company

D. Axelrad 2002, University of Grenoble, France

I.Shim, 2002, Korea University

Georg Kriebel, 2002-2003, Swiss Federal Institute of Technology at Lausanne

S. H. Shin, 2004-2006, Korea Advanced Institute of Science and Technology

S. I. Chae, 2005-2006, Seoul National University, Korea

Y. J. Song, 2005-2006, Konyang University, Korea

S. I. Lim, 2007-2008, Seokyung University, Korea

S. H. Shin, 2007- , KAIST

K. M. Kim, 2007- , KAIST

Y. S. Kim, 2008, UCSC

C. W. Kim, 2008-2009, Samsung Electronics, Korea

M. S. Son, 2008-2010, Sunchon University, Korea

J. J. Jung, 2007-2009, Korea University, Korea

P. Meinerzhagen, 2008, EPFL, Switzerland

OTHER SCHOLARLY ACTIVITIES

Distinguished Lecturer, University of Notre Dame, 1992

Distinguished Lecturer, University of Washington, 1991

Associate in The Center for Advanced Study, UIUC, 1991-1992

NSF Review Panel, Washington, DC, 1992

Distinguished Lecturer, Iowa State University, 1992

Invited Speaker, National Science Foundation Workshop, 1993

Invited Speaker, University of Washington, 1993

Distinguished Lecturer; National Research Council, Republic of China, 1993

Distinguished Lecturer, International Conference on VLSI and CAD, Korea 1993

Plenary Speaker, 1992 EOS/ESD Symposium, Dallas, TX, 1993

Invited Speaker, High Speed Interconnects Workshop, Santa Fe, NM, 1993

Invited Speaker, OSA Symposium, Toronto, Canada, 1993

Plenary Speaker, 1995 IEEE International Symposium on Circuits and Systems, 1995

Distinguished Lecturer, Asia-Pacific Conference on Circuits and Systems, 1994

Distinguished Lecturer, IEEE Circuits and Systems Society, 1994-1996

Invited Speaker, SPIE Photonics/East, 1994

Technical Program Chair, 1996 IEEE Asia-Pacific Conference on Circuits and Systems, Seoul, Korea, 1996

Technical Program Chair, 1997 IEEE International Symposium on Circuits and Systems, Hong Kong, 1997

Lecturer, Low Power Memory Design, Monterey, CA, April 1997

Lecturer, Low Power Memory Design, Lausanne, Switzerland, July 1997

Invited Talk, University of Karlsruhe, Germany, July 1997

Invited Talk, National University of Singapore, January 1998

Invited Talk, Korean Advanced Institute of Science and Technology, January 1998

Invited Talk, Technical University of Munich, Germany, July 1998

Invited Talk, Motorola Corp. Munich, Germany, Aug. 1998

Invited Talk, Tsinghua University, China, Dec. 2000

Invited Talk, Tokushima University, Japan, July 2001

Invited Talk, New York Chapter of KSEA, November 2001

Invited Talk, Plenary, "On-chip Thermal Engineering," Int. Symp. on Physical Design, San Diego, CA, Apr. 2001

Invited Talk, "UCSC School of Engineering," UC Board of Regents, Feb. 2002

Invited Talk, "Three Tenors of Technology for the 21st Century," Korean-American Chamber of Commerce of Silicon Valley, March 28, 2002

Invited Talk, "UCSC Engineering Programs," Cabrillo Kiwanis Club, Aptos, Oct. 2002

Invited Talk, UK House of Lords Science and Technology Committee, "Innovations in Microprocessors," June 10, 2002, Stanford University

Invited Talk, Santa Cruz Technology Symposium Keynote Address, February 23, 2002

Invited Talk, Korean Advanced Institute of Science and Technology (KAIST), June 2002

Invited Talk, "A Brief Highlight of Korean-American Engineers," at Centennial Celebration of Korean Immigration To United States Symposium, August 17, 2002, Falls Church, VA

Invited Talk, "UCSC Engineering Programs," Cabrillo College, Oct. 23, 2002

Invited Talk, " Industry-University Collaboration for Curriculum Development," Stanford University-KAIST Technology Forum, Stanford University, June 17, 2003

Invited Talk, "Building Engineering Programs for the 21st Century," IEEE Circuits and Systems Chapter Inauguration Meeting, San Jose, CA, June 16, 2003

Invited Talk, C. M. Lee Scholarship Award Ceremony, San Jose, CA, June 28, 2003

Invited Lectures, "Design for Manufacturability," KAIST, Taejon, Korea, Aug.12, 2003

Invited Talk, Santa Cruz Rotary Club, " Engineering for the 21st Century," June 3, 2004

Invited Talk, " Micro/Nanoelectronics for Life Systems," 2004 European Workshop for Microelectronics Education, Swiss Federal Institute of Technology, Lausanne, Switzerland, Apr.14-15, 2004

Invited Lecture, "Elements of Low Power Design," IEEE Circuits and Systems Society Distinguished Lecturer's Tour Lecture, Universidad Nacional del Sur, Bahia Blanca, Argentina, Nov. 19, 2004

Invited Talk, "Engineering Education for the 21st Century," IEEE Education Society-Silicon Valley Chapter, December 1, 2004

Invited Talk, "Education for Global Technological Leadership in the 21st Century," UKC 2005 Conference, UC Irvine, August 13, 2005

Invited Talk, "Future R&D Directions," UKC 2005 Conference, UC Irvine, August 12, 2005

Invited Lecture, "Design of Deep Submicron VLSI," ECCTD Conference, Cork, Ireland, September 2, 2005

Kenynote Talk, "Challenges and Innovations for Development of SOCs," International SOC Conference, Seoul, Korea, Oct. 21, 2005

Keynote Talk, "The Future of IT Education and Research," Hokkaido Information University International Forum," October 14, 2005

Keynote Talk, "Roles of Bioelectronics for Quality of Life," 32nd European Solid-State Circuits Conference, Montreux, Switzerland, Sept. 2006

Keynote Talk, "Nanobiotechnology for Quality of Life," IEEE Nanotechnology Symposium, Sunnyvale, CA, July 27, 2007

Keynote Talk, "Higher Education for the 21st Century," 2007 U.S.-Korea Conference, Washington D.C., August 11, 2007

Keynote Talk, "Global Leadership in Science and Technology," Global HR Forum, Seoul, Korea, Oct. 25, 2007

Keynote Talk, "To be VIP Scientists and Engineers," 2008 U.S.-Korea Conference, San Diego, CA, August 16, 2008

PROFESSIONAL IMPROVEMENT

Quality Control Workshop, 1990

University of Illinois Dean's Undergraduate Advising Workshop, 1993

National Institute of Teaching Effectiveness, June 1993

Dean's Workshop on Teaching: Tradition vs. Innovation, October 1993

Provost's New Administrators Orientation Workshop, September 1995

Provost's Pew Table Workshop, October 1995

Dean's Workshop on Partnership for Illinois, November 1995

NTU/Undergraduate Teaching Improvement, January 1996

Workshop on Investigation Techniques, Preparation of Findings and Mediation, January 1996

Sexual Harassment Workshop, University of Illinois, 1997

Budget Reform Workshop, University of Illinois, 1997

Presidential Retreat, University of Illinois, 1999

UC Management Institute, 2002

UCSC Chancellor's Retreat, 2001-2006

Sexual Harassment Training, University of California, 2008

Keith E. Alley
University of California-Merced
5200 N. Lake Road, Merced, California 95343
Phone: (209) 724-4447
e-mail: kalley@ucmerced.edu

Professional Experience:

Current Positions:

2006 -	Executive Vice Chancellor and Provost, University of California-Merced
2002-	Founding Faculty - Professor of Biology, School of Natural Sciences, University of California-Merced

Prior Academic Positions:

1985 - 2002	Professor of Oral Biology, College of Dentistry, Ohio State University
1985 - 2002	Professor, Department of Cell Biology, Neurobiology and Anatomy College of Medicine, Ohio State University
1980 - 1985	Associate Professor, Department of Anatomy School of Medicine, Case Western Reserve University
1980 - 1985	Associate Professor, Department of Oral Biology School of Dental Medicine, Case Western Reserve University
1974 - 1980	Assistant Professor, Department of Anatomy, School of Medicine, Case Western Reserve University

Prior Administrative Positions:

2002 – 2006	Vice Chancellor for Research and Dean of Graduate Studies, UC Merced
2005 – 2006	Interim Vice Chancellor for Administration, UC Merced
2000 - 2002	Senior Associate Vice President, Office of Research, Ohio State University
1999 - 2000	Interim Vice-President for Research, Ohio State University
1999 - 2000	President, the Ohio State University Research Foundation
1991 - 1998	Associate Dean for Research and Graduate Studies, College of Dentistry, Ohio State University
1985 – 2000	Chairman, Section of Oral Biology College of Dentistry, Ohio State University

Education :

University of Illinois	B.S.	Biology
University of Illinois	D.D.S.	Dentistry
University of Illinois	M.S.	Anatomy
University of Illinois	Ph.D.	Anatomy/Neuroscience
University of Iowa	Postdoctoral	Neurobiology

Honors:

Omicron Kappa Upsilon, National Honorary Society
(President, Theta Chapter, 1995 - 1996)
NIH predoctoral NRSA, 1968 - 1972
NIH Special Research Fellow, 1972 - 1974
NIH Research Career Development Award, 1976 - 1981
Teaching Excellence Awards, CWRU, 1975, 1978, 1979, 1980, 1985
NIH, DRG Study Section, 1988-1992

Memberships:

American Association for the Advancement of Science
Federation of American Societies for Experimental Biology
American Association of Anatomists

Educational Responsibilities:

Undergraduate Curriculum

Teaching:

-Program Brain 1976-1984
-Genes, Stem Cells and Human Development, 2006
-Neurobiology, 2007

Professional Curriculum

Teaching:

-Anatomy & Craniofacial Development 1974-1985 (director, 1976-1985)
-Neurobiology 1974 – 1985 (course director, 1975-1984)
-Oral Biology (course director, 1987 – 1993)
-Craniofacial Biology 1993-2002

New Course Development:

-Anatomy and Craniofacial Development
-Integrative Neurobiology
-Oral Histology and Craniofacial Developmental Biology
-Oral Physiology
-Advanced Topics in Oral Biology
-Cell and Molecular Biology of Wound Healing

Curriculum Development:

- Revamped Oral Biology curriculum to focus on modern biological science, problem solving and experimental science
-Integration of basic and clinical sciences
-Critical thinking skills, analysis of case studies, primary literature, writing

Graduate Curriculum

Teaching:

-Functional Morphology of Primates (course co-director), 1976

-Developmental Neurobiology (course director), 1986 - 1997
-Cell and Molecular Aspects of Wound Healing (course director), 1994
-Advanced Topics in Oral Biology (course director), 1991 - 2000

Course Development:
-MS core curriculum: Statistics, Epidemiology, Experimental Design, Wound Healing Modules
-Advanced Oral Biology Ph.D. Course Offerings
-Developmental Neurobiology Course Content

Program Development:
-Oral Biology Ph.D. Program
-Neurobiology Ph.D. Program

Graduate Advising:
-15 Masters Committee - chaired three
-26 Doctoral Dissertation Committees - chaired five
-34 Doctoral Candidacy Exam Committees
-External examiner, Faculte des Etudes Superieures, Universite de Montreal

Service Responsibilities

Case Western Reserve University

Department of Anatomy:
-Departmental Seminar Series, Director, 1975-1977
-Graduate Studies Committee, 1977- 1982

Schools of Medicine and Dental Medicine:
-Student Standing and Promotion, 1981-1985
-Research Committee (Chair), 1981-1985
-Faculty Retreat Committee, 1982
-Curriculum Committee (Chair), 1982-1985
-President, Cleveland Chapter IADR, 1982-1984
-Professional's Day Student Research Forum (Chair), 1983-1984
-Accreditation Steering Committee (co-chair), 1984-1985

University:
-Research Committee of the University Senate, 1983-1985
-Ad Hoc Committee on the Future of the Dental School, 1982
-Program Brain, Advisory Committee, 1978-1981
-Society for Neuroscience - Cleveland Chapter (President) 1977-1978

Ohio State University

College of Dentistry:
-Executive Committee, 1985- 2000
-Academic Progress Committee, 1986-2000
-Graduate Studies Committee (Chair), 1991-1999

-Research Committee, 1985-1990, (*ex officio*) 1991-1998
-Strategic Planning Committee (Chair), 1987-1989
-Oral Biology Ph.D. Planning Committee (Chair), 1987-1990
-Accreditation Steering Committee, 1989-1992; 1997-1999
-Promotion and Tenure Committee, 1990-1992; 1999-2002, chair, 01-02
-Basic Science Curriculum Review (Chair), 1997-1998

University:

-Presidential Fellowship Committee (Chair), 1986-1989
-Neuroscience Graduate Studies Committee, 1988-1993
-Central Electron Optic Facility-Steering Committee, 1988-1992
-University Senate, 1989-1992
-Distinguished University Professor Selection Committee, 1990
-Sullivant Award Selection Committee, 1992
-Research Space Advisory Committee, 1992-1994
-Research and Graduate Council (Chair '97-'98), 1994-1998
-OSHA Implementation Advisory Committee, 1996-1999
-Executive Committee of Graduate School, 1995-1996
-Graduate School Curriculum Committee (Chair), 1995-1996
-Search Committee, Associate Dean, Vet Med, 1996-1997
-University Research Commission, 1996-1998
-Academic Enrichment Evaluation Committee, 1998, 1999
-Research Committee, (Chair) 1996-1998
-Council on Academic Affairs, 1999-2000
-Graduate Fellowship Awards Committee, 1999-2000
-Campus Microscopy and Imaging Steering Committee, 1999-2000

University of California

-School of Social Sciences Humanities and Arts, Dean Search Committee, (Chair), 2002
-Council of Grad Deans representative to Coordinating Council on Graduate Education, 2003-2004
-Vice Chancellor for Administration, Search Committee (Chair), 2005
-System wide Task Force on Graduate and Professional Education, 2005
-System wide Planning Group on Affordability, 2007

National and International Service

-Ad Hoc member NINCDS Study Section, 1977
-NIH Site Visits, 1977, 1989, 1990, 1994 (Chair).
-Special Review, Oral Biology and Medicine, 1987-1992
-NSF Grant Reviews, 1987-2000
-NIH, MDCN-5 Study Section, 1999 (chair)
-Satellite Symposium: Molecular Aspects of Synaptogenesis

(co-organizer), 1988
-IADR Neuroscience Group, Symposium Chair, 1990-1993, 1999
1. Myoneural determinants of developing jaw-function Acapulco, 1990
2. Psychoneuroimmunology, Chicago, 1992
3. Neurotropic viruses; Experimental and Clinical Implications, Seattle, 1993
4. Neuronal Modulation of Wound Healing, Vancouver, 1999.

-Graduate Program Review, University of Maryland (chair) 1991
-AADR Student Research Fellowship Committee, 1992-1996
-Review of Dental Basic Sciences, University of Maryland, 1992
-Consultant to Eastman Dental Center, 1993
-Advisory Committee, University of Minnesota DSA program, 1993-2000
-IADR Neuroscience Group, President, 1994-1995
-Edison Biotech Corp, Advisory Council, 1994-1995
-IADR Membership and Recruitment Committee, 1995-1998
-AADR Membership and Recruitment Committee, 1997-2000
-Advisory Committee, Univ. of Maryland NRSA, 1998-

Elected Offices:

-Neuroscience Group - International Association for Dental Research
Program Chairman and President-elect, 1993-1994
President, 1994-1995; Councilor, 1995-1997
-American Association for the Advancement of Science, Section R, Councilor, 2001-2005

Editorial Responsibilities

Editorial Board:

-Journal of Dental Research, 1995-1999

Editorial Review:

Journal of Comparative Neurology; Neuroscience; Brain Research Bulletin; Journal of Dental Research; Archives of Oral Biology; American Journal of Anatomy; Neuroscience Letters; Cells Tissues Organs; Developmental Biology; Anatomical Record

Corporate and Foundation Boards:

Past: Transportation Research Center, Inc.; Ohio Airospace Institute; SciTech-Ohio; Prologue International; Orton Ceramics; National Research Regulatory Institute; Great Valley Center

Current: The Yosemite Association

Research, Training and Facility Support Grants:

1972-1974	Analysis of Neuronal Clusters in the Mesencephalic Nucleus. NIDR, $33,000, Principal Investigator, FO3 DE-53223.
1974-1976	Development of Brain Stem Motor Centers, CWRU, $50,000, Principal Investigator, University Seed Grant
1976-1982	Ontogenesis of Brain Stem Visuo-motor Neurons, NINCDS, $385,390, Principal Investigator, RO1 NS-12781.
1976-1981	Research Career Development Award, NINCDS, $157,800, Principal Investigator, KO4 NS-00147.
1981-1991	Neural Aspects of Craniofacial Morphogenesis, NIDR, $562,000, Principal Investigator, RO1 DE-05574.
1985-1986	Biomedical Instrumentation Grant, NIGMS, $280,000, Co-Investigator.
1985-1990	Short Term Research Training in the Health Sciences, NIH, $50,320, Principal Investigator, T35 DE-07155.
1987-1988	Multiuser Biomedical Instrumentation Grant, NIGMS, $300,000, Co-I.
1987-1990	Regulation of Metamorphic Myogenesis and Myolysis, NIDR, $93,000, PI
1989-1994	Neuronal Development, Plasticity and Regeneration, NINCDS, Training Grant, Co-Investigator.
1990-1991	Biological Mechanisms of Craniofacial Adaptation, NIDR, Conference Grant, $98,000, Co-Investigator.
1995-1997	Synaptic dynamics in the trigeminal motor complex, AADR, $19,000, P.I.
1999-2002	Ohio Learning Network, State of Ohio, $4,200,000, P.I.
2003-2004	Sierra Nevada Research Institute, Dept. of Education, $250,000, P.I.
2003-2004	Major Research Instrumentation, Dept. of Education, $250,000, P.I.
2004-2009	Alliance for Graduate Education and the Professorate, NSF, $301,000, P.I
2006-2009	Small Business Development Center, SBA, $1,300,000/ yr, PI

2008-2010 California Institute for Regenerative Medicine, Facility grant, Bio-Foundry $4,359,000, PI.

Publications

Alley, K. (1973). Quantitative analysis of the synaptogenic period in the trigeminal mesencephalic nucleus. *Anat. Rec.*, 177: 49-60.

Alley, K. (1974). Morphogenesis of the trigeminal mesencephalic nucleus in the hamster: Cytogenesis and neurone death. *J. Embryol. Exp. Morph.*, 31:99-121.

Simpson, J.I. and K.E. Alley (1974). Visual climbing fiber input to the vestibulo cerebellum: A source of direction specific information. *Brain Res.*, 82: 302-308.

Alley, K., R. Baker and J. Simpson (1975). Afferents to the vestibulo-cerebellum and the origin of the visual climbing fibers in the rabbit. *Brain Res.*, 98:582-589.

Alley, K. (1977). Anatomical basis for the interaction between the cerebellar flocculus and the brain stem. *Devel. in Neurosci.*, 1: 109-117.

Furgeson, J., M. Cole and K. Alley (1977). Is there a decussation of the facial motor root? An experimental neuroanatomical study. *Trans. Am. Neurol. Assoc.*, 102:51-53.

Shaw, M. and K. Alley (1981). Generation of the ocular motor nuclei and their cell types in the rabbit. *J. Comp. Neurol.*, 200:69-82.

Shaw, M. and K. Alley (1982). Generation of motoneurons in the rabbit brainstem. *J. Comp. Neurol.*, 207: 203-207.

Alley, K. and M. Barnes (1983). Birthdates of trigeminal motoneurons and metamorphic reorganization of the jaw myoneural system in frogs. *J. Comp. Neurol.*, 218: 395-405.

Barnes, M. and K. Alley (1983). Maturation and recycling of trigeminal motoneurons in anuran larvae. *J. Comp. Neurol.*, 218:406-414.

Alley, K. and J. Cameron (1983). Turnover of anuran jaw muscles during metamorphosis. *Anat. Rec.*, 205: 7a-9a.

Davidovitch, Z.,O.Nicolay, K.Alley, R.Lanese, J.Shanfeld (1988). First and second messenger interaction in stressed connective tissue *in vitro.* In: *The Biology of Tooth Movement*, Eds, L.A. Norton and C.J. Burstone, CRC Press: Boca Raton, pg 97-129.

Rosenthal, B. and K. Alley (1988). Trigeminal motoneurons in frogs develop a new dendritic field during metamorphosis. *Neurosci. Lett.*, 95: 53-58.

Alley, K. (1989). Myofiber turn over is used to retrofit frog jaw muscles during metamorphosis. *Amer. J. Anat.*, 184: 1-12.

Alley, K. (1990). Retrofitting larval neuromuscular circuits in the metamorphosing frog. *J. Neurobiol.*, 21: 1092-1107.

Nicolay, O., Z. Davidovitch, J. Shanfeld and K. Alley (1990). Substance P immunoreactivity in periodontal tissue during orthodontic tooth movement. *Bone and Mineral*, 11: 19-29.

Alle, A., K. Alley, et al (1991). Apoptosis: a general comment. *FASEB Journal*, 5: 2127-2129.

Nicolay, O., J. Shanfeld, Z.Davidovitch and K. Alley (1991). SP immunoreactivity in the dental pulp and periodontium during tooth movement. *Ann. N.Y. Acad. Sci.*, 632: 452-454.

Alley, K. (1992). Neurobiology of the Face. In: *Biological Mechanisms of Tooth Movement and Craniofacial Adaptation*, Ed. Z. Davidovitch, EBSCO Media:Birmingham, Alabama, pgs 455-456.

Alley, K., F. Omerza and P. Reiser (1992). Cellular aspects of neuromuscular accommodation during rapid craniofacial morphogenesis. In: *Biological Mechanisms of Tooth Movement and Craniofacial Adaptation*, Ed. Z. Davidovitch, EBSCO Media: Birmingham, Alabama, pgs 531-540.

Omerza, F. and K. Alley (1992). Redeployment of trigeminal motor axons during metamorphosis. *J. Comp. Neurol.*, 325: 124-134.

Alley, K. (1992). Oral Biology: Advanced education in dental research. *OSU Quarterly*, 16: 12-14.

Rosen, S., K.Alley and F. Beck (1994). Outcomes assessment of predoctoral research experience. *J. Dent. Edu.*, 583: 836-839.

Paulson, R., K. Alley, L. Salata and C. Whitmyer (1995). Tongue development in *Rana pipiens*, a scanning electron microscopy study. *Arch. Oral Biol.*, 40:311-319.

Hanken, J., M. Klymkowsky, K. Alley and D. Jennings (1997). Jaw muscle development as evidence for embryonic patterning in the direct developing frogs. *Proc. Biol. Sci./Roy. Soc., Lond.*, Ser. B 264: 1349-1354.

Alley, K. and F. Omerza (1998). Trigeminal motoneurons are reutilized during amphibian metamorphosis. *Brain Res.*, 813 (1): 187-190.

Alley, K. and F. Omerza (1999). Neuromuscular remodeling and myofiber turnover in the jaw muscles of *Rana pipiens*. *Cells Tissues Organs*, 164 (1): 46-58.

Alley, K., J. Cassady, H. Fields, R. Glaser, A. Goodridge, B. Moser, F. Sanfilippo, and W. Yonushonis (2001). Letter – Defining Stress. *Science*, 291, #5513, 2316-2317.

Alley, K., (2007). Creating the Infrastructure for Graduate Education and Research at a New Research University. In: *From rangeland to research university: The birth of the University of California, Merced*, Jossey-Bass: San Francisco, No. 139: 61-68.

Reiser, P. and K. Alley. Myosin heavy chain transitions accompany myofiber turnover in *Rana pipiens* jaw muscles during metamorphosis. *Tissue and Cell*, (in press).

Alley, K. Cellular dynamics during metamorphosis in amphibian jaw muscles. *Cell and Tiss. Res.*, (in press)

Covell, D. and K. Alley. Selected regeneration of the trigeminal nerve in the axolotl jaw. In preparation.

Abstracts

Alley, K. (1971). Masticatory significance of neuronal clusters in the trigeminal mesencephalic nucleus. *Amer. Zool.*, 11:703.

Alley, K. (1972). Neuronal death during metamorphosis of the trigeminal mesencephalic nucleus. *J. Dent. Res.*, 50:206.

Alley, K. and E. DuBrul (1972). Neuronal death in the morphogenesis of the mammalian mesencephalic nucleus. *Anat. Rec.*, 172: 261.

Alley, K. R. Llinas and D. Hillman (1973). Neuronal and synaptic morphology in the optic tectum of the blind cavefish. *Anat. Rec.*, 175: 263.

Alley, K. (1973). Neuronal morphology and synaptic patterns in the hypoglossal nucleus. *J. Dent. Res.*, 51:

Alley, K., R. Baker and J. Simpson (1976). Projections from the perihypoglossal complex to the vestibulocerebellum in the rabbit. *Neurosci. Abst.*, 2, 104.

Barnes, M. and K.Alley (1977). Neuromuscular transformation of the frog jaw during metamorphosis. *Anat. Rec.*, 87: 530.

Shaw, M. and K. Alley (1978). Innervation of the extrinsic ocular muscles in the rabbit. *Neurosci. Abst.*, 3: 168.

Shaw, M. and K. Alley (1979). Birthdates of oculomotor neurons in the rabbit. *Neurosci. Abst.*, 4: 253.

Barnes, M. and K. Alley (1980). Stability in the motor V nucleus during metamorphosis of the jaws in *Rana pipiens*. *Anat. Rec.*, 196: 13.

Alley, K. and M. Shaw (1980). Sequential generation of motoneuronal pools in the oculomotor nucleus of the rabbit: A theory of nuclear construction. *Neurosci. Abst.,6: 781*.

Alley, K. (1983). Development and respecification of trigeminal motoneurons in the frog. *J. Dent. Res.*, 62:194.

Blaszczak, J. and K. Alley (1983). Stability of trigeminal motor pools during jaw reconstruction in frogs. *J. Dent. Res.*, 62: 233.

Alley, K. (1983). Migration and axonal generation of anuran trigeminal motoneurons. *Neurosci. Abst.*, 9: 210.

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Rana. Pipiens. J. Dent. Res., 68: 240.
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trigeminal nerve central projections. *J. Dent. Res.,* 70:464.
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Homan, J., F. Omerza, K.Alley and R. Nordlander (1993). Development of trigeminal motor axons in anuran jaw muscles. *J. Dent. Res.,* 72: 163.

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Courtney, A., R. Paulson, P. Ngan, K. Alley, C. Hardy and K. Hicks (1994). Tensor analysis of growth changes in anuran hypobranchial apparatus. *J. Dent. Res.,* 73: 265.

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Huff, K., K. Alley and P. Reiser (1996). Myosin heavy chain transitions in frog jaw muscles. *J. Dent. Res.,* 75: 120.

Books

Melfi, R, and K. Alley (2000). Permar's Oral Embryology and Microscopy. 10th Ed, Lippincott, Williams and Wilkins: Philadelphia, p 284. (11th edition in preparation)

Invited Lectures, Symposia and Continuing Education Courses

1968 University of Illinois, Symposium on TMJ Disorders
Neural Aspects of Jaw Function

1972 University of Iowa, Department of Physiology
Development of the Trigeminal Mesencephalic Nucleus

1973 Ohio State University, Department of Anatomy
How Do Brains Develop?

1973 Case Western Reserve University, Department of Anatomy
Visual-Vestibular Interactions in the Cerebellar Flocculus

1977 International Congress of Physiology, Abbaye de Royaumont, Paris
Anatomical Basis for Floccular Control of Eye Movement

1978 Case Western Reserve University, Symposium on Occlusal Studies
Neural Correlates of Cyclic Jaw Movements

1978 Washington University, Department of Oral Biology
Neuromuscular Aspects of Jaw Development

1979 Louisiana State University, Department of Anatomy
Development of Eye Motoneurons: A Model for Nuclear Construction

1979 University of Illinois, Department of Oral Biology
Evolutionary Mechanisms for Change of Brain and Target

1980 Northeast Ohio College of Medicine, Department of Neurobiology
Temporal Variables in Neuronal Differentiation

1980 Akron Stomatognathic Society
Cranial Structure and Mechanics

1981 University of Chicago, Department of Anatomy
A Model of Neuronal Respecification

1982 Cleveland Crown and Bridge Study Club
Myths and Facts of TMJ Function and Dysfunction

1984 Emory University, College of Dentistry, Atlanta, Georgia

Neuronal Respecification Mediates Altered Jaw Function

1984 Ohio State University, Department of Anatomy, Columbus, Ohio
Neural Aspects of Craniofacial Morphogenesis

1985 Uniformed Services Health Science University, Department of Anatomy
Cellular Features of Neuromuscular Plasticity

1986 Ohio Academy of Sciences, Toledo, Ohio
Neuroscience: Its Past, Present and Future

1987 National Institute of Dental Research, Bethesda, Maryland
Making the Change: Catalyzing Faculty Research Development

1989 Emory University, Department of Anatomy
Developmental Neuromuscular Plasticity in the Jaw Apparatus

1990 Cold Springs Harbor Laboratory, Apoptosis in Biological Systems
Cell Death: A Developmental Strategy for All Stages

1990 American Society of Zoologists, Anuran Models of Development
Metamorphosis: A Model for Developmental Neuromuscular Accommodation

1991 University of Indiana, Bloomington, Indiana
Cellular Dynamics during metamorphosis of amphibian jaw muscles

1991 IADR Symposium, Acapulco, Mexico
Myoneural Determinants of Jaw Function

1991 UCLA, Department of Oral Biology
Neuromuscular Plasticity and Emergent Oral Behavior

1992 IADR Symposium, San Antonio, Texas
Neurotropic Viruses: Clinical and Experimental Implications

1992 NIH, The NIDR-University Partnership, Bethesda, Maryland
Making the Change: Traditional to Research Orientation

1993 IADR Symposium, Chicago, Illinois
Psychoneuroimmunology: Oral Health Implications

1995 Ohio State University, Post-College Assembly, Columbus, Ohio
Biology of Dentin: Prospects for Biodental Materials

1999 IADR Symposium, Vancouver, British Columbia
Wound Healing: Neurogenic and Neuroendocrine Modulation

1999 Council of Scientific Society Presidents, Washington, D.C.
The University in 2025: Challenges for Chief Research Officers

2000 University of California, Oakland, Ca
California's Research Portfolio: A Valley Left Behind

2002 Great Valley Center, Modesto, California
Research Universities as Regional Economic Drivers

2003 University of California, Council of UC Graduate Deans
What is the Research University of the 21st Century?

RÉSUMÉ
MARY ELAINE MILLER

EXPERIENCE

University of California, Merced, 2006 to present
Vice Chancellor for Administration

The Vice Chancellor for Administration is the campus officer responsible for the financial, budgetary and physical facilities planning and construction, and management of the campus and is the budget officer for the campus, working with the Chancellor, Executive Vice Chancellor for Academic Affairs and other cabinet members. The Vice Chancellor represents the University for all budget, business and financial matters with the University Office of the President and in Sacramento, the state capital. Directly supervises the following areas: administrative operations; budget office; controller and office of business and financial services; capital planning; contracts/real estate; environmental manage/environmental health and safety; facilities; human resources; physical planning, design and construction; police and public safety. The Vice Chancellor for Administration also serves on the Board of the University Community Land Company, which will create a full multiple use community adjacent to the campus to serve up to 30,000 residents in the community.

Texas A&M University, 1986 - 2006
Associate Vice President for Finance and Administration, restructured to Associate Vice President for Administration, 1995 - 2006.

Highlights of accomplishments:
Direct supervision of the following departments, representing over 2000 employees and over $100 million annual budgets: Aviation Services, Children's Center, Faculty Club, Food Services, Human Resources, Physical Plant, Parking Traffic and Transportation Services, and University Police.

- Led the development of the University's recently-completed comprehensive 50-year Campus Master Plan.
- Created the University's Child Care Center. Oversaw design and construction of the Center building. Raises tens of thousands of dollars each year as donations for tuition subsidy for low-income families.
- Supervised one of the largest and most flexible campus food operations in the country - $26 million annual budget.

- As manager over Physical Plant, expend between $4 and $6 million per year to reduce the deferred maintenance backlog. Currently embarking on a $45 million campus renovation program to accommodate an influx of new faculty.
- Worked with utilities division to achieve natural gas purchase contract and gas transportation contract, saving the university millions of dollars.
- Chaired a campus energy conservation committee, resulting in multiple cost-avoidance initiatives.
- Chaired the Campus Access Task Force, resulting in a plan for improved

vehicular, transit, and pedestrian flow.

- Implemented an annual College Planning Fair to assist predominantly low-income families with preparing their children for college.
- Established a Division Employee Advisory Committee.
- Established a Student Advisory Board for the division.
- Served on the President's Vision 2020 Advisory Council.
- Represents the university on several town/gown initiatives, including the Intergovernmental Council.
- Serves as Acting Vice President in absence of Vice President.

University Co-Facilitator, Continuous Improvement Program, 1992-1998.

- Initiated and led the University's C.I. (TQM) efforts, leading to significantly improved processes and customer satisfaction. Counseled and worked with divisions of Academic Affairs, Administration, Student Services and Finance.
- Sat on Quality Council with President and Vice Presidents.

Assistant Vice President for Finance and Administration, 1988-1995.

- Direct supervision of Human Resources Department, Parking, Traffic and Transportation Services, Environmental Health and Safety, the Faculty Club, and Operations Analysis.
- Served as "user coordinator" overseeing design and construction of the university's first three parking garages.
- Chaired a campus-wide Paper Flow Study.
- Chaired the Quality of Work Life Study for the University, an element of the SACS 10-year self-study, with the long-range goal of improving worklife for all faculty and staff.
- Served as student liaison for Division.
- Mentored minority interns in division.
- Served as Acting Vice President in absence of Vice President, overseeing the Fiscal and Purchasing Departments, as well as others.

Interim Director, Texas A&M University Press, 1993-1995.

- While continuing as Assistant Vice President, was assigned to temporary leadership position at the floundering University Press for 18 months, during which time the productivity and teamwork of the Press improved dramatically and several important manuscripts were acquired.
- Worked with staff to develop a strategic plan, including publication goals.
- New book series were begun, including a Mexico/Texas Borderlands Series.

Interim Executive Director, Human Resources Department, 1990-1992.

- While continuing as Assistant Vice President, assumed temporary leadership of Human Resources to transform department. During this period, many new programs were implemented, training and staff development offerings were expanded, an employee newsletter was first published, a new policy and procedures manual was developed, and greater emphasis was placed on customer service. Many of the Quality of Work Life initiatives were begun.
- Created an Employee Assistance Program and a Health Promotion Program for all faculty and staff.

Director, Budget Planning and Analysis, 1987-1988 and Senior Management Analyst, Operations Analysis, 1986-1987. Supervised the team that conducted operational reviews of several University departments and functions.

Kraus-Miller and Associates, Management Consultant, 1980-1986. Areas of expertise included organizational analysis, Organization Development, staff training, management development, strategic and operations planning.

Michigan Department of Social Services

Director of Planning, 1976-1979. Developed, implemented, refined and evaluated a statewide, formal strategic and annual planning process for a 14,000-employee agency.

Director, Agency Effectiveness Project, 1975-1977. Was Principal Investigator for a $500,000 federal demonstration project grant to demonstrate the effectiveness of management development and Organization Development programs in county offices of a state agency. Worked with consultants to design and deliver programs.

EDUCATION

Bachelor of Arts, Psychology, Loyola University
Continued university study in psychology and pre-medicine, Michigan State University
Numerous courses and programs in management, business, and Organization Development.

PROFESSIONAL MEMBERSHIPS

NACUBO (National Association of College and University Business Officers)
TASSCUBO (Texas Association)
SCUP (Society for College and University Planning)

COMMUNITY SERVICE

Board Member, Bryan Business Council, 2003 - present
University Representative, Intergovernmental Council, 2001 - present
Board Member, Scott & White Health Plan, 2001 - present
President, Brazos Valley United Way Board of Directors, 2000
Board Member, Brazos Valley United Way, 1996-2001
Community Advisory Committee, Bryan/College Station Junior League, 1999-2000
Founding Chair, Brazos Valley HealthSmart Coalition
Nominating Committee, Brazos Valley Arts Council
Board of Directors, League of Women Voters
Girl Scout Leader
Volunteer, St. Joseph Hospital and Sherwood Nursing Home
Co-host, "Parent Talk," a KAMU radio call-in show, 1985-1987

HONORS

Texas A&M University Student Government Administrator of the Year, 1994
TAPSS Outstanding Administrator Award, 1997
Governor's Executive Development Program, 1998
Fish Camp Namesake, 1999

Women's Week Administrator Award, 1999
Student Government Outstanding Administrator Award, 1999
Executive of the Year Award, 2003
"You're the Tops" Distinguished Women Award, 2005

RELEVANT PUBLICATIONS AND MAJOR REPORTS

Agency Effectiveness Demonstration Project Report, Project SHARE, Washington, D.C., 1978.

Evaluating Models for Management Development in a State Agency, ASTD Research Report, 1978.

Texas A&M University Paper Flow Study, 1991

Texas A&M University Quality of Work Life Study, 1993

Texas A&M University Campus Access Plan, 1999

Texas A&M University Campus Master Plan, 2004

PERSONAL

Married; three grown children

[redacted]

DR. SAMUEL JUSTIN TRAINA
Director, Sierra Nevada Research Institute
University of California, Merced
P.O. Box 2039
Merced, CA 95344

[redacted]
Married with one child

E-mail: Straina@ucmerced.edu
Phone: (209) 724-4311

EDUCATION

- University of California, Berkeley (Soil Resource Management) 1978
- Ph.D. University of California, Berkeley (Soil Chemistry) 1983

FIELD OF SPECIALIZATION

- Surface, colloidal, and complexation chemistry in soils, sediments, and natural waters, remediation of contaminated soils and sediments.

PROFESSIONAL EXPERIENCE

- Director of the Sierra Nevada Research Institute, July 1, 2002-present
  Professor of Natural Science, University of California, Merced, July 1, 2002-present
- Professor of Soil Physical Chemistry, School of Natural Resources, Professor of Environmental Science, Professor of Geological Science. The Ohio State University. July 1, 1997 – June 30, 2002.
- Associate Professor of Soil Physical Chemistry, School of Natural Resources, Associate Professor of Environmental Science, Associate Professor of Geological Science. The Ohio State University. July 1, 1994 – June 30, 1997.
- Director of the Graduate Program in Environmental Sciences, The Ohio State University. July 1, 1995 - 1998.
- Associate Professor of Soil Physical Chemistry, Department of Agronomy, and Associate Professor of Environmental Science. The Ohio State University. July 1, 1991 - June 30, 1994
- Assistant Professor of Soil Physical Chemistry, Department of Agronomy, and Assistant Professor of Environmental Biology. The Ohio State University. 1985-June 30, 1991.
- Assistant Research Soil Chemist Department of Soil and Environmental Sciences. University of California, Riverside. 1984-1985
- Postdoctoral Research Soil Chemist (with G. Sposito) Department of Soil and Environmental Sciences. University of California, Riverside. 1983-1984
- Graduate Research Assistant and Graduate Teaching Assistant, University of California, Berkeley. 1978-1983

HONORS

- Distinguished Research Award, Ohio Agricultural Research and Development Center. 1990
- Distinguished Multidisciplinary Team Research Award, Ohio Agricultural Research and Development Center. 1998.

- Cox Visiting Professor, School of Earth Sciences, Stanford University, 1998.
- Soil Science Society of America Fellow, 2001.
- Marion L. and Chrystie M. Jackson Clay Scientist Career Award, 2005.

ADMINISTRATIVE EXPERIENCE

- Chair of Graduate School Curriculum Committee, OSU 1991
- Chair of University Research Committee, OSU 1993
- Director of the Graduate Program in Environmental Sciences, OSU 1995 - 1998
- University Selective Investment Committee, OSU 1998-2000
- Associate Vice President of Agriculture Search Committee, OSU 1998-1999
- Co-Director of Environmental Molecular Science Institute, OSU 2001-2003
- SNRI Director, UC Merced 2002-present

BOOK CHAPTERS AND MONOGRAPHS

- Logan, T.J. and S.J. Traina. 1993. Trace metals in agricultural soils. *In* Metal speciation and transport in ground waters. Lewis publishers.

- Hayes, K.F., and S.J. Traina. 1998. Metal ion speciation and its significance to ecosystem health. *In* Soil Chemistry and Ecosystem Health. Soil Sci. Soc. Am., Special Publication.

- Traina, S.J. and S. Chattopadhyay. 1996. Spectroscopic methods for characterization of organic contaminants: applications of optical, electronic measurements. *In* Sahwney, B. ed. CMS Workshop Lectures, Organic pollutants in the environment. 8:173-197. The Clay Minerals Soc., Boulder, CO.

- Traina, S.J. 1999. The environmental chemistry of cadmium. Dev. Plant Soil Sci. *Cadmium in Soils and Plants* 85:11-37.

REFEREED PUBLICATIONS

1. Doner, H.E., S.J. Traina, and A. Pukite. 1982. Interaction of nickel, copper and cadmium with soil manganese in saline solutions. Soil Sci. 133:369-377.

2. Traina, S.J. and H.E. Doner. 1985. Heavy metal induced releases of Mn(II) from a hydrous manganese dioxide. Soil Soc. Am. J. 49:317-321.

3. Traina, S.J. and H.E. Doner. 1985. Copper-Mn(II) exchange on a chemically reduced birnesite. Soil Sci. Soc. Am. J. 49:307-313.

4. Traina, S.J. and H.E. Doner. 1985. Co, Cu, Ni, and Ca sorption by a mixed suspension of smectite and hydrous manganese dioxide. Clays and Clay Min. 33:118-122.

5. Traina, S.J., G. Sposito, D. Hesterberg, and U. Kafkafi. 1986. The effects of pH and organic acid addition on the solubility of residual orthophosphate in an acidic, montmorillonitic soil. Soil Sci. Soc. Am. J. 50:45-52.

6. Traina, S.J., G. Sposito, D. Hesterberg, and U. Kafkafi. 1986. Effects of ionic strength and added calcium ions on citrate-orthophosphate interactions in an acidic, montmorillonitic soil. Soil Sci. Soc. Am. J. 50:623-637.

7. Goldberg, S., and S.J. Traina. 1987. Chemical modeling of anion complexation on oxide surfaces using the constant capacitance model: Mixed ligand approach. Soil Sci. Soc. Am. J. 51:929-932.

8. Holtzclaw, K.M., R.H. Neal, G. Sposito, and S.J. Traina. 1987. A sensitive colorimetric method for the quantitation of selenite in soil solutions and natural waters. Soil Sci. Soc. Am. J. 51:75-78.

9. Neal, R.H., G. Sposito, K.M. Holtzclaw, and S.J. Traina. 1987. Selenite adsorption on alluvial soils: I. Soil composition effects. Soil Sci. Soc. Am. J. 51:1161-1165.

10. Neal, R.H., G. Sposito, K.M. Holtzclaw, and S.J. Traina. 1987. Selenite adsorption on alluvial soils: II. Solution composition effects. Soil Sci. Soc. Am. J. 51:1165-1169.

11. Sposito, G., and S.J. Traina. 1987. An ion-association model for highly saline, NaCl-dominated waters. J. Environ. Qual. 16:80-85.

12. Traina, S.J., G. Sposito, G.R. Bradford, and U. Kafkafi. 1987. Kinetic study of citrate effects on orthophosphate solubility in an acid montmorillonitic soil. Soil Sci. Soc. Am. J. 51:1483-1487.

13. Che, M.D., T.J. Logan, S.J. Traina, and J. M. Bigham. 1988. Properties of water treatment lime sludges and their effectiveness as agricultural limestone substituents. J. Water. Pollut. Cont. Fed. 60:674-680.

14. Traina, S.J., D.A. Spontak, and T.J. Logan. 1989. Effects of cations on complexation of naphthalene by water soluble organic carbon. J. Environ. Qual. 18:221-227.

15. Pierzynski, G.M., T.J. Logan, and S.J. Traina. 1990. Phosphorus chemistry and mineralogy in excessively fertilized soils: solubility equilibria. Soil Sci. Soc. Am. J. 54:1589-1595.

16. Pierzynski, G.M., T.J. Logan, S.J. Traina, and J.M. Bigham. 1990. Phosphorus chemistry and mineralogy in excessively fertilized soils: quantitative analysis of phosphorous rich particles. Soil Sci. Soc. Am. J. 54:1576-1583.

17. Pierzynski, G.M., T.J. Logan, S.J. Traina, and J.M. Bigham. 1990. Phosphorus chemistry and mineralogy in excessively fertilized soils: descriptions of phosphorous rich particles. Soil Sci. Soc. Am. J. 54:1583-1589.

18. Traina, S.J. 1990. Applications of luminescence spectroscopy to studies of colloid-solution interfaces. Advan. Soil Sci. 14:167-189.

19. Traina, S.J., J. Novak, and N.E. Smeck. 1990. An ultraviolet absorbance method of estimating the percent aromatic C content of humic acids. J. Environ. Qual. 19:151-153.

20. Guertal, E.A., D.J. Eckert, S.J. Traina, and T.J. Logan. 1991. Differential phosphorous retention in soil profiles under no-till crop production. Soil Sci. Soc. Am. J. 55:410-413.

21. Traina, S.J. and B.M. Onken. 1991. Cosorption of pyrene and aromatic nitrogen heterocycles by hydrated smectites. J. Cont. Hydrol. 7:237-259.

22. Winland, R.L., S.J. Traina, and J.M. Bigham. 1991. Chemical composition of ocherous precipitates from Ohio coal mine drainage. J. Environ. Qual. 20:452-460.

23. Che, M, M. M. Loux, S. J. Traina, and T. J. Logan. 1992. Effect of soil pH on sorption and desorption of imazaquin and imazethapyr on clays and humic acid. J. Environ. Qual. 21:698-703.

24. Harsh, J.B., S.J Traina, J. Boyle, and Y. Yang 1992. Adsorption of cations on imogolite and their effects on surface charge characteristics. Clays and Clay Min. 40:700-707.

25. He, X., S.J. Traina, and T.J. Logan. 1992. Chemical properties of composted municipal solid waste and its effects on soils. J. Environ. Qual. 21:318-329.

26. Jaynes, W.F., S.J. Traina, J.M. Bigham, and C.T. Johnston. 1992 Preparation and characterization of reduced-charge hectorites. Clays and Clay Min. 40:397-404.

27. Smith, S.C., C.C. Ainsworth, S.J. Traina, and R.J. Hicks. 1992. Effect of sorption on the biodegradation of quinoline. Soil Sci. Soc. Am. J. 56:737-747.

28. Geron, K., K. Danneberger, S.J. Traina, T. Logan, and J.R. Street. 1993 The effects of establishment methods and fertilization practices on nitrate leaching in turfgrass. J. Environ. Qual. 22:119-125.

29. Ma, Q.Y., S.J. Traina, T.J. Logan. and J. Ryan. 1993. In situ Pb immobilization by apatite. Environ. Sci. Technol. 27:1803-1810.

30. Radosevich, M., J.J. Crawford, S.J. Traina, K. Oh, and O.H. Tuovinen. 1993. Biodegradation of atrazine and alachlor in subsurface sediments. In: Sorption and Degradation of Pesticides and Organic Chemicals in the Soil (D.K. Linn, ed.), p. 33-41. Soil Science Society of America, Madison, WI.

31. Sims, G.K., M. Radosevich, X.T. He, and S.J. Traina. 1993 The effects of sorption on the bioavailability of pesticides. *In* Biodegradation of natural and synthetic materials. W.B. Bettes. ed. Springer-Verlag.

32. Stehouwer, R., S.J. Traina, and J. Johnson. 1993 K-exchange selectivity in anhydrous-ammonia fertilizer band. Soil Sci. Soc. Am. J. 57:346-350.

33. Stehouwer, R.C., W.A. Dick, and S.J. Traina. 1993. Characteristics of earthworm (*Lumbricus terrestris*) burrow lining affecting atrazine sorption. J. Environ. Qual. 22:181-185.

34. Fogarty, Andrew M.; Traina, Samuel J.; Tuovinen, Olli H. 1994. Determination of dicamba by reverse-phase HPLC. J. Liq. Chromatogr. 17(12), 2667-74.

35. Hudson, A., S.J. Traina, and B. Shane, 1994. Soil organic matter properties in wetable and nonwettable soils from bent grass sand greens. Soil Sci. Soc. Am. J. 58:361-367.

36. Ma, Q.Y., T.J. Logan, and S.J. Traina. 1994. Effects of NO_3^-, Cl^-, F^-, SO_4^{2-}, and CO_3^{2-} on Pb^{2+} immobilization by hydroxyapatite. Environ. Sci. Technol. 28:408-419.

37. Ma, Q.Y., S.J. Traina, and T.J. Logan, 1994. Effects of aqueous Al, Cd, Cu, Fe(II), Ni, and Zn on Pb immobilization by hydroxyapatite. Environ. Sci. Technol. 28:1219-1228.

38. Stehouwer, R. C.; Dick, W. A.; Traina, S. J. 1994. Sorption and retention of herbicides in vertically oriented earthworm and artificial burrows. J. Environ. Qual. 23:286-292

39. Xu, Y., F. W. Schwartz, and S.J. Traina. 1994. Sorption of Zn^{2+} and Cd^{2+} on hydroxyapatite surfaces. Environ. Sci. Technol. 28:1472-1480.

40. Wander, M., S.J. Traina, R.B. Stinner, and S.E. Peters. 1994. The Effects of Organic and Conventional Management on Biologically-active Soil Organic Matter Pools. Soil Science Society of America Journal 58:1130-1139.

41. Cai, X.H. S.J. Traina, T.J. Logan, T. Gustafson, and R.T. Sayre. 1995. Applications of eukaryotic algae for the removal of heavy metals from water. Molec. Mar. Biol. Biotech. 4:338-344.

42. Danielsen, K.M., Y.P. Chin, J.S. Buterbaugh, T.L. Gustafson, and S.J. Traina. 1995. Solubility enhancement and fluorescence quenching of pyrene by humic substances: the effect of dissolved oxygen on the quenching process. Environ. Sci. Technol. 29:2162-2165.

43. He Xin-Tao, Logan, Terry J. and Traina, Samuel J. 1995. Physical and Chemical characteristics of selected U.S. municipal solid waste composts. J. Environ. Qual. 24:543-552.

44. Ma, Q. Y., T.J. Logan, and S.J. Traina. 1995. Lead immobilization from aqueous solutions and contaminated soils using phosphate rocks. Environ Sci. Technol. 29:1118-1126.

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46. Radosevich, M., Y.-L. Hao, S.J. Traina, and O.H. Tuovinen. 1995. Degradation and mineralization of atrazine by a soil bacterial isolate. Appl. Environ. Microbiol. 61:297-302.

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64. Ostrofsky, E.B., S.J. Traina, and O.H. Tuovinen. 1997. Variation in atrazine mineralization rates in relation to agricultural management practice. J. Environ. Qual. 26:647-657.

65. Radosevich, M., S.J. Traina and O.H. Tuovinen. 1997. Atrazine mineralization in laboratory-aged soil microcosms inoculated with s-triazine-degrading bacteria. J. Environ. Qual. 26:206-214.

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of Pb(II) sorbed to biofilm s on SiO2, Al2O 3, and FeOOH surfaces. J. Sync. Rad. 6(3), 642-644.

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109. Klupinski, Theodore P.; Chin, Yu-Ping; Traina, Samuel J. 2004. Abiotic Degradation of Pentachloronitrobenzene by Fe(II): Reactions on Goethite and Iron Oxide Nanoparticles. Environ. Sci. Tech. 38:4353-4360.

110. Taerakul, Panuwat; Lamminen, Mikko; He, Yontian; Walker, Harold W.; Traina, Samuel J.; Whitlatch, Earl. 2004. Long-Term Behavior of Fixated Flue Gas Desulfurization Material Grout in Mine Drainage Environments. J. Environ. Engin. 130:816-823.

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115. He, Y.T., J.M. Bigham, and S.J. Traina. 2005. Biotite dissolution and Cr(VI) reduction at elevated pH and ionic strength. Geochim. Cosmochim. Acta in press

GRADUATE STUDENTS AND POSTDOCS

Former Graduate Students

Name	Degree	Year	Current Appointment
Spontak, Dona	M.S.	1989	unknown
Shongwe, Gideon	Ph.D.	1990	Professor, University of Swaziland
Windland, Ron	M.S.	1990	US EPA
O'Loughlin, Edward	M.S. Ph.D.	1991 1999	Senior Research Scientist, Argone National Lab
Kane, Staci (formerly Kehrmeyer)	M.S.	1991	Research Scientist, LLNL
Onken, Blake	Ph.D.	1992	Agricultural Research Scientist, Navaho Nation
Wander, Michelle	Ph.D.	1992	Assoc. Prof. University of Illinois
Crawford, Jennifer	M.S.	1993	unknown
Radosevich, Mark	Ph.D.	1994	Assoc. Prof. University of Tennessee
Myneni, Satish	Ph.D.	1995	Assist. Prof. Princeton University
Martinez, Gustavo	Ph.D.	1995	Assoc. Prof. University of Puerto Rico
Xue, Yuan	Ph.D.	1995	Sprint
Peixoto, Ricardo	Ph.D.	1997	State Soil Scientist Paranah Brazil
Chattophadhyay, Sandip	Ph.D.	1997	Senior Research Scientist Battelle Memorial Institute
Adhyiya, Jagat	M.S.	1998	Environmental Consultant
Loch, Amy	M.S.	1999	Environmental Consultant
Brill, Marion	M.S.	1999	Environmental Consultant
Williams, David	M.S.	1999	Research Scientist, U`SGS
Lappin-Ickes, Jennifer	M.S.	1999	Environmental Consultant
Leonor-Barajas, Carmen	Ph.D.	2002	Assist. Prof. Universidad Francisco de Paula Santander, Columbia
Wen, Yi	Ph.D.	2002	Ph.D. student, Stanford
He, Yontian	Ph.D.	2003	postdoc with Patricia Dove Virginia Tech. University

Current Graduate Students
Doug Beak Ph.D. student, The Ohio Sate University (expected completion June 2005)
Samantha Lada Ph.D. student, The Ohio State University (expected completion, June 2005)
John Eward, Ph.D. student, UC Merced
Donald Schweizer, Ph.D. student, UC Merced

Former PostdocsPostdocs

Name	Doctoral Institution	Current Appointment
He, Xin-Tao	University of Illinois	unknown
Ma, Lena	Colorado State University	Professor, Univ. of Florida
Laperche, Valerie	University of Paris	Senior Research Scientist CNRS, France
Chen, Chia-chen	University of Michigan	Research Scientist, University of Texas
Yamakawa, Isao	Ohio State University	Chemical Abstracts
Chattophadyay, Demavita	Ohio State University	Senior Research Scientist, Battelle Memorial Institute

Current Postdocs
Domenik Wolff-Boenisch, Ph.D from
Shankar Sharma Sarkar, Ph.D. from University of Wyoming

RESEARCH PANELS
- DOE EPSCOR Program, 1992. Panel member
- Review of DOE Subsurface Science Program, Deep Microbiology and Co-contaminants Programs. 1994. Panel member
- US EPA, Exploratory Research Program, 1994. Panel Member
- USDA, National Research Initiative. 1994. Panel Member.
- USDA National Research Initiative. 1996. Panel Chair.
- DOE, ER-NABIR Program. 1996. Panel Member.
- DOE, ER-NABIR Program. 1996. Panel Chair.
- National Academy of Science/National Research Council Panel on Remediation of Naval Weapons Sites.
- DOE Workshop on "Advanced Technologies for Measuring Microbial Biomass and Activity at the Core Scale" Co-chair of workshop. 1998.
- DOE, OS-EM-EMSP 1999 Panel Chair.
- DOE, OS-EM-EMSP Panel Member, 2000
- DOE, OS-EM-EMSP Panel Member, 2001
- Review of Actinide Chemistry Group, Los Alamos National Laboratory. 2001. Panel Member.
- DOE Counter-terrorism advisory workshop, 2002
- DOE BERAC Subcommittee Member, 2003-2005.
- Review Committee for DOE, Savanah River Ecology Laboratory, 2003

- Review of Geochemistry Department, Earth Sciences Division, LBNL, 2003
- Grand Challenges Workshop in Biogeochemistry, DOE PNNL, 2003
- Selection Committee, DOE E.O. Lawrence Award, 2004
- Review of Geophysics Department, Earth Sciences Division, LBNL, 2004
- Committee of Visitors, Environmental Research Science Division, DOE, 2004
- Beam line proposal review panel, Advanced Light Source, 2004-present
- Beam line proposal review panel, Stanford Synchrotron Radiation Laboratory, 2004-present

PROFESSIONAL SOCIETY SERVICE

- Symposium Chair on Environmental Computational Chemistry, American Chemical Society, 1995.
- Associate Editor, Soil Science Society of America Journal 1994-1996.
- Chair, Division S-11 (Soils and Environmental Quality) of the Soil Science Society of America. 1996.
- Marion Jackson Award Com., Soil Science Soc. Amer. 1996-1998.
- Clarke Medal Committee. Geochemistry Soc. 1996-1999. (Chair, 1998).
- Associate Editor, Environmental Engineering Science, 1997-2002.
- Technical Chair, Clay Minerals Society, 1998-1999.
- Associate Editor, Geochimica et Cosmochimica Acta, 2000-2003.
- Associate Editor, Critical Reviews in Environmental Control, 2000-present.
- Clay Council, Clay Minerals Society, 2001-2007.
- Manuscript reviews for: Geochemica et Cosmochimica Acta, Environmental Science and Technology, Clays and Clay Minerals, Soil Science Society of America Journal, Journal of Environmental Quality, Langmuir, and Science.

UC MERCED SERVICE

- Director, Sierra Nevada Research Institute, July 2002-present
- Faculty Chair of UCM Proto-divisional Council, May-September, 2004
- Search Committee member for Biological Sciences positions (Natural Sciences)
- Search Committee member for Ecosystem Science position (Natural Sciences)
- Search Committee member for Environmental Microbiology position (Engineering)
- Search Committee member for Economics Positions (SSHA)
- Search Committee Chair for Microbial Ecology position (Natural Sciences)
- Search Committee Chair for Director of World Cultures Institute
- Design Committee for Castle Laboratories
- Presented seminars on UC Merced's Sierra Nevada Research Institute to:
  - Merced Chapter of AARP
  - Merced Chapter of Rotary
  - Merced Chapter of Sierra Club
  - Sierra Nevada Alliance
  - California Women in Agriculture
  - UC Merced Board of Trustees
  - Yosemite Forum (Yosemite National Park)
  - Statewide County Supervisors Meeting of UC Cooperative Extension Service

CURRENT GRANTS

Traina, S.J. *Collaborative Proposal: Probing the reductive potential of wetland pore waters and sediments.* NSF 2004-2007.

Traina, S.J. *Biogeochemistry of aerobic solubilization of Pu and U by microorganisms and their siderophores, reductants and exopolymers.* DOE-NABIR 2004-2005.

Traina, S.J. *Contaminant organic complexes: Their structure and energetics in surface decontamination.* DOE-EMSP. 2003-2005.

Traina, S.J. *Effects Of Chipped Orchard Prunings On C-Sequestration By Almond Orchard Soils.* Kearney Foundation for Soil Science. 2004-2005.

Harmon, T. (PI) , Traina, S.J., Bales, R., Estrin, D., Kaiser, W. Planning a multiscale sensor network to observe, forecast and manage a CLEANER California water cycle. NSF. 2004-2005

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PROFESSIONAL EXPERIENCE

Vice Chancellor for Student Affairs — October 2001 to Present
University of California, Merced

Responsible for development of the Division of Student Affairs at the 10th campus of the University of California. Units or services created and overseen include: undergraduate admissions, residence life and housing, career services, recreation and athletics, health services, counseling services, student life, advising and tutoring programs, students first center, orientation, judicial affairs, disability services, financial aid and scholarships, registration, dining services, bookstore, and the campus card. Also responsible for the Center for Educational Partnerships which administers all of the University's early academic outreach programs as well as a number of grant-funded programs.

Primary responsibilities:

- Hiring, evaluating and professional development of senior staff within Student Affairs from Assistant Directors to Associate Vice Chancellor
- Creating appropriate administrative structures and policies for units within Student Affairs
- Creating and overseeing budgets for state, registration fee funded and auxiliary units within Student Affairs
- Developing and implementing policies related to students in such areas as judicial affairs, student and residence life and housing; working with the faculty on the creation and revision of the academic honesty policy; working with the Undergraduate Council on academic policies
- Overseeing enrollment management including recruitment and retention, marketing, admissions processing, scholarship awarding strategies, and outreach to K-12 system
- Ensuring that staff within Student Affairs reflects the student populations that we serve and that our services/units respond to the complex needs of first generation, low income and educationally disadvantaged students
- Developing technical systems that respond to the needs of our students and that allow automation of as many processes as possible
- Working with the faculty and Schools to ensure that our services and units respond to their needs and the needs of the students
- Working to develop housing, dining, recreation and other physical spaces for students. This involves working with OP, UC Merced physical and capital planning staff, facilities, architects, campus housing

directors, donors and so forth. Have developed Valley Terraces, Dining Commons, and the Gallo Recreation and Wellness Center. Dining expansion currently underway.

- Developing the mission, vision and assessment plans for the Division of Student Affairs
- Ensuring that students have a rich learning environment outside the classroom through a wide range of activities, clubs, organizations, student government, recreational, intramural and club sports, community service opportunities and internships
- Obtaining grants and scholarships and other funds to support services and units for students
- Assisting with the WASC accreditation process
- Coordinating the production of the University Catalog along with other publications and reports, including a Division of Student Affairs Year End Report
- Creating special programs that meet the needs of our students or community, examples include: Family Weekend, Parent-Family Association, Yosemite Leadership Program, Sophomore Year Experience Committee and so forth
- Serving on numerous University committees on and off campus. Some on campus committees: Chancellor's Senior Staff, Executive Vice Chancellor's Coordinating Council, Undergraduate Council, College One Executive Committee, Course and Miscellaneous Fee Committee
  Off campus: Education Finance Model Committee, Academic Planning Council, UC Leads Committee, Senior International Leaders Committee
- Chairing (in 2003) the UCM faculty group that attended the Association of American Colleges and Universities' Institute on General Education and chairing the faculty retreat that developed the Guiding Principles for General Education and initial School general education programs

Vice Provost for Undergraduate Education January 2000 to September 2001
University of Vermont

Primary responsibilities included: undergraduate educational issues; curricular and programmatic changes, including academic program review; undergraduate student advising; first year programs; and enrollment management (enrollment planning, recruitment and retention). Also involved in: university-wide academic planning and budgeting, student orientation, publications, collaborations with other higher education institutions, first year programs, undergraduate curricular and policy issues, and community engagement and service learning. In addition, I served as project director for a Hewlett Foundation General Education grant that I obtained.

Areas under my direct supervision were: admissions, financial aid, registrar's office, international education (both education abroad and international students/scholars), academic integrity, and residential academic living/learning programs.

Served on numerous committees, including: President's Cabinet, Executive Planning Committee, Council of Deans, Faculty Senate Academic Affairs Committee, University-wide Honors Committee, Affirmative Action Liaisons, Subcommittee on Academic Program Review, UVM Marketing/Image Team,

First Year Experience Committee. Worked frequently with the UVM Board of Trustees.

Director 1994 to January 2000
University Honors College
Washington State University

Responsible for the education of academically-talented undergraduates at Washington State University. The Honors College enrolled over 1300 students from all undergraduate colleges and majors at WSU's main campus in Pullman, Washington. The College's four-year structured curriculum was designed to provide Honors students with an alternative interdisciplinary general/liberal education. Worked with faculty on two of WSU's branch campuses to extend programs for academically-talented students to those locations.

Day-to-day responsibilities included: supervising Honors faculty (approximately 100 per year) and professional and support staff; selecting, orienting, and evaluating Honors instructors; overseeing Honors College admissions, academic advising, scholarships, and graduation requirements; proposing and implementing curriculum changes; teaching yearly; monitoring the budget and development and endowment funds; maintaining positive relations with the College's over 3,200 alumni; organizing fundraising efforts; writing grants to agencies and foundations; serving on numerous University committees; working with all academic deans, numerous faculty, student affairs personnel, registration and admissions office on issues related to the education of academically-talented students; working with Honors student organization; representing the Honors College locally, in the state, and in regional and national organizations; and overseeing the operation and appropriate use of the Honors Center and the Potter House Annex.

Major committee assignments from 1994-1999 included: WSU Presidential Search Committee; Council of Deans; Accreditation Self Study Committee on Undergraduate Education; Assessment, Accountability, and Accreditation Committee; Athletic Council; Center for Teaching and Learning Advisory Board; Conduct Board; Enrollment Management Task Force (chair); Thomas S. Foley Institute for Public Policy and Public Service Faculty Governing Board; Freshmen and Senior Year Experience Committees; Honorary Doctoral Degree Committee (chair); Multicultural Student Recruitment Task Force; Prestigious Scholarship Committee (chair); Sahlin Teaching Excellence Committee (chair); Marion E. Smith Faculty Teaching Excellence Committee (chair); Honors College Advisory Board (alumni and donors)

Director 1992-June 1994
University Honors Program
University of Maryland
College Park, MD 20742

Responsible for Honors education at the University of Maryland, College Park, including lower division general Honors program and over 30 departmental and college Honors programs. Approximately 1400 students, an Honors

Living/Learning Center, and six Honors floors in the residence halls. Day-to-day responsibilities included: recruiting faculty to teach Honors seminars; developing academic policies and programs, including an innovative freshmen seminar program; assisting departments and colleges with the creation of Honors programs; teaching yearly; supervising professional (Associate and Assistant Directors and Coordinator of the Francis Scott Key Scholarship Program) and clerical staff; chairing the Honors scholarship and other Honors award committees; overseeing the admissions process; preparing and monitoring budgets; organizing special orientation sessions for new Honors students; monitoring student advising and academic progress; working with Honors student organizations; serving on University-wide committees; assisting with the creation of study abroad opportunities for Maryland Honors students; and representing the Honors Program at University functions.

Affiliate Assistant Professor 1992 to June 1994
Department of Education Policy, Planning and Administration
University of Maryland
College Park, MD 20740

Member of the Graduate Faculty. Included in my responsibilities was teaching a graduate course, "The History of American Higher Education."

Project Director 1994
National Endowment for the Humanities Grant
University of Maryland

NEH grant obtained to explore the feasibility of establishing a core curriculum within the University of Maryland's Honors Program.

Assistant Director June 1988-June 1991
University Honors Program
University of Maryland
Also Acting Director of the University Honors Program from July 1, 1991 until January 1, 1992.

Responsibilities similar to those described above under Director.

Research Assistant 1986 to June 1988
National Center for Postsecondary Governance and Finance
University of Maryland
College Park, MD 20742

Assisted on a three-year federally funded Institutional Planning Project. Participated in all phases of the project including: preparing and implementing a national survey of planning practices; assisting with an extensive review of the literature; and helping to prepare case studies of 16 colleges and universities. The National Center was funded by a grant from the U.S. Department of Education and was a consortium of several universities, including: the University of Maryland, Columbia University, Stanford University, and Arizona State University.

Research Associate July 1986 to November 1987
American Association for Higher Education
One Dupont Circle, Suite 600
Washington, DC 20036

Assisted in the researching, writing, and preparing for publication a monograph on the selection of senior-level administrators in high education. Responsibilities included: review of all relevant literature; correspondence and interviews with experts at both executive search firms and at higher education institutions around the country; preparation and analysis of a survey of selected search committee chairs; and organization of regional meetings at which various components of the search process were discussed. Book title: "The Search Committee Handbook: A Guide to Recruiting Administrators"; published in December 1987. Project funded by grants from the Exxon Education Foundation and TIAA-CREF.

EDUCATION

UC Management Institute
University of California
Nominated by campus; attended Summer 2002

Management Development Program, 2000
Harvard University
Cambridge, Massachusetts

Doctor of Philosophy, 1990
University of Maryland
College Park, Maryland

Dissertation: Gubernatorial Commissions and Maryland Higher Education, 1946-1987

Master of Arts, 1978
San Diego State University
San Diego, California
German and Central European History

Bachelor of Arts, 1972
California Polytechnic State University
San Luis Obispo, California
Modern European History
Graduated with Honors

University of California, Berkeley, 1975
German, conversational and reading

Credentials:
California Community College Teaching Credential in History (lifetime credential)

Recent Honors:
Lifetime membership, Washington State University Alumni Association, 1999
Center for Teaching Excellence, University of Maryland, Teaching Awards, 1992 and 1993
Outstanding Teacher Award, UMCP Panhellenic Society, 1991
Honorary Induction into Phi Eta Sigma, 1997

Honorary Induction into Mortar Board, 1994
Honorary Induction into Phi Kappa Phi, 1993
Honorary Induction into Omicron Delta Kappa, 1991
Honorary Induction into Golden Key Honors Society, 1991

PROFESSIONAL ACTIVITIES

Invited Participant:
Salzburg Seminar Universities Project, Salzburg, Austria, April 1998. Asked to speak about "Meeting Students' Needs and the Role of Students in Institutional Affairs" and to facilitate a working group of American and European and Eastern European participants.

Publications in Progress
Asked by Jossey-Bass to edit a book on the development of UC Merced. Co-authoring the publication with Karen Merritt. Writing currently in progress. Expected publication: 2007

Publications:

Marchese, Theodore and Lawrence, Jane Fiori. The Search Committee Handbook, 2nd Edition. Stylus Press, 2006.

Lawrence, Jane Fiori. "Teaching Academically-Talented Students: Some Perspectives from Honors Programs/Colleges" The National Teaching & Learning Forum (Fall 1999)

Lawrence, Jane Fiori. "Innovative Approaches to Educating Academically-Talented Students at Metropolitan Colleges and Universities." Metropolitan Universities (Fall 1998)

Lawrence, Jane Fiori. "To be or not to be ….. an Honors College?" The National Honors Report (Fall 1998)

Lawrence, Jane Fiori. Guest Editor of special thematic issue of Metropolitan Universities on Honors Programs/Colleges (Fall 1998)

Lawrence, Jane Fiori. "Portz Scholars Program Honors the Contributions of John and Edythe Portz" The National Honors Report (Winter 1998), 23-25.

Lawrence, Jane Fiori. "1996 Portz Scholars Selected" The National Honors Report (Winter 1997), 61-63.

Spurrier, Robert and Lawrence, Jane Fiori. "Developing in Honors" The National Honors Report (Fall 1996), 7-8.

Lawrence, Jane Fiori. "The Educated Self: A Historical Perspective" Universe (Spring 1996), 20-26.

Lawrence, Jane Fiori. "Moving in Honors or how I changed from a Terp (the University of Maryland) into a Cougar (Washington State University)" The National Honors Report (Fall 1995), 28-30.

Mielke, Patricia and Lawrence, Jane Fiori. "Lessons Learned from Promoting Academic Agendas in the Residence Hall" Talking Stick (Publication of the Association of College and University Housing Administrators) (April 1995), 20-22.

Lawrence, Jane Fiori. "Honors Programs Within Multi-Campus Systems: Opportunities for Cooperation and Collaboration". The National Honors Report (Spring 1994), 4-5.

Gerrity, Deborah A., Lawrence, Jane Fiori, and Sedlacek, William E. "Honors and Non-Honors Freshman: Practical Information for Advisors," National Academic Advising Journal (Spring 1993).

Gerrity, Deborah A., Lawrence, Jane F., and Sedlacek, William E. "A Comparison of Incoming Honors and Non-Honors Freshmen at the University of Maryland, College Park 1990," Research Report #10-91, Counseling Center, University of Maryland at College Park, 1991.

Lawrence, Jane Fiori. "Honors Living at Maryland," The National Honors Report (Fall 1991), 5.

Lawrence, Jane Fiori and Marchese, Theodore J. "Encountering Search Committees" in New Directions for Higher Education: Administrative Careers and the Marketplace. San Francisco: Jossey-Bass, 1990.

Lawrence, Jane Fiori. "Commissions and Maryland Higher Education." Maryland Association for Higher Education Journal (Fall 1990).

Lawrence, Jane Fiori and Boyd, Carolyn P. "Honors at Maryland: A Look Both at a Year of Transition and Change." The National Honors Report (Fall 1990), 29-30.

Lawrence, Jane Fiori and Potts-Dupre, Lorine. "Collaborative Teaching and Learning: Essential to Honors Programs." The National Honors Report (Summer 1989), 13-16.

Potts-Dupre, Lorine and Lawrence, Jane Fiori. "Developing Effective Interdisciplinary and Collaborative Teaching Techniques with Honors Students. Proceedings of the Seventh Annual Conference on Non-Traditional and Interdisciplinary Programs, George Mason University, May 1989.

Lawrence, Jane Fiori. "A Review: The Search Committee Handbook: A Guide to Recruiting Administrators." Maryland Association for Higher Education Journal 11 (October 1988), 27-28.

Presentations:

2002-Present: Numerous presentations to community groups on UC Merced, including Rotary groups, Merced County Realtors, Merced City Council, Merced County Housing Authority and so forth

“Converting from an Honors Program to an Honors College” with Gary Bell, National Collegiate Honors Conference, Washington, D.C., October 2000.

“Honors Colleges” with Gary Bell, Ted Humphrey, National Collegiate Honors Conference, Orlando, FL., October 2000.

“Metropolitan Universities – Honors Inside and Outside the Loop” with Ada Long, Rae Rosenthal, and Jay Freyman. National Collegiate Honors Conference, Chicago, IL., November 1998.

“Service Learning in Honors: Results of a Survey of NCHC Member Institutions” National Collegiate Honors Conference, Chicago, IL, November 1998.

“Academics and the Importance of Scholarship” Panhellenic and Interfraternity Council Scholarship Celebration, WSU, (featured speaker), February 1998.

“Maintaining Traditions, Implementing Curriculum Change” with Ada Long. National Collegiate Honors Conference, Atlanta, GA, October 1997.

"Expanding Honors Programs and Articulating with Other Institutions" with George Mariz, National Collegiate Honors Conference, San Francisco, CA, November 1996.

"Successful Links with Honors Alumni" with Malcolm Russell and Norman Weiner, National Collegiate Honors Conference, San Francisco, CA, November 1996.

"The Honors Administrator: Rewards and Recriminations" with Gary Bell and Wallace Kay. National Collegiate Honors Conference, Pittsburgh, PA, November 1996.

"Making the Nation our Neighborhood: NCHC Satellite Seminar" with Robert Spurrier, K. Ann Dempsey, and Elizabeth Vieu. National Collegiate Honors Conference, Pittsburgh, PA, November 1996.

"Journey Not Destination: The Search for an Honorable Education" Honors Student Advisory Council Invited Lecture, Washington State University, April 11, 1995.

"Honors Offices, Budgeting, and Campus Politics" with Julia Bondanella and Earl Brown, National Collegiate Honors Conference, San Antonio, Texas, October 1994.

"Honors Residence Halls" with Ira Cohen and William Collins, National Collegiate Honors Conference, San Antonio, Texas, October 1994.

"Building Academic and Residential Communities within a University-wide Honors Program," Northeast Regional National Collegiate Honors Conference, Albright College, Reading, PA, April 1993.

"Creating a Culturally Diverse Honors Community" with Rae Rosenthal. Northeast Regional Collegiate Honors Conference, Albright College, Reading, PA, April 1993.

"Rogues, Scholars and Literati: 20th Century Maryland Leaders," National Collegiate Honors Conference, Baltimore, MD, October 1990.

"Interdisciplinary Approaches to Honors," SUNY Honors Directors and Faculty Conference, Nassau Community College, October 1989.

"Developing Effective Interdisciplinary and Collaborative Teaching Techniques with Honors Students," George Mason University's Non-Traditional and Interdisciplinary Programs Conference, May 1989.

"10 Ways to Improve the Search and Selection Process," Albright College (PA) December 1988.

"Gubernatorial Commissions and the Evolution of State Control Over Higher Education in Maryland," Education Policy, Planning and Administration Graduate Research Conference, University of Maryland, November 1988.

Lectured during 1986 and 1987 to undergraduate and graduate acting classes at the Shakespeare Theatre at the Folger, Washington, D.C. on the following topics: the Italian Renaissance, Elizabethan England, the English Revolution and Restoration, and the French Revolution.

Consultations:

Invited by the Provost at Iowa State University to review and make recommendations on how to improve honors education at that institution, June 2004.

Member of National Endowment for the Humanities grant review panel. February 2004.

Invited by the Director of the Honors Program at the University of Southern Maine to review, evaluate and make recommendations on how to improve honors education at the institution. October 2001.

Invited by the Director of the Honors Program at the University of Louisville to examine and recommend how to transform their college-based honors program into an Honors college. February 2001.

Invited by the Director of the Honors Program at the University of North Texas to review their Honors Program and to make recommendations for improvements. July 1998.

Invited by the Provost at North Carolina State University to consult on their University Scholars Program and Departmental and College Honors Program. Extensive report to Provost and Honors Council prepared. April 1998.

PROFESSIONAL ASSOCIATIONS

Association of American Colleges and Universities
National Collegiate Honors Council
- Member, Editorial Board for the Journal of the National Collegiate Honors Council (refereed journal)
- Chair, Portz Fund Committee
- Chair, Portz Scholars Selection Committee
- Co-Chair, Developing in Honors
- Member, Honors and Technology Committee
- Member, 1998 Conference Planning Committee, Chicago Conference
- Member, Long Range Planning Committee

American Association of Collegiate Registrars and Admissions Officers
American College Personnel Association
National Association of Student Personnel Administrators

John Garamendi, Jr.
Vice Chancellor
University Relations
University of California, Merced

John Garamendi Jr. received his B.A. from the University of California Berkeley and his M.B.A. from California State University Hayward. He has also been a Fulbright Scholar in Montevideo, Uruguay where he studied philanthropy.

Garamendi's background includes a highly successful track record in fund raising from his years working at UC Berkeley, UC Davis and the UC Office of the President. As a development professional, Garamendi has been part of several prominent fund-raising campaigns, including UC Berkeley's $1.1 billion *Campaign for the New Century*, UC Davis' $60 million *Mondavi Center for the Performing Arts Campaign*, and the planning for UC Berkeley's *Campaign for Memorial Stadium*.

The Vice Chancellor is the chief advancement officer for the UC Merced campus with responsibility for the areas of development, university relations, advancement services, governmental relations, communications, the UC Merced Foundation and its Board of Trustees, alumni affairs, and special events and protocol.

An Eagle Scout, former Army Reserve Officer and Peace Corps volunteer, Garamendi was raised in the California Delta community of Walnut Grove. He resides with his family in Merced, California.

JANET E. YOUNG

EDUCATION

Willamette University College of Law, Salem, Oregon
Doctor of Jurisprudence, 1977

Oregon State University, Corvallis, Oregon
Bachelor of Arts with Honors, 1974
Major: Political Science Minor: History

Corvallis High School, 1970

PROFESSIONAL EXPERIENCE

Associate Chancellor and Chief of Staff, University of California, Merced. October 2007 to present. **Assistant Chancellor and Chief of Staff**, June 2001 to September 30, 2007.

Chief of Staff, Los Alamos National Laboratory.
October 1998 to June 2001.

Associate to the President, University of California (System-wide).
October 1996 to October 1998.

Special Assistant to the President, University of California (System-wide).
September 1986 to October 1996.

Special Assistant to the President, Assistant to the Vice President, Oregon Health Sciences University, Portland, Oregon.
March 1980 to August 1986.

Assistant to Chancellor, Oregon State System of Higher Education, Eugene, Oregon. October 1978 to March 1980.

Administrative Intern to Chancellor, Oregon State System of Higher Education, Eugene, Oregon. October 1977 to October 1978.

Assistant to Dean of Students, Willamette University, Salem, Oregon. Spring semester 1977.

Law Clerk, firm of Mattson, Ricketts, Davies, Stewart and Calkins, Lincoln, Nebraska. Summer 1976.

Acting Associate Dean of Students, Willamette University (college student center, residence halls). Summer 1975.

Graduate Assistant, Willamette University, Office of the Vice President for Student Affairs. Academic years 1974-75 and 1975-76.

PROFESSIONAL ORGANIZATIONS	National Association of College and University Attorneys (1980-88) Society of University Patent Administrators (1984-86)
COMMUNITY ORGANIZATIONS	Rotary Club of Merced; Board of Directors (2004-2006) Board of Directors, Mercy Medical Center, Merced (Chair 2007-) Economic Development Advisory Committee, City of Merced Airport Authority Board, Merced Municipal Airport (Chair 2007-08) Board of Directors and Executive Board, Castle Air Museum Foundation Merced County High Speed Rail Committee Chancellor's Associates, Development Organization for UC Merced Los Alamos National Laboratory Foundation, Board of Directors (1998–2001) Vice President (2000-2001) Museum of New Mexico Foundation
HONORS AND AWARDS	1988 Professional Achievement Award (MAP), University of California OSU Woman of Achievement, 1973-74 Mortarboard Junior Class University Scholarship and Leadership Award National Student Register
UNIVERSITY ACTIVITIES	Oregon State University: Memorial Union President Memorial Union Board of Directors, Vice Chairman Board of Intercollegiate Athletics
PERSONAL	Hobbies: piano, reading, sailing, swimming, tennis
REFERENCES	Available upon request

PROFESSIONAL RESPONSIBILITIES IN APPOINTMENTS

Associate Chancellor and Chief of Staff, Assistant Chancellor and Chief of Staff, University of California, Merced. June 2001 to present. (UC Merced is the new 10th campus of the University of California and the only research university in the Central Valley. The campus opened in fall 2005 and will grow to a 25,000 student enrollment.)

Interact with the Chancellor on regular basis on issues of importance to UC Merced. Matters generally are of a substantial and complex nature, and often confidential.

Independently analyze and resolve issues and serve as a "trouble shooter" and point of contact in a wide range of areas.

Interface with senior campus administrators on issues of interest and significance to the Chancellor. Communicate views of the Chancellor to internal and external parties on issues of importance to the campus. Extensive participation in addressing public affairs matters.

Significant leadership role in planning for the development of the UC Merced campus, particularly with respect to satisfying requirements of the federal Clean Water Act Section 404 permit process and California Environmental Quality Act. This entails contributions to the development and execution of strategy, composition and editing of significant written materials, and interaction with representatives of local, state, and federal entities. Lead presenter for UC Regents' presentations and briefings for UC System senior executives.

PROFESSIONAL RESPONSIBILITIES IN APPOINTMENTS (cont'd)

Maintain effective on-going relationship with appointed and elected officials of the City and County of Merced and with staff of local Congressional representative. Lead negotiator in discussions with City and County on a wide variety of matters related to campus development. Represent the Chancellor's views on topics related to campus development to several local governmental and civic bodies. Actively engage in range of civic and community activities on behalf of UC Merced. Serve on City of Merced Technical Advisory Committee for the City General Plan Update.

Member of the Chancellor's Cabinet, a group of seven individuals comprising the top management of the campus. Coordinate Deans and Directors meetings and campus development planning sessions. Prepare topical agendas for the meetings described above and ensure that campus priorities are addressed. Member of Chancellor's steering committee for strategic academic planning.

Liaison to the University of California Office of the President and coordinator of UC Merced Regents' items. Liaison to the University's Office of the General Counsel for coordination of legal issues related to UC Merced. Campus coordinator for responses to information requests under the California Public Records Act. Locally Designated Official (LDO) for Whistleblower complaint management and resolution.

Led planning and implementation of several major events involving over 5,000 participants related to the opening of the UC Merced campus in September 2005.

Appointed by UC President to special ad hoc committee to examine University policies and practices related to executive compensation (May 2005 – present).

Represent UC Merced on board of directors of Limited Liability Company established to oversee development of University Community contiguous to campus. The University Community will feature residential and retail areas, business/research park, schools, entertainment and recreational venues.

Co-chair of UC Merced Information Technology Advisory Committee; chair of UC Merced campus events committee (2001-2005); significant involvement with UC Merced policy formulation; coordinated confidential searches for several key senior administrative personnel.

Chief of Staff, Los Alamos National Laboratory. October 1998 to June 2001. (Los Alamos National Laboratory is managed by the University of California under contract with the U. S. Department of Energy. During this time period, the annual budget for the Laboratory was $1.5 billion and the work force numbered about 12,000 employees.)

Interacted with Laboratory Director on regular basis on issues of importance to Laboratory, which were typically of a complex and sensitive nature. Independently pursued and resolved substantive issues, consistent with priorities of Director. Served as a "trouble shooter" and point of contact on broad range of topics. Provided independent analysis of complex matters and follow-up on critical issues of special interest to the Director. Represented Director's views in meetings and discussions with a wide variety of internal and external groups including UC, U.S. Department of Energy (DOE), community organizations, as well as Pueblo governing bodies, and elected and appointed governmental officials.

Member of Laboratory Senior Executive Team, a body of nine individuals comprising the top management of the Laboratory.

Experienced crisis manager, with hands-on involvement in the management of a wide variety of urgent and high profile national security issues, Congressional investigations, customer inquiries, internal and external complaints and other challenges to the management objectives of the Laboratory and the University.

PROFESSIONAL RESPONSIBILITIES IN APPOINTMENTS (cont'd)

Maintained liaison with University of California, developed UC Regents' items related to Laboratory.

Interacted with Senior Executive Team members on daily basis on Laboratory management issues and to ensure activities were consistent with Director's objectives; prepared topical agendas for Director for Senior Executive Team discussions, coordinated Director's Planning and Review meetings and set priorities for management's agenda.

Maintained effective working relationship with DOE Albuquerque Operations Office and Los Alamos Area Office. Participant in regular senior management meetings involving Laboratory Director and Albuquerque DOE leadership.

Extensive involvement with policy development, public affairs issues, and external relations activities.

Participant and key liaison to California legislative officials regarding certain Laboratory policies including labor relations.

Member of labor/employee relations planning committee. Developed and led implementation of resolution to significant Laboratory employee relations issue.

Coordinated significant Laboratory events and visits by special guests of the Laboratory including UC Regents and Senior Managers, the Secretary of Energy, DOE Deputy Secretary, DOE Under Secretary, Administrator of the National Nuclear Security Administration, and others.

Associate to the President, Special Assistant to the President, University of California (System-wide). September 1986 to October 1998. (During this period the University of California was comprised of nine campuses including five academic medical centers and university hospitals, with an enrollment of over 165,000 undergraduate, graduate, and professional students. The University also manages three National Laboratories under contract with the U. S. Department of Energy.)

Interacted daily with the President of the University on issues of a highly complex nature.

Independently resolved a wide range of substantive, complex, and confidential matters with Chancellors and Vice Presidents. Acted as a resource to Chancellors and, in many instances, served as the point of contact. Interacted with Chancellors, Vice Presidents, Laboratory Directors and Deputy Directors, Chair and Vice Chair of the Academic Council, and many other administrators and faculty members on a variety of issues.

Provided necessary independent follow-up on critical issues of special interest to the President. Served as a "troubleshooter" on many topics and completed confidential assignments at the request of the President. Provided analysis of complex matters as well as finished text and documents. Resolved confidential personnel issues regarding University executives.

Coordinator and lead negotiator for 1991-92 negotiations for renewal of the three five-year management contracts totaling about $3 billion annually for the National Laboratories managed by the UC for the U. S. Department of Energy (Lawrence Berkeley National Laboratory, Lawrence Livermore National Laboratory, Los Alamos National Laboratory). This involved working with the Senior Vice President -- Administration and laboratory executives in formulating an entirely new approach to the management contracts and negotiation of the provisions with the DOE.

Member of UC-DOE contract negotiation team for renewal of the National Laboratory management contracts, effective October 1, 1997.

PROFESSIONAL RESPONSIBILITIES IN APPOINTMENTS (cont'd)

Led UC initiative with U.S. Department of Energy concerning issues related to the University of California Retirement Plan (UCRP).

Primary UC representative to 1993-94 review of UC - DOE laboratory management contracts conducted by the U. S. General Accounting Office.

Coordinator for first phase of the President's economic development initiatives, with particular emphasis on the initiative focusing on technology transfer program expansion. This involved working with the Senior Vice President -- Administration, who chaired the initiatives steering group, as well as Chancellors and DOE Laboratory Directors.

Served as a member of the President's Cabinet, and developed Cabinet agendas. Served as a member of the UC National Laboratory Coordinating Council.

Facilitated on behalf of the President and attended meetings of the President and Vice Presidents, including special executive sessions comprised of the most senior of these officials, including the President.

Coordinated monthly Council of Chancellors meetings, including agenda preparation, and attended the Council meetings.

Coordinated major phase of University long range planning and the culminating 1987 special day-long presentation to the UC Board of Regents. Served as liaison for the UC President to ongoing long range planning work (1986-95).

Coordinated confidential executive searches for Chancellors, Vice Presidents, and National Laboratory Directors, working with UC President. Engaged in direct confidential discussions with finalist candidates in pursuit of a recruitment effort.

Participated in Transition Team meetings and ad hoc executive committee planning sessions concerning Office of the President re-organization. This occurred in conjunction with the appointment of a new UC President in 1992.

Familiarity with UC Medical School Faculty Clinical Compensation Plan and related policy and retirement plan matters, as well as with a broad range of health care and medical center management issues.

Attended meetings of the UC Board of Regents, exercised oversight of Regents' agenda items of particular interest to UC President, developed selected remarks for delivery by UC President at Regents' meetings.

Represented University or coordinated response to sensitive matters including past requests for high volume of public records directed to the University over many months concerning executive compensation. Worked with University Relations staff in responding to a number of media inquiries on a range of topics.

Represented University and negotiated a resolution to periodic protest demonstrations which occurred in the President's Immediate Office area.

Planned, coordinated, and supervised execution of inaugurations of newly appointed UC Chancellors, working with a campus liaison/coordinator from 1986 - 1991. Each inauguration involved 2,500 to 4,000 guests participating in a variety of ceremonies and events.

PROFESSIONAL RESPONSIBILITIES IN APPOINTMENTS (cont'd)

Special Assistant to the President, Assistant to the Vice President, Oregon Health Sciences University. (The Oregon Health Sciences University is the state's only academic health sciences center, comprised of schools of Dentistry, Medicine, and Nursing; a University Hospital; Crippled Children's Division, and an Institute for Advanced Biomedical Research.)

Coordinated state government relations program, legislative liaison, drafted legislation, and devised and executed lobby strategy, 1980 -1984.

Liaison for in-house legal issues to Oregon Department of Justice, contract drafting, risk management and tort liability policies.

Assisted University, School (Dentistry, Medicine, Nursing), and teaching hospital administrators and medical staff with a variety of administrative matters including faculty employment and tenure questions, student conduct issues, and medical staff policy drafting. Designed and coordinated implementation of Oregon Tort Claims Act mandated policies for clinical faculty; liaison for University to major criminal investigation by DHHS Office of Inspector General; assisted Vice President in effort to secure peace officer status for OHSU public safety officers; chaired campus radiation safety office consolidation study; participant in efforts to form faculty (medical) group practice organization; responsible for administrative rule drafting and adoption, etc.

March 1984 to August 1986: Assumed additional duties including administration of University patent, technology transfer, and copyright activities which involved restructuring and significantly increasing numbers of discovery disclosures and patent prosecutions, as well as license agreements pursued, working with faculty investigators, retained patent lawyers, and industry representatives. Other additional duties included supervision of bankruptcy matters, development of various University-wide administrative procedures, and management of University-owned real estate.

July 1980 to March 1984. Acting Director of Development/Acting Executive Director of OHSU Foundation (was asked to undertake these duties on an interim basis in addition to full-time responsibilities described above). Reorganized development/Foundation office; administered non-profit corporation OHSU Foundation, with asset growth from $4.4 million to in excess of $14 million, as only professional staff member; developed operating procedures and systems and participated in formulation of financial policies; worked with attorneys, donors, and medical staff in establishing estate plans and conveying gifts; managed Foundation real estate holdings; and supervised staff.

Assistant to the Chancellor, Oregon State System of Higher Education. October 1978 to March 1980. (The Oregon State System of Higher Education is the state's public system of higher education, comprised of eight universities and colleges.)

Liaison to 1979 Legislative Assembly for OSSHE; registered lobbyist. Represented Chancellor at variety of educational, governmental, and professional meetings, drafted position papers and correspondence, worked on daily basis with Chancellor, also with system Vice Chancellors, OSSHE institution presidents, and members of Board of Higher Education, attended monthly meetings of Board of Higher Education and monthly meetings of Chancellor, Vice Chancellors, and institution Presidents.

Richard M. Kogut
Associate Vice Chancellor and Chief Information Officer
University of California, Merced

Employment History

University of California, Merced 2002-present

Associate Vice Chancellor and Chief Information Officer
Created and evolved IT organization and infrastructure for a major new research university that opened in September 2005 and will gradually expand until enrollment reaches approximately 25,000 students. Scope includes academic and administrative computing as well as all telecommunications services.

- Deployed student information system (Banner) in 10+ months
- Deployed first production implementation worldwide of the Sakai Collaborative Learning Environment
- Championed pilot deployment of the Open Source Portfolio for Writing Program
- Oversaw deployment of best practices classroom technology strategy
- Inaugurated and deployed unified, scaleable, network services architecture based on best practices and innovative use of portal technology
- Successfully deployed all essential technology in time for campus opening
- Gained national reputation for UC Merced's information technology deployment:
  - 2006 Computerworld Honors Program Laureate
  - Campus Technology [Magazine] 2006 Innovator

Georgetown University 1997-2002

Chief Information Technology Architect (1998-2002)
Defined IT architecture and initiatives for Georgetown University, a major research university with approximately 12,500 students and 1,400 faculty. Worked with key industry vendors and the academic community to identify technologies of interest and establish relationships.

- Created architectural framework for delivering institution-wide network services, including directory, authentication, electronic mail, calendaring, and remote access to provide highly manageable services at reduced cost
- Constructed plan and partnerships to replace 35 building/10,000 port network with a fiber-to-the-desktop network employing emerging technology, enabling IP telephony, Internet 2 applications, etc. ($13M project budget)
- Served on oversight committee for PeopleSoft Financials implementation
- Developed strategic planning and project life-cycle management methodology for to effectively engage the management team and to enhance staff focus, understanding, and productivity
- Inaugurated and co-chaired the campus advisory body for technology adoption

Director of Technology Services (1997-1998)
Provided core information technology services to faculty, students, and staff. Mainframe and server platform operations and infrastructure; data, voice, and video networks; LAN services; training and help desks. Staff of 100+ and $7M budget.

- Completed replacement of Medical Center network with state-of-the-art technology enabling the deployment of new hospital applications
- Evolved and consolidated organization to provide better customer service

- Continued progress and provided stewardship in an acting CIO role facilitating the transition to a university-wide CIO structure

Brown University 1987-1997

Director of Systems and Operations (1994-1997)
Planned, implemented, operated, and provided user and technical support for the systems and networks used to run the major administrative applications, electronic mail and other general information services, most student computing, and significant academic research in a large campus environment. Staff of approximately 50 people and a multi-million dollar budget.

- Implemented platforms and support structure for client/server technology
- Deployed state-of-the-art network management and problem management
- Formulated enterprise-wide IT architecture
- Played key role in major financial systems upgrade (mainframe)

Manager, Systems Services (1987-1994)
Selected, implemented, and supported hardware and software platforms used for both academic and administrative computing. Supported central applications, departmental file servers, campus and local area networks, telecommunications, and connection to national and international networks.

- Designed and deployed fiber optic backbone interconnecting 100+ buildings via ATM and Ethernet
- Reduced unscheduled system interruptions from 2-3 per day to 1 per year while reducing the number of support personnel
- Supported mainframe HRIS implementation; identified and deployed state-of-the art change management system which significantly shortened implementation time line
- Developed and implemented technical and financial strategy for $3M mainframe upgrade

Compagnie IBM France 1974-1987

Staff Researcher (on assignment at the Institute for Research in Information and Scholarship at Brown University, 1984-1987)
Researched prototype solutions for the high-speed connection of Local Area Networks to IBM mainframes.

- Developed 3270 emulator and file transfer package ultimately forming the basis of an IBM software package
- Evaluated and influenced design of pre-product IBM LAN/mainframe interface units

Systems Engineer (Paris, France, 1976-1984)
Provided pre- and post-sales expert support for VM/370 mainframe products to IBM branch offices in France and other French-speaking countries.

- Specialized in large-systems performance analysis and tuning
- Assisted over 50+ branch offices
- Participated actively in customer/vendor organizations; regularly gave presentations and represented IBM in an official capacity

Visiting Researcher (IBM Paris Scientific Center, 1974-1975)
Primarily worked on developing prototype microcode to enhance IBM mainframe performance; some of this work was shipped with the IBM 370/148.

Brown University 1969-1974

Systems Programmer

Developed software exploiting virtual memory, enabling one of the earliest deployments of general availability of time-sharing services to students.

Education

ScB, Electrical Engineering, Brown University
ScM, Computer Science, Brown University

Professional Development

Leadership Development Program, Center for Creative Leadership, Greensboro NC

Organizations

Institute of Electrical and Electronics Engineers
Sigma Xi
EDUCAUSE Committee on Evolving Technologies (2000-2002)
EDUCAUSE Network Awards Committee (2004-2005)

Publications

"The Segment Based File Support System", Proceedings of the ACM SIGARCH-SIGOPS Workshop on Virtual Computer Systems, March 1973.
"Report on Network-to-Mainframe Connection Project", Institute for Research in Information and Scholarship Technical Report 86-1, October 1986.
"Razing the Firewall", Information Security Magazine, November 2000.
“The Vision Thing”, CIO Magazine, January 15, 2006.
Founding contributor to CIO Knowledge Space blog, CIO Magazine, January 2007-present.

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EMPLOYMENT

- University of California, Merced, Library
  - Founding University Librarian (2001-present)
- University of California, San Diego, Libraries
  - Associate University Librarian—User Support Services (1987-2001)
- Indiana University Libraries System (statewide)
  - Systems Officer (1983-87)
- University of Texas at Austin, General Libraries
  - Special Assistant, Information and Systems (1978-1983)
  - Assistant Head, Automated Cataloging Department (1976-1978)
  - Library Assistant, Humanities Research Center (1973-1975)

PROFESSIONAL

- Pacific Rim Digital Library Alliance
  - Secretariat Chair (2007-present)
- Library and Information Technology Association
  - Vice President (1994)
  - Board of Directors (1992-93)

EDUCATION

- University of Texas at Austin
  - Doctoral student—Information science (1976-77)
  - Master of Library Science (1975, Beta Phi Mu)
  - Graduate student—Russian literature/language (1970-71, Phi Kappa Phi)
- University of Texas at Arlington
  - B.A. Psychology (1968)

HONORS

- University of Texas at Austin, Graduate School of Library and Information Science, Alumnus of the Year (1984)
- University of Texas at Austin, General Libraries, Librarian Excellence Award (1983)

SELECTED PUBLICATIONS

With Karl K. Lo. "The Digital Pacific Rim Library of the University of California, San Diego," in *Proceedings of the Kyoto International Conference on Digital Libraries*. IEEE. (March 2001)

With Phyllis S. Mirsky and Karl K. Lo. "The Pacific Rim Digital Library Alliance," *D-lib Magazine* (July/August 1999)

With Phyllis S. Mirsky and Karl Lo. "From Farmington Plan to the Pacific Rim Digital Library Alliance: New Strategies in Developing International Collections," *Collection Management*. 24, 3&4: 241-250 (2000)

With Milton T. Wolf, "The Information Future," *Information Technology and Libraries.* 14, no.4: 215-269 (December 1995)

With Milton T. Wolf, *Thinking Robots, an Aware Internet, and Cyberpunk Librarians.* Chicago: Library and Information Technology Association, 1992. 200 p.

Books About the Future. Chicago: American Library Association, 1992. brochure, 12 leaves.

With Karl K. Lo, "Computers and Romanization of Chinese Bibliographic Records," *Information Technology and Libraries.* 10, no.3: 221-233 (September 1991)

"Images of Information Technology and Libraries in Science Fiction" in *Convergence.* Chicago: American Library Association, 1990. p.261-267

"Glossary of Terms, Networks, and Organizations" in *Library Perspectives on NREN: The National Research and Education Network.* Chicago: Library and Information Technology Association, 1990. p.71-75
Reprinted in:

- *The Whole Library Handbook.* Chicago: American Library Association, 1991. p.372-375.

"Contingency Planning Resources," *Information Technology and Libraries.* 9, no.2: 179-180 (June 1990)

"Libraries and Computers: Disaster Prevention and Recovery," *Information Technology and Libraries*. 7, no.4, 349-358 (December 1988)

"Viability of Automation Vendors," in *Library Hi Tech Bibliography*. 3, 121-128 (1988)

With Raymond Debuse and Susan K. Martin, "Biblio-Techniques, Inc.: The Promise that Was BLIS," in *Library Hi Tech*. 5, no.3, 40-41 (1987)

With Anne Rimmer, “Psychological Preparation for Automation,” in *Proceedings, Conference on Integrated Online Library Systems.* Canfield, OH: Genaway, 1987. p.373-383.

Systems Office Organization. (SPEC Kit 128) Washington: System and Procedures Exchange Center, Office of Management Studies, Association of Research Libraries, 1986. 97 p.

“Radiation, Ergonomics, Ion Depletion, and VDTs,” *Information Technology and Libraries.* 2, no.3: 151-158 (June 1983)
Reprinted in:

- *DoD Librarian Interfaces: 32nd Military Librarians' Workshop Proceedings.* San Diego: Naval Oceans Systems Center, 1989. p. 191-205
- *Training Issues in Changing Technology.* Chicago: Library Administration and Management Association, 1986. p.27-43
- *Alternative Library Literature, 1982-1983.* Phoenix: Oryx Press, 1984. p.32-37

This paper is frequently cited and excerpted. It forms the foundation for a number of related publications not cited here.

“Non-roman Scripts and Computer Terminal Developments,” *Information Technology and Libraries.* 1, no.2: 143-148 (June 1982)

“Planning, Creating, and Maintaining the Bibliographic Database,” in *Proceedings of the Preconference on Online Catalogs.* Houston: Texas Library Association, 1982. p.24-42.

“Authority Control in the Network Environment” in *Authority Control: The Key to Tomorrow's Catalog.* Phoenix: Oryx Press, 1982. p.36-52

Name Authority Control for Card Catalogs in the General Libraries. Austin: University of Texas at Austin, General Libraries, 1981. 144 p.

CURRICULUM VITAE

Personal Data:

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Present Position:

Professor
University of California, Merced

Diplomas and Training Since High School:

1979	B.A. in Biophysics University of California, Berkeley
1986	Ph.D. in Biophysics University of California, Berkeley

Professional Activities:

1985-1987	Postdoctoral Fellow Harvard Medical School, Boston
1988-1991	Postdoctoral Fellow/Assistant Professor Rockefeller University, New York
1991-2004	Permanent Research Staff Institut Pasteur, Paris Institut Jacques Monod, Paris
2000-2004	Professor (Cell Biology and Biochemistry) Université Paris – Denis Diderot, Paris

2004-… Professor (Cell Biology and Immunology)
University of California, Merced

Administration (main activities):

2001-2004 --Search Committee member (commission de spécialistes), Biology Department, Université Paris 7
(The Search Committee recruits teaching assistants, assistant professors and full professors once a year, in April-May)

2003-2004 --Member and vice-president, Scientific Council (conseil scientifique), Biology Department, Université Paris 7

2003-2004 --Co-director, Master's Program in "Cellular Microbiology"
Université Paris 5 (Institut Necker) and Université Paris 7 (Jussieu)

2004-… --Member or Chair, over 15 search committees, UC Merced
(genomics, evolution, developmental biology, statistics, bioengineering, systems biology, anthropology, stem cell biology, biophysics, complex diseases …)

2005-2008 --Faculty vice-chair, School of Natural Sciences, UC Merced

2008-… --Faculty chair, School of Natural Sciences, UC Merced

2005 --Vice-chair, UC Merced Committee on Academic Personnel (CAP)
(CAP is a faculty committee that makes final recommendations on appointment, tenure, and merit increases for the entire UC Merced campus)

2006-2007 --Chair, UC Merced Committee on Academic Personnel (CAP)

2007-2008 --Chair, "Quantitative and Systems Biology" Graduate Group, UC Merced

2007-… --UC Merced representative for University of California (UC) Planning Committee for creation of a UC-wide School of Global Health Sciences

2008-… --Vice Provost for Academic Personnel, UC Merced
(Half-time administrative position. Accepts recommendations from CAP and is responsible for the academic personnel process at UC Merced.)

Editorial Activities:

1997-1998 --Editor-in-chief, *Bulletin de l'Institut Pasteur*

1999-... --Review Editor and Associate Editor, *Microbes and Infection*
http://www.elsevier.com/locate/issn/12864579

2000-... --Member of Editorial Board, *Research in Microbiology*
http://www.pasteur.fr/infosci/publisci/presentation.html#rm

2003-... --Member of Editorial Board, *BMC Infectious Diseases*
http://www.biomedcentral.com/bmcinfectdis/

2003-... --Compilation of monthly "Disease Watch" section, *Nature Rev. Microbiol.*
http://www.nature.com/nrmicro/

2006-… --Member of Editorial Board, *Journal of Biological Chemistry*
http://www.jbc.org/

2006-… --Member of Editorial Board, *PLoS ONE*
http://www.plosone.org/

Technical and Scientific Roles:

2004-… --Ad hoc reviewer, "Innate immunity and inflammation" study section, National Institutes of Health

2001-… --Reviewer of manuscripts for: *Immunity*, *Journal of Experimental Medicine*, *Journal of Biological Chemistry*, *Journal of Immunology*, *Infection and Immunity*, *Antimicrobial Agents and Chemotherapy*, *Cellular Microbiology*

LIST OF ORIGINAL PUBLICATIONS

1. Tsui, F.C., Ojcius, D.M. & Hubbell, W.L. The intrinsic pKa values for phosphatidylcholine and phosphatidylethanolamine in phosphatidylcholine host bilayers. *Biophys. J.* (1986) 49:459-468.

2. Ojcius, D.M. & Solomon, A.K. Sites of p-chloromercuribenzene-sulfonate inhibition of red cell urea and water transport. *Biochim. Biophys. Acta* (1988) 942:73-83.

3. Janoshazi, A., Ojcius, D.M., Kone, B., Seifter, J.L. & Solomon, A.K. Relation between the anion exchange protein in kidney medullary collecting duct cells and red cell band 3. *J. Memb. Biol.* (1988)103:181-189.

4. Ojcius, D.M., Toon, M.R. & Solomon, A.K. Is an intact cytoskeleton required for native red cell urea and water transport? *Biochim. Biophys. Acta* (1988) 944:19-28.

5. Castella-Escola, J., Mattei, M.G., Ojcius, D.M., Passage, E., Valentin, C. & Cohen-Solal, M. In situ mapping of the muscle-specific form of phosphoglycerate mutase gene to human chromosome 7p12-7p13. *Human Genetics* (1990) 84:210-212.

6. Castella-Escola, J., Ojcius, D.M., Le Boulch, P., Joulin, V., Blouquit, Y., Garel, M.C., Valentin, C., Rosa, R., Climent-Romeo, F. & Cohen-Solal, M. Isolation and characterization of the gene encoding the muscle-specific isozyme of human phosphoglycerate mutase. *Gene* (1990) 91:225-232.

7. Ojcius, D.M. & Young, J.D.-E Characterization of the inhibitory effect of lysolipids on perforin-mediated hemolysis. *Molec. Immunol.* (1990) 27:257-261.

8. Jiang, S., Ojcius, D.M., Persechini, P.M. & Young, J.D.-E Resistance of cytolytic lymphocytes to perforin-mediated killing: Inhibition of perforin binding activity by surface membrane proteins. *J. Immunol.* (1990)144:998-1003.

9. Jiang, S., Ojcius, D.M. & Young, J.D.-E Perforin binding to cells and lipid membranes determined by a simple competition assay. *J. Immunol. Methods* (1990) 126:29-37.

10. Ojcius, D.M., Jiang, S., Persechini, P.M., Storch, J. & Young, J.D.-E Resistance to the pore forming protein of cytotoxic T cells: comparison of target cell membrane rigidity. *Molec. Immunol.* (1990) 27:839-845.

11. Jiang, S., Hasselkus-Light, C.S., Ojcius, D.M. & Young, J.D.-E Purification of a membrane-associated serine esterase from murine cytotoxic T lymphocytes by a single reverse phase column. *Protein Expression & Purification* (1990) 1:77-80.

12. Zheng, L.M., Zychlinsky, A., Liu, C.-C., Ojcius, D.M. & Young, J.D.-E Extracellular ATP as a trigger for apoptosis or programmed cell death. *J. Cell Biol.* (1991) 112:279-288.

13. Ojcius, D.M., Muller, S., Hasselkus-Light, C., Young, J.D.-E & Jiang, S. Plasma membrane-associated proteins with the ability to partially inhibit perforin-mediated lysis. *Immunol. Lett.* (1991) 28:101-108.

14. Zheng, L.M., Ojcius, D.M., Liu, C.-C., Kramer, M.D., Simon, M.M., Parr, E.L. & Young, J.D.-E Immunogold labelling of perforin and serine esterases in granulated metrial gland cells. *FASEBJ.* (1991) 5:79-85.

15. Ojcius, D.M., Persechini, P.M., Zheng, L.M., Barbosa, P.A.C.N., Sousa, S.C.A. & Young, J.D.-E Cytolytic and ion channel forming properties of the N-terminus of lymphocyte perforin. *Proc. Natl. Acad. Sci. USA* (1991) 88:4621-4625.

16. Ojcius, D.M., Zheng, L.M., Sphicas, E.C., Zychlinsky, A. & Young, J.D.-E Subcellular localization of perforin and serine esterase in lymphokine-activated killer (LAK) cells and cytotoxic T cells by immunogold labelling. *J. Immunol.* (1991)146:4427-4432.

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19. Ojcius, D.M., Zychlinsky, A., Zheng, L.M. & Young, J.D.-E Ionophore-induced apoptosis: role of DNA fragmentation and calcium fluxes. *Exp. Cell Res.* (1991) 197:43-49.

20. Persechini, P.M., Ojcius, D.M., Adeodato, S.C., Notaroberto, P.C., Daniel, C.B. & Young, J.D.-E Channel forming activity of the perforin N-terminus and an α-helical region homologous with complement C9. *Biochemistry* (1992) 31:5017-5021.

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23. Ojcius, D.M., Abastado, J.-P., Godeau, F. & Kourilsky, P. Binding of alanine-substituted peptides to the MHC class I protein K^d. *FEBS Lett.* (1993) 317:49-52.

24. Zheng, L.M., Ojcius, D.M. & Young, J.D.-E Perforin-containing cells during spontaneous abortion. *Biol. Reprod.* (1993) 48:1014-1019.

25. Ojcius, D.M., Godeau, F., Abastado, J.-P., Casanova, J.-L. & Kourilsky, P. Real-time measurement of antigenic peptide binding to empty and preloaded single-chain MHC class I molecules. *Eur. J. Immunol.* (1993) 23:1118-1124.

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34. Dittes, K., Gakamsky, D., Haas, E., Ojcius, D.M., Kourilsky, P. & Pecht, I. Picosecond fluorescence spectroscopy of a single-chain class I major histocompatibility complex-encoded protein in its peptide loaded and unloaded states. *Immunol. Lett.* (1994) 40:125-132.

35. Lone, Y.C., Bellio, M., Prochnicka-Chalufour, A., Ojcius, D.M., Boissel, N., Ottenhoff, T.H.M., Klausner, R.D., Abastado, J.-P. & Kourilsky, P. Role of the complementary-determining region 1 of the T-cell receptor β chain in the binding to a major histocompatibility complex class I-peptide complex. *Int. Immunol.* (1994) 6:1561-1565.

36. Roth, C., Kourilsky, P. & Ojcius, D.M. Ly-49-independent inhibition of NK cell-mediated cytotoxicity by a soluble MHC class I molecule. *Eur. J. Immunol.* (1994) 24:2110-2114.

37. Ojcius, D.M., Thibon, M., Mounier, C & Dautry-Varsat, A. pH and calcium dependence of hemolysis due to *Rickettsia prowazekii:* comparison with phospholipase activity. *Infect. Immun.* (1995) 63:3069-3072.

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51. Boleti, H., Ojcius, D.M. & Dautry-Varsat, A. Fluorescent labelling of intracellular bacteria in living host cells. *J. Microbiol. Meth.* (2000) 40:265-274.

52. Perfettini, J.L., Darville, T., Gachelin, G., Souque, P., Huerre, M., Dautry-Varsat, A. & Ojcius, D.M. Effect of *Chlamydia trachomatis* infection and subsequent TNFα secretion on apoptosis in the murine genital tract. *Infect. Immun.* (2000) 68:2237-2244.

53. Coutinho-Silva, R., Perfettini, J.L., Persechini, P.M., Dautry-Varsat, A. & Ojcius, D.M. Modulation of P2Z/P2X_7 receptor activity in macrophages infected with *Chlamydia psittaci*. *Am. J. Physiol.* (2001) 280:C81-C89.

54. Bonnin, A., Ojcius, D.M., Souque, P., Barnes, D.A., Doyle, P.S., Gut, J., Nelson, R.G., Petersen, C. & Dubremetz, J.F. Characterization of a monoclonal antibody reacting with antigen-4 domain of gp900 in *C. parvum* invasive stages. *Parasitol. Res.* (2001) 57:589-592.

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57. Perfettini, J.L., Darville, T., Dautry-Varsat, A., Rank, R.G. & Ojcius, D.M. Inhibition of apoptosis by gamma interferon in cells and mice infected with *Chlamydia muridarum* (the mouse pneumonitis strain of *Chlamydia trachomatis*). *Infect. Immun.* (2002) 70:2559-2565.

58. Jungas, T., Motta, I., Duffieux, F., Fanen, P., Stoven, V. & Ojcius, D.M. Glutathione levels and BAX activation during apoptosis due to oxidative stress in cells expressing wild-type and mutant cystic fibrosis transmembrane conductance regulator. *J. Biol. Chem.* (2002) 277:27912-27918.

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61. Lupu, M., Ojcius, D., Perfettini, J.L., Patry, J., Dimicoli, J.L. & Mispelter, J. Changes of sodium ion compartmentalization in biological systems due to pathological states. An NMR study. *Biochimie* (2003) 85:849-861.

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68. Pajot, A., Michel, M.L., Fazilleau, N., Pancre, V., Auriault, C., Ojcius, D.M., Lemonnier, F.A. & Lone, Y.C. A mouse model of human adaptive immune functions: HLA-A2.1-HLA-DR1-transgenic H-2 class I-/class II-knockout mice. *Eur. J. Immunol.* (2004) 34-3060-3069.

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78. Welter-Stahl, L., Ojcius, D.M., Viala, J., Girardin, S., Liu, W., Delarbre, C., Philpott, D., Kelley, K.A. & Darville, T. Stimulation of the cytosolic receptor for peptidoglycan, Nod1, by infection with *Chlamydia trachomatis* or *Chlamydia muridarum*. *Cell. Microbiol.* (2006) 8:1047-1057.

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81. Ying, S., Fischer, S., Pettengill, M., Conte, D., Paschen, S.A., Ojcius, D.M., Häcker, G. Characterization of host cell death induced by *Chlamydia trachomatis*. *Infect. Immun.* (2006) 74:6057-6066.

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CHAPTERS, COMMENTARIES AND INVITED REVIEWS

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2. Ojcius, D.M., Jiang, S. & Young, J.D.-E Restriction factors of homologous complement: A new candidate? *Immunol. Today* (1990) 111:47-49.

3. Ojcius, D.M. & Young, J.D.-E Cell-mediated killing: effector mechanisms and mediators. *Cancer Cells* (1990) 2:138-145.

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7. Horta, M.F.M., Ojcius, D.M. & Young, J.D.-E "Resistance of effector cells to perforin-mediated cytolysis," *in* NK Cell Mediated Cytotoxicity: Receptors, Signalling and Mechanisms (ed. E. Lotzova), CRC Press (1992), pp. 355-368.

8. Zychlinsky, A., Ojcius, D.M. & Young, J.D.-E "Large granular lymphocyte," *in* Encyclopedia of Immunology (ed. I.M. Roitt), Academic Press (1992), pp. 951-952.

9. Joag, S.V., Ojcius, D.M. & Young, J.D.-E "Killer and target: A tale of two cells," *in* Mononuclear Phagocytes. Biology of monocytes and macrophages (ed. R. van Furth), Kluwer Academic Publishers (1992), pp. 293-302.

10. Ojcius, D.M. & Dautry-Varsat, A. Les mille et une ruses des microbes intracellulaires. *La Recherche* (1995) 26:142-148.

11. Ojcius, D.M., Niedergang, F., Subtil, A., Hellio, R. & Dautry-Varsat, A. Immunology and the confocal microscope. *Res. Immunol.* (1996) 147:175-188.

12. Gachelin, G., Apostolou, I. & Ojcius, D.M. Introduction: novel specific immunity functioning alongside classical specific immunity. *Res. Immunol.* (1996) 147:271-358.

13. Duke, R.C., Ojcius, D.M. & Young, J.D. Cell suicide in health and disease. *Scientific American* (1996) 275:80-87.

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15. Ojcius, D.M., Liu, C.C. & Young, J.D. Pore-forming proteins. *Science & Medicine* (1998) 5:44-53.

16. Bavoil, P.M., Ojcius, D.M., Dautry-Varsat, A., Souriau, A., Bernard, F., Rodolakis, A. & Hsia, R-c. *Chlamydia trachomatis*, ennemi intérieur : de la biologie moléculaire aux modèles animaux. *Médecine et maladies infectieuses* (1999) 29 (suppl. 1):23-37.

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21. Ojcius, D.M., Darville, T. & Bavoil, P.M. Can chlamydia be stopped? *Scientific American* (2005) 292:72-79.

22. Verbeke, P., Stahl, L., Jungas, T., Delarbre, C., & Ojcius, D.M. "A pathogen with two personalities: death and survival during infection with *Chlamydia*", *in Chlamydia*: Genomics and Pathogenesis (eds. P.M. Bavoil & P.B. Wyrick), Horizon Bioscience (2006), pages 297-322.

23. Coutinho-Silva, R., Cruz, C., Persechini, P.M. & Ojcius, D.M. The role of P2 receptors in controlling infections by intracellular pathogens. *Purinergic Signalling* (2007) 3:83-90.

24. Perfettini, J.-L., Ojcius, D.M. & Kroemer, G. "L'Apoptose" *in* Encyclopaedia Universalis (2008).

25. Avila, M., Saïd, N. & Ojcius, D.M. The book reopened on infectious diseases. *Microbes Infect.* (2008) 10:942-947.

26. Coutinho-Silva, R., Corrêa, G., Sater, A.A. & Ojcius, D.M. The $P2X_7$ receptor and intracellular pathogens: a continuing struggle. *Purinergic Signalling* (2009) in press.

Christopher Viney

Resume

Current Appointments at the University of California, Merced, USA

July 2003: Professor of Engineering (appointed as one of the eight first founding members of the University's faculty). Tenured, Full Professor position, currently at Step V.
January 2008: Vice Provost for Undergraduate Education.

Previous Employment

- **Heriot-Watt University, Edinburgh, UK**:
  Professor of the Chemistry of Materials, and Head of Section for the Chemistry of Materials; Chemistry (December 1998 to July 2003). Also:
  - Deputy Head of Chemistry (August 1999 to July 2002).
  - Head of Chemistry, and Member of the School Management Group; School of Engineering and Physical Sciences (August 2002 to July 2003).
  - Elected Member of the Heriot-Watt University Court, and of the Finance Committee of Court (August 2000 to July 2003).
- **University of Oxford, UK**:
  University Lecturer in the Department of Materials, and Tutorial Fellow in Materials at St Catherine's College (February 1995 to December 1998).
- **University of Washington, Seattle, USA**:
  - Associate Professor (with tenure), Center for Bioengineering, and Adjunct Associate Professor, Department of Materials Science & Engineering, (September 1993 to January 1995).
  - Assistant Professor, Center for Bioengineering, and Adjunct Assistant Professor, Department of Materials Science & Engineering (December 1990 to September 1993).
  - Assistant Professor, Department of Materials Science & Engineering (December 1987 to December 1990).
- **IBM Almaden Research Center, San Jose, USA**:
  World Trade Visiting Scientist (September 1986 to September 1987).
- **University of Cambridge, UK**:
  - Postdoctoral Research Fellow, Department of Metallurgy & Materials Science (October 1983 to September 1986).
  - Lector in Engineering / Materials Science, Trinity College (January 1984 to September 1986).

Principal Research Experience

Scope

Biomolecular materials (interdisciplinary design of materials synthesis, assembly, processing, and physical property optimization strategies based on examples from Nature).

Physical science / engineering of polymers and liquid crystals (relationship between chemical structure, molecular order and properties; phase transformations and processing of thermotropic and lyotropic macromolecules; natural polymers and their derivatives).

Techniques

Light and electron microscopy, small- and wide-angle x-ray diffraction, computer modeling, thermal analysis, static and dynamic mechanical property characterization.

Degrees

- PhD (1983), Trinity College and Dept. of Metallurgy & Materials Science, University of Cambridge, UK. Dissertation: *Microstructural Aspects of Liquid Crystalline Polymers*. Advisor: Dr A.H. Windle.
- BA (1980), Trinity College and Dept. of Metallurgy & Materials Science, University of Cambridge, UK. Graduated with First Class Honours. MA (1984) conferred by right.

Professional Accreditation

CSci (2004); the Science Council, London, UK.
CChem, FRSC (1999); the Royal Society of Chemistry, London, UK.
CPhys, MInstP (1986); CPhys, FInstP (1999); the Institute of Physics, London, UK.

Professional Organizations

- **Royal Society of Chemistry**, London: Fellow; Chartered Chemist.
- **Institute of Physics**, London: Fellow; Chartered Physicist.
  - Committee Member, Polymer Physics Group (March 1999 to September 2003).
- **Materials Research Society**: Member.
  - Fall 1992 Symposium on *Biomolecular Materials*; Co-Organizer and lead Proceedings Editor.
  - Fall 1994 Symposium on *Characterization and Properties of Defects in Ordered Polymers*; Co-Organizer.
  - Fall 2004 Symposium on *Mechanical Properties of Bioinspired and Biological Materials*; Co-Organizer and lead Proceedings Editor.
  - Fall 2006 Symposium on *Mechanics of Biological and Bioinspired Materials*; Co-Organizer and lead Proceedings Editor.
- (Electron) **Microscopy Society of America**: Member.
  - 1991 Symposium on *Confocal Microscopy and 3-D Imaging*. Co-Organizer.
  - 1992 Symposium on *Microscopy of Small-Molecule and Polymeric Liquid Crystals*; Organizer.
- **ASM International**, Materials Park, Ohio: Fellow.
  - University of Washington Chapter: Adviser to Students 1989–1990.
  - Puget Sound Chapter:
    Executive Committee 1989-94.
    Treasurer 1990-91 (Chapter awarded 5-star status).
    Vice-Chairman 1991-92 (Chapter awarded 5-star status).
    Chairman 1992-93 (Chapter awarded 5-star status).
  - International:
    Member of 1994 Nominating Committee.
    Elected to 2000 Class of Fellows.
    Member, Materials Education Foundation Board of Trustees, 2005–2007.
- **American Chemical Society**: Member.
- **Sigma Xi, The Scientific Research Society**: Life Member.

- *International Workshops on Silks* (University of Virginia, Charlottesville).
  - *First International Workshop* (January 1993); Co-Organizer.
  - *Second International Workshop* (June 1998); Co-Organizer.
- *TAC 97* (combining the *Second UK National Thermal Analysis & Calorimetry Symposium* and *Thermal Analysis of Advanced Materials II*; University of Oxford, April 1997); Co-organizer.
- *EuroConferences on High Performance Fibers*.
  - *Fiber Fracture* (Cala Viñas, Majorca, Spain, October 2000); Vice Chairman.
  - *Self-Assembling Fibrous Materials* (Bad Herrenalb, Germany, September 2002); Chairman.

Editorial Boards and Activities

- *International Journal of Biological Macromolecules* (Elsevier, Amsterdam):
  - Senior Editor (Europe, Asia, Africa, Australia), March 1999 to June 2003.
  - Guest Co-Editor of March / April 1999 issue (v.24, nos 2,3).
  - Member of International Advisory Board, July 1995 to Feb. 1999.
- *Biorheology* (IOS Press, Amsterdam): member of Board of Editors, since July 1993.
- *MRS Bulletin* (Materials Research Society, Pittsburgh): Guest Editor of Sept. 1995 issue (v.20, no.9).
- *Institute of Materials* (London): member of Books Committee (formerly University Books Subcommittee), Dec. 1995 to Dec. 2005.
- *Bioengineering of Materials* (monograph series published by Birkhaüser, Boston): member of Editorial Advisory Board, since Dec. 1996.
- *Thermochimica Acta* (Elsevier, Amsterdam): Guest Editor of 5 May 1998 issue (v.315, no.1).
- *Current Opinion in Solid State and Materials Science* (Elsevier, Amsterdam): Guest Editor of March 2004 issue (v.8, no.2).

Honors and Awards

- Resolution *"to commend and recognize Dr. Christopher Viney for his outstanding volunteer community services within Merced County"* presented by the Merced County Superintendent of Schools. The resolution's observations include: "*Professor Viney is able to explain very complex natural processes and the behavioral properties of materials in terms that any audience can understand"* and *"Professor Viney teaches with enthusiasm and a passion for exciting students of all ages about engineering professions"* (April 2008).
- Honored by the Merced County Board of Supervisors in their 2008 Volunteer of the Year Recognition Program.

  Honorable Mention for Community Service as Speaker for Local Service Clubs and Coordinator for UC Staff Lectures at Challenger Center of Science Education.

  Certificates of Recognition were presented on behalf of the Merced County Board of Supervisors, the California State Assembly, the California State Senate, and the US House of Representatives (April 2008).
- Inaugural recipient of the Science Communicator Award, presented by the University of California at Merced Chapter of Sigma Xi, the Scientific Research Society (April 2008).

  Recognizing Outstanding and Unique Lectures, Presentations and Articles for Public Audiences, and a Long-Term Commitment to Science Communication.
- A poster presentation "Microstructure, Nanostructure and Properties of the Wasp Petiole" by Emily J. Reed and Christopher Viney won a first place award in the undergraduate research poster competition at UC Merced's First Annual Research Day (April 2007). It also won a first place award in the "Interdisciplinary Research" category at the Seventh Annual Sigma Xi Student Research Conference (Orlando, Florida, Nov. 2007).
- Air Force Association (Major General Charles I. Bennett, Jr. Chapter, Merced, CA): Chapter Award recognizing collaborative educational outreach activities (October 2006).

  The Chapter earned the California AFA Distinguished Achievement Award for Aerospace Education in 2006.

- UC Merced Faculty of the Year 2005-2006, presented by Student Affairs at the Inaugural University Awards Gala (May 2006).
- Elected to ASM International Materials Education Foundation Board of Trustees (2005 – 2007).
- Honorary Professor of Materials Chemistry, in the School of Engineering and Physical Sciences, Heriot-Watt University, Edinburgh, UK (Aug. 2003 - present).
- Walker Memorial Lecture, University of Edinburgh (Jan. 2002).
- UK Millennium Science, Engineering & Technology Student of the Year Awards: supervised winner of the Rolls-Royce Award for the Best Materials Student of 2000. (Prizes awarded to Heriot-Watt University and to project student.)
- Elected Fellow of ASM International (June 2000).

  For significant contributions to the understanding of structure-property-processing relationships in biomaterials and for leadership in materials education.
- 1999 Interdisciplinary Award, Royal Society of Chemistry (March 2000).

  Distinguished for research into biomolecular materials, polymers and liquid crystals.
- Invited Professor, Escuela de Ciencia e Ingeniería de los Materiales «Eduardo Torroja», Universidad Internacional Menéndez Pelayo, Santander, Spain (July 1998, July 2001 and July 2002).
- Campaign for Real Thermal Analysis Award, Thermal Methods Group, Royal Society of Chemistry (April 1997).
- Tutorial Fellowship, St Catherine's College, Oxford, UK (Feb. 1995 to Dec. 1998).
- Affiliate Professor, Center for Bioengineering, University of Washington, Seattle, USA. (Associate, Feb. 1995 - Sept. 1999; Full, Sept. 1999 - present).
- Elected to ASM International 1994 Nominating Committee (Dec.1993).
- Distinguished Teaching Award, University of Washington, Seattle, USA (April 1992).
- 3M Nontenured Faculty Grant Award (for research; three awards 1991, 1992 and 1993).
- Research Fellowship, Darwin College, Cambridge, UK (Oct. 1983 to Sept. 1986).
- Research Scholarship, Trinity College, Cambridge, UK (Oct. 1980 to Sept. 1983).
- Tripos Prize, Trinity College, Cambridge, UK (June 1980).
- Entrance Exhibition, Trinity College, Cambridge, UK (Oct. 1977 to Sept. 1979).
- G.A. Reynolds Entrance Scholarship at University of Cape Town, South Africa (Jan. 1977).
- Cape Provincial Administration Bursary, Cape Province, South Africa (for performance in 1976 Senior Certificate Examination; placed second in Cape Province).

Other Skills and Interests

Fluent in German and Afrikaans; good reading knowledge of Dutch; attempting to learn scientific and conversational Spanish; award-winning professional photography (nature, architecture); hiking; music (choral, classical organ); history; science outreach.

Personal

[redacted] [redacted]
Place of Birth: Skegness, Lincolnshire, UK
Nationality: US (by naturalization) and UK (by birth)

Christopher Viney

Technical Publications

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1. C. Viney and A.H. Windle, "Phase Transformations in the Thermotropic Liquid Crystal Polymer: 60/40 PABA/PET", *Journal of Materials Science* 17(9):2661-2670, 1982.
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13. A.M. Donald, C. Viney and A.P. Ritter, "The Parabolic Focal Conic Texture in a Lyotropic Liquid Crystalline Polymer", *Liquid Crystals* 1:287-300, 1986.

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15. C. Viney, "Using the Optical Microscope to Characterize Molecular Ordering in Polymers", *Polymer Engineering and Science* 26:1021-1032, 1986. **Invited**.

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48. L.A. Chick and C. Viney, "Entropy of rodlike particles: continuum versus lattice representations", *Molecular Crystals and Liquid Crystals* 204:123-132, 1991.

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116. D. Brown and C. Viney, "New Materials", in *Biotechnology: The Science and the Business (Second Edition)* (Edited by D.G. Springham, V. Moses and R.E. Cape), Harwood Academic Publishers, Amsterdam, 1999, pp.351-366. **Invited**.

117. C. Dai, P. Nguyen, T.B. Marder, A.J. Scott, W. Clegg and C. Viney, "Control of Single Crystal Structure and Liquid Crystal Phase Behaviour via Arene-Perfluoroarene Interactions", *Chemical Communications* 1999, Issue 24, pp.2493-2494.

118. S.W. Watt, I.J. McEwen and C. Viney, "Stability of Molecular Order in Silkworm Silk", *Macromolecules* 32:8671-8673, 1999.

119. C. Viney, "Mucus Liquid Crystallinity: is function related to microstructural domain size?", *Biorheology* 36:319-323, 1999.

120. N. Sharma, D. Carr, P. Kelly and C. Viney, "Modelling and Experimental Investigation into the Ballistic Behaviour of an Ultra High Molecular Weight Polyethylene / Thermoplastic Rubber Matrix Composite", in *Proceedings of the 12th International Conference on Composite Materials* (ICCM-12, Paris, July 1999), paper 915 (10 pages), ISBN 2-9514526-2-4 (CD-ROM, January 2000).

121. C. Joseph and C. Viney, "Electrical-Resistance Curing of Carbon-Fibre / Epoxy Composites", *Composites Science and Technology* 60:315-319, 2000.

122. J. Pérez-Rigueiro, C. Viney, J. Llorca and M. Elices, "Mechanical Properties of Single-Brin Silkworm Silk", *Journal of Applied Polymer Science* 75:1270-1277, 2000.

123. J.P. Craven, R. Cripps and C. Viney, "Evaluating the silk/epoxy interface by means of the Microbond Test", *Composites Part A: Applied Science and Manufacturing* 31:653-660, 2000.

124. E. Renuart and C. Viney, "Biological Fibrous Materials: Self-Assembled Structures and Optimised Properties", in *Structural Biological Materials* (Edited by M. Elices), Pergamon / Elsevier Science, Oxford, 2000, pp. 221-267. **Invited**.

125. C. Viney, "Silk Fibres: Origins, Nature and Consequences of Structure", in *Structural Biological Materials* (Edited by M. Elices), Pergamon / Elsevier Science, Oxford, 2000, pp. 293-333. **Invited**.

126. J.Y. Barghout, C. Viney and J.T. Czernuszka, "Characterisation of Spider (*Araneus diadematus*) Cocoon Silk Fibres", in *Proceedings of the 12th European Congress on Electron Microscopy* (EUREM volume 1: Biological Sciences, edited by S. Cech and R. Janisch), Czechoslovak Society for Electron Microscopy, 2000, pp. 509-510.
Also: ISBN 80-238-5503-4 (CD-ROM, 2000).

127. J. Pérez-Rigueiro, C. Viney, J. Llorca and M. Elices, "Mechanical Properties of Silkworm Silk in Liquid Media", *Polymer* 41:8433-8439, 2000.

128. F. Gray and C. Viney, "Packing of spheres around rods in supramolecular aggregates", *European Journal of Physics* 21:609-615, 2000.

129. C. Viney, "From Natural Silks to New Polymer Fibres", *Journal of the Textile Institute* 91(3):2-23, 2000. **Invited** contribution to special issue on *Technologies for a New Century*.

130. F.N. Braun and C. Viney, "Fluctuation-entanglement mechanism for director anchoring at nematic polymer surfaces", *Physical Review E* 63:031708, 2001 (4 pages).

131. J.Y.J. Barghout, J.T. Czernuszka and C. Viney, "Multiaxial Anisotropy of Spider (*Araneus diadematus*) Cocoon Silk Fibres", *Polymer* 42:5797-5800, 2001.

132. C. Viney, "New Polymers from our Oldest Suppliers: Building on 4 Billion Years of Research", in *Polymer '01. The New Polymers: Design, Development & Applications* (Edited by J. Watts), IoM Communications, London, 2001, pp. 1-7. **Invited**.

133. I.J. McEwen, S. Watt and C. Viney, "The effect of concentration on the rate of formation of liquid crystal and crystalline phases", *Polymer* 42:6759-6764, 2001.

134. J. Pérez-Rigueiro, M. Elices, J. Llorca and C. Viney, "Tensile properties of *Attacus atlas* silk submerged in liquid media", *Journal of Applied Polymer Science* 82:53-62, 2001.

135. C. Viney, "Natural Protein Fibers", in *Encyclopedia of Materials: Science and Technology* (Edited by K.H.J. Buschow, R.W. Cahn, M.C. Flemings, B. Ilschner, E.J. Kramer and S. Mahajan), Pergamon / Elsevier Science, Oxford, 2001, vol.6, pp. 5948-5957. **Invited**.

136. J. Trancik, J.T. Czernuszka, C. Merriman and C. Viney, "A simple method for orienting silk and other flexible fibres in transmission electron microscopy specimens", *Journal of Microscopy* 203(3):235-238, 2001.

137. J. Pérez-Rigueiro, M. Elices, J. Llorca and C. Viney, "Tensile properties of silkworm silk obtained by forced silking", *Journal of Applied Polymer Science* 82:1928-1935, 2001.

138. J. Pérez-Rigueiro, M. Elices, J. Llorca and C. Viney, "Tensile properties of *Argiope trifasciata* drag line silk obtained from the spider's web", *Journal of Applied Polymer Science* 82:2245-2251, 2001.

139. C. Viney, "Material Facts about Chemistry", *Studying Science & Engineering in Britain* 2(4):26-27, 2001. **Invited**.

140. M.A. Garrido, M. Elices, C. Viney and J. Pérez-Rigueiro, "Active control of spider silk strength: comparison of drag line spun on vertical and horizontal surfaces", *Polymer* 43:1537-1540, 2002.

141. C. Viney, "New materials from Nature's chemists", *Education in Chemistry* 39:15-17 and 20, 2002. **Invited**.

142. J. Pérez-Rigueiro, M. Elices, J. Llorca and C. Viney, "Effect of degumming on the tensile properties of silkworm (*Bombyx mori*) silk fiber", *Journal of Applied Polymer Science* 84:1431-1437, 2002.

143. F.I. Bell, I.J. McEwen and C. Viney, "Supercontraction stress in wet spider dragline", *Nature* 416:37, 2002.
DOI: 10.1038/416037a

144. M. Struthers, G. Rosair, J. Buckman and C. Viney, "The Physical and Chemical Micro-structure of the *Achatina fulica* Epiphragm", *Journal of Molluscan Studies* 68:165-171, 2002.

145. M.A. Garrido, M. Elices, C. Viney and J. Pérez-Rigueiro, "The variability and inter-dependence of spider drag line tensile properties", *Polymer* 43:4495-4502, 2002.

146. J. Buckman and C. Viney, "The effect of a commercial extended egg albumen on the microstructure of icing", *Food Science and Technology International* 8(2):109-115, 2002.

147. F.N. Braun and C. Viney, "Sliding friction of nematic elastomers", *Journal of Physics: Condensed Matter* 14:6771-6775, 2002.

148. C. Viney, "Fracture of Natural Polymeric Fibres", in *Fiber Fracture* (Edited by M. Elices and J. Llorca), Elsevier Science, Oxford, 2002, pp. 303-328. **Invited**.

149. R.A. Pethrick and C. Viney (Editors), *Techniques for Polymer Organisation and Morphology Characterisation* (243pp.), John Wiley & Sons, Chichester UK, 2003.

150. F.N. Braun and C. Viney, "Modelling self assembly of natural silk solutions", *International Journal of Biological Macromolecules* 32:59-65, 2003.

151. C. Smith, J. Ritchie, F.I. Bell, I.J. McEwen and C. Viney, "Creep and low strength of spider dragline subjected to constant loads", *Journal of Arachnology* 31:421-424, 2003.

152. C.E. Smith, P.S. Smith, R.Ll. Thomas, E.G. Robins, J.C. Collings, C. Dai, A.J. Scott, S. Borwick, A.S. Batsanov, S.W. Watt, S.J. Clark, C. Viney, J.A.K. Howard, W. Clegg and T.B. Marder, "Arene-perfluoroarene interactions in crystal engineering: structural preferences in polyfluorinated tolans", *Journal of Materials Chemistry* 14:413-420, 2004.
DOI: 10.1039/b314094f

153. N.A. Morrison, F.I. Bell, A. Beautrait, J. Ritchie, C. Smith, I.J. McEwen and C. Viney, "Do Natural Silks Make Good Engineering Materials?", in *Biological and Bioinspired Materials and Devices* (MRS Symposium Proceedings, vol. 823; Edited by J. Aizenberg, W.J. Landis, C. Orme and R. Wang), Materials Research Society, Warrendale PA, 2004, pp. 97-102 (pp. W8.4.1-W8.4.6).

154. S.W. Watt, C. Dai, A.J. Scott, J.M. Burke, R.Ll. Thomas, J.C. Collings, C. Viney, W. Clegg and T.B. Marder, "Structure and Phase Behaviour of a 2:1 Complex Between Arene- and Fluoroarene-Based Conjugated Rigid Rods", *Angewandte Chemie International Edition* 43:3061-3063, 2004.
(Alternative citation: *Angewandte Chemie* 116:3123-3125, 2004.)
DOI: 10.1002/anie.200453828

155. C. Viney, "Steamed Superhero?", *Materials Today* 7(7/8):64, 2004. **Invited**.
DOI: 10.1016/S1369-7021(04)00370-0

156. C. Viney, "Self-Assembly as a Route to Fibrous Materials: Concepts, Opportunities and Challenges", *Current Opinion in Solid State and Materials Science* 8:95–101, 2004.
DOI:10.1016/j.cossms.2004.04.001

157. C. Viney and F.I. Bell, "Inspiration versus Duplication with Biomolecular Fibrous Materials: Learning Nature's Lessons without Copying Nature's Limitations", *Current Opinion in Solid State and Materials Science* 8:165–171, 2004.
DOI:10.1016/j.cossms.2004.03.001

158. T.M. Fasina, J.C. Collings, D.P. Lydon, D. Albesa-Jové, A.S. Batsanov, J.A.K. Howard, P. Nguyen, M. Bruce, A.J. Scott, W. Clegg, S.W. Watt, C. Viney and T.B. Marder, "Synthesis, Optical Properties, Crystal Structures and Phase Behaviour of Selectively Fluorinated 1,4-bis(4'-pyridylethynyl)benzenes, 4-(phenylethynyl)pyridines and 9,10-bis(4'-pyridylethynyl) anthracene, and a $Zn(NO_3)_2$ Coordination Polymer", *Journal of Materials Chemistry* 14: 2395-2404, 2004.
DOI: 10.1039/b405128a

159. T.M. Fasina, J.C. Collings, J.M. Burke, A.S. Batsanov, R.M. Ward, D. Albesa-Jové, L. Porrès, A. Beeby, J.A.K. Howard, A.J. Scott, W. Clegg, S.W. Watt, C. Viney and T.B. Marder, "Synthesis, optical properties, crystal structures and phase behaviour of symmetric, conjugated ethynylarene-based rigid rods with terminal carboxylate groups", *Journal of Materials Chemistry* 15:690-697, 2005.
DOI: 10.1039/b413514h

160. J. Ritchie, C. Smith, F.I. Bell, I.J. McEwen and C. Viney, "Effects of Wetting and Desiccation on the Creep Properties of Spider Dragline Silk", in *Mechanical Properties of Bioinspired and Biological Materials* (MRS Symposium Proceedings, vol. 844; Edited by C. Viney, K. Katti, F.-J. Ulm and C. Hellmich), Materials Research Society, Warrendale PA, 2005, pp. 125-130 (pp. Y4.4.1-Y4.4.6).
ISBN: 1-55899-792-X

161. J.E. Trancik, J.T. Czernuszka, F.I. Bell and C. Viney, "Nanoscale Origins of Spider Dragline Mechanical Properties", in *Mechanical Properties of Bioinspired and Biological Materials* (MRS Symposium Proceedings, vol. 844; Edited by C. Viney, K. Katti, F.-J. Ulm and C. Hellmich), Materials Research Society, Warrendale PA, 2005, pp. 131-136 (pp. Y4.7.1-Y4.7.6).
ISBN: 1-55899-792-X

162. C. Viney, K. Katti, F.-J. Ulm and C. Hellmich (Editors), *Mechanical Properties of Bioinspired and Biological Materials* (MRS Symposium Proceedings, vol. 844; 342pp.), Materials Research Society, Warrendale PA, 2005.
ISBN: 1-55899-792-X

163. J.E. Trancik, J.T. Czernuszka, D.J.H. Cockayne and C. Viney, "Nanostructural physical and chemical information derived from the unit cell scattering amplitudes of a spider dragline silk", *Polymer* 46:5225–5231, 2005.
DOI: 10.1016/j.polymer.2005.04.007

164. J.E. Trancik, J.T. Czernuszka, F.I. Bell and C. Viney, "Nanostructural features of a spider dragline silk as revealed by electron and X-ray diffraction studies", *Polymer* 47:5633-5642, 2006. (**Invited** contribution to special issue in honor of Professor David Bassett.)
DOI: 10.1016/j.polymer.2005.01.110

165. E.J. Reed, M.R. Dunlap, J. Jasinski and C. Viney, "Microstructure, Nanostructure and Properties of the Wasp Petiole", *Materials Research Society Symposium Proceedings* 975E, Warrendale, PA, 2007), paper 0975-DD07-04.

166. C. Viney, K. Katti, C. Hellmich and U. Wegst (Editors), *Mechanics of Biological and Bio-Inspired Materials* (MRS Symposium Proceedings, vol. 975E), Materials Research Society, Warrendale, PA, 2007.

167. E.J. Reed, L. Klumb, M. Koobatian and C. Viney, "Biomimicry as a Route to New Materials: what kinds of lessons are useful?", *Philosophical Transactions of the Royal Society A*, 2009, in press. **Invited**.
DOI:10.1098/rsta.2009.0010

Christopher Viney

Research, Teaching and Infrastructure Support from *External* Agencies

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* *Joint study program* with Drs R.J. Twieg and T.P. Russell of the IBM Almaden Research Center, San Jose, CA.
  1 April 1988 to 31 March 1995.
  This program provided access to materials synthesis and characterization facilities in San Jose, and supported free exchange of materials and reimbursed travel between Seattle and San Jose.
  $140,000 estimated value of IBM support ($20,000 per year).

* *Applications of Liquid Crystalline Polymers*.
  Washington Technology Centers (WTC), Seattle, WA.
  1 July 1988 - 30 June 1993.
  $144,000 total.

* A Philips *x-ray generator* was donated by the IBM Almaden Research Center, San Jose, CA.
  27 October 1988.
  $35,000 estimated value.

- *Tailored Organometallic Polymers* (with R.M. Laine).
  Air Force Office of Scientific Research (AFOSR).
  1 May 1989 - 30 April 1992, extended to 31 October 1992.
  $480,000 total; $102,000 allocated to CV.

* *The Nucleation and Growth of Ordered Domains in Liquid Crystalline Polymers*.
  American Chemical Society Petroleum Research Fund (ACS-PRF).
  1 September 1989 - 31 August 1991.
  $18,000 total direct costs.

* *Liquid Crystalline Polymers and the Microstructure of Silk*.
  US Army Research Labs, Natick MA.
  1 April 1990 - 30 September 1990.
  $7,800 awarded as a Student Service Contract.

* *Liquid Crystalline Polymers and the Microstructure of Silk*.
  US Army Research Labs, Natick MA.
  1 July 1991 - 30 September 1991.
  $4,988 awarded as a Student Service Contract.

* *Liquid Crystalline Routes to Ordered Biopolymers*.
  US Army Research Labs, Natick MA.
  1 August 1991 - 31 July 1994, extended to 31 January 1995.
  $126,142 total.

* *3M Nontenured Faculty Grant Award*.
  3M Corporation, Ceramic Technology Center, St Paul MN.
  Three annual awards 1991-1993.
  $45,000 total direct costs.

- *Tailored Copolymers as Advanced Dental Restorations* (with R.M. Laine and J.I. Nicholls).
  National Institute of Dental Research (NIH / NIDR).
  30 September 1991 - 29 September 1994.
  $342,104 total direct costs; $131,000 direct costs allocated to CV.

* *Spinning Natural and Genetically Engineered Silk: Advancing Liquid Crystalline Polymer Technology* (with P. Yager).
  National Science Foundation (NSF).
  1 August 1992 - 31 July 1995.
  $450,000 total; approx. $300,000 allocated to CV.

* *From Natural Silk Secretions to High-Performance Fibers*.
  American Chemical Society Petroleum Research Fund (ACS-PRF).
  1 September 1992 - 31 August 1995.
  $50,000 total direct costs.

* *Acquisition of an Environmental Scanning Electron Microscope (ESEM)*.
  National Science Foundation (NSF). Proposal STI-9413464.
  July 1994.
  $197,340 total direct costs.

- *Modelling and Simulation of the Properties and Processing of Materials* (with 1 Principal Investigator and 15 other Co-Investigators).
  Higher Education Funding Council for England / Office of Science and Technology / Engineering and Physical Sciences Research Council (HEFCE / OST / EPSRC).
  December 1996.
  £726,000 total.

* *Microstructural Studies of Property-Optimised Polymer Fibres (Spider Silk)*.
  Engineering and Physical Sciences Research Council (EPSRC). Grant GR/L28326.
  1 August 1997 - 31 July 2000.
  £184,474 total.

- *Refurbishment of Polymer, Biomaterials and Metallurgical Processing Laboratories* (with 1 Principal Investigator and 4 other Co-Investigators).
  Higher Education Funding Council for England (HEFCE).
  May 1998.
  £136,400 total.

* *Birefringence of Natural Silks*.
  The Royal Society, London. Grant RSRG 20212.
  February 1999.
  £9,362 total direct costs.

* *Supramolecular Liquid Crystals* (with F. Gray).
  The Carnegie Trust for the Universities of Scotland: Vacation Scholarships for Undergraduates.
  April 1999.
  £570 total direct costs.

* *RSC Public Affairs Small Grants Scheme*.
  The Royal Society of Chemistry.
  September 1999.
  £250 total direct costs.

* *Towards high-performance fibres inspired by natural silk: an integrated approach* (with M. Elices).
  The British Council: *Acciones Integradas* Programme.
  March 2000.
  £4,950 total direct costs.

* *Time-dependent tensile properties of silk* (with J. Ritchie).
  The Carnegie Trust for the Universities of Scotland: Vacation Scholarships for Undergraduates
  May 2000.
  £760 total direct costs.

* *Creep Deformation of Natural Silks* (with C. Smith).
  The Nuffield Foundation. Grant URB/00210/G.
  May 2000.
  £1,380 total direct costs.

* *Nuffield Science Bursaries 2000* (with J.E. Parker and J.H. Cameron).
  The Nuffield Foundation (supporting summer vacation research by High School students).
  July 2000.
  £910 total direct costs.

* *Communicating the Attractions of Chemistry*.
  Esso Higher Education Support Scheme.
  August 2000.
  £10,857 total direct costs.

- *Dynamic Environmental Scanning Electron Microscopy (ESEM) Analysis* (with 1 Principal Investigator and 5 other Co-Investigators).
  Engineering and Physical Sciences Research Council (EPSRC); Multi-Project Research Equipment Proposal.
  1 October 2000 - 30 September 2003. Grant GR/N38435/01.
  £282,045 total.

* *Nuffield Science Bursaries 2001* (with J.E. Parker).
  The Nuffield Foundation (supporting summer vacation research by High School students).
  July 2001.
  £520 total direct costs.

* *EuroConference on Self-Assembling Fibrous Materials*.
  European Commission / European Science Foundation.
  Awarded 2001, for Conference held in Bad Herrenalb (Germany) 7-12 September 2002.
  Euro 50,545 total.

* *Centre For Biomimetic Design & Synthesis* (with P.D. Bailey).
  Scottish Higher Education Funding Council (SHEFC) Research Investment Fund & Science Research Investment Fund.
  1 May 2002 - 30 September 2002.
  £607,000 total.

* *Molecular Model Kits for Chemistry Undergraduates*.
  Motorola.
  November 2002.
  £780 total.

* *A SANS study of mucin-water phases*.
ISIS – Rutherford Appleton Laboratory.
February 2003.
£10,000 total.

- *Engineering Projects in Community Service (EPICS)*. Subcontract from Purdue University National EPICS Service Learning Program, supported by NSF (#DUE-0231361).
Co-PI; with R. Bales, M. Colvin, M. Conklin, T. Harmon, V. Leppert (PI), R. Winston, J. Wright.
1 February 2004 - 31 January 2008.
$112,000 total to UC Merced.

* *DLR: Implementing Student Excellence - A Unique Opportunity*.
National Science Foundation, Planning Grant (#EEC-0431972; ranked #1 by review panel).
PI; with M. Colvin, T. Harmon, V. Leppert.
1 August 2004 - 31 July 2006.
$99,918 total.

* *An Investigation of Hippopotamus "Sweat"*.
Unilever R&D (Port Sunlight, UK).
PI
March 2005.
$5,225 total.

- *Center of Integrated Nanomechanical Systems (COINS)*. Nanoscale Science and Engineering Center, supported by NSF. Subcontract from UC Berkeley (Multi-Campus Award #SA4593).
UC Merced Co-PI, with V. Leppert (PI) and T. Harmon.
1 September 2004 - 31 August 2009.
$525,000 total to UC Merced.

- *MRI: Acquisition of Cryogenic Capabilities for Microanalysis of Hard-Soft Nanoscale Materials in the Transmission Electron Microscope*.
National Science Foundation (#DMR-0521685).
Co-PI; with V. Leppert (PI), D. Kelley, D. Ojcius, P. O'Day.
1 September 2005 - 31 August 2008.
$246,526 total.

- *MRI: Acquisition of a Powder X-ray Diffractometer for Environmental & Materials Research at UC Merced*.
National Science Foundation (#EAR-0619398).
Co-PI; with P. O'Day (PI), S. Traina, V. Leppert.
1 August 2006 - 31 July 2008.
$187,407 total.

* Asterisks denote that CV was the principal investigator / applicant

Christopher Viney

Teaching Experience

Lectures, Courses and Modules

University of California at Merced

- ICP 1 (inaugural Freshman level *Integrated Calculus and Physics**; 8 credits; 5x; Fall Semester 2005, 2006, 2007 and Spring Semester 2006, 2007; jointly with one other faculty member). Lectured Physics component (and substituted on several occasions for the Mathematics faculty member); developed a laboratory exercise; offered office hours and evening review sessions on both the Physics and Calculus components.
- CORE 1 (inaugural Freshman level general education course *The World at Home – Planning for the Future in a Complex World I**; 4 credits; 8x; Fall Semester 2005 to 2008 and Spring Semester 2006 to 2009; jointly with other faculty members). *Introductory Lecture* (part); lecture on *Quantitative Literacy*; lecture on *The Rise of Science, Technology, Infrastructure and Expertise*; lecture on *Shifting the Origin: the Legacy of Copernicus, Galileo and Newton*; lecture on *Technology: Boon without Bane?*; participation in discussion sections and panels; introductory contextual material for several *CORE Friday* events. Co-Chair of planning committee, and principal coordinator of the course, 2004 – June 2007.
- CORE 100 (inaugural Junior level general education course *The World at Home – Planning for the Future in a Complex World II**; 4 credits; 2x; Spring Semester 2006, 2007; jointly with other faculty members). Lecture on *The Scientific Method applied to Public Policy*; lecture on *How to Give an Effective Presentation*.
- CORE 090X Freshman Seminar (*The Material World**; 1 credit; 2x; Fall Semester 2006, 2007). Presentations, demonstrations, practical exercises and discussions.
- CORE 090X Freshman Seminar (*Materials Innovation in History and the Arts**; 1 credit; 1x; Spring Semester 2007). Presentations, demonstrations, practical exercises and discussions.
- WRI 116 (Junior level *Writing in the Natural Sciences**; 4 credits; 2x; Fall Semester 2006 and Spring Semester 2007). Discussion section guest.
- ENGR 45 (Sophomore level *Introduction to Materials**; 4 credits; 2x; Spring Semester 2008, 2009). Included development of all lectures and weekly laboratory classes.
- ENGR 97 / ENGR 197 (*Service Learning**; 1 or 2 credits; 8x; Fall Semester 2005 to 2008 and Spring Semester 2006 to 2009). Mentored an inaugural team developing materials to enhance science curricula for *Merced County Office of Education*. Also, "skills session" lecture for all teams, on *How to Give an Effective Presentation*.
- BIOE 195 (*Upper Division Undergraduate Research**; 2 credits; 1x; Spring Semester 2008). Supervised student researching *Molecular Order in Natural Latex*.
- BIOE 199 (*Upper Division Individual Study**; 1 credit; 4x; Fall Semester 2005, 2006 and Spring Semester 2006, 2007). Supervised student researching *Nature's Uses for Liquid Crystalline Order*, and *Microstructure, Nanostructure and Properties of the Wasp Petiole*.
- CHEM 195 (*Upper Division Undergraduate Research**; 2 or 3 credits; 5x; Fall Semester 2006 to 2008 and Spring Semester 2007, 2008). Supervised student researching *Liquid Crystallinity in Suspensions of Filamentous Phage*.

- ENGR 195 (*Upper Division Undergraduate Research**; 2 credits; 1x; Fall Semester 2007). Supervised student researching *Molecular Order in Natural Latex*.
- AMSE 290 (Graduate level *Current Topics in Molecular Science and Engineering**; 3 credits; 1x; Fall Semester 2005; jointly with other faculty members). Mentored student readings and presentations for 2-week period.
- BEST 201 (Graduate level course *Special Topics in Materials**; 3 credits; 2x; Fall Semester 2007, 2008; jointly with other faculty members). Two-hour lecture on *Entropy, Materials and Life*.

*New material.

Development of scope and contents for the following inaugural majors / courses / programs:

- *Bioengineering* (led effort to establish Bioengineering as an opening major; led effort to define inaugural curriculum).
- *Materials Science & Engineering* (led effort to establish Materials Science & Engineering as a major; led effort to define inaugural curriculum).
- *Engineering Service Learning* (member of committee developing hallmark service learning program for all engineering students; PI on nationally top-ranked planning grant from NSF to support service learning).
- *General Education Core Courses* (co-chair of cross-school committee that developed 1-semester 4-credit course for Freshmen).
- *Integrated Physics and Calculus* (member of committee that developed 1-semester 8-credit course for Freshmen).

<u>Heriot-Watt University, Edinburgh</u>

- BSc I: *Chemical Principles** (1x; Spring Term 2003; jointly with other faculty members).
- BSc I: *Chemistry for Biological Scientists** (3x; Autumn Term 2000 to 2002; jointly with other faculty members).
- BSc II: *Molecular Structure and Spectroscopy* (1x; Summer Term 2003; jointly with other faculty members).
- BSc III: *Chemistry of Materials** (4x; Autumn Term 1999 to 2002; module co-ordinator; taught jointly with three other faculty members).
- BSc IV / MChem: *Microstructures and Properties of Material*s* (4x; Autumn Term 1999 to 2002; module co-ordinator; taught jointly with two other faculty members).
  This course was developed in formats suitable for both traditional and electronic delivery.
- BSc IV / MChem: *Computers in Chemistry** (4x; Summer Term 2000 to 2003; taught jointly with three other faculty members).
- Graduate level: *Supramolecular Self-Assembly of Biological Fibrous Materials** (1x; Summer Term 1999).

*New modules integrated into the curriculum.

- Chair, management committee overseeing provision of Chemistry modules for Life Sciences degrees.
- Co-originator of new degree program in *Chemistry with Forensic Science*.
- Director of degree program in *Chemistry with a Year in North America*.

University of Oxford (*denotes new courses integrated into the curriculum)

- First year Physical Sciences: *Structure of Materials: Introduction* (2x; Michaelmas Term 1997 to 1998). Included the first lecture taken by Freshmen entering the Department of Materials.
- First year Physical Sciences: *Transforming Materials: Polymer Synthesis** (4x; Hilary Term 1995 to 1998).
- Second year Metallurgy & the Science of Materials (MSOM) / Metallurgy, Economics & Management (MEM): *Structure and Transformations of Materials: Microstructures of Polymers** (4x; Hilary Term 1995 to 1996, Trinity Term 1997 to 1998).
- Second year MSOM/MEM: *Fluid Flow* (2x; Hilary Term 1997 to 1998).
- Second year MSOM/MEM: *Engineering Applications of Materials: Polymers** (4x; Trinity Term 1995 to 1998).
- Second year Supplementary Subject in Physical Sciences: *Materials Chemistry of Metals, Ceramics and Polymers* – Introductory lecture (1x; Michaelmas Term 1997) and all Polymer lectures* (3x; Hilary Term 1996 to 1998).
- Second year MSOM / third year MEM: *Tensor Properties of Materials* (1x; Michaelmas Term 1997; substitute for terminally ill colleague at short notice).
- Third year MSOM / third year MEM / fourth year EMS Advanced Option: *Polymer Molecules, Microstructures & Mechanical Properties** (4x; Michaelmas Term 1995 to 1998).
- Third year MSOM / fourth year MEM Advanced Option: *Electrical Polymers** (3x; Hilary Term 1996 to 1998).

University of Washington (*denotes new courses integrated into the curriculum)

- Junior level: *Materials Processing: Transport* (fluid flow, heat flow, diffusion), Department of Materials Science & Engineering (4x; Winter Quarter 1988 to 1991).
- Junior level: *Introduction to Research & Design*, Department of Materials Science & Engineering (2x; Spring Quarter 1989 and 1990).
- Junior level: *Practical Metallurgy**, Department of Materials Science & Engineering (1x; Fall Quarter 1990; jointly with 2 other faculty members).
- Graduate / Senior level: *Polymeric Materials**, Department of Materials Science & Engineering, and Center for Bioengineering (8x; Summer Quarter 1988, Spring Quarter 1989, Fall Quarter 1989 - 1994).
  This course was recorded on video and televised in Fall Quarter 1990.
- Graduate level: *Advanced Optical Microscopy & Imaging**, Department of Materials Science & Engineering (1x; Fall Quarter 1988).
- Graduate level: *Fundamentals of Materials Processing**, Department of Materials Science & Engineering (1x; Fall Quarter 1989; jointly with 2 other faculty members).
- Graduate level: *Materials Math**; Department of Materials Science & Engineering (1x; Spring Quarter 1990).
- Graduate level: *Liquid Crystals**, Center for Bioengineering, and Department of Materials Science & Engineering (3x; Spring Quarter 1991-1992, 1994).
- Graduate level: *Molecular Bioengineering Fundamentals**, Center for Bioengineering (4x; Fall Quarter 1991-1992, Spring Quarter 1992, 1994; jointly with other faculty members).
- Graduate level: *Biomedical Light Microscopy & Imaging**, Center for Bioengineering (1x; Spring Quarter 1993; jointly with 1 other faculty member).

Cambridge University

- Initiated and presented Graduate course on *Optical Microscopy*, Dept. of Materials Science & Metallurgy (2x; Jan. 1985 to Sept. 1986). First lecture course to be offered by a postdoctoral researcher in the Department.

Intensive Small Group Teaching

University of Oxford

Undergraduate Tutorials in Metallurgy & the Science of Materials (MSOM); Metallurgy, Economics & Management (MEM); Engineering & Materials Science (EMS).
Tutorials last for an hour; students typically attend singly or in pairs. The number of hours typically spent with each student, per topic in the following list, is indicated in parentheses. Exact contents depend on needs of each student.

- 1st year: Broad coverage of materials curriculum, including:
  Crystallography (4), *Metals & Alloys* (1), *Properties of Gases* (1), *Thermodynamics & Kinetics* (3), *Polymer Synthesis* (1), *Elasticity & Structures* (2), *Point Defects* (1), *Planar Defects & Dislocations* (2), *Plasticity* (1), *Fracture* (1), *Microstructures of Materials* (4), *Composites* (1), *Introduction to Processing* (1).
- 2nd year: Broad coverage of materials curriculum, including:
  Tensor Properties of Materials (2), *Fluid Flow* (1), *Extraction* (2), *Corrosion* (1), *Powder Processing* (1), *Strengthening Mechanisms* (2), *Creep* (1), *Microstructures of Polymers* (1), *Mechanical Properties of Polymers* (1), *Mechanical Properties of Composites* (1), *Engineering Applications of Polymers* (1).
- 3rd year: Advanced Option topics:
  Polymer Molecules, Microstructures & Mechanical Properties (2), *Electrical Polymers* (1), *Non-Ferrous Metallurgy* (1).

Third Year Team Design Project Adviser.
Projects are open-ended; they address design and market analysis, and may also involve demonstration of concept. They are intended to promote working in teams, i.e. managing a team project, dividing the workload sensibly, and communicating efficiently. Each team member spends a nominal 100 hours working on the project. The objective is to produce a report, in the form of detailed design proposals, which could be used by a manufacturer to launch a marketable product or by an engineer to implement a new process. Teams also deliver a formal presentation on their proposals, as if to a company Board.

Cambridge University

Supervisions in Undergraduate Natural Sciences.
Supervisions at Cambridge are equivalent to Tutorials at Oxford. The number of hours typically spent with each student per topic in the following list is indicated in parentheses.

- 1st year: *Crystalline Materials* (20), for St Edmund's House (Oct. 1981 to June 1982).
- 2nd year: *Crystalline State* (20), for Trinity College (Oct. 1981 to June 1986); *Metallurgy & Materials Science* (20), for Trinity College (Oct. 1982 to June 1986).

Supervisions in Undergraduate Engineering.

- 1st year: *Materials* (2), for Trinity College (Oct. 1983 to June 1986).
- 2nd year: *Materials - General and Electrical Options* (4), for Trinity College (Oct. 1982 to June 1986).
- 3rd year: *Materials - Production Engineering Option* (2), for Trinity College, Gonville and Caius College, and Peterhouse (Oct. 1987 to Dec. 1987).

Training Courses and Workshops Attended

Heriot-Watt University, Staff Development Programme

- Using the Web in Assessing Student Learning (27 Oct. 1999; Institute for Computer Based Learning / The Learning Technology Service).

University of Oxford, Staff Development Programme

- Refreshing Lecturing (28 Sept. 1995).
- Methods of Assessment: examining and assessing undergraduates (31 May 1996).
- Lecturing Skills Practice (8 Oct. 1996).
- Creating Knowledge: scholars, tutors and learning processes
  - The science of intuition: why understanding increases when you think less (11 Nov. 1997).
  - Why students don't learn (25 Nov. 1997).
- Pastoral Skills for Tutors (20 April 1998).

University of California at Merced, Center for Research in Teaching Excellence

- Who are Our Students? Maximizing Our Teaching Impact (25 February 2008).
- Who are First Generation and Generation 1.5 Students? Influences on Teaching and Learning (5 March 2008).
- Assessing Student Learning: Course, Program and Institutional Levels (10 March 2008).
- What is Our Role in WASC Accreditation? What the Faculty Needs to Know (12 March 2008).
- How can my Lectures be More Effective? Enriching Lectures with Active Learning (19 March 2008).
- How Scoring Rubrics can Save Time, Enhance Student Learning, and Improve Teaching (2 April 2008).
- How is Disability Services a Teaching Resource? (9 April 2008).

Christopher Viney

Graduate Students Supervised

University of Washington, Seattle, USA

- Daniel J. Brown (MS, Materials Science & Engineering, defended December 1994)
  "Computer Simulation of Microstructural Defects in a Nematic Liquid Crystal"
- Lawrence A. Chick (PhD, Materials Science & Engineering, defended July 1990)
  "Ordering of Rodlike Particles: Continuum versus Lattice Representations"
  Daytime contact: (509) 375-2145
- Christine M. Dannels (MS, Materials Science & Engineering, defended September 1990)
  "Microstructural Scale in Liquid Crystalline Materials"
  Daytime contact: (415) 940-6974
- Dwayne L. Dunaway (MS, Bioengineering, defended January 1994)
  "Mechanical Property and Diameter Evaluation of Epoxide-Treated Silk Fibers"
- Keith B. Guess (MS, Bioengineering, defended January 1995)
  "Effect of Spinning Rate on Properties of Major Ampullate Silk"
- Anne Huber (Baker) (PhD, Bioengineering, defended December 1995)
  "Chimeric Liquid Crystallinity of Bacterial Levan"
- Wendy S. Putnam (MS, Materials Science & Engineering, defended August 1990)
  "Effect of Processing Variables on Banded Textures in Liquid Crystalline Polymers"
  Daytime contact: (415) 620-3974
- Bradley L. Thiel (PhD, Materials Science & Engineering, defended December 1994)
  "The Hierarchical Structure of Spider (Major Ampullate) Silk"

University of Oxford, UK

- Simon Carmichael (MEng, Department of Materials, examined June 1997)
  "The Effect of a Post-Spinning Draw on the Molecular Order of *N. clavipes* Major Ampullate Silk"
- John Craven (MEng, Department of Materials, examined June 1998)
  "Silk-Epoxy Composites"
- Jonathan M. Davies (MEng, Department of Materials, examined June 1996)
  "Water-Mucin Phases"
- Chris Joseph (MEng, Department of Materials, examined June 1998)
  "Variable Matrix Cure in Carbon Fibre / Epoxy Resin Composites"

- Robert W. MacGregor (MEng, Department of Materials, examined June 1997)
  "Raman and Photoluminescence Studies of Plastic Deformation in Synthetic and Poly-crystalline Diamond"

- Nikhil Sharma (MEng, Department of Materials, examined June 1998)
  "Assessment of a Finite Difference Code for Selecting Materials Used in Body Armour"

- Jessika Ebba Trancik (DPhil, Department of Materials, examined March 2001)
  "Silk Microstructures"

Heriot-Watt University, Edinburgh, UK

- Fraser Ian Bell (PhD, Department of Chemistry, examined November 2003)
  "Effects of Temperature, Humidity and Time on the Mechanical Properties of Silk"

- Natalie Morrison (MChem, Chemistry, examined May 2003)
  "Is Natural Silk a Useful Material?"

- Stephen W. Watt (PhD, Department of Chemistry, examined November 2003)
  "Factors that Influence Molecular Packing in both Liquid Crystalline and Related Solid Phases"

University of California at Merced, USA

- Emily J. Reed (PhD, Biological Engineering and Small-scale Technologies (BEST) Graduate Group, in progress)

Christopher Viney

Service on Qualifying, General, and Final Examination Committees for Graduate Students
This list does ***not*** include service as principal research advisor

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University of Washington, Seattle, USA

Center for Bioengineering

- Douglas Arm (Principal Advisor: Prof. Allan F. Tencer)
  Passed PhD Qualifying Examination in November 1991

- Bryon Bhagwandin (Principal Advisor: Prof. Martin A. Afromowitz)
  Passed PhD Qualifying Examination in September 1991

- Carol DeWeese (Principal Advisor: Prof. Terry Lybrand)
  Passed PhD Qualifying Examination in September 1993

- Frederick T. Gittes (Principal Advisor: Prof. Jonathon Howard)
  Passed PhD General Examination in July 1993; defended PhD dissertation in November 1994 (*Mechanics of Microtubules and the Molecular Motor Kinesin*)

- Dan Leotta (Principal Advisor: Prof. Joan E. Sanders)
  Passed PhD Qualifying Examination in June 1993

- Shelli R. Letellier (Principal Advisor: Prof. Viola Vogel)
  Defended MSE thesis in March 1993 (*Molecular Assemblies at Interfaces: New Model Systems for Studying Biomaterial Interactions*)
  Passed PhD Qualifying Examination in October 1993

- Thor D. Osborn (Principal Advisor: Prof. Paul Yager)
  Passed PhD General Examination in July 1992; defended PhD dissertation in March 1994 (*Development of a Mass-Producible Lipid Bilayer Support Device*)

- Frederick (Fritz) Reitz (Principal Advisor: Prof. Leonard J. Pagliaro)
  Passed PhD Qualifying Examination in September 1993

- Ann E. Schmierer (Principal Advisor: Prof. Buddy D. Ratner)
  Passed PhD Qualifying Examination in May 1992

- Philip Tan (Principal Advisor: Prof. Patrick Stayton)
  Passed PhD Qualifying Examination in February 1994

- Kimberly A. Trabbic (Principal Advisor: Prof. Paul Yager)
  Passed PhD Qualifying Examination in February 1994; passed PhD General Examination in August 1996; defended PhD dissertation in August 1999 (*Control of Fibroin Conformation: Toward the Development of a Biomimetic Spinning Process for Silk Fibers*)

Dept. of Chemical Engineering

- Richard A. Brouns (Principal Advisor: Prof. G.Graham Allan)
  Passed PhD General Examination in September 1991; defended PhD dissertation in July 1993 (*Reaction Mechanisms and Kinetics in Epoxy/Dicyanate Co-Reactive Resins*)

Dept. of Electrical Engineering

- Michael R. Tidwell (Principal Advisor: Prof. Thomas A. Furness)
  Defended MS thesis in January 1995 (*A Virtual Retinal Display for Augmenting Ambient Visual Environments*)

Dept. of Materials Science & Engineering

- Robin S. Adams (Principal Advisor: Prof. Lucien N. Brush)
  Defended MS thesis in May 1994 (*A Weakly Non-Linear Analysis of Finite Amplitude Interface Instability During the laser Melting of Thin Silicon Films*)

- Jean-Maurice Férauge (Principal Advisor: Prof. William D. Scott)
  Defended MS thesis in August 1989 (*Characterization of Low Velocity Impact Damage in a Twenty Four Ply Graphite-Epoxy Laminate*)

- F. Robert Frazier (Principal Advisor: Prof. Michael J. Kaufman)
  Defended MS thesis in August 1989 (*Microstructure-Property Relationships in Al_3Nb Alloys*)

- Dennis Gallagher (Principal Advisor: Prof. Ilhan A. Aksay)
  Defended PhD dissertation in August1988 (*Dispersion in Nonaqueous Solvents for Enhanced Consolidation*)

- Kevin Gaw (Principal Advisor: Prof. F. Ohuchi)
  Defended MS thesis in October 1993 (*Mineralization of Hornified Cellulose Fibers by in situ Precipitation of Calcium Carbonate*)

- Edward W. Hare (Principal Advisor: Prof. Robert G. Stang)
  Passed PhD General Examination in January 1991 (*The Effects of Impurity Elements on the Stress Relaxation and Creep Characteristics of Eutectic Sn-Pb Solder*)

- Richard A. Kennish (Principal Advisor: Prof. Richard M. Laine)
  Defended MS thesis in July 1989 (*Decomposition Pathways of Organometallic Precursors Used in the Fabrication of High T_c Superconducting Fibers*)

- John J. Lannutti (Principal Advisor: Prof. Ilhan A. Aksay)
  Defended PhD dissertation in July 1990 (*Inorganic Polymers in Ceramic Processing*)

- Timothy R. Robinson (Principal Advisor: Prof. Richard M. Laine)
  Defended MS thesis in December 1990 (*Novel, Low Temperature Synthetic Routes to Tailored Soluble Silicates*)

- Barbara J. Tarasevich (Principal Advisor: Prof. Ilhan A. Aksay)
  Defended MS thesis in June 1988 (*Colloidal Interactions and Packing of Nanometer-Sized Particles; Applications to Gel Processing*)

- Mehrdad Yasrebi (Principal Advisor: Prof. Ilhan A. Aksay)
  Defended PhD dissertation in December 1988 (*Microstructural Development in Ceramic-Polymer Systems*)

- Shahrzad Zarkoob (Principal Advisor: Prof. W.D. Scott)
  Defended MS thesis in June 1994 (*ISO 9000 and How it Affects the Underground Cable Industry*)

- Zhi-Fan Zhang (Principal Advisor: Prof. Richard M. Laine)
  Defended MS thesis in August 1990 (*Fabrication of High T_c Superconducting Fibers from Organometallic Precursors*)

Dept. of Physics

- Douglas J. Tweet (Principal Advisor: Prof. Larry B. Sorensen)
  Defended PhD dissertation in December 1990 (*X-Ray Determination of the Molecular Tilt and Layer Fluctuation Profiles of Freely Suspended Liquid Crystals*)

- Tianming Zhang (Principal Advisor: Prof. Larry B. Sorensen)
  Passed PhD General Examination in October 1993 (*Critical Behavior in the Smectic-A Phase*)

University of Oxford, UK

Dept. of Materials

- Alison Lawson (Principal Advisor: Dr Jan Czernuszka)
  Defended D.Phil. thesis in March 1999 (*Collagen – Calcium Phosphate Composites*)

- Hwee Koon Tay (Principal Advisor: Dr John M. Sykes)
  Defended D.Phil. thesis in July 1997 (*Barrier Properties of Water-Borne Polymeric Coatings and Corrosion Protection*)

Dept. of Opthalmology

- Jyotin C. Pandit (Principal Advisor: Dr John M. Tiffany)
  Defended Master of Science by Research thesis in July 1996; again in November 1998 (*The Role of Mucins in Human Tear Fluid*)

Heriot-Watt University, Edinburgh, UK

Dept. of Chemistry

- Juliet D. Cameron (Principal Advisor: Prof. Ian Cowie)
  Defended PhD thesis in June 2000 (*Investigation of the Mechanical and Structural Properties of Cellulose Tricarbanilate / Polymethacrylate Blends*)

- Simona Gagliardi (Principal Advisor: Dr Valeria Arrighi)
  Defended PhD thesis in January 2003 (*Conformation and Dynamics in Cyclic and Linear Polymers by Neutron Scattering Techniques*)

University of California at Merced, USA

Physics and Chemistry Graduate Group

- Korana Burke (Principal Advisor: Prof. Kevin Mitchell)
  Passed PhD Qualifying Examination in May 2007

Biological Engineering and Small-scale Technologies (BEST) Graduate Group

- Eric Chen (Principal Advisor: Prof. Wei-Chun Chin)
  Passed PhD Qualifying Examination in August 2008

- Gayatri Premasekharan (Principal Advisor: Prof. Valerie Leppert)
  Passed PhD Qualifying Examination in October 2008

World Cultures and History Graduate Group

- Trevor D. Albertson (Principal Advisor: Prof. Gregg Herken)
  Passed PhD Qualifying Examination in November 2007

University of Cambridge, UK

Dept. of Materials Science & Metallurgy

- S. Eilidh Bedford (Principal Advisor: Prof. Alan H. Windle)
  Defended PhD dissertation in June 1992 (*Computational Prediction of Liquid Crystalline Microstructures*)

Dept. of Physics

- Owen M. Astley (Principal Advisor: Dr Athene M. Donald)
  Defended PhD dissertation in December 2000 (*Scattering Studies of Cell Wall Polymers*)

- Anne L. Fletcher (Principal Advisor: Dr Athene M. Donald)
  Defended PhD dissertation in February 1998 (*Cryogenic Developments and Signal Amplification in Environmental Scanning Electron Microscopy*)

University of Limerick, Ireland

Dept. of Materials Science and Technology

- Gordon James Armstrong (Principal Advisor: Prof. Martin Buggy)
  Defended PhD thesis in December 2002 (*Self-Assembling Hydrogen-Bonded Polymers*)

Christopher Viney

Seminar, Colloquium, and Conference Presentations (external; selected; as presenter)

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1. G.R. Mitchell, C. Viney and A.H. Windle
"The Relationship of Molecular Organisation to the Optical Textures of Liquid Crystalline Polymers"
1982 Modern Metallography in Metallurgy Conference & Exhibition, University of Cambridge, UK (6-8 Sept. 1982)

2. C. Viney and A.H. Windle
"Interpretation of Optical Microstructures of Liquid Crystal Polymers"
Biennial Conference on *Physical Aspects of Polymer Science*, University of Reading, UK (14-16 Sept. 1983)

3. C. Viney
"Optical Microscopy of Liquid Crystalline Polymers"
Invited Presentation, Symposium on *Polymer Characterisation*, Instituttet for Kemiindustri, The Technical University of Denmark, Lyngby, Denmark (26 March 1984)

4. C. Viney
Various (4) prepared discussion contributions
Faraday Discussion no.79: *Polymer Liquid Crystals*, University of Cambridge, UK (1-3 April 1985)

5. C. Viney
"Molecular Ordering as Deduced from Optical Microscopy"
Invited Presentation, Department of Physics, University of Reading, UK (29 April 1985)

6. C. Viney and A.H. Windle
"Molecular Ordering in Nitrocelluloses"
21st Anniversary Conference on Physical Aspects of Polymer Science, University of Reading, UK (11-13 Sept. 1985)

7. C. Viney and A.H. Windle
"Lyotropic Behaviour of Nitrocellulose"
11th International Liquid Crystal Conference, Berkeley, CA (30 June - 4 July 1986)

8. C. Viney and A.H. Windle
"Molecular Ordering of Nitrocellulose"
Cellucon '86: Wood and Cellulosics, The North East Wales Institute, Wrexham, UK (14-18 July 1986)

9. C. Viney
"Intermolecular Correlations in Liquid Crystalline Polymers"
Invited Presentation, Department of Chemistry, Stanford University, Palo Alto, CA (6 March 1987)

10. C. Viney
"Intermolecular Correlations in Liquid Crystalline Polymers"
Invited Presentation, Department of Materials Science & Engineering, University of Washington, WA (13 March 1987)

11. C. Viney, D.Y. Yoon, B. Reck and H. Ringsdorf
"Phase Behaviour and Molecular Ordering in a Polymer with both Thermotropic and Lyotropic Properties"
Gordon Research Conference on Liquid Crystals, Wolfeboro, NH (22-26 June 1987)

12. C. Viney
"Transmitted Polarised Light Microscopy of Liquid Crystalline Polymers: Critical Interpretation of Contrast"
Invited Presentation, Istituto Guido Donegani, Novara, Italy (8 July 1987)

13. C. Viney
"Transmitted Polarised Light Microscopy of Liquid Crystalline Polymers: Critical Interpretation of Contrast"
Invited Presentation, Istituto di Chimica Industriale, Genoa, Italy (9 July 1987)

14. C. Viney
"A Flexible View of some Rigid Molecules"
Invited Presentation, Battelle Pacific Northwest Laboratories, Richland, WA (1 April 1988)

15. C. Viney, R.J. Twieg, T.P. Russell and L.E. Depero
"The Structural Basis of Transitions between Highly Ordered Smectic Phases in Semi-Fluorinated Alkanes"
12th International Liquid Crystal Conference, Freiburg, West Germany (15-19 Aug. 1988)

16. R.J. Twieg, C. Viney and K.M. Betterton
"Novel Synthesis of 4,4'-di-n-alkylphenylbenzoates and the Characterization of their Liquid Crystalline Transitions"
12th International Liquid Crystal Conference, Freiburg, West Germany (15-19 Aug. 1988)

17. C. Viney
"Effect of Processing Environment on Order in Liquid Crystalline Polymer Matrix Materials"
U.S./Japan Workshop on the *Processing of Advanced Ceramics*, Seattle, WA (21-24 Aug. 1988)

18. L.A. Chick, C. Viney and I.A. Aksay
"Liquid crystal-like phase separation in systems of macroscopic rods"
Materials Research Society (MRS) 1988 Fall Meeting, Boston, MA (28 Nov. - 3 Dec. 1988)

19. L.A. Chick, C. Viney and I.A. Aksay
"Phase Separation in Rod-like Particles and Implications for Composite Structure"
63rd Colloid and Surface Science Symposium, sponsored by the American Chemical Society (ACS) Division of Colloid and Surface Chemistry, Seattle, WA (18-21 June 1989)

20. C. Viney
"Crystallinity and Ordered Structures in Polymers: Concepts and Challenges"
Invited Opening Paper, *Du Pont Polymer Products Department TECHCON 89*, Princeton, NJ (5-7 June 1989)

21. C. Viney
"Light Microscopy of Polymers"
Invited Tutorial, *47th Annual Meeting of the Electron Microscopy Society of America (EMSA)*, Symposium on *Microscopy of Polymers*, San Antonio, TX (6-11 Aug. 1989)

22. C. Viney
"Liquid Crystalline Polymer Textures near the Resolution Limit of the Light Microscope"
Invited Paper, *47th Annual Meeting of the Electron Microscopy Society of America (EMSA)*, Symposium on *Microscopy of Polymers*, San Antonio, TX (6-11 Aug. 1989)

23. C. Viney and W.S. Putnam
"On Resolving Fine Periodic Microstructures in the Optical Microscope"
47th Annual Meeting of the Electron Microscopy Society of America (EMSA), Symposium on *Microscopy of Polymers*, San Antonio, TX (6-11 Aug. 1989)

24. C. Viney
"Light Microscopy of Liquid Crystalline Polymers"
Invited Paper, *American Chemical Society (ACS) 198th National Meeting*, Symposium on *Advances in Liquid Crystalline Polymers*, Miami Beach, FL (10-15 Sept. 1989)
[Abstract published in *Abstracts of Papers of the American Chemical Society* 198(Sept):279-POLY, 1989]

25. C. Viney and L.A. Chick
"Modelling Microstructure in Materials that Contain Anisotropic Particles"
Materials Research Society (MRS) 1989 Fall Meeting, Boston, MA (27 Nov. - 2 Dec. 1989)

26. C. Viney
"The Scale of Liquid Crystalline Polymer Microstructures"
Invited Presentation, Institute of Materials Science, University of Connecticut, Storrs, CT (1 June 1990)

27. C. Viney, R.J. Twieg, B.R. Gordon and J.F. Rabolt
"Transitions to liquid crystalline phases in tri-block oligomers $F(CF_2)_n(CH_2)_m(CF_2)_nF$"
13th International Liquid Crystal Conference, Vancouver, Canada (22-27 July 1990)

28. C. Viney
"Polymers for multifunctional applications: general considerations"
Invited Opening Paper, NATO Workshop on *Organometallic Polymers with Special Properties*, Cap D'Agde, France (9-14 Sept. 1990)

29. C. Viney
"Characterizing polymeric materials"
Invited Paper, NATO Workshop on *Organometallic Polymers with Special Properties*, Cap D'Agde, France (9-14 Sept. 1990)

30. K. Kerkam, D. Kaplan, S. Lombardi and C. Viney
"Liquid Crystalline Characteristics of Natural Silk Secretions"
Materials Research Society (MRS) 1990 Fall Meeting, Boston, MA (26 Nov. - 1 Dec. 1990)

31. C. Viney, K. Kerkam, L. Gilliland, D. Kaplan and S. Fossey
"Molecular Order in Silk Secretions"
Materials Research Society (MRS) 1991 Fall Meeting, Boston, MA (2-6 Dec. 1991)

32. C. Viney
"Light Microscopy of Self-Assembling Biological Macromolecules"
Invited Paper, *American Chemical Society (ACS) 203rd National Meeting*, Symposium on *Macromolecules and the New Microscopy*, San Francisco, CA (5-10 April 1992)
[Abstract published in *Abstracts of Papers of the American Chemical Society* 203(3):499-POLY, 1992]

33. C. Viney, A. Huber and P. Verdugo
"Processing Biological Polymers in the Liquid Crystalline State"
Invited Paper, *Biodegradable Materials and Packaging Symposium*, US Army RD&E Center, Natick, MA (16-18 June 1992)

34. C. Viney
"Bioengineered Materials: Becoming Second Nature?"
Invited Presentation, Department of Materials Science and Metallurgy, Cambridge University, UK (26 June 1992)

35. C. Viney
"Use of Light Microscopy in the Qualitative and Quantitative Study of Liquid Crystalline Order"
50th Annual Meeting of the Electron Microscopy Society of America (EMSA), Boston, MA (16-21 Aug. 1992)

36. R. Sinicki and C. Viney
"Human Gallstones: Specimen Preparation and Light Microscopy"
50th Annual Meeting of the Electron Microscopy Society of America (EMSA), Boston, MA (16-21 Aug. 1992)

37. C. Viney
"Coherence at the Materials / Life Science Interface"
Invited Paper, *Materials Research Society (MRS) 1992 Fall Meeting*, Symposium on *Frontiers of Materials Research*, Boston, MA (29 Nov. - 4 Dec. 1992)

38. C. Viney, A.E. Huber, D. Dunaway, P. Verdugo and S.T. Case
"Processing Biological Polymer Solutions: Kinetic Aspects of Microstructural Control"
Materials Research Society (MRS) 1992 Fall Meeting, Boston, MA (29 Nov. - 4 Dec. 1992)

39. C. Viney, A.E. Huber, D.L. Dunaway, P. Yager, K. Kerkam and S.T. Case
"Optical Characterization of Silk Secretions and Fibers"
Workshop on *Silks: Biology, Structure, Properties, Genetics* (sponsored by the Division of Polymer Chemistry, American Chemical Society), University of Virginia, Charlottesville, VA (28-29 Jan. 1993)

40. C. Viney and W.S. Putnam
"Characterization of Sheared Liquid Crystalline Polymers by Light Microscopy"
Invited Paper, *51st Annual Meeting of the Microscopy Society of America (MSA)*, Symposium on *Aspects of Imaging in Polymer Science*, Cincinnati, OH (1-6 Aug. 1993)

41. B.L. Thiel, D.D. Kunkel, K.B. Guess and C. Viney
"Chemical and Physical Microstructure of Spider Dragline"
Invited Paper, *Materials Research Society (MRS) 1993 Fall Meeting*, Symposium on *Biomolecular Materials by Design*, Boston, MA (28 Nov. - 3 Dec. 1993)

42. C. Viney
"Lessons from Natural Materials: Processing and Microstructural Control"
Whitaker Distinguished Lecture in Bio-Based Engineering, Department of Bioengineering, University of Utah, Salt Lake City, UT (28 Feb. 1994)

43. C. Viney and B.L. Thiel
"Hierarchical Molecular Order in Silk Secretions and Fibers"
Invited Paper, *American Chemical Society (ACS) 207th National Meeting*, Symposium on *Industrial Biotechnological Polymers*, San Diego, CA (13-17 March 1994)
[Abstract published in *Abstracts of Papers of the American Chemical Society* 207(2):81-BTEC, 1994]

44. C. Viney
"Molecular Order in Silk Secretions and Fibres"
Invited Presentation, Department of Materials, University of Oxford, UK (13 June 1994)

45. C. Viney
"Spider Silk: Natural Lessons in Engineered Materials"
Invited Speaker (Spring 1994 Program: *Engineering for Value*), Courtaulds Strategic Research & Technology, Coventry, UK (23 June 1994)

46. C. Viney
"Nature's Material Assets"
Invited Presentation, ASM International, Puget Sound Chapter, Seattle, WA (8 Nov. 1994)

47. C. Viney
"The Hierarchical Structure of Silk: a study of *Nephila clavipes* major ampullate fibre"
Invited Paper, Workshop on the *Science of Spider Silk*, Hoechst Celanese Corporation, Summit, NJ (24 March 1995)

48. C. Viney
"The Matter of Nature"
Invited Presentation, Polymers and Colloids Group, Cavendish Laboratory (Department of Physics), Cambridge University, UK (26 May 1995)

49. C. Viney
"Nature's Material Assets"
Invited Presentation, Raychem, Swindon, UK (5 June 1995)

50. C. Viney and B.L. Thiel
"The Hierarchical Structure of Silk: a study of drag line (major ampullate) fiber from *Nephila clavipes* spiders"
17th Biennial Conference on *Physical Aspects of Polymer Science*, University of Leeds, UK (6-8 Sept. 1995)

51. C. Viney
"Natural Paradigms for Advanced Polymers"
Invited Paper, *Advances in Polymer Materials* Meeting, Oxford, UK (3 Oct. 1995)

52. C. Viney and B.L. Thiel
"Major Ampullate Spider Silk: archetypal concepts for assembling new polymer fibres"
Invited Paper, *Materials Research Society (MRS) 1995 Fall Meeting*, Symposium on *Self-Assembling Materials and Structures*, Boston, MA (26 Nov. - 1 Dec. 1995)

53. C. Viney
"Smart Assembly of Polymer Fibres: lessons from major ampullate spider silk"
Invited Paper, SPIE Workshop on *Smart Functions in Biological Systems: a Guide for Advanced Materials*, San Diego, CA (29 Feb. - 2 March 1996)

54. C. Viney and B.L. Thiel
"Hierarchical Biological Composites: smart engineering with imperfect crystals"
Invited Paper, Royal Microscopical Society Conference on *Microscopy of Composite Materials III*, Oxford, UK (1-3 April 1996)
[Abstract published in *Proceedings of the Royal Microscopical Society* 31(1):33-34, 1996]

55. C. Viney
"From Engineered Protein to Engineering Polymer: can silk be made to order?"
Invited Paper, High Polymer Research Group Conference on *Structural Hierarchy in Polymers*, Moretonhampstead, UK (30 April - 2 May 1996)

56. C. Viney
"The Matter of Nature: silk and other liquid crystalline biological polymers"
Invited Presentation, H.H. Wills Physics Laboratory, University of Bristol, UK (29 May 1996)

57. C. Viney
"Smart Assembly of Polymer Fibres: lessons from major ampullate spider silk"
Invited Presentation, Defence Clothing and Textiles Agency, Colchester, UK (17 July 1996)

58. C. Viney
"Bioengineering: from revelation to revolution"
Featured Speaker, *National Bioengineering Career Symposium*, University of Washington, Seattle, WA (15-16 Aug. 1996)

59. C. Viney
"Molecular Self Assembly in Spider Silk"
Invited Paper, Institute of Materials Workshop on *Biomimetics: Ideas from Nature are SMART*, Reading, UK (23 Sept. 1996)

60. C. Viney
"Silk Polymers: Progress through Arachnophilia"
Invited Presentation, Department of Physics, University of Reading, UK (29 October 1996)

61. C. Viney
"Bioengineered Materials: can bugs build a bicycle?"
Featured Speaker, Cambridge University Scientific Society, Cambridge, UK (14 Nov. 1996)

62. C. Viney
"Silk Polymers: Progress through Arachnophilia"
Invited Presentation, Departamento de Ciencia de Materiales, Universidad Politecnica de Madrid, Spain (10 Dec. 1996)

63. C. Viney
"Spider Silks"
Bedson Lecture, Department of Chemistry / RSC local section, University of Newcastle upon Tyne, UK (14 Jan. 1997)

64. C. Viney
"Spider Silk"
Invited Presentation, Manchester Materials Science Centre, University of Manchester / UMIST, UK (5 March 1997)

65. C. Viney
"Thermal Analysis and Scanning Calorimetry of Natural Polymers"
Invited Paper, *The Second UK National Thermal Analysis and Calorimetry Symposium* (Royal Society of Chemistry), together with *Thermal Analysis of Advanced Materials II* (Oxford Centre for Advanced Materials and Composites), Oxford, UK (14-15 April 1997)

66. C. Viney
"Silk, Slugs, Slime and Scanning Calorimetry"
Invited Presentation, *Perkin Elmer Thermal Analysis Users' Meeting*, Harrogate, UK (15 Oct. 1997)

67. C. Viney
"Molecules, Microbes and Engineering Materials"
Featured Speaker, Cardiff Scientific Society, Cardiff, UK (12 Nov. 1997)

68. C. Viney
"The Properties of Spider Silk"
Invited Presentation, Department of Chemistry and Applied Chemistry, University of Salford, UK (26 Nov. 1997)

69. C. Viney
"Natural Routes to Novel Materials: side-chain, supramolecular and chimeric liquid crystals"
Invited Presentation, Division of Chemistry, and Division of Materials Research, National Science Foundation, Washington, DC (8 Jan. 1998)

70. C. Viney
"Biological Liquid Crystalline Polymers: side-chain, supramolecular and chimeric systems"
Invited Presentation, Department of Materials Science, University of Delaware, Newark, DE (12 Jan. 1998)

71. C. Viney
"Biological Liquid Crystalline Polymers: supramolecular, side-chain and chimeric systems"
Invited Presentation, Department of Chemistry, University of Hull, UK (11 March 1998)

72. C. Viney
"Natural Routes to Novel Materials: silks, slimes and smart liquid crystals"
Invited Presentation, *Mass Transport to Medicine: Designer Materials for the New Millennium* seminar at ISIS Innovation Limited, Oxford, UK (12 March 1998)

73. C. Viney
"Gazing at Liquid Crystal Balls: molecular order in silk, mucus and other biological polymers"
Invited Presentation, School of Metallurgy and Materials, University of Birmingham, UK (18 March 1998)

74. C. Viney
"Silk: Molecules, Microstructures and Mechanical Properties"
Invited Presentation, Department of Chemistry, University of Southampton, UK (21 April 1998)

75. C. Viney
"From Natural Chemistry to Designed Materials"
Invited Presentation, Department of Chemistry, Heriot-Watt University, Edinburgh, UK (28 May 1998)

76. J. Barghout, S. Carmichael, B. Thiel and C. Viney
"Structural Models of Molecular Order in Silk Fibres"
Second International Workshop on Silk, University of Virginia, Charlottesville, VA (14-17 June 1998)

77. E. Renuart and C. Viney
"Biological Fibrous Materials: Relationships between Structure and Properties"
Invited Lecture, *Biomateriales estructurales. Relaciones entre estructura y propiedades. Diseño de biomateriales y diseño con biomateriales.*
Universidad Internacional Menéndez Pelayo, Santander, Spain (9 July 1998)

78. C. Viney
"Silk Fibres: Design"
Invited Lecture, *Biomateriales estructurales. Relaciones entre estructura y propiedades. Diseño de biomateriales y diseño con biomateriales.*
Universidad Internacional Menéndez Pelayo, Santander, Spain (10 July 1998)

79. C. Viney
"Spiders, Slugs and Mutant Bugs"
Invited Presentation, Durham University Chemical Society, Durham, UK (23 Feb. 1999)

80. C. Viney
"Material Lessons from Spiders: from 1307 (?) to 1999 and beyond"
Invited Presentation, Heriot-Watt University Scottish Borders Campus, Galashiels, UK (3 March 1999)

81. C. Viney
"Supramolecular Order in Biological Polymers: Silk, Mucus and Levan/DNA"
Invited Presentation, National Institute of Agrobiological Resources, Tsukuba, Japan (29 March 1999)

82. C. Viney
"Supramolecular Order in Biological Polymers: Silk, Mucus and Levan/DNA"
Invited Presentation, Department of Biomaterial Sciences, Graduate School of Agricultural and Life Science, University of Tokyo, Japan (30 March 1999)

83. C. Viney
"Supramolecular and Chimeric Liquid Crystal Phases"
Invited Paper, *Biomolecular Folding and Self-Assembly Conference* held at the *Institute of Physics 1999 Congress*, Salford, UK (12-14 April 1999)

84. C. Viney
"Supramolecular Ball-and-Stick Models of Biological Polymers: Insights from Light Microscopy"
Invited Opening Paper, Royal Microscopical Society Meeting on *Microscopy of Biomaterials III*, London, UK (14 April 1999)

85. C. Viney
"Optical Birefringence: a Mature Technique to Probe Advanced Materials"
Invited Paper, *European Science Foundation Workshop on Silk*, Oxford, UK (15-18 April 1999)

86. C. Viney
"Diverse Themes on Common Threads"
Invited Presentation, Centre for Self-Organising Molecular Systems, University of Leeds, UK (21 January 2000)

87. C. Viney
"Diverse Themes on Common Threads"
Invited Presentation, Physical Chemistry Colloquium, Department of Chemistry, University of Edinburgh, UK (9 February 2000)

88. C. Viney
"Supramolecular Self-Assembly: Nature's Way to Useful Fibres"
Invited Presentation, Colloquium in Organic Chemistry, Department of Pure And Applied Chemistry, University of Strathclyde, Glasgow, UK (16 February 2000)

89. C. Viney
"Tenacious Threads and Slippery Slimes: material lessons from Nature"
Invited Presentation, combined event: Lecture, Manchester Metallurgical Society / Research Colloquium, Manchester Materials Science Centre
University of Manchester / UMIST, Manchester, UK (28 March 2000)

90. C. Viney
"Silk and Slime: Successful Supramolecular Science"
Keynote Lecture, *Institute of Materials Congress 2000: Materials for the 21st Century*, Cirencester, UK (12-14 April 2000)

91. C. Viney
"Opportunities and Challenges with Biological Polymers"
Invited Presentation, *Scottish Polymer Technology Network: Biomolecules Club Meeting*, Riccarton, UK (4 July 2000)

92. C. Viney
"Bottom-up approaches to new high-performance fibres"
Invited Paper, *New Directions for Research in Biological Material*s (Symposium held at *Experimental Biology 2000 - Milestones and Goals*, sponsored by the Society for Experimental Biology), Cambridge, UK (30 July - 3 August 2000)

93. C. Viney
"Silk and Slime: fibre-forming complex fluids in Nature"
Invited Paper, *Complex Fluids 2000* (in association with EPSRC Soft Matter Network, RSC Statistical Mechanics and Thermodynamics Group, and IoP Polymer Physics Group), Sheffield, UK (11-13 September 2000)

94. C. Viney
"Spider Silk and Slug Slime: common LCPs with uncommon properties"
Invited Lecture, *2nd International Conference on Chemistry and Characterisation of Mesophase Materials*, Bayreuth, Germany (17-19 September 2000)

95. C. Viney
"Natural Lessons for Materials Chemistry"
Invited Presentation, Royal Society of Chemistry Mid-Scotland Section, BP Visitors Centre, Grangemouth, UK (28 September 2000)

96. C. Viney
"Fracture of Natural Polymeric Fibres"
Invited Paper, *High Performance Fibers* (EuroConference on Fiber Fracture), Cala Viñas, Mallorca, Spain (19-24 October 2000)

97. C. Viney
"New Materials from the Zoo"
Invited Presentation, Department of Chemistry, Imperial College of Science, Technology and Medicine, London, UK (17 November 2000)

98. C. Viney
"New Materials from the Zoo"
Invited Presentation, Annual Joint Meeting of the Institute of Physics Yorkshire Branch and the Royal Society of Chemistry Central Yorkshire Section
Department of Chemistry, University of York, UK (24 January 2001)

99. C. Viney
"Can Bioengineered Bugs Build a Better Bicycle?"
Invited Presentation, Glasgow University Alchemists' Club, Glasgow, UK (1 February 2001)

100. C. Viney
"New Materials from the Zoo"
Special Lecture, Oxford Materials Society
University of Oxford, Oxford, UK (13 February 2001)

101. C. Viney
"New Materials from the Zoo"
Invited Presentation, Department of Chemistry, University of Aberdeen, Aberdeen, UK (21 February 2001)

102. C. Viney
"New Materials from the Zoo"
Invited Presentation, Department of Chemistry, University of Missouri St Louis, St Louis, MO, USA (26 February 2001)

103. C. Viney
"New Materials from the Zoo"
Invited Presentation, ICASE Colloquium, NASA Langley Research Center, Hampton, VA, USA (1 March 2001)

104. C. Viney
"New Materials from the Zoo"
Invited Presentation, Department of Applied Mathematics, University of North Carolina at Chapel Hill, Chapel Hill, NC, USA (2 March 2001)

105. C. Viney
"New Polymers from our Oldest Suppliers: building on 4 billion years of research….."
Plenary opening paper, *Polymer '01. The New Polymers: Design, Development & Applications*, Bath, UK (9-11 April 2001)

106. C. Viney
"Natural Lessons for Materials Chemistry"
Invited Paper, High Polymer Research Group Conference on *Reacting and Responding Polymers*, Moretonhampstead, UK (30 April - 2 May 2001)

107. C. Viney
"Some Polymer Problems and their Natural Solutions"
Invited Presentation, *Differential Equations and Applications Seminar*, Oxford Centre for Industrial and Applied Mathematics, University of Oxford, Oxford, UK (10 May 2001)

108. C. Viney
"Silk and Slime: Successful Supramolecular Science"
Invited Presentation, joint meeting of the Tyne and Wear Materials Society and the North-East Polymers Association
University of Newcastle, Newcastle-Upon-Tyne, UK (15 May 2001)

109. C. Viney
"Biological Fibres"
Invited Lecture, *Materiales biológicos estructurales*
Universidad Internacional Menéndez Pelayo, Santander, Spain (12 July 2001)

110. C. Viney
"Spider Silk Fibres"
Invited Lecture, *Materiales biológicos estructurales*
Universidad Internacional Menéndez Pelayo, Santander, Spain (12 July 2001)

111. C. Viney
"Self Assembly of Biological Materials"
Invited Lecture, *Materiales biológicos estructurales*
Universidad Internacional Menéndez Pelayo, Santander, Spain (13 July 2001)

112. C. Viney
"Biomimetics – a future vision"
Invited Presentation, *Scottish Materials Exchange III: Biomaterials*, Glasgow Science Centre, Glasgow, UK (7 November 2001)

113. C. Viney
"Spiders and other materials scientists in nature"
Invited Presentation, Department of Physics and Astronomy, University of Edinburgh, UK (15 November 2001)

114. C. Viney
"Should Chemists Copy Nature's Materials?"
Walker Memorial Lecture, Department of Chemistry, University of Edinburgh, UK (30 January 2002)

115. C. Viney
"Supramolecular Liquid Crystallinity in Natural and Synthetic Materials"
Invited Presentation, *Fifth Annual Paul Flory Conference on Physical and Macromolecular Chemistry*, Stanford University, Stanford, CA, USA (22 February 2002)

116. C. Viney
"Supramolecular Liquid Crystallinity in Natural and Synthetic Materials"
Invited Presentation, Lawrence Livermore National Laboratory, Livermore, CA, USA (25 February 2002)

117. C. Viney
"New Materials from the Zoo"
Invited Presentation, Division of Engineering, University of California at Merced, Castle Aviation and Development Center, Atwater, CA, USA (26 February 2002)

118. C. Viney
"Should Chemists Copy Nature's Materials?"
Invited Presentation, Department of Chemistry, University of Missouri St Louis, St Louis, MO, USA (1 March 2002)

119. C. Viney
"Does Self-Assembly Produce Good Materials?"
Invited Presentation, *Royal Society of Chemistry* ***Interdisciplinary Awards Symposium*** *on Biological Self-Assembly*, Cambridge, UK (23 April 2002)

120. C. Viney
"Structures That Make Themselves"
Invited Lecture, Cambridge University Government Policy Programme, meeting on *Nanotechnology: Exploiting the Millimicro*, Sidney Sussex College, Cambridge, UK (26 April 2002)

121. C. Viney
"Should Industry Copy Nature's Materials?"
Invited Presentation, Procter and Gamble (Rusham Park Technology Centre), Egham, UK (15 May 2002)

122. C. Viney
"Some Polymer Problems and their Natural Solutions"
Invited Presentation, Industrial and Applied Mathematics Seminar, Department of Mathematics, Heriot-Watt University, Edinburgh, UK (29 May 2002)

123. C. Viney
"New Materials from the Zoo"
Invited Presentation, Polymers and Colloids Group, Cavendish Laboratory (Department of Physics), Cambridge University, UK (31 May 2002)

124. C. Viney
"Nanomaterials Inspired by Nature"
Invited Lecture, *Nano-Biomateriales*
Universidad Internacional Menéndez Pelayo, Santander, Spain (12 July 2002)

125. C. Viney
"Self-assembled fibres as engineering materials"
Invited Paper, *High Performance Fibers* (EuroConference on Self-Assembling Fibrous Materials), Bad Herrenalb, Germany (7-12 September 2002)

126. C. Viney
"Is Spider Silk a Useful Material?"
Invited Presentation, Department of Textile Sciences, University of Massachusetts Dartmouth, North Dartmouth, MA, USA (20 September 2002)

127. C. Viney
"Is Spider Silk a Useful Material?"
Invited Presentation, Joint UC Seminar Series (UC Davis and UC Merced), Department of Chemical Engineering and Materials Science, University of California at Davis, Davis, CA, USA (24 September 2002)

128. C. Viney
"Spider Silk - the stuff of nightmares or the stuff of dreams?"
Hallowe'en Lecture, University of St Andrews Chemical Society, St Andrews, UK (30 October 2002)

129. C. Viney
"Is Spider Silk a Useful Material?"
Invited Presentation, Department of Bioengineering, University of Washington, Seattle, WA (19 December 2003)

130. N.A. Morrison, F.I. Bell, A. Beautrait, J. Ritchie, C. Smith, I.J. McEwen, and C. Viney
"Do Natural Silks Make Good Engineering Materials?"
Materials Research Society (MRS) 2004 Spring Meeting, Symposium on *Biological and Bio-Inspired Materials and Devices*, San Francisco, CA (12-16 April 2004)

131. C. Viney, N.A. Morrison, F.I. Bell, A. Beautrait, J. Ritchie, C. Smith, and I.J. McEwen
"Is Spider Silk a Useful Biomaterial?"
The 5th University of California Systemwide Bioengineering Symposium, Irvine, CA (26-28 June 2004)

132. C. Viney
"How Nature Does It: materials properties of biological substrates"
Invited Overview, *Biomaterials SPARK* Workshop*, Unilever Research Centre, Port Sunlight, UK (30 September – 1 October 2004)
**S*ymposium to *P*romote *A*wareness of *R*esearch *K*nowledge

133. J. Ritchie, C. Smith, F.I. Bell, I.J. McEwen, and C. Viney
"Effects of Wetting and Desiccation on the Creep Properties of Natural Silk"
Materials Research Society (MRS) 2004 Fall Meeting, Symposium on *Mechanical Properties of Bio-Inspired and Biological Materials*, Boston, MA (29 Nov. - 3 Dec. 2004)

134. C. Viney
"Stress relaxation and creep of silk"
Keynote Lecture, *Plasticity 2005*, Symposium on *Biomaterials and Biological Materials*, Lihue, Kauai, HI (3-8 January 2005)

135. C. Viney
"Hanging by a thread without being let down: what can engineers usefully learn from spider silk?"
Presentation as **Invited Session Chair**, *3rd International Symposium on Advanced Biomaterials / Biomechanics*, Montreal, Canada (3-6 April 2005)

136. E. Reed, M.R. Dunlap, J. Jasinski, and C. Viney
"Microstructure, Nanostructure & Properties of the Wasp Petiole"
Materials Research Society (MRS) 2006 Fall Meeting, Symposium on *Mechanics of Biological and Bioinspired Materials*, Boston, MA (27 Nov. - 1 Dec. 2006)

137. A. Zielinski, E. Resner, and C. Viney
"Networking with Nature for Lessons that Gel"
Invited Presentation, *Materials Research Society (MRS) 2007 Fall Meeting*, Symposium on *Bioinspired Polymer Gels and Networks*, Boston, MA (26-30 Nov. 2007)

Christopher Viney

Outreach and Service Presentations (selected)

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1. Everett Community College, Everett, WA (20 Nov. 1989)
   Addressed technology students, on topical issues in Materials Science & Engineering

2. ASM International, Puget Sound Chapter, Seattle, WA (13 March 1990)
   "Facets of Materials Science"

3. Challenger Elementary School, Issaquah, WA (15 March 1990)
   Addressed school assembly on aerospace and materials, under the theme "Challenger"

4. *Women in Engineering* Program, University of Washington, Seattle, WA (11 May 1990)
   Addressed pre-engineering undergraduate students on career opportunities in Materials Science & Engineering

5. Pacific Science Center, Seattle, WA (11-26 Aug. 1990)
   Co-organiser and demonstrator, "Micro Visions - Scope it Out" (provided equipment and expertise for this microscopy-related exhibition)

6. Saturday Seminar Series, University of Washington, Seattle, WA (3 Nov. 1990)
   "Tailored Materials: Engineering the Fabric of the Future"

7. SAMPE (Society for the Advancement of Material and Process Engineering) Seattle Chapter, Tukwila, WA (12 Feb. 1992)
   Presentation on biologically inspired materials engineering

8. Engineering Open House, University of Washington, Seattle, WA (25 April 1992)
   "Spider Tales and Mollusk Trails"

9. Engineering Alumni Association, University of Washington, Seattle, WA (28 May 1992)
   "Engineered Materials Innovation: is it Second Nature?"

10. Federal Way Kiwanis Club, Federal Way, WA (29 July 1992)
    Addressed service club members on "Bioengineered Materials: Becoming Second Nature?"

11. Mercer Island ProBus Club, Mercer Island, WA (5 Aug. 1992)
    Addressed service club members on "Bioengineered Materials: Becoming Second Nature?"

12. Saturday Seminar Series, University of Washington, Seattle, WA (19 Sept. 1992)
    "Spiders, Snails and Kangaroo Tails: Nature Inspiring Science"

13. ASM International, Puget Sound Chapter, Seattle, WA (Feb. 1993)
    Contributions to *Metallurgy for the Non Metallurgist* (3 hours of presentations on casting / hot working / cold working)

14. Mid-Columbia Regional Science and Engineering Fair, Richland, WA (20 March 1993)
Guest Speaker

15. Workshop on *Engineering and the News Media: Making it Work*, sponsored by the American Society for Engineering Education (UW Chapter), College of Engineering, University of Washington, Seattle, WA (9 Nov. 1993)
Presentation titled "A faculty perspective"

16. Wedgewood Elementary School, Seattle, WA (14 Jan. 1994)
Addressed two 3rd-grade classes, on lessons from spiders and slugs

17. Student Union Facilities Advisory Board, University of Washington, Seattle, WA (20 Jan. 1994)
Last Lecture Series presentation on "Simple versus Simplistic: a Distinction Worthy of Learning"

18. Challenger Elementary School, Issaquah, WA (26 Jan. 1994)
Addressed 5th-grade class, on lessons from spiders and slugs

19. 8th Annual Northwest Pear Research Review (convened by Washington Tree Fruit Research Commission), Wenatchee, WA (14 Feb. 1994)
"New Materials from Spiders, Slugs and Viruses"

20. 1994 Spring Conference of the Washington Technology Educators' Association (WETA) and the Trade and Industrial, Technical and Health Occupations (T&I, T&HO) Instructors' Section of the Washington Vocational Association, Wenatchee, WA (5 March 1994)
"Bio-Molecular Engineering"

21. Engineering Open House, University of Washington, Seattle, WA (22 April 1994)
"Natural Lessons for Engineered Materials: From the Stuff of Nightmares to the Stuff of Dreams"

22. Bellevue ProBus Club, Bellevue, WA (19 May 1994)
"Natural Lessons for Engineered Materials"

23. ASM International, Puget Sound Chapter, Seattle, WA (8 Nov. 1994)
"Nature's Material Assets"

24-27. Department of Materials, University of Oxford, England (22, 23, 28 & 29 March 1995)
Addresses to 6th-form pupils and teachers: "Nature's Materials"

28. Wycombe Abbey School, High Wycombe, England (21 June 1995)
Address to Science Club: "The Nature of Matter & The Matter of Nature"

29. Department of Materials, University of Oxford, England (18 March 1996)
Public lecture / demonstration (in association with *SET 96*): "Molecules and Materials: From Atom to Appliance"

30-33. Department of Materials, University of Oxford, England (20, 21, 26 & 27 March 1996)
Addresses to 6th-form pupils and teachers: "What is Materials Science?"

34-35. Department of Materials, University of Oxford, England (25 & 26 June 1996)
Public lectures (in association with *Oxford Science Open Days*): "Materials in YOUR Future"

36. Winchester College, Winchester, England (30 Sept. 1996)
Address to Science School 6th-form pupils and teachers: "The Nature of Matter & The Matter of Nature"

37. The Dragon School, Oxford, England (11 Oct. 1996)
Address to Science Club: "Materials Science"

38. Department of Materials, University of Oxford, England (7 Nov. 1996)
Address to 1st year 6th-form pupils and teachers visiting from Radley College, Abingdon: "What is Materials Science?"

39. North London Collegiate School, Edgware, England (27 Feb. 1997)
Address to Science Society: "The Nature of Stuff, and the Stuff of Nature"

40-43. Department of Materials, University of Oxford, England (17 & 18 March; 17 & 18 April, 1997)
Addresses to 6th-form pupils and teachers: "What is Materials Science?"

44. Department of Materials, University of Oxford, England (20 March 1997)
Public lecture (in association with *SET 97*): "Materials from Microbes: can bacteria build a bicycle?"

45. St John's College, University of Oxford, England (14 June 1997)
Target Schools Open Day address to 6th-form pupils: "Degree Courses in Materials Science"

46-47. Department of Materials, University of Oxford, England (1 & 2 July 1997)
Public lectures (in association with *Oxford Science Open Days*): "New Materials, New Horizons"

48-51. Department of Materials, University of Oxford, England (19, 20, 23 & 24 March 1998)
Addresses to 6th-form pupils and teachers: "What is Materials Science?"

52. The Dragon School, Oxford, England (8 May 1998)
Address to Science Club: "Materials Science"

53-54. Department of Materials, University of Oxford, England (30 June & 1 July 1998)
Public lectures (in association with *Oxford Science Open Days*): "Materials Beyond the Millennium"

55. Department of Materials, University of Oxford, England (19 Oct. 1998)
Address to 1st year 6th-form pupils and teachers visiting from The Haberdashers' Aske's School, Borehamwood: "What is Materials Science?"

56. Department of Chemistry, Heriot-Watt University, Edinburgh, Scotland (30 June 1999)
Study Week for Teachers of Chemistry presentation on: "Nature's Lessons for Materials Chemistry"

57. The Royal Museum of Scotland, Edinburgh, Scotland (22 Nov. 1999)
Public lecture (in association with the Royal Society of Chemistry's *Chemistry Week 1999*): "New Materials from Nature's Chemists: Lessons from Spiders, Silkworms, Slugs and Giraffes"

58-59. Glen Urquhart High School, Drumnadrochit, Inverness-shire, Scotland (26 Jan. 2000)
Two addresses to mixed groups of Chemistry / Physics / Biology pupils:
- "From the Stuff of Nightmares to the Stuff of Dreams" (years S3-S6)
- "Why You Don't Digest Yourself….."(years S3-S6)

60-61. St Benet Biscop Catholic High School, Bedlington, Northumberland, England (2 Feb. 2000)
Two addresses to mixed groups of Chemistry / Physics / Biology pupils:
- "Spiders, Slugs and Chemist Bugs" (year 11)
- "Why You Don't Digest Yourself….." (year 12)

62. Stewart House Men's Club, Edinburgh, Scotland (4 Feb. 2000)
Address to association of retired business and professional men: "Spider Silk"

63-65. Cramlington High School, Cramlington, Northumberland, England (17 Feb. 2000)
Three addresses to mixed groups of Chemistry / Physics / Biology pupils:
- "From the Stuff of Nightmares to the Stuff of Dreams" (years 12-13)
- "Why You Don't Digest Yourself….." (year 11)
- "Why You Don't Digest Yourself….." (year 11)

66-67. Portree High School, Portree, Isle of Skye, Scotland (3 March 2000)
Two addresses to mixed groups of Chemistry / Physics / Biology pupils:
- "Why You Don't Digest Yourself….." (years S4-S6)
- "Spiders, Slugs and Chemist Bugs" (years S5-S6)

68. Plockton High School, Plockton, Ross-shire, Scotland (3 March 2000)
Address to mixed group of Chemistry / Physics / Biology pupils: "Spiders, Slugs and Chemist Bugs" (years S4-S6)

69. Elgin Academy, Elgin, Moray, Scotland (9 March 2000)
Address to mixed group of Chemistry pupils: "Spiders, Slugs and Chemist Bugs" (years S4-S6)
Other schools in attendance (all from Moray, Scotland): Buckie High School; Elgin High School; Keith Grammar School; Lossiemouth High School; Speyside High School.
Reported in *The Northern Scot* (Elgin), 10 March 2000

70. Grantown Grammar School, Grantown-on-Spey, Badenoch and Strathspey, Scotland (17 March 2000)
Address to mixed group of Science pupils: "From the Stuff of Nightmares to the Stuff of Dreams" (years S3-S6)
National Science Week event

71. St Aloysius' College, Glasgow, Scotland (23 March 2000)
Address to mixed group of Chemistry / Physics / Biology pupils: "Why You Don't Digest Yourself….." (years S5-S6)

72. The Royal Museum of Scotland, Edinburgh, Scotland (9 April 2000)
Public lecture (in association with the *12th Edinburgh International Science Festival*): " A Material World: Can Bioengineered Bugs Build a Better Bicycle?"

73. Heriot-Watt University, Edinburgh, Scotland (7 June 2000)
Inaugural lecture: "Back to Nature for New Materials"

74. Department of Chemistry, Heriot-Watt University, Edinburgh, Scotland (14 June 2000)
Address to participants (years S2-S3) in Regional Finals of *Salters' Festival of Chemistry*: "The Magic of Mucus: Slime, Slugs and SALT!"

75. Department of Chemistry, Heriot-Watt University, Edinburgh, Scotland (28 June 2000)
Study Week for Teachers of Chemistry presentation on: "Nature's Lessons for Materials Chemistry"

76. Edinburgh Academy, Edinburgh, Scotland (3 Nov. 2000)
Address to *Scientific and Mathematical Society*: "New Materials from the Zoo"

77. Gairloch High School, Gairloch, Wester Ross, Scotland (15 Dec. 2000)
Address to mixed group of Chemistry and Biology pupils: "The Marvel that's Mucus" (years S5-S6).
Individual meetings with the year 6 Chemistry pupils

78. Ross High School, Tranent, East Lothian, Scotland (19 Dec. 2000)
Address to mixed group of Chemistry and Biology pupils: "The Marvel that's Mucus" (years S5-S6)

79. Inveralmond Community High School, Livingston, West Lothian, Scotland (20 Dec. 2000)
Christmas Lecture – address to mixed group of Chemistry and Biology pupils: "Mucus: an essential ingredient of good body chemistry" (years S3-S5)

80. The Duchess's Community High School, Alnwick, Northumberland, England (21 Dec. 2000)
Christmas Lecture – address to mixed group of Chemistry / Biology / Physics pupils: "New Materials from the Zoo" (years 11-13)

81-82. The British Council School, Madrid, Spain (16 Jan. 2001)
Two addresses to mixed groups of Chemistry / Physics / Biology pupils: "New Materials from the Zoo" (level equivalent to 'Lower 6th')

83. Department of Chemistry, Heriot-Watt University, Edinburgh, Scotland (7 March 2001)
Address to invited year S5-S6 Chemistry pupils and teachers: "Good Stuff from Nature's Chemists"

84-85. Caldew School, Dalston (Carlisle), Cumbria, England (13 March 2001)
Two addresses to mixed groups of Chemistry and Physics pupils:
- "The Marvel that's Mucus" (years 11-12)
- "New Materials from the Zoo" (years 10-12)

86-87. Thurso High School, Thurso, Caithness, Scotland (21 March 2001)
Two addresses to (mainly) Chemistry pupils:
- "New Materials from the Zoo" (years S5-S6)
- "New Materials from the Zoo" (years S3-S4)

88. Braes High School. Falkirk, Scotland (26 March 2001)
Address to Chemistry pupils: "New Materials from the Zoo" (year S3)

89-90. William Howard School, Brampton, Cumbria, England (4 April 2001)
Two addresses to Chemistry pupils:
- "The Marvel that's Mucus" (year 8)
- "New Materials from the Zoo" (years 12-13)

91. Menzieshill High School, Dundee, Scotland (23 April 2001)
Address to Chemistry pupils: "New Materials from the Zoo" (years S5-S6)

92. Department of Chemistry, Heriot-Watt University, Edinburgh, Scotland (25 June 2001)
Study Week for Teachers of Chemistry presentation on: "Nature's Lessons for Materials Chemistry"

93. Lornshill Academy, Alloa, Clackmannanshire, Scotland (17 Dec. 2001)
Address to Chemistry pupils: "Stuff" (year S3)

94-95. Dumfries Academy, Dumfries, Scotland (16 Jan. 2002)
Two addresses:
- "Stuff" (year S4 Chemistry)
- "Stuff" (year S2 Chemistry and Biology; year S6 Chemistry)

96. Glasgow Academy, Glasgow, Scotland (31 Jan. 2002)
Address to Chemistry pupils: "New Materials from the Zoo" (years S5-S6)

97. Beaconhurst School, Bridge of Allan, Scotland (6 Feb. 2002)
Address to Chemistry and other science pupils: "New Materials from the Zoo" (years S2-S5)

98. Keith Grammar School, Keith, Moray, Scotland (7 Feb. 2002)
Address to Chemistry pupils: "New Materials from the Zoo" (year S3)

99. Holyrood Secondary School, Glasgow, Scotland (8 Feb. 2002)
Address to Chemistry and other science pupils: "Stuff" (years S2-S3)

100-101. Whitehill Secondary School, Glasgow, Scotland (14 Feb. 2002)
Two addresses to general Chemistry / Physics / Biology pupils: "Stuff" (year S2)

102. Trinity Academy, Edinburgh, Scotland (13 March 2002)
Address to Chemistry pupils: "New Materials from the Zoo" (year S4)

103-104. Millburn Academy, Inverness, Scotland (20 March 2002)
Two addresses to Chemistry pupils: "New Materials from the Zoo" (year S3)

105-106. Tain Royal Academy, Tain, Scotland (20 March 2002)
Two addresses to Chemistry pupils:
- "Stuff" (year S3)
- "Stuff" (year S4)

107-111. Arbroath Academy, Arbroath, Scotland (21 March 2002)
Five addresses to general Chemistry / Physics / Biology pupils: "Stuff" (years S1-S2)

112. Forrester High School, Broomhouse, Edinburgh, Scotland (22 March 2002)
Address to Chemistry pupils: "New Materials from the Zoo" (year S3)

113-114. Hirst High School, Ashington, Northumberland, England (9 May 2002)
Two addresses to GCSE Chemistry pupils:
- "New Materials from the Zoo" (year 11)
- "Stuff" (year 11)

115. Dean Park Primary School, Balerno, Scotland (5 June 2002)
"Learning from Nature" (year P3)

116. Glasgow Academy, Glasgow, Scotland (11 June 2002)
Address to Chemistry pupils: "Stuff" (year S2)

117. Department of Chemistry, Heriot-Watt University, Edinburgh, Scotland (26 June 2002)
Study Week for Teachers of Chemistry presentation on: "Nature's Lessons for Materials Chemistry"

118. St Serf's School, Edinburgh, Scotland (9 Dec. 2002)
Address to general Chemistry / Physics / Biology pupils: "Stuff" (year S2)

119-120. Kilchuimen Academy, Fort Augustus, Inverness-shire, Scotland (15 January 2003)
Two addresses to Chemistry / Physics / Biology pupils (the entire school):
- "Stuff" (years S1-S6)
- "New Materials from the Zoo" (years S1-S6)

121-122. Perth Grammar School, Perth, Scotland (20 Jan. 2003)
Two addresses:
- "New Materials from the Zoo" (year S5 Chemistry and Biology)
- "New Materials from the Zoo" (years S1-S2 general Chemistry / Physics / Biology pupils)

123-124. Torry Academy, Aberdeen, Scotland (21 Jan. 2003)
Two addresses to Chemistry / Physics / Biology pupils:
- "New Materials from the Zoo" (year S2)
- "Stuff" (year S1)

125-126. St Joseph's College, Dumfries, Scotland (28 Jan. 2003)
Two addresses to Chemistry / Biology pupils: "Stuff" (years S5-S6)

127-128. George Stephenson High School, Killingworth, Newcastle-upon-Tyne, England (29 Jan. 2003)
Two addresses to Chemistry / Physics / Biology pupils: "New Materials from the Zoo" (year 10)

129. Uddingston Grammar School, Uddingston, Glasgow, Scotland (10 Feb. 2003)
Address to general Chemistry / Physics / Biology pupils: "New Materials from the Zoo" (year S2)

130. *Association for Science Education, Scotland* (2003 Annual Meeting, St Machar Academy, Aberdeen, 8 March 2003)
Address to Chemistry / Biology / Physics secondary-school teachers: "Nature's Lessons for Materials Chemistry"

131. James Young High School, Livingston, Scotland (10 March 2003)
Address to Chemistry / Biology / Physics pupils: "New Materials from the Zoo" (year S3)

132. Lornshill Academy, Alloa, Clackmannanshire, Scotland (12 March 2003)
Address to Chemistry pupils: "Stuff" (year S3)

133- Hookergate School, Rowlands Gill, Tyne & Wear, England (13 March 2003)
134. Two addresses to Chemistry pupils:
- "New Materials from the Zoo" (year 9)
- "New Materials from the Zoo" (year 10)

135- Websters High School, Kirriemuir, Angus, Scotland (17 March 2003)
136. Two addresses to Chemistry pupils: "Stuff" (year S2)

137- Breadalbane Academy, Aberfeldy, Perthshire, Scotland (26 March 2003)
138. Two addresses to general Chemistry / Biology / Physics pupils: "New Materials from the Zoo" (year S2)

139. Coltness High School, Wishaw, North Lanarkshire, Scotland (27 March 2003)
Address to Chemistry / Biology pupils: "New Materials from the Zoo" (years S4-S5)

140. Dean Park Primary School, Balerno, Scotland (31 March 2003)
"Atoms and Molecules" (year P4)

141. Kingussie High School, Kingussie, Inverness-shire, Scotland (2 April 2003)
Address to general Chemistry / Biology / Physics pupils: "New Materials from the Zoo" (year S2)

142. St Serf's School, Edinburgh, Scotland (5 May 2003, the official opening of the new science laboratory and classroom block)
Address to pupils, parents, teachers, Board of Governors and alumni: "Education, Science and the Future" (followed by cutting the ribbon and declaring the facilities open)

143. Department of Chemistry, Heriot-Watt University, Edinburgh, Scotland (26 June 2003)
Study Week for Teachers of Chemistry presentation on: "Nature's Lessons for Materials Chemistry"

144. San Joaquin Valley University of California Alumni Network, Atwater, CA (23 Oct. 2003)
"Learning from the Natural World"

145- Tenaya Middle School, Merced, CA (31 Oct. 2003)
147. Addressed one 6th-grade class and two 7th-grade classes, on "Stuff"
Reported in the *Merced Sun-Star*, 1 November 2003, pg. A1

148. Merced College, Merced, CA (12 Nov. 2003)
Addressed *Introduction to Engineering* students, on "Nature's Lessons for Engineered Materials"

149. Castle-Atwater Kiwanis Club, Atwater, CA (20 Nov. 2003)
Addressed service club members on "New Materials from the Zoo: learning from the natural world"

150. Merced County Career Partnership Technology Industry Day, Merced County Office of Education, Merced, CA (11 Dec. 2003)
Keynote address: "Computers, Technology and Related Careers"

151. Merced College, Merced, CA (11 Feb. 2004)
Addressed *Introduction to Engineering* students, on "Nature's Lessons for Engineered Materials"

152. Challenger Learning Center for Space Science Education, and Castle Science & Technology Center, Atwater, CA (21 Feb. 2004)
Century of Powered Flight Foundation Lecture Series
Address to general audience: "Materials that Allowed Airplanes to Fly"

153. Visalia Convention Center, Visalia, CA (6 May 2004)
UC Merced Educator Update Seminar presentation on: "Learning from the Natural World"

154. McSwain Elementary School, Merced, CA (13 May 2004)
Address to 4th-grade class: "The Power of Numbers"

155. Challenger Learning Center for Space Science Education, and Castle Science & Technology Center, Atwater, CA (15 May 2004)
Century of Powered Flight Foundation Lecture Series
Address to general audience: "Space Age Materials: from the Stuff of Nightmares to the Stuff of Dreams"

156. Kiwanis Club of Merced, Merced, CA (19 May 2004)
Addressed service club members on "Material Lessons from Nature"

157-158. University of California at Merced, *Health Career Day*, Atwater, CA (17 Sept. 2004)
Two addresses to junior high, high school, and community college students: "Engineering Healthcare with Lessons from the Zoo"

159-163. Mt Whitney High School, Visalia, CA (21 Sept. 2004)
Five addresses to mixed groups of Algebra II, Pre-Calculus, Calculus, Computer Programming, Statistics, Physics, Biology, and Honors Biology students (grades 9-12): "Learning from the Natural World: a pathway to Bioengineering"

164. University of California at Merced, Atwater, CA (13 Oct. 2004)
SCOPE (State Capital Outlay and Planning Evaluation) Visit
Presentation to staff from the California Legislature, the Legislative Analyst Office (LAO), the Department of Finance (DOF), the California Postsecondary Education Commission (CPEC), and the University of California Office of the President (UCOP) Budget Office: "Engineering our Future with Lessons from Nature"

165. Merced College, Merced, CA (20 Oct. 2004)
Addressed *Introduction to Engineering* students, on "Nature's Lessons for Engineered Materials"

166-168. Mitchell Senior Elementary School, Atwater, CA (3 Nov. 2004)
Addressed three 8th-grade classes, on "Stuff"

169-171. Mitchell Senior Elementary School, Atwater, CA (10 Nov. 2004)
Addressed three 8th-grade classes, on "Stuff"

172-174. University of California at Merced, *Engineering Conference: Careers and the Academic Program at UC Merced*, Atwater, CA (13 Nov. 2004)
Three addresses to high school juniors, seniors and their parents: "Bioengineering: Inventions for the Future of Healthcare"

175- Peggy Heller Elementary School, Atwater, CA (17 Nov. 2004)
176. Addressed two 5th-grade classes, on "Learning from Nature"

177. University of California at Merced, *UC Merced Senior Parent Night*, Atwater, CA (17 Nov. 2004)
Address to high school seniors and their parents: "Life at the Frontier"

178- Bellevue Elementary School, Atwater, CA (15 Dec. 2004)
179. Addressed two 5th-grade classes, on "Learning from Nature"

180. *4-H Leadership Conference of Regional Teens* (*LCORT,* 2005 Annual Meeting, Wonder Valley Ranch, Sanger, CA, 28-30 Jan. 2005)
Address to 360 delegates (7th-, 8th- and 9th-grade), plus leadership team members (older high school students) and adult chaperones, from Fresno, Kern, Kings, Madera, Mariposa, Merced, Monterey, San Benito, Santa Cruz, Stanislaus, Tulare and Tuolumne Counties: "Survival at the Frontiers of Knowledge"

181. McSwain 4-H Club, McSwain Elementary School, Merced, CA (16 Feb. 2005)
Addressed General Meeting, on "Learning from Nature"

182. Merced Group of the Sierra Club, Merced, CA (17 March 2005)
Addressed Group members on "Life at the Frontier: using Nature's secrets to manufacture new products"

183. G.A.T.E. (Gifted and Talented Education) Program, Bellevue Elementary School, Atwater, CA (24 March 2005)
Addressed group of 3rd-grade through 6th-grade students, on "Stuff"

184. Kern County Regional Science Fair, Bakersfield Convention Center, Bakersfield, CA (13 April 2005)
Keynote address to >800 4th-grade through 12th-grade students, plus teachers and parents, on "Nature's Lessons for Tomorrow's Engineer"

185. Merced College, Merced, CA (18 April 2005)
Addressed *Introduction to Engineering* students, on "Nature's Lessons for Engineered Materials"

186. Waterford High School, Waterford, CA (13 May 2005)
Addressed 9th-grade through 12th-grade *AVID* (*Advancement via Individual Determination*) class, on "Engineering our Future with Lessons from Nature"

187. Weaver Elementary School, Merced, CA (17 May 2005)
Addressed inaugural meeting of *WITS* (*Worldwide Investigations through Technology & Science*) after-school club for 4th-grade through 8th-grade students, on "Learning from Nature";
also, answered winning questions from the school's *Stump the Professor* competition

188. Waterford High School, Waterford, CA (20 May 2005)
Addressed 9th-grade through 12th-grade *AVID* (*Advancement via Individual Determination*) class, on "Engineering our Future with Lessons from Nature"

189. University of California at Merced, inaugural *New Student Orientation* event, Bakersfield, CA (9 July 2005)
Address to incoming students: "Survival at the Frontiers of Knowledge – and some tips for getting there"

190. ASM International Materials Camp℠, University of Washington, Seattle, WA (28-30 July 2005)
Featured address to high school juniors and seniors: "New Materials from the Zoo" (plus address to participants and parents, and presentation of diplomas, at the camp's Graduation Ceremony).

191. University of California at Merced, *UC Merced Foundation: Foundation Diplomats Lecture*, Merced, CA (14 Dec. 2005)
"Engineering our Future with Lessons from the Zoo"

192. Challenger Learning Center for Space Science Education, and Castle Science & Technology Center, Atwater, CA (17 Dec. 2005)
Frontiers of Science & Engineering Lecture Series
Address to general audience: "What Kind of Stuff can a Bioengineered Bug Build?"

193. Challenger Learning Center for Space Science Education, and Castle Science & Technology Center, Atwater, CA (18 Feb. 2006)
Frontiers of Science & Engineering Lecture Series
Address to general audience: "Isaac Newton: scientific, historical and social perspectives"

194-196. Weaver Elementary School, Merced, CA (5 May 2006)
Addressed three groups of 7th/8th-grade students at *Career Day 2006*, on "Engineering, a Bridge to the Future"

197. University of California at Merced, Merced, CA (17 May 2006)
Addressed visiting group of 4th-grade students from Alicia Reyes Elementary School, Merced, on "Learning from Nature"

198. ASM International Materials Camp℠ for Teachers, California State University at Long Beach, CA (12 July 2006)
Featured address to high school teachers: "New Materials from the Zoo"

199. University of California at Merced, *New Student Orientation* event, Merced, CA (17 July 2006)
Address to incoming students: "Survival at the Frontiers of Knowledge – and some tips for getting there"

200. University of California at Merced, *New Student Orientation* event, Merced, CA (7 Aug. 2006)
Address to parents of incoming students: "Academics and Academic Expectations"

201. University of California at Merced, *Freshman 101: Recipe for Success* event, Merced, CA (26 Aug.2006)
Address to incoming freshman class: "Academics and Academic Expectations"

202. University of California at Merced, Merced, CA (7 Sept. 2006)
Addressed visiting group of 4th-grade students from Alicia Reyes Elementary School, Merced, on "Learning from Nature"

203. University of California at Merced, Merced, CA (12 Oct. 2006)
Addressed visiting group of 4th-grade students from Alicia Reyes Elementary School, Merced, on "Materials, Molecules and Magic"

204. University of California at Merced, Merced, CA (17 Nov. 2006)
Addressed visiting group of 4th-grade students from Alicia Reyes Elementary School, Merced, on "Big Ideas about Very Small Things "

205. University of California at Merced, Merced, CA (7 Dec. 2006)
Addressed visiting group of 4th/5th-grade students from Alicia Reyes Elementary School, Merced, on "Stuff"

206. Challenger Learning Center for Space Science Education, and Castle Science & Technology Center, Atwater, CA (17 Feb. 2007)
Frontiers of Science & Engineering Lecture Series
Address to general audience: "Technology: Boon without Bane?"

207. University of California at Merced, *Experience UC Merced* event, Merced, CA (24 March 2007)
Address to admitted students and parents of admitted students: "Life at the Frontiers of Knowledge "

208. University of California at Merced, Merced County Office of Education, and San Joaquin County Office of Education, *Dinner with a Scientist*, Merced, CA (27 March 2007; this was the first ever DWAS hosted by a UC campus)
Keynote address to approx. 150 middle school students (grades 6-8) and teachers: "Life at the Frontiers of Knowledge"

209. Alicia Reyes Elementary School, Merced, CA (19 April 2007)
Family Science Night
Address to students and their parents: "Life at the Frontiers of Knowledge "
Multiple classroom demonstrations

210. University of California at Merced, *Experience UC Merced* event, Merced, CA (5 May 2007)
Address to admitted students and parents of admitted students: "Life at the Frontiers of Knowledge "

211. University of California at Merced, *New Student Orientation* event, Merced, CA (16 July 2007)
Address to parents of incoming students: "Academics and Academic Expectations"

212. University of California at Merced, *New Student Orientation* event, Merced, CA (20 July 2007)
Address to parents of incoming students: "Academics and Academic Expectations"

213. University of California at Merced, *New Student Orientation* event, Merced, CA (20 July 2007)
Address to incoming students: "Survival at the Frontiers of Knowledge – and some tips for getting there"

214-219. The Settlers High School, Bellville, South Africa (1 Aug. 2007)
Addressed six groups of students from Grades 10-12, on "New Materials from the Zoo"

220. University of California at Merced, *Freshman Assembly*, Merced, CA (25 Aug. 2007)
Address to incoming freshman class: "Academics and Academic Expectations"

221. University of California at Merced, *Resident Life Program*, Merced, CA (12 Sept. 2007)
Address to general university and civic audience: "Journey to the Heart of Africa: a Perspiring Professor Seeking Sweaty Hippos"

222. University of California at Merced, Merced, CA (13 Sept. 2007)
Addressed visiting group of 4th-grade students from Alicia Reyes Elementary School, Merced, on "Journey to the Heart of Africa: a Perspiring Professor Seeking Sweaty Hippos"

223-227. McSwain Elementary School, Merced, CA (4 Oct. 2007)
Addressed five 7th/8th grade classes: "Journey to the Heart of Africa: a Perspiring Professor Seeking Sweaty Hippos"

228. University of California at Merced, Merced, CA (11 Oct. 2007)
Addressed visiting group of 4th-grade students from Alicia Reyes Elementary School, Merced, on "Journey to the Heart of Africa: a Perspiring Professor Seeking Sweaty Hippos"

229. University of California at Merced, Merced, CA (15 Nov. 2007)
Addressed visiting group of 4th-grade students from Alicia Reyes Elementary School, Merced, on "Journey to the Heart of Africa: a Perspiring Professor Seeking Sweaty Hippos"

230. Challenger Learning Center for Space Science Education, and Castle Science & Technology Center, Atwater, CA (16 Feb. 2008)
Frontiers of Science & Engineering Lecture Series
Address to general audience: "Journey to the Heart of Africa: a Perspiring Professor Seeking Sweaty Hippos"

231. University of California at Merced, Merced, CA (13 March 2008)
Addressed visiting group of 4th-grade students from Margaret Sheehy Elementary School, Merced, on "Stuff"

232. Challenger Learning Center for Space Science Education, and Castle Science & Technology Center, Atwater, CA (15 March 2008)
Frontiers of Science & Engineering Lecture Series
Address to general audience: "Materials Innovation in History and the Arts: Builders and Poker Players"

233. University of California at Merced, Merced, CA (10 April 2008)
Addressed visiting group of 4th-grade students from Margaret Sheehy Elementary School, Merced, on "Stuff"

234. University of California at Merced, Merced, CA (17 April 2008)
Keynote speaker for the *Spring Conference of the San Joaquin Valley Regional Association of California Counties*. Address to County Supervisors: "From Dreaming Spires to Perspiring Dreams"

235. University of California at Merced, *New Student Orientation* event, Merced, CA (11 July 2008)
Address to parents of incoming students: "Academics and Academic Expectations"

236. University of California at Merced, *New Student Orientation* event, Merced, CA (14 July 2008)
Address to parents of incoming students: "Academics and Academic Expectations"

237. University of California at Merced, *New Student Orientation* event, Merced, CA (14 July 2008)
Address to incoming students: "New Materials from the Zoo"

238. University of California at Merced, *New Student Orientation* event, Merced, CA (18 July 2008)
Address to parents of incoming students: "Academics and Academic Expectations"

239. University of California at Merced, *New Student Orientation* event, Merced, CA (25 July 2008)
Address to parents of incoming students: "Academics and Academic Expectations"

240. University of California at Merced, *New Student Orientation* event, Merced, CA (28 July 2008)
Address to parents of incoming students: "Academics and Academic Expectations"

241. University of California at Merced, *New Student Orientation* event, Merced, CA (1 Aug. 2008)
Address to parents of incoming students: "Academics and Academic Expectations"

242. University of California at Merced, *New Student Orientation* event, Merced, CA (4 Aug. 2008)
Address to parents of incoming students: "Academics and Academic Expectations"

243. University of California at Merced, *Freshman Assembly*, Merced, CA (25 Aug. 2008)
Address to incoming freshman class: "Academics and Academic Expectations"

244. University of California at Merced, Merced, CA (2 October 2008)
Addressed visiting group of 4th-grade students from Alicia Reyes Elementary School, Merced: "Let's Talk About Hippos (from Dreaming Spires to Perspiring Dreams)"

245. Merced Multicultural Arts Center, Merced, CA (11 October 2008)
2nd Saturdays children's performance: "Hippos are Cool"

246. G.A.T.E. (Gifted and Talented Education) Program, Bellevue Elementary School, Atwater, CA (31 October 2008)
Addressed group of 3rd-grade through 8th-grade students: "Let's Talk About Hippos"

247. University of California at Merced, Merced, CA (6 November 2008)
Addressed visiting group of 4th-grade students from Alicia Reyes Elementary School, Merced: "Let's Talk About Hippos"

248. University of California at Merced, Merced, CA (4 December 2008)
Addressed visiting group of 4th-grade students from Alicia Reyes Elementary School, Merced: "Let's Talk About Hippos"

249- Farmdale Elementary School, Merced, CA (3 February 2009)
251. Interactive presentations and demonstrations at the school's first *Family Science Night*.

Community Service

1. Physics Lab Event Supervisor and Judge, NorCal State Science Olympiad Competition, California State University, Stanislaus (1 April 2006)

2. Presentation Judge, 2008 State 4-H Field Day (State 4-H Presentation Day), University of California at Davis (31 May 2008)

3. Poster Judge (Engineering and Interdisciplinary), Sigma Xi Annual Meeting and Student Research Conference, Washington, DC (21 November 2008)

Christopher Viney

Service / Administration / Organizational Experience (selected)

External Activities

- Organizer or Co-organizer of 11 international symposia.
- Senior Editor of *International Journal of Biological Macromolecules* (March 1999 to June 2003, with responsibility for Europe, Asia, Africa, Australia; the journal's impact factor increased significantly during this time).
- Membership of 3 other editorial boards (2 current).
- Guest editor or co-editor of 4 special journal issues.
- Lead editor of 3 *Materials Research Society* proceedings volumes.
- Held various officer posts in Puget Sound Chapter of ASM International (details on pg 1.2 of resume; 5-star status awarded by ASM World Headquarters is the highest performance rating that a Chapter can receive).
- ASM International Nominating Committee (1994).
- NSF Review Panel member: Course, Curriculum, & Laboratory Improvement (CCLI) Program, Educational Materials Development (EMD) track (July 2004).
- ASM International Materials Education Foundation Board of Trustees (2005–2007).
- Originator and writer of monthly *"Good Thing You Asked"* column in *Merced Sun-Star* newspaper (Merced, CA), answering questions submitted by K-12 readers. The column addressed topics in science, engineering, technology and the natural world, emphasizing how ideas are connected across disciplines (Jan. 2005 to June 2007).
- Coordinator of – and multiple contributor to – UC Merced's participation in the Castle Air Museum / Castle Science & Technology Center Foundation lecture series celebrating *A Century of Powered Flight* (2004) and *Frontiers in Science and Engineering* (2005–present). Recipient of Air Force Association Chapter Award (Major General Charles I. Bennett, Jr. Chapter, Merced, CA), recognizing collaborative educational outreach activities (awarded October 2006). The Chapter earned the California AFA Distinguished Achievement Award for Aerospace Education in 2006.
- Member of EPSRC (Engineering and Physical Sciences Research Council; the UK's equivalent of NSF) Peer Review College on Structural Materials (Jan. 1997 to Dec. 2005).
- Founding member of Biomimetics Network for Industrial Sustainability (BIONIS); launched in UK with EPSRC seed funding in 2002; now international.
- Committee of the Polymer Physics Group, Institute of Physics, London (March 1999 to June 2003).
- Senior Management Group, Scottish Polymer Technology Network (Nov. 2000 to Dec. 2001).

University of California, Merced

University of California System-Wide Service

- Council of Undergraduate Deans / Vice Provosts
  - UC Merced representative (Jan. 2008 to present)
- University Committee on Academic Personnel (UCAP).
  - UC Merced representative (Sept. 2007 to Dec. 2007).

- University Committee on Planning and Budget (UCPB).
  - UC Merced representative (2 years; Sept. 2003 to Sept. 2005).
  - Multi-Campus Research Unit (MRU) review process subcommittee (2004).
  - MRU review subcommittee for California Sea Grant: leader (2004/5).
- Bioengineering Institute of California (BIC; this is an all-campus MRU).
  - UC Merced Associate Director (Sept. 2004 to June 2007).
  - Steering Committee: member (Feb. 2004 to June 2007).
- Board of Admissions and Relations with Schools (BOARS).
  - UC Merced alternate (Sept. 2003 to Sept. 2004).

<u>UC Merced Campus-Wide Service</u>

- Vice Provost for Undergraduate Education (Jan. 2008 to present).
- Proto-Divisional Council: member (Oct. 2004 to Sept. 2005).
- Committee on Academic Personnel (CAP): vice-chair (Sept. 2007 to Dec. 2007).
- Committee on Committees (COC): member (Sept. 2006 to Dec. 2007).
- Committee for Academic Planning and Resource Allocation (CAPRA): chair (2 years; Sept. 2003 to Sept. 2005).
- College One Executive Committee: member (July 2005 to Sept. 2007).
  - Co-chair (Sept. 2006 to Sept. 2007).
  - Member, Freshman Seminar Proposal Review Subcommittee (Sept. 2006 to Sept. 2007),
- Undergraduate Council: member (Sept. 2005 to Sept. 2006); *ex-officio* member (Jan. 2008 to present).
  - Chair, Subcommittee on Undergraduate Academic Programs and Policy (2005/2006).
  - Member, Subcommittee on Summer School Policies (2005/2006).
- Committee on Privilege and Tenure: member (Sept. 2005 to Sept. 2007).
- Campus Recharge Committee: member (Jan. 2004 to Sept. 2006).
- Campus Physical Planning Committee: member (Jan. 2004 to Sept. 2005).
- Campus Arts Committee: member (Jan. 2007 to present).
- Advisory Committee for Arts–UCM One Year Development Initiative: member (Jan. 2008 to present).
- Academic Strategic Planning Committee: member (Oct. 2007 to present).
  - Subcommittee on Undergraduate Education: member (Oct. 2007 to present).
- WASC Steering Committee (Sept. 2008 to Aug. 2011).
- Chancellor's Blue Ribbon Commission on Intercollegiate Athletics at the University of California, Merced: member (June 2008 to present)
- Survey Coordinating Committee: member (July 2008 to present).
- General Education CORE Course Planning / Development Committee: member (Aug. 2003 to June 2007).
  - Co-chair (Sept. 2004 to June 2007).
  - Alternate representative on College One Advisory Board (Sept. 2004 to July 2005).
- Chemistry Curriculum Innovation Workshop: co-organizer (18 June 2004).
- Integrated Calculus / Physics Course Development Workshop: co-organizer and co-chair (9-10 Sept. 2004).
- Ad Hoc Committee on WASC Assessment / On-going Program Review: member (Jan. 2005 to June 2006).
- Contingency Planning task force: member (Aug. 2004 to June 2005).
- Health Sciences / Medical Sciences / Medical Education Planning task group: member (July 2004 to January 2006).
- Systems Biology Institute pre-planning task force: member (July 2004 to Sept. 2004).
- Stem Cell Capital Facility (SCCF) Task Force: UC Merced Senate representative (Jan. 2005 to April 2005).
- Sierra Nevada Research Institute: founding member (June 2004 to September 2008).

- Founding member of three Graduate Groups:
  - Molecular Science and Engineering (now Physics and Chemistry) Graduate Group (Sept. 2003 to present).
  - Quantitative Systems Biology Graduate Group (QSB; Sept. 2003 to present).
  - Biological Engineering and Small-scale Technology Graduate Group (BEST; May 2006 to present). Member of Executive Committee (Aug. 2006 to present).
- Holiday Parade Committee: chair (Sept. 2003 to Dec. 2003).
- Bobcat Naming Committee: member (Sept. 2005).

School of Engineering Committees

- School of Engineering Faculty Chair (May 2005 to Sept. 2006).
- Executive Committee: member (Sept. 2006 to Dec. 2007).
- Committee on Committees: member (Sept. 2006 to Dec. 2007).
- Curriculum Committee: member (January 2006 to Sept. 2007).
  - Chair (Sept. 2006 to Sept. 2007).
- Bioengineering Major / Course Development Committee: chair (July 2004 to June 2006).
- Materials Science & Engineering Major / Course Development Committee: chair (April 2005 to Dec. 2007).
- Engineering Service Learning Committee: member (Aug. 2003 to present).

Faculty Search Committees

- Bioengineering Faculty Search Committees (x5; July 2004 to Dec. 2007).
  - Chair for 4 searches; three positions filled (Wei-Chun Chin, Michelle Khine, Kara McCloskey).
  - Member for one search; filled (Ariel Escobar).
- Materials Science & Engineering Faculty Search Committees (x3; Sept. 2005 to Dec. 2007).
  - Chair for one search (cross-school); not filled.
  - Member for 2 searches; one filled (Jennifer Lu).
- Organic Chemistry Faculty Search Committee: member (March 2004 to Aug. 2004); filled (Matthew Meyer).
- Materials Chemistry / Materials Physics Faculty Search Committee: member (Oct. 2006 to May 2007); not filled.

Employee Training Courses Completed

- Injury and Illness Prevention Program (27 Aug. 2003).
- Laboratory Safety Tutorial (9 Oct. 2003).
- American Red Cross First Aid Basics Certificate (Merced Tri-College Center, 6 Nov. 2003).
- American Red Cross Adult CPR Certificate (15 Jan. 2004).
- Preventing Sexual Harassment in the Workplace / Education Setting (24 February 2004).
- Online Ethics Briefing (9 Jan. 2007).
- Sexual Harassment Prevention for Faculty (12 Oct. 2007).
- Collaborative Institutional Training Initiative (CITI): Human Research Curriculum – Basic Biomedical Research course (24 May 2007).
- Collaborative Institutional Training Initiative (CITI): Human Research Curriculum – Basic Social / Behavioral Research (SBR) course (24 May 2007).
- Collaborative Institutional Training Initiative: Working with the IACUC – Basic course (26 May 2007).

Heriot-Watt University, Edinburgh

Gained versatile experience in the management of change. Undertook various administrative roles during extensive operational restructuring of the university in 2000-2002 (Departments were reorganized into Schools, establishing a new system where executive management of teaching, research, personnel, budgets and space are addressed co-operatively at the School level rather than the individual Departmental level). It was necessary to guide faculty and staff sensitively through a round of significant job losses.

Held formal appointment as Deputy Head of Department of Chemistry throughout the restructuring period, in practice assuming joint responsibility with the then Head of Department while the old and new management structures operated side-by-side. Appointed as first Head of Chemistry within the new structure, which included representing Chemistry on the Engineering and Physical Sciences School Management Group.

University (both old and new structures)

- Heriot-Watt University Senate: member (Dec. 1998 to July 2003).
- University Library Review Team : Appointed Member, (Oct. 2001 to July 2002).
- Heriot-Watt University Court: Elected Member (Aug. 2000 to July 2003).
- Heriot-Watt University Court Finance Committee: Elected Member (Aug. 2000 to July 2003).

The Heriot-Watt University Court is the governing body of the University. There are approximately 30 ex-officio, elected and co-opted members. It has custody and disposition of all the property of the University, and the control of its finances. It fulfills essentially the same functions as the Board of Regents at a public university in the USA.

Faculty of Science (old structure)

- Board of the Faculty of Science: member (Dec. 1998 to July 2002).

School of Engineering and Physical Sciences (new structure; School consists of Chemistry, Physics, Mechanical Engineering, Chemical Engineering, Electrical Engineering, Combined Studies)

- Member of 12-person School Management Group (Aug. 2002 to July 2003).
- Member of Teaching Co-ordination Group (Aug. 2002 to July 2003).

Chemistry (new structure; from Aug. 2002), and
Department of Chemistry (old structure; up to July 2002)

- Head of Chemistry (Aug. 2002 to July 2003)
- Deputy Head of Department (Aug. 1999 to July 2002). Included:
  - Performing any of Head of Department's functions
  - Undergraduate Liaison Committee: chair
  - Finance Committee: member
  - Research Workers Liaison Committee: member
  - Analytical Services Committee: member
  - Technical Staff Committee: member
- Head of Materials Section (Dec. 1998 to July 2003). Included:
  - Departmental Management Group: member
  - Research Committee: member
  - Academic Assessment/Audit Group: member
  - Honours Examinations Scrutiny Committee: member
  - MChem Committee: member

- Director of *Chemistry with a Year in North America* programmes (Feb. 1999 to July 2003).
- Academic Staff Committee: member (Dec. 1998 to July 2003).
- Department of Chemistry Refurbishment Task Force: member (June 1999 to July 2003).
- WWW Working Group: member (Feb. 1999 to July 2003).

Staff & Management Development Programmes Completed

- Training for Appraisers (30 Aug. 1999).
- Recruitment and Selection Training (30 Nov. 1999).
- Recruitment and Selection Law (22 March 2000).
- Roles and Responsibilities of the Head of Department (11 May 2000).
- Disability Awareness Training (16 May 2000).
- Financial Planning 1 – Resource Allocation Models (31 May 2000).
- Financial Planning 2 – Resource Allocation Models (8 June 2000).
- Human Resource Management – Dealing with Conflict (22 Jan. 2001).
- Discipline and Grievance (12 March 2001).
- Managing your Staff in a Period of Change (27 June 2001).
- Data Protection Act 1998 (28 May 2002).
- Management and Support Staff Program (28 Aug. 2002).

University of Oxford

St Catherine's College

- Senior Subject Tutor for Materials (Feb. 1995 to Dec. 1998). Included sole responsibility to organise, administer, evaluate and report on the tutorial teaching received by undergraduates studying Metallurgy & the Science of Materials (MSOM); shared responsibility for Materials, Economics & Management (MEM), and Engineering & Materials Science (EMS).
  Also responsible for selection / admission of MSOM students applying through St Catherine's.
- Governing Body: member (Feb. 1995 to Dec. 1998).
- Tutorial Committee: member (April 1995 to Dec. 1998).
- Finance Committee: member (Sept. 1995 to Aug. 1998). Authorised signatory on College bank account.
- Committee to define the relationship between the Academic Policy Committee, the Planning & Resources Committee, and the Dispensations Committee: member (1997).

Department of Materials

- Elector to the Cookson Professorship of Materials in the University of Oxford (1995).
- Departmental Open Day Co-Ordinator (Sept. 1995 to Dec. 1998).
  Each year this involved organizing:
  - Four one-day courses on "Materials at Oxford", each attended by approximately 50 high school pupils and their teachers.
  - Departmental activities on the two university-wide "Science Open Days".
  - Departmental activities during "Science, Engineering & Technology Week", promoted by the British Association for the Advancement of Science.
- Supplementary Subject Examiner (1996 and 1997).
- "Finals" Examiner (1998).
- Schools Liaison Officer (Sept. 1996 to Dec. 1998).
- Undergraduate Design Project Organiser (Sept. 1997 to Aug. 1998).
- Departmental Representative on Earth Sciences Subfaculty (Sept. 1997 to Aug. 1998).
- Harassment Advisor (Nov. 1997 to Dec. 1998).

Staff Development Programme

Voluntary attendance at appropriate courses offered by the University of Oxford to enhance the personal effectiveness of its faculty and advisors:

- Effective interviewer skills for undergraduate admissions (27 Sept. 1995).
- Methods of examining and assessing undergraduates (31 May 1996).
- Dealing with information overload (*Beat the Bumph*: reading effectively, managing volumes of paperwork, remembering information) (9 Jan. 1997; follow-up 11 Mar. 1997).
- Time management (4 Nov. 1997).
- Harassment Advisors' Training (13 Nov. 1997; 12 Feb. 1998).
- Pastoral Skills for Tutors (20 April 1998).

University of Washington

Center for Bioengineering

- Graduate Student Admissions Committee: member (Dec. 1990 to Jan. 1995).
- Institutional proposal to NSF (Academic Research Infrastructure Program) for purchase of Environmental Scanning Electron Microscope (March 1994). Co-ordinated input from 7 other faculty in Bioengineering and one in MS&E. The proposal was funded.

Department of Materials Science & Engineering

- Undergraduate Program Committee: member (Dec. 1987 to Dec. 1990).
- Graduate Student Recruiting Committee: member (Dec.1987 to Sept. 1988).
- Computer Committee: member (Sept. 1988 to Sept. 1990).
- Advisor to Student Chapter of ASM International (Sept. 1989 to Sept. 1990).

College of Engineering

- College Fellowships Committee, including Selection Subcommittee: member (March 1988 to Sept. 1989).
  Chaired Selection Subcommittee from Oct. 1988 to Sept. 1989.
- Computer Committee: member (Sept. 1988 to Sept. 1989).
- ECSEL Evaluation Committee: member (Jan. 1992 to Jan. 1995).

University of Cambridge

Co-organized the Darwin College Lecture Series for two years. Each series comprised eight high-profile interdisciplinary public lectures:

- *Origins* (1985 / 1986; inaugural series).
- *Man and the Environment* (1986 / 1987).

The Darwin College Lecture Series remains one of the premier public events in the Cambridge University academic calendar.

Hans C. Björnsson, Ph.D.

Dean, School of Social Sciences, Humanities and Arts
Vice Provost for Academic Planning
University of California, Merced
Merced, California
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Professor, School of Technology Management & Economics (currently on leave of absence)
Chalmers University of Technology
Göteborg, Sweden
hansbj@chalmers.se

Education

- M.Sc (CE) (1967) Chalmers University of Technology, Sweden
- M.U.R.P. (1974) University Of Illinois at Urbana-Champaign
- Ph.D. (1974) Chalmers University of Technology, Sweden

General

Hans Björnsson is a professor in Systems Management at Chalmers University and, until recently, at Stanford University. He is currently acting dean of the School of Social Sciences at University of California, Merced where he is charged with the creation of a new Management School (The Earnest & Julio Gallo School of Management) including an Entrepreneurship Center. In his research he is modeling and analyzing business processes and infrastructure projects and risks involved with undertaking such projects. His research also concerns the use of information technology in the industry. Recent works focus on decisions on investments in information technology, information systems and risks involved in such decisions. He is a former founding dean of the School of Technology Management & Economics at Chalmers. He has been the director of IMIT (Institute for Management of Innovation and Technology, 1984-88), director of CIFE (Center for Integrated Facility Engineering, 1997-2004) at Stanford University and on the faculty of University of Illinois at Urbana-Champaign, M.I.T., and the University of Southern California and Stanford University. He is a member of the Royal Swedish Academy of Engineering Sciences.

Courses

Systems Thinking - Systems Modeling (PhD program), Information Technology/Systems management (IE, MoP), Systems Thinking and Modeling (CE, IE and Business Adm), Decision Support and Expert Systems (IE, CE), Management of Information Technology (Bus), Financial Theory (IE, MoP), Information Management (Executive Program), Project Finance (Stanford Executive Program, Program Director), Construction Methods and Productivity (CE), Cost Estimation of Civil Engineering Works (CE), Project Control (CE), Operations Research (IE), Modeling and stochastic Processes (IE), Simulation for Production and Corporate Planning (IE)

Longer lecturing assignments at various universities:

The Chinese University, Hong Kong (Business School, Information Technology Management), one-week executive program, annually, Nanyang University of Technology, Singapore (Project Management), one week graduate program, annually, University of Stellenbosch, South Africa (Technology Management), The Catholic University of Parana, Curitiba, Brazil (Technology Management), University of Hong Kong, 1994-95 (part-time visiting professor in Project Economics and Management). Examiner and advisory Board member at several universities in the United Kingdom, Africa and Asia

Other pertinent data:

- On the editorial board of several journals, e.g, International Journal of Internet and Enterprise Management, International Journal of Project Management, and Journal of Construction Management and Economics.
- Member of the Royal Academy of Engineers
- Author of more than 100 scholarly publications

Curriculum Vita

Jeff R. Wright

EDUCATION

Ph.D. The Johns Hopkins University, C.W.G Whiting School of Engineering, Department of Geography and Environmental Engineering, June, 1982.

MSE University of Washington, Department of Civil Engineering; Program in Water and Air Resources, Seattle, Washington, June, 1977.

BSE University of Washington, Department of Civil Engineering; Program in Water and Air Resources, Seattle, Washington, June, 1975.

BA University of Washington, Department of Speech Communication; Program in Social Psychology, Seattle, Washington June, 1975.

ACADEMIC APPOINTMENTS

University of California, Merced

Dean of Engineering, University of California, Merced, 2001 – present.

Campus Director, CITRIS Research Institute (Computer and Information Technology Research in the Interest of Society), 2001 – present.

Interim Dean, College I, UC Merced, 2004 – present.

Interim Director, UC Merced Energy Research Institute (MERI), 2004 – present.

Purdue University

Associate Dean of Engineering *(Research, Facilities Planning, & Diversity),* 2001.

Assistant Dean of Engineering *(Information Technologies & Diversity),* 1997 - 2001.

Professor of Civil Engineering, Purdue University, July, 1991 - 2001.

Director, Indiana Water Resources Research Center, June, 1989 - 2001.

Participating Faculty, Environmental Sciences and Engineering Institute, Purdue University, 1994 - 2001.

Participating Faculty, Graduate Program in Geographic Information Systems and Remote Sensing, Purdue University, August, 1985 – 2001.

Associate Professor of Civil Engineering, Purdue University, July, 1987 - July, 1991.

Visiting Researcher, Center for Advanced Decision Support for Water and Environmental Systems, University of Colorado at Boulder, 1989 - 1990.

Assistant Professor of Civil Engineering, Purdue University, September 1982 - July, 1987.

Research Assistant Professor of Civil Engineering, University of Washington, 1976 - 1978.

OTHER PROFESSIONAL APPOINTMENTS

Board of Directors; San Joaquin Valley Clean Energy Organization, appointed 2007.

Board of Directors; Castle Challenger Learning Center, 2003 – present.

Founding Editor-in-Chief, ASCE Journal of Infrastructure Systems, 1994 – 2001.

Member of the National Academy of Engineering Action Forum on Diversity, 1998 - 2004.

American Society of Civil Engineers; Task Committee on Diversity, 1999 - 2001.

American Society of Civil Engineers; Board Communications Committee, 1998 - 2000.

Member; American Society of Civil Engineering Management Group A, 1996 – 2000.

Associate Editor; American Society of Civil Engineers, Journal of Computing in Civil Engineering, 1990 – 1993.

Intern, Interstate Commission on the Potomac River Basin, Rockville, Md., 1979 - 1981.

Director of Documents, World Conference on the Human Environment, Swedish United Nations Association, Stockholm, March, 1972 - July, 1972.

AWARDS, RECOGNITION, AND HONORS

State of the Art Award, American Society of Civil Engineers, May, 2001.

Innovation Award, National Institutes for Water Research (NIWR), March 2001.

CYBERSTAR Finalist Award for Teaching Innovation, Indiana Association for Information Technologies, April, 2000.

Purdue University Teaching Academy, elected April, 1999.

Service to the Profession Award, Presented by the American Society of Civil Engineers, June, 1999.

Fellow of the Big Ten Consortium for Institutional Cooperation (CIC), elected 1997.

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS AND SOCIETIES

American Society of Civil Engineers
American Society for Engineering Education
Chi Epsilon Honorary
ASEE Engineering Dean's Council
National Society of Black Engineers
Omega Rho Operations Research Honor Society
Regional Sciences Association
Sigma Xi Scientific Research Honorary
Society of Hispanic Professional Engineers
Society of Women Engineers
Tau Beta Pi Engineering Honorary
Women in Engineering Program Advocates Network

EVIDENCE OF TEACHING EXCELLENCE

Elected to the Purdue Teaching Academy 1999.

Initiated a university-wide program at Purdue for supporting engineering faculty use of the Internet in support of course design, development and implementation.

PI or Co-PI for competitive grants totaling nearly $1-million for course/curriculum development or mentoring.

CONTRIBUTIONS TO COURSE AND CURRICULUM DEVELOPMENT

University of California, Merced

Core 90X: Freshman Seminar (Open Source Systems, You'll Be What You Write)
ENGR 97: Service Learning – Engineering Projects in Community Service (EPICS)
ENGR 191: Professional Seminar (for graduating seniors)
ENVE 140: Water Resources Planning and Management
ES 240: Water Resources Planning and Management

Purdue University

CE 392: Stochastic Concepts and Methods in Civil Engineering
CE 393: Civil Engineering Systems Analysis
CE 394: CE History, Ethics, Economic Analysis, and Case Studie
CE 495: Mathematical Modeling of Civil Engineering Systems
CE 497K: Computer Applications in Systems Engineer
CE 590: Water Resources Systems Engineering
CE 594: Economic Evaluation of Environmental Resources
CE 597F: Expert Systems in Transportation & Land Planning
CE 597I: Civil Infrastrcuture Systems Engineering
CE 597N: Internet Resources Design and Development
CE 597V: GIS in Civil Engineering
CE 597T: Advanced Internetworking Topics & Concepts
CE 645: Advanced Water Resources Systems

PUBLISHED WORK

Books

Civil and Environmental Engineering Systems (2nd Edition), ReVelle, C.S, Whitlatch, EA, and Wright, J.R., Prentice-Hall, (12004) ISBN: 0-13-047822-9.

Custom Edition: Civil and Environmental Engineering Systems, Wright, J.R., Prentice-Hall, (1998). ISBN: 0-536-01739-5

Civil and Environmental Engineering Systems, ReVelle, C.S, Whitlatch, EA, and Wright, J.R., Prentice-Hall, (1997) ISBN: 0-13-138678-6.

Edited Volumes

Expert Systems: Applications to Environmental Planning, J.R. Wright, L. Wiggins, R.K. Jain, and T.J. Kim (eds.), Springer-Verlag, March, 1993.

Digital Image Processing: Techniques and Applications in Civil Engineering, J.D. Frost and J.R. Wright (eds.), ASCE, July, 1993.

Proceedings of the 7th Annual Conference on Computing in Civil Engineering and Geographic Information Systems, Goodno, B.J. and Wright, J.R. (eds). ASCE, November, 1992.

Expert Systems: Applications to Urban Planning, T.J. Kim, L. Wiggins, and J.R. Wright (eds.), Springer-Verlag, December, 1989.

Regional Environmental Systems: Assessment of Research Applied to National Needs, Brian W. Mar and Jeff R. Wright (eds.) National Science Foundation, June, 1977.

Articles in Refereed Journals

Wallace, R.M., Zhang, Y., and Wright, J.R. "Distributed System for Coastal Infrastructure Modeling and Assessment," *ASCE Journal of Computing in Civil Engineering*, Vol. 15, No. 1, pp 67-73, 2001.

Iranpour, R., Stenstrom, M. G. Tchobanoglous, Miller, D., Wright, J.R. and Vossoughi, M. "Environhmental Engineering: Energy Value of Replacing Waste Disposal with Resource Recovery," *Science* Volume 285, pp 706-711, 1999.

Kandula, P. and Wright, J.R., "Designing Network Partitions to Improve Maintenance Routing," *ASCE Journal of Infrastructure Systems*, Vol. 3, No. 4, pp 160-169, December, 1997.

Chang, Y.C., Wright, J.R. and Engel, B.A., "Evidential Reasoning for Assessing Environmental Impact," *Civil Engineering Systems Analysis*, Vol. 14, pp 55-77, 1996.

Kandula, P., and Wright, J.R., "Optimal Design of Maintenance Districts," *Transportation Research Record*, No. 1509, pp 6-14, 1995.

Wang, J.Y., Kandula, P., and Wright, J.R., "Evaluation of Computer Generated Routes for Improved Snow and Ice Control," *Transportation Research Record*, No. 1509, pp 15-21, 1995.

Haslam, E.P., and Wright, J.R., "Indiana WETnet: A Virtual Water Resource," *Water Resources Update*, Number 99, pp 3-11, 1995.

Wang, J.Y., and Wright, J.R., "Interactive Design of Service Routes," *ASCE Journal of Transportation Engineering*, Vol 120, No. 6, pp 897-913, 1994.

Srinivasan, R., Engel, B.A., Wright, J.R., Lee, J.G., and Jones, D.D., "The Impact of GIS Derived Topographic Attributes on a NonPoint Source Pollution Model (AGNPS)," *Transactions of the American Society of Agricultural Engineers*, Vol 10, No. 4, pp 561-566,1994.

Wright, J.R. and Kosiba, E.D., "Assessing Alternatives for Automating District Office Administration," *Transportation Research Board*, No. 1305, pp 131-140, 1992.

Kosiba, E.D., Wright, J.R., and Cobbs, A.E., "Discrete Event Sequencing as a Traveling Salesman Problem," *Computers in Industry,* Vol. 19, No. 3 pp 317-327 1992.

Wright, J.R. and Wang, J.Y., "Integrating GIS and CAD for Transportation Route Design: PHASE I - Database Development," *Transportation Research Record No. 1304,* pp 212-218, 1992.

Haslam, E, and Wright, J.R., "Application of Routing Technologies to Rural Snow and Ice Control," *Transportation Research Record No. 1304,* pp 202-211, 1992.

Benabdallah, S. and Wright, J.R., "Multiple Subregion Allocation Models," *ASCE Journal of Urban Planning and Development*, Vol. 118, No. 1, pp 24-40, March, 1992.

Diamond, T.J. and Wright, J.R., "An Implicit Enumeration Technique for the Land Acquisition Problem," *Civil Engineering Systems*, Vol. 8, pp 101-114, 1991.

Buehler, K.A., and Wright, J.R., "A Bayesian Reasoning Shell for Land Management Part I: Structure & Function," *Journal of Computing in Civil Engineering*, ASCE. (3)2, pp 267-282, July, 1991.

Buehler, K.A., and Wright, J.R., "A Bayesian Reasoning Shell for Land Management Part II: Implementation," *Journal of Computing in Civil Engineering*, ASCE.(3)2, pp 283-299, July, 1991.

Benabdallah, S. and Wright, J.R. "Shape Considerations in Spatial Optimization," *Civil Engineering Systems Analysis*, Vol. 8, pp 145-151, 1991.

Engel, B.A., Jones, D.D., and Wright, J.R., "Selection of an Expert System Development Tool," *AI Applications in Natural Resource Management*, Vol. 5, No. 1 1991, pp 15-22.

Wright, J.R., Benabdallah, S., and Engel, B.A., "A Normalized User Interface for the Storm Water Management Model," *AI Applications in natural Resource Management*, Vol. 4, No. 2, pp. 11 - 16, 1990.

Randall, D., Houck, M.H. and Wright, J.R., "Drought Management of an Existing Water System", *Journal of Water Resources Planning and Management*, ASCE, Vol. 116, No. 1, pp 1-20, January, 1990.

Wright, J.R. and Skibniewski, M., "A Graduate Course Expert Systems Prototype Development," *International Journal of Applied Engineering Education*, Vol. 6, No. 2, pp. 233 - 242, 1990.

Armijos, A., Wright, J.R. and Houck, M.H., "Bayesian Inferencing Applied to Real-time Reservoir Operations and Management," *ASCE Journal of Water Resources Planning and Management*, Vol. 116, No. 1, pp 38-51, January, 1990.

Diamond, J.T. and Wright, J.R., "Efficient Land Allocation," *Journal of Urban Planning and Development*, ASCE, Vol. 115, No. 2, pp 81-96, Sept. 1989.

Sheer, D.P., Baeck, M.L., and Wright, J.R., "The Computer as Negotiator," *Journal of the American Water Works Association*, Vol. 81, No. 2, pp 68-73, 1989.

Jacobs, T., Wright, J.R. and Cobbs, A., "Optimal Inter-process Steel Production Scheduling," *Computers in Industry*, Vol. 15, No. 6, pp 497-508, 1988.

Houck, M.H., Wright, J.R., Diamond, J.T., and Toft, G., "Planning Indiana's Water Infrastructure from a Competitive Perspective," *Water Resources Bulletin*, American Water Resources Association, Vol. 24, No. 3, pp 651-659, June, 1988.

Diamond, J.T. and Wright, J.R., "Design of an Integrated Spatial Information System for Multiobjective Land-use Planning," *Environment and Planning -B*, Vol. 15, pp. 205-214, June, 1988.

Wright, J.R., Egly, S.E., and Berg, D., "Efficient Personnel Management for Winter Highway Maintenance," *Transportation Research Record* No. 1127, National Research Council, pp. 9-15, June, 1988.

Diamond, J.T. and Wright, J.R., "A Multiobjective Analysis of Public School Consolidation," *Journal of the Urban Planning Division*, ASCE, Vol. 113, No. 1, pp. 1-18, May, 1987.

Egly, S.E., and Wright, J.R., "A Microcomputer-Based Multiobjective Personnel Management Model," *Journal of Computing in Civil Engineering*, ASCE, Vol. 1, No. 2, pp. 114-127, April, 1987.

Wright, J.R., Houck, M.H., Diamond, J.T., and Randall, D., "Drought Contingency Planning," *Civil Engineering Systems*, Vol.3, pp. 210-221, December, 1986.

Randall, D., Houck, M.H., and Wright, J.R., "Simulating Water System Operation During Periods of Drought," *Journal of the American Water Works Association*, Vol. 78, No. 8, pp. 53-60, August, 1986.

Wright, J.R., Egly, S.C., and Gallivan, H.W., "A Multiobjective Model for Seasonal Personnel

Reassignment," *Civil Engineering Systems*, Vol. 3, pp. 16-21, March, 1986.

Wright, J.R., ReVelle, C.S., and Cohon, J.L., "A Multiobjective Integer Programming Model for the Land Acquisition Problem," *Regional Science and Urban Economics*, Vol. 13, pp. 31-53, 1983.

Kroll, P. and Wright, J.R., "SLIMS--A Microcomputer-based Information Management System for a Particular Cross Regional Comparison Application," *Journal of the Urban and Regional Information Systems Association*, pp. 83-94, August, 1983.

Mar, B.W. and Wright, J.R., "Exchange Mechanisms for Policy Analysis Games," *Simulation and Games*, Vol. 9, No. 4, pp. 393-412, December, 1978.

Articles in Refereed Books and Proceedings

Wright, J.R., Carpin, S., Cerpa, A., Gavilan, G., Kallmann, M., Laird, C, Larid, K., Newsam, S, and Noelle, D. "An Open Source Teaching and Learning Facility for Computer Science and Engineering Education," *Proceedings of the International Conference on Frontiers in Education: Computer Science and Computer Engineering (FECS)*, Las Vegas, Nevada, June, 2007.

Ritschel, A. and Wright, J.R. "Development of a Solar Energy Research and Test Center at the University of California, Merced," *Proceedings of the IEEE 4th World Conference on Photovoltaic Energy Conversion*, pages 2517-2519 Hawaii, June, 2006.

Driscoll, D.M., Kokini, K., Katehi, L. P.B., Wright, J.R., and Percifield, C.P., "A New Paradigm for Diversity in Engineering," Proceedings of the 2003 American Society of Engineering Education Annual Conference and Exposition, 8 pages, June, 2003.

Wright, J.R. and Houck, M.H., "Water Resources Planning and Management," in *The Civil Engineering Handbook (Second Edition)* (W.F. Chen and J.Y.R. Liew, eds.), ISBN-10: 0-8493-0958-1, 42 pages, 2003.

Wright, J.R. and Houck, M.H., "Chapter 39: Water Resources Planning and Management," in *The Civil Engineering Handbook* (W.F. Chen ed.), ISBN-10: 0-8493-8953-4, pages 39-1-39-18, 1995.

Daniels, Jane, and Wright, J.R., "Designing a More Inclusive Engineering Education," *Proceedings of the International Conference on Gender and Science and Technology*, Copenhagen, Denmark, 6 pages, July 2001.

Wright, J.R. Gavilan, G., Zhang, Y. and Redinbo, K., "Emerging Technologies for Developing Distributed Database Systems," *Proceedings of the ASCE 2000 Joint Conference on Water Resources Engineering and Water Resources Planning and Management*, pp 188-197, July, 2000.

Franks, S., Gallagher, Wright, J.R., Daniels, J.Z., and Tietjen, J.S., "Designing Engineering and Science Education for the 21st Century," *Proceedings of the WEPAN 2000 National Conference: Creating a New Vision in the 21st Century*, pp 93-98, June, 2000.

Gavilan, G. and Wright, J.R., "Optimal Design of Groundwater Monitoring Networks," *Proceedings of the 26th ASCE Water Resources Planning and Management Division Specialty Conference*, 8 pages, June, 1999.

Lemer, A.C., and Wright, J.R., "Developing a Comprehensive Infrastructure Management System," *Proceedings of the 103rd American Public Works Association Congress on Innovations in Infrastructure Management*, Minneapolis, September, 1997.

Wright, J.R. "An Efficient Algorithm for Solving the Region Aggregation Problem," *Proceedings of the 2nd International Conference on Digital Image Processing in Civil Engineering*, Davos, Switzerland, 14 pages, June, 1997.

Wright, J.R. and Houck, M.H., "Chapter 37: Water Resources Planning and Management," in *The Civil Engineering Handbook* (W.F. Chen, ed.), pages 1166 - 1183, 1995.

Wright, J.R., "Integrating Spatial Network Data and Operations Research Methodologies for Improved Transportation Network Maintenance," *Proceedings from the NSF/Korean Symposium on IVHS & TIS in Transportation*, 20 pages, 1994.

Wang, J.Y., and Wright, J.R., "Route Design and Management," *Geographic Information Systems in Transportation*, Rutgers University Press, 1994.

Wright, J.R., Want, J-Y, and Haslam, E.P., "A Spatial Decision Support System for Vehicle

Routing, "P*roceedings fot he 5th International Conference on computing in Civil and Building Engineering*, ASCE, 8 pages, New York, June, 1993.

Wright, J.R., "Teaching Expert Systems Prototyping at Purdue," Chapter 9 in *Expert Systems for Civil Engineers - Education*, S. Mohan and M.L. Maher (eds.), ASCE Monograph, Spring, 1989.

Kroll, P. and Wright, J.R., "A Microcomputer-based Information Management System for Cross Regional Comparison," *Proceedings of the Urban and Regional Information Systems Association,* 11 pages, Atlanta, August, 1983.

Editorials, Notes, and Discussions in Refereed Journals

Wright, J.R. "Internetworking and Lifeline Learning," A*SCE Journal of Water Resources Planning and Management*, Vol. 126, No. 1, pp 1-3, 2000.

Wright, J.R. "Introducing the ASCE Journal of Infrastructure Systems," ASCE Journal of Infrastructure Systems, Vol. 1, No. 1, pp 1-2, 1995.

Wright, J.R., "GIS and Civil Engineering," *ASCE* J*ournal of Computing in Civil Engineering, V*ol. 7 No. 3, pp 257-260, July, 1993.

Book Chapters and Invited Contributions to Books

Wright, J.R., "Building the School of Engineering," Chapter 4 in From Rangeland to Research University: *The Birth of the University of California, Merced*, K. Meritt and J.F. Lawrence (eds.), Wiley, Fall, 2007.

Wright, J.R., and Buehler, K.A., "Probabilistic Inferencing and Spatial Decision Support Systems," Chapter 6 in *Expert Systems in Environmental Planning and Engineering*, J.R. Wright, L.Wiggins, R.K. Jain, and T.J. Kim (eds.), Springer-Verlag, Fall, 1992.

Wright, J.R., "Integrating Multiobjective Optimization and Knowledge-Based Systems in Land Allocation Models," Chapter 3 in E*xpert Systems: Applications to Urban Planning*, T.J. Kim, L. Wiggins, and J.R. Wright (eds.), Springer-Verlag, December, 1989.

Other Proceedings Articles

Benitez, P., Winston, R., Diaz, G., Reed, L., Cisneros, J., Tovar, F., Ritschel, A. and Wright, J. "Novel high-concentration mirror-based Kohler Integrating system for tandem solar cells," *Poster presentation at the IEEE 4th World Conference on Photovoltaic Energy Conversion, Hawaii*, June, 2006.

Wright, J.R., "Tilting the Bowl: Changing Institutional Culture Towards Diversity," 2000 National Meeting of the Women in Engineering Programs & Advocates Network (WEPAN), 6 pages, April, 2001.

Wright, J.R., A Distributed Database for Journal Management," *Proceedings of the WebNet2000 World Conference* , San Antonio, TX, 7 pages, October, 2000.

Wallace, R., Wright, J.R., and Zhang, Y. "A Demonstration Coastal Information System for Indiana," *Proceedings of the 26th ASCE Water Resources Planning and Management Specialty Conference*, June, 1999.

Wright, J.R. "Too Much Technology; Too Fast?" *Proceedings of the Water Resources and Urban Development Joint Specialty Conference, ASCE*, 6 pages, June 8, 1998.

Wright, J.R. "Experiences with Asynchronous Learning Tools," *Proceedings of the Water Resources and Urban Development Joint Specialty Conference, ASCE*, June, 1998.

Uber, J., Grayman, W., and Wright, J.R., "Water Resources Planning & Management Information Systems," *Proceedings of the ASCE Water Resources Planning and Management Division Specialty Conference*, 5 pages, June, 1996.

Kandula, P., and Wright, J.R. "Application of Partitioning Models to Address Location Issues," *Proceedings of the 42nd North American Meeting of the Regional Science Association, International*, Cincinnati, 9 pages, November, 1995.

Kandula, Pl and Wright, J.R., "Network Partitioning for Improved Route Design," Proceedings of the 41st North American meeting of the Regional Science Association, International, 9 pages, Niagra Falls, Ontario, Canada, November, 1994.

Wright, J.R., "Multiobjective Region Aggregation with Shape Considerations," *First*

International Engineering Foundation/NSF Conference on Image Processing in Civil Engineering, Kona, Hawaii, , 8 pages, March 1993.

Wright, J.R., "Automating the Design of Service Routes," *Proceedings of the 34th International Conference Highway Engineering*, 32 pages, September, 1992.

Lutz, C.H., Dillon, T.M., Houck, M.H., and Wright, J.R., Interpreting Dredge Material Bioassay Data--COBIAA," *Water Forum '92, Annual conference of the Water Planning and Management Division, ASCE*, pates 108-113, August, 1992.

Wright, J.R., "A Computer Aided System for Planning Efficient Routes,"*Geographic Information Systems (GIS) for Transportation*, Portland, OR., March, 1992.

Wang, J.Y., and Wright, J.R. "Advanced Technologies for Transportation Route Design," *ASCE 8th Conference on Computing in Civil Engineering*, Dallas, June, 1992.

Wright, J.R. "Route Planning and Management: Applications to Transportation Systems Management," *Managing Snow and Ice Control Operations*, pages 23-24, Madison, WI, September, 1991.

Wright, J.R., "GIS Data Structures for Advanced Computer Technologies," *TUNGIS '91: An International Seminar on GIS*, Tunis, Tunisia, September, 1991.

Wright, J.R. and Wang, J.Y., "Emerging Technologies for Water Resources Modeling: New Tools and Challenges for the Classroom,? International conference on Computer Applications in Water Resources, 10 pages, Taiwan, July, 1991.

Wright, J.R., and Haslam, E., "Application of Routing Technologies to Rural Snow and Ice Control," *70th Annual Meeting of the Transportation Research Board*, Washington, D.C., January, 1991.

Wright, J.R., "Personnel Management for Winter Operations: A PC-based Decision Support System," *70th Annual Meeting of the Transportation Research Board*, Washington, D.C., January, 1991.

Kosiba, E.D., and Wright, J.R., "Facility Location Models for Cooperative Foundry Wast Reclamation," *ORSA/TIMS Joint National Conference, Philadelphia*, October, 1990.

Wright, J.R., "Advanced Spatial Decision Support Systems in Water Resources Research," *Specialty Conference on Irrigation and Drainage and Watershed Management* Symposium, 12 pages, Drango, CO, July, 1990.

Wright, J.R. and Henry, R.H., "Computer Futures in Civil Engineering Education," *1990 Educational Forum*, Las Vegas, 8 pages. April, 1990.

Wright, J.R., "The Role of Raster-based GIS in Water Resources Systems Analysis," *16th Annual national Specialty Conference*; ASCE Water Resources Planning and Management Division, pages 145-148, Sacramento, May, 1989.

Wright, J.R., "Electronic Communications in Water Resources Systems," *16th Annual national Specialty Conference*; ASCE Water Resources Planning and Management Division, pages 59-62, Sacramento, May, 1989.

Armijos, A. and Wright, J.R., "Bayesian Inferencing Applied to Real-time Reservoir Operations, 16*th Annual national Specialty Conference*; ASCE Water Resources Planning and Management Division, pages 485-488, Sacramento, May, 1989.

Jacobs, T.L. and Wright, J.R., "Strategies for Urban Drainage Infrastructure Rehabilitation, *16th Annual national Specialty Conference*; ASCE Water Resources Planning and Management Division, pages 107-110, Sacramento, May, 1989.

Engel, B.A., Jones, D.D., and Wright, J.R., "Selection of an Expert System Development Tool, "Proceedings of the 1998 Summer Meeting of the American Society of Agricultural Engineers, 7 pages, Rapid City, SD, June, 1988.

Wright, J.R., "Engineering Workstations for Civil Engineers, "Proceedings of the 5th Conference on Computing in Civil Engineering: Microcomputers to Supercomputers, ASCE, pages 62-69, Alexandria, VA., March, 1988.

Wood, D.M. and Wright, J.R., "Calibrating Complex Simulation Models using Rules-based Inferencing," Proceedings of the 1988 Multiconference on Computing in Civil Engineering, pages 256-261, San Diego, February, 1988.

Rendall, D., Houck, M.H., and Wright, J.R., "Policy Screening Models for Water Supply

Operations," *Proceedings of the American Society of Civil Engineers Conference: Water Forum '86—World Water Issues*, pages 1912-1919, Long Beach, August, 1986.

Wright, J.R., and Houck, M.H., "An Application of Systems Modeling in Steel Production Scheduling," *Proceedings of the Fourth International Conference and Exhibition on Engineering Software*, Pages 15/127 – 15/140, London, England, June, 1985.

Randal, D., Houck, M.H., and Wright, J.R., "Building a Water Supply Optimization Model for Indianapolis," *Proceedings of the International Symposium on Urban Hydrology, Hydraulics, and Sediment Transport*, pages 39-46, Lexington, KY, July, 1984.

Wright, J.R., Houck, M.H., and Randall, D., "Comparison of Mathematical Programming Packages," *Proceedings of the American Society of Civil Engineers Third conference on Computing in Civil Engineering*, pages 350 – 354, San Diego, April, 1984.

Wright, J.R., "Computer Literacy for Civil Engineers," *Proceedings of the American Society of Civil Engineers Third conference on Computing in Civil Engineering*, pages 143 – 149, San Diego, April, 1984.

Wright, J.R., and Kroll, P., "Rigid Format Database Management Using Microcomputers," *Proceedings of the American Society of Civil Engineers Third conference on Computing in Civil Engineering*, pages 449 – 458, San Diego, April, 1984.

Wright, J.R., "The Trouble with Computers," *Proceedings of the 70th annual Road School, pages 125-129*, Purdue University, March, 1984.

Wright, J.R. "The Acquisition of Recreational Lands Using Multiobjective Integer Programming," *1983 Symposium on Leisure Research*, pages 234 - 241Kansas City, October, 1983.

Houck, M.H., and Wright, J.R., "The Use of Cumulative Distribution Functions in Water-energy Real-time Operating Models," *Joint National Meeting of the Institute for Mangement Science and Operations Research Society of America*, pages 331-339, Chicago, April, 1983.

INVOLVEMENT IN GRADUATE RESEARCH

Major Professor for Completed Theses and Dissertations

Year	Student	Degree	Thesis/Dissertation Title
2003	J.K. Hou	Ph.D.	Client/server Architecture for Distributed Infrastructure Modeling
2002	R. Wallace	Ph.D.	Region Aggregation Modeling using Circle Packing
2001	P. Johnson	Ph.D.	Civil Infrastructure Policy, Planning and Management
2001	Y. Zhang	Ph.D.	Distributed Spatial Environmental Modeling
2001	F. A. Bonilla	Ph.D.	Perturbation Techniques in Stochastic Hydrology
2000	C. Engstrom	MSCE	Systems Engineering
1999	G. Reid	MSCE	Coastal Engineering and Management
1999	H. Gavilan	Ph.D.	GIS in Water Resources Planning and Management
1999	D. Medema	MSCE	Civil Infrastructure Systems Analysis
1998	C-I. Yen	MSCE	Automating Region Aggregation Model using GIS
1997	P. Johnson	MSE	Relationship Between Infrastructure Investment and Economic Status
1996	P. Kandula	Ph.D.	Location, Allocation, Routing Models
1995	Y.C. Chang	Ph.D.	An Efficient Heuristic for Solving the Region Aggregation Problem
1995	J. Miedema	MSCE	Assessing the Value of Information for Improved Winter Network Maintenance Management
1993	E. Markstrom	MSCE	Expert Systems for Environmental Operations Management
1993	J.C. Kilburn	MSCE	Predicting Space Shuttle Launch Blast Emissions

1992	J-Y Wang	Ph.D.	Multiobjective Route Design and Analysis
1992	B. Nicholson	MSCE	Multiobjective Analysis of Infrastructure Maintenance
1991	Y.C. Chang	MSCE	A Dempster-Shafer Shell for Spatial Indexing
1991	E.D. Kosiba	Ph.D.	Locating Shared Production Facilities on a Network
1990	K.A. Buehler	MSCE	A Bayesian Indexing Scheme for Land Management
1990	S. Benaballah	Ph.D.	Multiobjective Morphological Modeling
1989	D. Hickey	MSCE	Goundwater Pollution Impact Prediction Using GIS
1989	T.L. Jacobs	Ph.D.	Multiobjective Rehabilitation Strategies for Dams
1988	E. Haslam	MSCE	The Application of Routing Technologies to Snow Removal
1988	P. Kurmas	MSE	Processing of Digital Line Graph Data for Engineering Management
1988	J.T. Diamond	Ph.D.	Multiobjective Discrete Optimization for Land Management
1987	S. Ditlinger	MSCE	Integrated Land Management
1986	G. Stukel	MSCE	A Database for Highway Maintenance Management
1986	E.D. Kosiba	MSCE	A Traveling Salesman Model for Discrete Event Sequencing
1986	S.C. Egly	MSCE	A Microcomputer-Based Linear Model for Personnel Mgmt.
1985	T.L. Jacobs	MSCE	Mathematical Modeling Applied to Production Scheduling
1985	J.T. Diamond	MSE	Multiobjective Analysis of Public School Consolidation
1984	N. Cullen	MSCE	Dynamic Simulation Modeling of Activated Sludge w/J. Alleman

GRANTS AND AWARDS FOR RESEARCH AND EDUCATION

Current and Recently Completed Grants (at UC Merced)

Sponsor/Period	Title / *(Involvement)*	Amount
PG&E Corproration Fall, 2007	Support for Establishing the California Solar Energy Testing Center – *Co-Author and PI w/Professor Winston*	$2,000,000
PG&E Corporation 10/07 – 12/12	Support for UC Merced Engineering Student Recruitment and Retention - *Author and PI*	$1,000,000
Kearney Foundation 7/07 – 6/12	A Salable Object Database for Distributed Document Management: Phase II – *Author and PI*	$148,494
Cal. Bay Delta Authority 1/04 – 6/07	Web Based Proposals, Submission, Review, and Management System – *Author and PI*	$384,413
Hewlett-Packard 8/05 - 12/07	Free and Open Source Software (FOSS) in Engineering *Author and PI*	$180,000
Cal. Bay Delta Authority 6/05 - 8/05	Online Submission System Technical Support *Author and PI*	$43,675
CALFED 5/04 – 4/05	Developing a Client-Server Architecture for Water Resources Proposals Management – Author and PI	$91,075
Cal. Bay Delta Authority 5/04 – 5/05	Design, Development, and Implementation of a Distributed Information for Proposal Management - *Author and PI*	$114,778
Foster Family Fall, 2005	Endowment to establish the UC Merced Engineering Service Learning Program – *Co-Author, Co-PI w/Prof. Leppert.*	$1,250,000
The Hewlett Foundation 1/03 – 12/07	Developing a Partnership with UC and Community College for Promoting Articulation – *Co-Author and Co-PI*	$600,000
Kearney Foundation 5/02 – 6/07	A Scalable Object Database for Distributed Document Management – *Author and PI*	$195,600

Past Grants (at Purdue University)

Sponsor/Period	Title / *(Involvement)*	Amount
Kearney Foundation 3/02 - 4/03	Design of a Distributed Object Database for Document Management - *Author and PI*	$58,000
National Science Found. *9/01 - 12/0*2	Program Extension for the Computer Science, Engineering, Mathematics (CSEMS) Scholars Program – *Co-Author, Co-PI*	$132,000
U.S. Geological Survey 3//01 - 2/02	Annual Water Resources Research Institute Program for Indiana - *Author and PI*	$68,178
U.S. Geological Survey 9/00 - 10/01	An On-line Reporting System for the USGS Cooperative Research Units Program - *Author and PI*	$79,234
U.S. Geological Survey 3/99 - 3/00	Annual Water Resources Research Institute Program for Indiana - *Author and PI*	$68,178
U.S. Geological Survey 9/98 - 9/01	Development of an Intranet for the National Institutes for Water Resources - *Author and PI*	$51,000
National Science Found. 1/00 - 12/01	Experience High Achieving Students in Computer Science, Engineering and Mathematics - *Co-Author Co-PI*	$220,000
The GE Fund 9/99 - 8/02	Creating a Freshman Engineering Learning Community - *Co-Author, Co-PI*	$449,792
U.S. Geological Survey 3/99 - 2/00	Annual Water Resources Research Institute Program for Indiana - *Author and PI*	$85,000
The GE Fund 6/98-7/99	Learning Excellence: Transforming the Freshmen Engineering Experience – *Co-Author and Co-PI*	$165,000
National Science Found. 1/98 - 12/00	Internet 2 Connectivity for Purdue University - *Co-PI and Oversight Committee Chair*	$305,000
U.S. Geological Survey 1/98 - 2/99	Annual Water Resources Research Institute Program for Indiana - *Author and PI*	$85,000
Intel Corporation 8/97 - 8/01	Advanced Computation Modeling for Environmental and Natural Resources Protection - *Co-Author, Co-PI*	$250,030
Purdue University 1/97 - 1/98	Distance Learning Technology Development *Author and PI*	$30,000
In. Dept. of Env. Mgmt. 9/96 - 9/98	Indiana WETnet - Phase II: Distributed Modeling Methods *Co-Author, Co-PI*	$98,838
U.S. Geological Survey 7/97 - 6/98	Annual Water Resources Research Institute Program for Indiana - *Author and PI*	$82,000
Ind. Dept. Nat'l. Res. 9/96 – 9/98	Indiana WETNET: Phase II Distributed Modeling Methods Co-*Author and Co-PI*	$98,838
Ind. Dept of Natural Res. *7/96 - 8/98*	The Coastal Situation Report *Co-PI*	$75,000
Ind. Dept. of Natural Res. *7/96 - 1/98*	Design of a Coastal Spatial Information System *Author, PI*	$24,000
Purdue Res. Foundation 1/96 - 12/98	Integrated Infrastructure Management and Decision Support *Author and PI*	$20,400
City of Indianapolis 3/96 - 12/96	Integrated Infrastructure Management and Decision Support *Co-Author and PI*	$15,000
National Science Found. 10/95 - 9/98	Integrated Infrastructure Management and Decision Support *Co-Author and PI*	$99,546
U.S. Geological Survey 7/96 - 6/97	Annual Allotment for Water Resources Research - *Author and PI*	$20,000
Purdue Res. Foundation 8/94 - 12/94	Jump-Start Award for Interdisciplinary Research *Author and PI*	$17,700

U.S. Geological Survey 7/95 - 6/96	Annual Allotment for Water Resources Research *Author and PI*	$78,545
National Science Found. 6/94	International Travel Grant *Co-Author and Co-PI*	$1,8500
U.S. Geological Survey 7/94 - 6/95	Annual Allotment for Water Resources Research *Author and PI*	$101,348
Purdue Res. Foundation 6/94 - 6/94	International Travel Grant *Author and PI*	$1,500
FHWA, IDOH 1/94-6/95	Real-time models for Snow and Ice Control Operations *Author and PI*	$85,000
FHWA, IDOH 1/93-6/97	Multiobjective Arc-Partitioning *Author and PI*	$235,000
National Science Found. 7/92 - 3/94	Civil Engineering Exploration Curriculum – *Co-Author* *Co-Author and Co-PI*	$75,000
U.S. Geological Survey 7/93 - 6/94	Annual Allotment for Water Resources Research *Author and PI*	$105,274
Atlantic Richfield Co. 3/92 - 12/92	Expanding the Knowledge Base of an Oil Spill Remediation Expert System: REMEDIATOR II *Author and PI*	*$10,000*
FHWA, IDOH *1/92-12/92*	Implementation of the Computer Aided System for Planning Efficient Routes: CASPER - *Author and PI*	$74,258
Purdue Research Grant 1/92 - 7/92	Environmental Modeling in Northern Africa *Author and PI*	$2,500
U.S. Army WES 1/92 - 3/93	Expert Systems for Interpreting the Consequences of Bioaccumulation on Aquatic Animals*, Co-Author and Co-PI*	$85,000
U.S. Army CERL 3/92 - 5/92	Continuation of XGRASS - GIS Conceptual Design and Development - *Author and PI*	$14,945
U.S. Geological Survey 7/92 - 6/93	Annual Allotment for Water Resources Research *Author and PI*	$105,274
Bechtel Corporation 1986 - 1991 *(recurring)*	Systems Applications in CAD/CAE *Author and PI*	$12,000
U.S. Army CERL 7/91 - 6/92	Development of GIS Workshops and Documentation on Environmental Map Themes *Co-Author and PI*	$84,574
Showalter Trust Fund 4/91 - 3/92	Spatial Environmental Modeling *Co-Author and Co-PI*	$7,696
U.S. Army CERL 6/91 - 6/92	VIPER: Visual Interactive Policy Evaluation Routine *Author and PI*	$19,273
U.S. Geological Survey 7/91 - 6/92	Annual Allotment for Water Resources Research *Author and PI*	$105,274
U.S. Army WES 1/91 - 2/92	Bioaccumulation and Effects Assessment in Aquatic Biota Exposed to Contaminated Dredged Material – Co-Author, *PI*	$132,000
U.S. DOE 9/90 - 6/92	Environmental Restoration and Waste Management *Co-Author and PI*	$25,000
U.S. Army CERL 11/90 - 5/91	GIS Data Structures for Advanced GIS Technologies *Author and PI*	$25,650
U.S. Geological Survey 7/90 - 6/91	Annual Allotment for Water Resources Research *Author and PI*	$112,424
Argonne Laboratory 9/89 - 3/91	Energy, Economic and Technical Factors of Foundry Sand Recycling and Reclamation - *Co-Author and Co-PI*	$75,000
U.S. Army CERL 9/89 -12/91	Automated Management of Dredge Material Disposal *Author and PI*	$127,000
U.S. Army CERL	Development of Advanced Spatial Modeling Algorithms	$134,608

7/89 -8/91	*Author and PI*	
FHWA, IDOH 3/89-1/91	Multiobjective Service Route Design *Author and PI*	$143,510
Purdue Res. Foundation - 1989	XL International Travel Grant; Singapore, Shanghai *Author and PI*	$1,200
U.S. Army WES 10/88 – 12/90	Automating Dredge Material Disposal Management *Co-Author and Co-PI*	$120,000
National Science Found. 1989	International Travel Grant: Singapore, Shanghai *Author and PI*	$1,200
U.S. Army CERL 5/88 – 5/88	Evaluation of Multiobjective Land Management Models *Author and PI*	$11,803
Purdue University 1988	Creative Undergraduate Instruction *Co-Author and Co-PI*	$10,100
JHRP, INDOT 7/87 – 6/89	Development of a Prototype System for Show Route Design and Management – *Author and PI*	$23,308
U.S. Army CERL 6/88 - 9/91	Exceed $2,00,000 for research related to facilities planning and management in areas of GIS and spatial analysis - *PI*	Indef.
Bechtel Corporation 1986	Systems Applications in CAD/CAE *Author and PI*	$2,000
U.S. Army CERL 1/86-3/87	Division Support for Training Land Resource Utilization *Author and PI*	$49,950
INDOT/JRHP 3/86-2/87	Remote Office Automation Analysis *Author and PI*	$19,971
Purdue Res. Foundation 1986	Expert Systems int eh Planning and Design of Sewerage Systems Rehabilitation and Expansion – *Author and PI*	$13,200
U.S. Geological Survey 3/86-3/87	Development of an Expert System for Rehabilitation of the Urban Drainage Systems – *Co-Author and Co-PI*	$33,000
Purdue Res. Foundation 1985	International Travel Grant *Author and PI*	$6,500
U.S. Army CERL 1985	Optimization Methods and Systems analysis for Computerized Planning and Environmental Management – *Author and PI*	$14,915
U.S. Army CERL 6/85 - 7/87	The Integrated Training Lands Management System *Author and PI*	$67,136
INDOT/JHRP 6/84 – 8/86	Optimal Reassignment Strategics for Snow Personnel *Author and PI*	$22,103
U.S. Army CERL 8/84 - 7/85	Distributed Training Scheduling System Design *Co-author and Co-PI*	$24,787
U.S. Army CERL 1/84-6/85	Testing and Evaluation of the Division Gunnery Model *Author and PI*	$34,992
Purdue Res. Foundation 1994	A Multiobjective Integer Programming Solution to the Site Selection Problem – *Author and PI*	$13,200
U.S. Army CERL 7/83-6/84	Training Lands Systems Concepts *Author and PI*	$24, 678
Indiana WRRC 7/83 – 6/84	Developing a Drought Simulation Exercise *Co-Author and Co-PI*	$11,584
U.S. Army CERL 1983	Conceptual Design of a Training Lands Management System *Author and PI*	$12,667
Bethlenem Steel Corp. 1/83-6/86	Optimization Techniques Applied to Steel Production Scheduling – *Author and PI*	$32,500

SIGNIFICANT SCHOLARLY WEBSITES DEVELOPED

UC Merced *(authentication required)*

Interactive website and database for administering the proposal submission, review and management support system for the Kearney Foundation of Soil Science. The research prospectus of the Foundation may include work that leads to further understanding of mechanisms and processes governing carbon cycling processes and trace gas dynamics and the development of quantitative cause-effect relationships between identified soil C sequestration strategies and land use. In particular, there is a need to understand how processes are spatially and temporally distributed across diverse landscapes.

https://uckearney.org/2006/ *

Distributed information system for tdocument review and management support system of the CALFED Bay-Delta Program agencies through the California Bay-Delta Authority, the California Department of Fish and Game, the U.S. Fish and Wildlife Service, and the National Marine Fisheries Service receives, reviews, and makes awards for research projects that assist farmers in integrating agricultural activities with ecosystem restoration. The geographic area of interest is California's Sacramento River and San Joaquin River watersheds and the San Francisco Estuary.

http://www.calwater.ca.gov/Solicitation/index.htm *

Purdue University

Online Journals Management System for the ASCE Journal of Infrastructure Systems: http://bridge.ecn.purdue.edu/JIS/

Interactive Information Management Systems for the ASCE Water99-2002 Specialty Conference: http://www.ecn.purdue.edu/Water2002/

The Indiana Coastal Information System (Interactive surface transport model): http://www.ecn.purdue.edu/Coastal/

The SANTA personnel management model online: http://gunsmoke.ecn.purdue.edu/~yiguo/santa/

Online database and Intranet for the USGS Cooperative Research Units Program: https://Engineering.Purdue.edu/WRRC/CRUP_new/index_html

Online database and Intranet for the National Institutes for Water Resources: http://www.niwr.org/NIWR/

Multiobjective Network Arc Partitioning modeling tools: http://gunsmoke.ecn.purdue.edu/~wrightje/DropBox/Secure/molparcpart

Indiana Online Water Logs (Interactive datasource for Indiana water log data): http://WetNet.www.ecn.purdue.edu/WetNet/index-old.html

The Indiana Coastal Situation Report (State of the Indiana Lake Michigan shorelines): http://bridge.ecn.purdue.edu/~waterl

Indiana WETnet Water Resources Information Server: http://bridge.ecn.purdue.edu/WETnet/

Intranet for the Purdue/NSF Civil Infrastructure Systems Integrative Research Program: http://bridge.ecn.purdue.edu/~iims/

Purdue Schools of Engineering Diversity Forums Intranet and Database: http://webct.cc.purdue.edu/SCRIPT/DAC0101/scripts/serve_home

Online Interactive Region Aggregation and Land Leveling Modeling System: http://gunsmoke.ecn.purdue.edu/~yiguo/java/

Purdue Schools of Engineering Strategic Plan Collaborative Development System: https://Engineering.Purdue.edu/Engr/strategic_plan/

Interactive resource for teaching linear optimization: characterization of extreme points: http://gunsmoke.ecn.purdue.edu/~yiguo/ce597t/

Multiobjective linear optimization teaching tool--the region aggregation problem: http://gunsmoke.ecn.purdue.edu/~yiguo/acquisition/

National Institutes for Water Resources Proposal Submission system for the national grants program: http://www.niwr.org/NIWR/app/FY2000

INVITED PRESENTATIONS

"The Big Picture: Our Energy/Climate Challenge," Panel Presentation to the Clean Energy and Environment Roundtable; World Ag Expo, Tulare, Ca. February 12, 2008.

"The Hidden Challenge for Climate Change: U.S. Energy Workforce Retooling," *UC Merced Climate Change Teach-in*, January 31, 2008.

"Opportunities for Free and Open Source Software in Engineering Education," *A panel presentation at the third Annual Government Open Source Conference (GOSCON),* October 15-16, 2007, Portland, Oregon.

"The CITRIS Research Agenda at UC Merced," *Presentation to the CITRIS in London Symposium*, London, July 11-12, 2007.

"State of the State of Open Source," *Presentation to the California GTC West Conference on Open Source*, Sacramento, May 16, 2007.

"Open Source Development at UC Merced," Presentation to the Olliance Group 2007 Open Source ThinkTank, California Napa Valley, March 2007.

"Open Source Systems in Engineering at UC Merced," *Presentation to the Information Technologies Unit of the California Air Resources Board*, Sacramento, October 3, 2006.

"Changing the Face of Engineering Education," *A presentation to the Chicano-Latino Intersegmental Convocation Policy Summit*, Sacramento, August 18, 2006.

"Institutionalizing Service Learning: Our Experience at UC Merced," *A panel presentation at the National Conference on Engineering Service Learning: National Academy of Engineering*, Washington, D.C., May, 2006.

"Civic Engagement, the Undergraduate Academic Experience and Policy Implications," *Results from the University of California Undergraduate Experience Survey and the SERU21 Project*, Berkeley, June, 2005

"Engineering Education at UC Merced," *Presentation to the Tulare Educators*, Tulare, CA, March 29, 2005.

"Introducing the University of California at Merced," *Presentation to the faculty of the National Institute of Advanced Studies*, Bangalore, India, February 10, 2005.

"Building a Research University: The Engineering Perspective," *Presentation to the North Fresno Rotary Club*, Fresno, CA, January 20, 2005.

"Research and Education in Engineering at UC Merced," *Luncheon Presentation to the Groundwater Resources Association: Arsenic in Groundwater,* October 19, 2004.

"Introducing UC Merced and our Energy Initiative," *Presentation to the faculty and administration of Modesto Junior college*, Modesto, September 17, 2004.

"Perspectives on Diversity in Research Universities," Presentation during the Richard Tapia Celebration of Diversity in Computing, Atlanta, October 16, 2003.

"Impact of Service Learning on Participation of Women in Engineering," *2003 National Conference of the Society of Women Engineers*, Birmingham, AL, October 9, 2003.

"Planning for Diversity in Engineering Education, " *Presentation to the 2003 SACNAS National Conference, 30th Anniversary Meeting*, Albuquerque, NM, October, 2003.

"Women in Engineering at UC Merced: Our Focus and Direction," *Luncheon presentation to the 2003 Joint Regional ABJ Meeting of the Society of Women Engineers*, Reno, Nevada, September 13, 2003

"The Potential for Optimization Models to Assist with Ballast Water Discharge Operations," *Presented to the NSF Workshop on Controls for Ballast Water Discharge: Developing Research Needs*, Seattle, April, 2003.

"Computer Science and Engineering at the UC's 10th Campus," *Presentation to the CITRIS Corporate Founding Members*, Palo Alto, February 27, 2003.

"The UC Merced Vision for Diversifying Engineering," *Invitational Conference on Gender Equity in Engineering Education: Towards Gender Equity in Engineering Education*, National Academy of Engineering, Washington, January 15, 2003.

"Starting from Scratch: Building the School of Engineering at UC Merced," *Presentation to the American Society of Engineering Education 2002 Conference and Exhibition*, Montreal, Canada, June, 2002.

"Mainstreaming Diversity into Engineering," *SWE Regional Conference: mainstreaming Divesity Into Engineering*, Davis, CA., February, 2002.

"Diversity in Engineering at UC Merced," Presentation to the Action Forum on Diversity in the Engineering Workplace: 7th Meeting, National academy of Engineering, Irvine, CA., January 23, 2002.

"Best Practices – The Hard Stuff," *Panelist during the National Academy of Engineering Best Practices in managing Diversity Symposium*," National Academy of Sciences, Washington, D.C., October 29, 2001.

"Changing Institutional Culture Toward Diversity," *A panel presentation at the combined national meeting of the National Association of Minority Engineering Program Administrators (NAMEPA) and the Women in Engineering Programs and Advocates Network (WEPAN)*, Alexandria, VA., April, 2001.

"Client/server Information Management for Technical Proposal Management," *Demonstration to the CALFED Water use Efficiency Grants and Loans Working Group*, Sacramento, October 20, 2000.

"Emerging Technologies for Developing Distributed Database Systems for Conference Management," American Society of Civil Engineers *Water Resources Specialty Conference: Building Partnerships*, July 30 - August 2, Minneapolis, 2000.

"The Challenges of Designing Engineering and Science Education for the 21st Century: A Panel Discussion," *2000 National Meeting of the Women in Engineering Programs & Advocates Network*, June 25-27, Washington, D.C., 2000.

"Collaboration Technologies," *Presented to the ASCE Board Communications Committee and ASCE staff*, Reston, VA, November, 1999.

"Engineering Diversity Initiatives," *Presented to the GE Workshop on Pathways to Academia's Future, Purdue University*, Fall, 1999.

"The Business of Diversity: A Panel Discussion," A workshop sponsored by the *National Academy of Engineering and the National Science Foundation*, October, 1999

"Educational Middleware for Distance Education," *Surveying and Mapping Educators Conference: Teaching the Teacher*, Purdue University, July 10-14, 1999.

"Growing Old Digitally," *Featured Presentation: Proceedings of the 26th ASCE Water Resources Planning and Management Division Specialty Conference,* June 6-9, Tempe, Arizona, 1999.

"Interfacing Applications using Client/Server Technologies," *26th Annual Specialty Conference of the Water Resources Planning and Management Division*, June 6-9, Tempe, Arizona, 1999.

"Future Opportunities for Engineering Research via Internet 2," *Panel Presentation; CAUSE'98 Conference on the Networked Academy*, Seattle, December, 1998.

"Engineering Economic Analysis for the EIT," *EIT Review Tutorial Series, Purdue University*, November, 1998.

"Adaptive Learning using Modern Distributed Database Technologies," *Panel Presentation, WebNET World Conference'98*, Orlando, November, 1998.

"Using Distributed Database Technologies for Evaluating the impact of Engineering Education," *Panel Presentation, 2nd Conference on Global Engineering Education*, Crystal City, November, 1998.

"The Future of Information Technology in Infrastructure Engineering," *George Mason University USE Distinguished Speaker Series*, October 26, 1998.

"Distributed Information Technologies for Managing Environmental Information," *Universities Council on Water Resources; National Institutes for Water Resources Board*

of Direction Meeting, Hood River Oregon, August, 1998

"Using Interactive Spreadsheet Models for Teaching Engineering Economic Analysis," *Tuck School of Management*, Dartmoth College, June 27, 1998.

"Teaching Internet Courses: the Good, the Bad, and the Ugly," *Multimedia Instructional Development Center's Seminar Series, Purdue University*, April, 1998

"Teaching, Learning and Technology Showcase: Panel on Future Visions," *Purdue University*, March, 1998

"Developing a Comprehensive Infrastructure Management System," *Presentation with Andrew C. Lemer to the 103rd Congress of the American Public Works Association*, Minneapolis, Mn. September, 1997.

"The Global Internet," *Presentation at ExpoCad 97,* San Jose Costa Rica, September 1997.

"Internetworking Tutorials," *Presented to at the annual specialty conferences of the ASCE Technical Council on Computer Practices and the Water Resources Planning and Management Division*, Houston, August, 1997.

"Customizing the Internet: What's possible now? What's on the Horizon," *Keynote presentation to the meeting of the combined American Society of Civil Engineers TAC/PAC/EdAC Leadership Luncheon*, Philadelphia, July, 1997.

"Internetworking Tutorial," *Presented at the 4th Congress on Computing in Civil Engineering*, Philadelphia, June, 1997.

"Using the Internet for Distance Modeling," *2nd International Conference on Digital Image Processing in Civil Engineering, Davos*, Switzerland, June, 1997.

"Internetworking to Enhance Personal and Professional Productivity," *Tutorial Presented at the 24th Annual Water Resources Planning and Management Division Conference*, Houston, April, 1997.

"Has Anybody Seen the Puck?" *Presentation to the faculty; George Mason University's Program for Civil, Environmental and Infrastructure Engineering*, April, 1997.

"Basics of Engineering Optimization," *Presented to the 1997 Prudue Road School*, with Professors Tarko, Peeta, and Abraham, March, 1997.

"Internetworking for Engineering Professionals: A Tutorial," *ASCE Computing Congress, Atlanta*, June, 1996.

"Internetworking for Water Professionals," *ASCE Specialty Conference of the Water Resources Planning and Management Division, Boston*, May, 1996.

PROFESSIONAL SOCIETY RESPONSIBILITIES

Current Activities

Member of the Editorial Board; American Society of Civil Engineers Journal of Infrastructure Systems, 2001 – present

Member of the Committee on Data Management and Analysis, Dean's Council of the American Society of Engineering education

Past Activities

Member of the National Academy of Engineering Forum on Diversity, 1998 - 2004.

Founding Editor-in-Chief of the Journal of Infrastructure for the American Society of Civil Engineers, 1990 – 2001

Member of the Board Communications Committee for the American Society of Civil Engineers.

Member of the Board-level Task Committee on Diversity for the American Society of Civil Engineers.

Appointed to the ASCE Technical Activities Committee Task Committee on Reclustering, October, 1996.

Management Group A Contact, American Society of Civil Engineers.

Member: Environmental and Water Resources Institute (EWRI) of the ASCE.

Member: Water Resources Planning and Management Division (WRPMD) of ASCE.

Member: Technical Council on Computer Practices (TCCP) of the ASCE.

Editorial Board, *Publics Works Management and Policy*, Sage Publications, 1995 – 2001.

PARTICIPATION IN OUTREACH, WORKSHOPS, AND SHORT COURSES

"The National Society of Black Engineers Career Fair Presentations," *Sponsored by NSBE*, Indianapolis, IN, April 21, 2000.

"24th Annual Graduate Education for Minorities (GEM), *Annual Board Meeting*," Washington, D.C., May, 2000.

"Workshop 2000: A National Dialogue to Increase Minority Participation in Science, Engineering and Math," Atlanta, GA, February 24-26, 2000

"GE Faculty for the Future Workshop: Pathways to Academia's Future," West Lafayette, IN, Nov., 1999.

"The Summit on Women in Engineering," *National Academy of Engineering*, Wash., D.C., May 17-18, 1999.

"New Integrations of Research, Scholarship and Undergraduate Education," *Best Practices Workshop*, University of Michigan, Ann Arbor, March 30, 1999.

"The National Society of Black Engineers Career Fair Presentations," *NSBE*, Kansas City, March 27, 1999.

"GE Change Acceleration Process (CAP) Workshop," *A Joint Endeavor of Purdue University and the GE Fund*, West Lafayette, IN, March 2-3, 2999.

"Continuing the Journey," *Purdue Engineering Workshop on Diversity*, August, 1999.

"Integrated Infrastructure Decision Making," A workshop sponsored by the National Science Foundation to develop future research strategies for civil infrastructure, Washington, July 15-17, 1998.

"Improving Proposal Success Ratio." *A workshop sponsored by the National Science Foundation*, Washington, D.C., November 15-16, 1997.

CITATIONS AND BIOGRAPHICAL LISTINGS

Who's Who in the World

Who's Who in America

Who's Who in the Midwest United States

Who's Who Environmental Registry

American Men and Women of Science

International Directory of Distinguished Leadership

Who's Who in American Education

Who's Who in Finance & Industry

International Who's Who of Professionals

Stathmore's Who's Who

UNIVERSITY SERVICE

University of California System

Intercampus Advisory Board Representative to the UC Infrastructure Institute (MRU), appointed July, 2007.

ITR Review 15-year Committee Chair.

Chair; UC Committee on Engineering Education (2006 – present).

Intercampus Advisory Board Representative to the UC Energy Institute (UCEI) July, 2007 – June, 2010.

University of California, Merced

UC Merced Director; California Center for Information Technology Research in the Interest of Society (CITRIS).

Interim Dean of College I.

Interim Director, UC Merced Energy Research Institute.

Author of the UC Merced non-commercial FM radio station permit application to the FCC

Chair; Academic Space Committee.

Student Chapter Advisor; Engineers Without Borders.

Student Chapter Advisor; National Society of Black Engineers (NSBE).

Numerous planning and policy making committees.

Purdue University

Primary responsibility for research programming and planning within the Schools of Engineering at Purdue.

Primary responsibility for space management within the Purdue Schools of Engineering.

Primary responsibility for facilities planning for major (50%) capacity expansion within the Purdue Schools of Engineering.

Responsibility for diversity initiatives within Purdue Schools of Engineering at Purdue, and liaison with national diversity efforts within the engineering community.

Responsibility for comprehensive strategic planning within Engineering, and coordination with university level strategic planning efforts across the Purdue campus.

Member of the Primary Committee of the School of Civil Engineering (1991 – 2001)

Elected by the faculty of the School to the Area Promotions Committee (1995-98)

Founding member of the Martha Dick Stevens Graduate Fellowship Committee

Member/contributing author: Purdue North Central Accreditation Planning and Response Committee (AY'98)

Chairperson; High-performance networking Subcommittee of the Purdue Research Computing and Communications Advisory Committee (1997-2001)

Member of the Purdue Information Access Policy Committee (1996-98)

Member of the Purdue University Computing Center Review Committee (1998-99)

Member of the Purdue Distance Learning Advisory Board (1997-00)

Member of the search advisory committee: Purdue Environmental Sciences & Engineering Institute

COMMUNITY AND REGIONAL SERVICE ACTIVITIES

Current Activities

Board of Directors; San Joaquin Valley Clean Energy Organization (SJVCEO, appointed 2007.

Board of Directors; Castle Challenger Learning Center, 2003 – present.

Central Valley Salinity Policy Group (CVSPG).

Central Valley Policy Group Technical Advisory Committee of the Central Valley Regional Water Quality Control Board.

Interagency Task Force for SanJoaquin Valley (Energy Policy and Technology Committee).

Committee Member: GVC Agri-food Informatics Institute Planning Committee.

Previous Activities

Board of Directors; Purdue Employees Federal Credit Union, March, 1993 - March, 1999.

Purdue Employees Federal Credit Union Assets and Technologies Committee.

West Lafayette School Corporation Math Textbook Adoption Committee, 1991-1994.

Chief Judge for Physical Sciences, Regional Science Fair (1986-1992).

Little kids baseball coach (1985-1991).

CURRICULUM VITAE (Academic)

Maria G. Pallavicini, Ph.D.
Dean and Professor, School of Natural Sciences
University of California, Merced
Voice: 209 228-2969
e-mail: mpallavicini@ucmerced.edu

EDUCATION

1973	University of California at Berkeley, CA	B.A.	Biochemistry
1977	University of Utah, Salt Lake City, UT	Ph.D.	Pharmacology

PROFESSIONAL EXPERIENCE

1977-1978	The Ontario Cancer Institute, Toronto	Post doctoral scholar	Radiation Biology
1978-1991	Lawrence Livermore National Laboratory, Livermore, CA	Biomedical Scientist	Biomedical Sciences Division
1989-1991	University of California, San Francisco	Adjunct Assistant Professor	Dept. of Laboratory Medicine
1991-1994	University of California, San Francisco, CA	Associate Professor	Depts. of Laboratory Medicine and Radiation Oncology
1992 -1997	Lawrence Berkeley National Laboratory, Berkeley, CA	Senior Scientist	Biology
1994-2002	University of California, San Francisco, CA	Professor	Depts. of Laboratory Medicine and Radiation Oncology
2002-present	University of California Merced, CA	Founding Professor	School of Natural Sciences
2002-present	University of California Merced, CA	Founding Dean	School of Natural Sciences

RESEARCH INTERESTS

Genetic and functional changes in stem cells in cancer (leukemia, breast cancer) that impact stem cell fate decisions. Hematopoietic stem cell niches in health and disease. Proteome and transcriptome-mediated response to therapy. Environmental-mediated leukemogenesis.

PROFESSIONAL ORGANIZATIONS

American Association of Cancer Research
American Association of Hematology
Experimental Hematology
International Society of Analytical Cytometry

PEER-REVIEWED PUBLICATIONS

Pallavicini MG, Nichols WK. Inhibition of lymphocyte blastogenesis by factor(s) in alloxan-diabetic rat plasma. Diabetes. 1976;25:614-622.

Pallavicini MG, Cohen AM, Dethlefsen LA, Gray JW. In vivo effects of 5-fluorouracil and ftorafur[1-(tetrahydrofuran-2-yl)-5-fluorouracil] on murine mammary tumors and small intestine. Cell and Tissue Kinetics. 1979;12:177-189.

Pallavicini MG, Hill RP. Relationship of tumor blood flow with radiation and drug response. International Journal of Radiation Oncology, Biology, Physics. 1979; 5:1767-1772.

Pallavicini MG, Lalande ME, Miller RG, Hill RP. Cell cycle distribution of chronically hypoxic cells and determination of the clonogenic potential of cells accumulated in G2 + M phases after irradiation of a solid tumor in vivo. Cancer Research. 1979;39:1891-1897.

Pallavicini MG, Mazrimas JA. High-performance liquid chromatographic analysis of cytosine arabinoside and metabolites in biological samples. Journal of Chromatography. 1980;183:449-458.

Gray JW, Pallavicini MG, George YS, Groppi V, Look M, Dean PN. Rates of incorporation of radioactive molecules during the cell cycle. Journal of Cellular Physiology. 1981;108:135-144.

Pallavicini MG, Folstad LJ, Dunbar C. Solid KHT tumor dispersal for flow cytometric cell kinetic analysis. Cytometry. 1981;2:54-58.

Folstad L, Look M, Pallavicini M. A polycarbonate filter technique for collection of sorted cells. Cytometry. 1982;3:64-65.

Gray JW, Pallavicini MG. Ara-C scheduling: theoretical and experimental considerations. Medical and Pediatric Oncology. 1982;10 Suppl 1:93-108.

Pallavicini MG, Gray JW. Ara-C cytokinetic studies in normal tissues in vivo. Medical and Pediatric Oncology. 1982;10 Suppl 1:109-123.

Pallavicini MG, Gray JW, Folstad LJ. Quantitative analysis of the cytokinetic response of KHT tumors in vivo to 1-beta-D-arabinofuranosylcytosine. Cancer Research. 1982;42:3125-3131.

Dolbeare F, Gratzner H, Pallavicini MG, Gray JW. Flow cytometric measurement of total DNA content and incorporated bromodeoxyuridine. Proceedings of the National Academy of Sciences of the United States of America. 1983;80:5573-5577.

Hill RP, Pallavicini MG. Hypoxia and the radiation response of tumors. Advances in Experimental Medicine and Biology. 1983;159:17-35.

Pallavicini MG, Hill RP. Effect of tumor blood flow manipulations on radiation response. International Journal of Radiation Oncology, Biology, Physics. 1983;9:1321-1325.

Pallavicini MG. Cytosine arabinoside: molecular, pharmacokinetic and cytokinetic considerations. Pharmacology and Therapeutics. 1984;25:207-238.

Pallavicini MG, Ng CR, Gray JW. Bivariate flow cytometric analysis of murine intestinal epithelial cells for cytokinetic studies. Cytometry. 1984;5:55-62.

Pallavicini MG, Ng CR, Gray JW. Relationship between surviving clonogenic crypt fraction and animal lethality after cytosine arabinoside (Ara-C) exposure. Virchows Archiv. B, Cell Pathology Including Molecular Pathology. 1984;46:33-42.

Pallavicini MG, Ng CR, Gray JW. Relationship between surviving clonogeneic crypt fraction and animal lethality after cytosine arabinoside (Ara-C) exposure. Virc Arch. Cell Pathol B. 1984;46:33-42.

Dolbeare F, Beisker W, Pallavicini MG, Vanderlaan M, Gray JW. Cytochemistry for bromodeoxyuridine/DNA analysis: stoichiometry and sensitivity. Cytometry. 1985;6:521-530.

Pallavicini MG, Summers LJ, Dean PN, Gray JW. Enrichment of murine hemopoietic clonogenic cells by multivariate analyses and sorting. Experimental Hematology. 1985;13:1173-1181

Pallavicini MG, Summers LJ, Dolbeare FD, Gray JW. Cytokinetic properties of asynchronous and cytosine arabinoside perturbed murine tumors measured by simultaneous bromodeoxyuridine/DNA analyses. Cytometry. 1985;6:602-610.

Pallavicini MG, Summers LJ, Giroud FJ, Dean PN, Gray JW. Multivariate analysis and list mode processing of murine hemopoietic subpopulations for cytokinetic studies. Cytometry. 1985;6:539-549.

Shao-Bai X, Pallavicini MG, Gray JW. Double label radioactivity per cell (RC) analyses in vivo: rapid cytokinetic analyses of KHT tumors. Acta. Biolog. Sinica. 1985;18:215-224.

Gray JW, Dolbeare F, Pallavicini MG, Beisker W, Waldman F. Cell cycle analysis using flow cytometry. International Journal of Radiation Biology and Related Studies in Physics, Chemistry and Medicine. 1986;49:237-255.

Matsson P, Pallavicini MG, Summers L. Quantitative flow cytometric and clonogenic evaluation of glass bead affinity fractionation of antibody-labeled murine bone marrow. Journal of Immunological Methods. 1987;105:45-53.

Pallavicini MG, Levin J, Summers L, Levin F. Multivariate flow cytometric characterization and enrichment of murine megakaryocyte progenitors (CFU-Meg). Experimental Hematology. 1987;15:704-709.

Pallavicini MG, DeTeresa PS, Wurm FM. Use of fluorescence in situ hybridization to detect and monitor transfected and amplified sequences in recombinant CHO cells. Developments in Biological Standardization. 1989;70:165-172.

Pallavicini MG, Haendel S, Rosette C, Barlett R. Rapid screening and selection of monoclonal antibodies by bivariate flow cytometric analyses. Journal of Immunological Methods. 1989;117:99-106.

Pallavicini MG, DeTeresa PS, Rosette C, Gray JW, Wurm FM. Effects of methotrexate on transfected DNA stability in mammalian cells. Molecular and Cellular Biology. 1990;10:401-404.

Pallavicini MG, Rosette C, Reitsma M, Deteresa PS, Gray JW. Relationship of c-myc gene copy number and gene expression: cellular effects of elevated c-myc protein. Journal of Cellular Physiology. 1990;143:372-380.

Rosette CD, DeTeresa PS, Pallavicini MG. Simultaneous flow cytometric detection of cellular c-myc protein, incorporated bromodeoxyuridine, and DNA. Cytometry. 1990;11:547-551.

Amendola R, Haendel S, Weier HU, Pallavicini MG. Transgene integration in hair follicles and peripheral blood cells measured by in vitro DNA amplification and fluorescence in situ hybridization. DNA and Cell Biology. 1991;10:311-317.

Neben S, Redfearn WJ, Parra M, Brecher G, Pallavicini MG. Short- and long-term repopulation of lethally irradiated mice by bone marrow stem cells enriched on the basis of light scatter and Hoechst 33342 fluorescence. Experimental Hematology. 1991;19:958-967.

Zanjani ED, Pallavicini MG, Harrison MR, Tavassoli M. Successful stable xenograft of human fetal hemopoietic cells in preimmune fetal sheep. Transactions of the Association of American Physicians. 1991;104:181-186.

Gray JW, Kallioniemi A, Kallioniemi O, Pallavicini M, Waldman F, Pinkel D. Molecular cytogenetics: diagnosis and prognostic assessment. Current Opinion in Biotechnology. 1992;3: 623-631.

Pallavicini MG, Flake AW, Madden D, Bethel C, Duncan B, Gonzalgo ML, Haendel S, Montoya T, Roberts L. Hemopoietic chimerism in rodents transplanted in utero with fetal human hemopoietic cells. Transplantation Proceedings. 1992;24:542-543.

Pallavicini MG, Langlois RG, Reitsma M, Gonzalgo M, Sudar D, Montoya T, Weier HU, Haendel S. Comparison of strategies to detect and quantitate uniquely marked cells in intra- and inter-species hemopoietic chimeras. Cytometry. 1992;13:356-367.

Wurm FM, Pallavicini MG, Arathoon R. Integration and stability of CHO amplicons containing plasmid sequences. Developments in Biological Standardization. 1992;76:69-82.

Zanjani ED, Pallavicini MG, Ascensao JL, Flake AW, Langlois RG, Reitsma M, MacKintosh FR, Stutes D, Harrison MR, Tavassoli M. Engraftment and long-term expression of human fetal hemopoietic stem cells in sheep following transplantation in utero. Journal of Clinical Investigation. 1992;89:1178-1188.

Brecher G, Bookstein N, Redfearn W, Necas E, Pallavicini MG, Cronkite EP. Self-renewal of the long-term repopulating stem cell. Proceedings of the National Academy of Sciences of the United States of America. 1993;90:6028-6031.

Brecher G, Pallavicini MG, Cronkite EP. Competitive repopulation in leukemic and normal bone marrow. Blood Cells. 1993;19:691-697; discussion 698-707.

Busch MP, Lee TH, Donegan E, Pallavicini M. Use of an inbred mouse model system for studies of allogeneic transfusion-induced immunosuppression . Blood. 1993;82:3509-3511.

Gray JW, Pallavicini MG. Molecular cytogenetics: solid tumors and leukemia. Blood Cells. 1993;19:677-683.

Reitsma MJ, Harrison MR, Pallavicini MG. Detection of a male-specific sequence in nonhuman primates through use of the polymerase chain reaction. Cytogenetics and Cell Genetics. 1993;64:213-216.

Willman CL, Sever CE, Pallavicini MG, Harada H, Tanaka N, Slovak ML, Yamamoto H, Harada K, Meeker TC, List AF, et al. Deletion of IRF-1, mapping to chromosome 5q31.1, in human leukemia and preleukemic myelodysplasia. Science. 1993;259:968-971.

Andrews RG, Bryant EM, Muirhead DY, Bartelmez SH, Bensigner W, Pallavicini MG, Bernstein ID. Long term reconstitution of in vivo lymphohematopoiesis by purified allogeneic CD34+, T and B lymphocyte-depleted marrow cells. J. Hematotherapy. 1994;35:46-53.

Miyashita K, Vooijs MA, Tucker JD, Lee DA, Gray JW, Pallavicini MG. A mouse chromosome 11 library generated from sorted chromosomes using linker-adapter polymerase chain reaction. Cytogenetics and Cell Genetics. 1994;66:54-57.

Pallavicini MG, George T, Deteresa PS, Amendola R, Gray JW. Intracellular dynamics of c-myc mRNA traffic in single cells in situ. Journal of Cellular Physiology. 1994;158:223-230.

Goodarzi MO, Lee TH, Pallavicini MG, Donegan EA, Busch MP. Unusual kinetics of white cell clearance in transfused mice. Transfusion. 1995;35:145-149.

Mehrotra B, George TI, Kavanau K, Avet-Loiseau H, Moore D, 2nd, Willman CL, Slovak ML, Atwater S, Head DR, Pallavicini MG. Cytogenetically aberrant cells in the stem cell compartment (CD34+lin-) in acute myeloid leukemia. Blood. 1995;86:1139-1147.

Litle VR, Lockett SJ, Pallavicini MG. Genotype/phenotype analyses of low frequency tumor cells using computerize image microscopy. Cytometry. 1996;23:344-349.

Miles DK, Freedman MH, Stephens K, Pallavicini M, Sievers EL, Weaver M, Grunberger T, Thompson P, Shannon KM. Patterns of hematopoietic lineage involvement in children with neurofibromatosis type 1 and malignant myeloid disorders. Blood. 1996;88:4314-4320.

Stiehm ER, Roberts RL, Hanley-Lopez J, Wakim ME, Pallavicini MG, Cowan MJ, Ettenger RB, Feig SA. Bone marrow transplantation in severe combined immunodeficiency from a sibling who had received a paternal bone marrow transplant New England Journal of Medicine. 1996;335:1811-1814.

Avet-Loiseau H, Andree-Ashley LE, Moore D, 2nd, Mellerin MP, Feusner J, Bataille R, Pallavicini MG. Molecular cytogenetic abnormalities in multiple myeloma and plasma cell leukemia measured using comparative genomic hybridization. Genes, Chromosomes and Cancer. 1997;19:124-133.

Litle VR, Warren RS, Moore D, 2nd, Pallavicini MG. Molecular cytogenetic analysis of cytokeratin 20-labeled cells in primary tumors and bone marrow aspirates from colorectal carcinoma patients. Cancer. 1997; 79:1664-1670.

Moore DH, II, Pallavicini M, Cher ML, Gray JW. A t-statistic for objective interpretation of comparative genomic hybridization (CGH) profiles. Cytometry. 1997;28:183-190.

Pallavicini MG, Redfearn W, Necas E, Brecher G. Rescue from lethal irradiation correlates with transplantation of 10-20 CFU-S-day 12. Blood Cells, Molecules, and Diseases. 1997;23:157-168

Quijano CA, Moore D, 2nd, Arthur D, Feusner J, Winter SS, Pallavicini MG. Cytogenetically aberrant cells are present in the CD34+CD33-38-19- marrow compartment in children with acute lymphoblastic leukemia. Leukemia. 1997;11:1508-1515.

Mueller P, Carroll P, Bowers E, Moore D, 2nd, Cher M, Presti J, Wessman, M, Pallavicini MG. Low frequency epithelial cells in bone marrow aspirates from prostate carcinoma patients are cytogenetically aberrant Cancer. 1998;83:538-546.

Green WB, Slovak ML, Chen IM, Pallavicini M, Hecht JL, Willman CL. Lack of IRF-1 expression in acute promyelocytic leukemia and in a subset of acute myeloid leukemias with del(5)(q31). Leukemia. 1999;13:1960-1971.

Ginzinger DH, Godfrey TE, Nigro J, Moore II DH, Suzuki S, Pallavicini MG, Gray JW, Jensen RH. Measurement of DNA copy number at microsatellite loci using quantitative PCR analysis. Cancer Research. 2000; Cancer Research 60: 5405-9.

Giver C, Moore II DH, Pallavicini MG. Radiation Induced Translocations in Mice: Persistence, Chromosome Specificity and Influence of Genetic Background Radiation Research 2000. 154: 283-292.

Mullaney BM, Ng V, Herndier B, Pallavicini MG. Comparative genomic analyses of primary effusion lymphoma. Arch. Lab. Med. Path. 2000; 124:824-826.

Stock W, Tsai T, Golden C, Rankin C, Sher D, Slovak ML, Pallavicini MG, Radich JP, Boldt DH. Cell cycle regulatory gene abnormalities are important determinants of leukemogenesis and disease biology in adult acute lymphoblastic leukemia. Blood. 2000;95:2364-2371.

Stull RA, Hyun WC, Pallavicini MG. Simultaneous flow cytometric analyses of enhanced green and yellow fluorescent proteins and cell surface antigens in doubly transduced immature hematopoietic cell populations. Cytometry. 2000;40:126-134.

Giver CR, Wong RW, Moore II DH, Pallavicini MG. Dermal benzene and trichlorethylene induce aneuploidy in immature murine hematopoietic subpopulations in vivo. Envir. Molecular Mutagenesis. 2001. 37(3):185-94.

Tiirikainen M, Mullaney B, Ng V, Herndier B, McGrath M, Pallavicini MG and Jensen R: DNA Copy Number Alterations in HIV Positive and Negative Patients with Diffuse Large-Cell Lymphoma. Journal of Acquired Immune Deficiency Syndromes 2001;27:272-276.

Mullaney, BP and Pallavicini, MG. Protein-Protein Interactions in Hematology Using Phage Display. Exp. Hematology, 2001. 29: 1136-1146.

Giver, CR. Wong, R, Moore II, DH and Pallavicini, MG. Persistence of aneuploid immature/primitive hemopoietic sub-populations in mice 8 months after benzene exposure in vivo. Mutation Research 2001 12: 127-38.

Mullaney BP, Pallavicini MG, and Marks JD. Epitope mapping of neutralizing botulinum neurotoxin A antibodies by phage display. Infect Immun. 2001 69:6511-4.

Mullaney, B, Marks, J, Pallavicini, MG. Mimotopes and proteome analyses using human genomic and cDNA epitope phage display. Comparative and Functional Genomics.3: 254-263, 2002.

Johnston DL, Meshinchi S, Opheim KE, Pallavicini MG, Feusner J, Woods WG, Lange BJ, Radich JP, Bernstein ID.. Progenitor cell involvement is predictive of response to induction chemotherapy in paediatric acute myeloid leukemia. Br J Haematol. 2003 Nov;123(3):431-5, 2003.

Wang D, Jensen RH, Williams KE, Pallavicini MG.. Differential protein expression in MCF7 breast cancer cells transfected with ErbB2, neomycin resistance and luciferase plus yellow fluorescent protein. Proteomics. 2004 Jul;4(7):2175-83, 2004.

Wang D, Jensen R, Gendeh G, Williams K, Pallavicini MG.Proteome and transcriptome analysis of retinoic acid-induced differentiation of human acute promyelocytic leukemia cells, NB4. J Proteome Res. 2004 May-June 3(3):627-35, 2004.

Drummond, DC, Marx, C, Guo Z, Scott G, Noble, C, Wand, D. Pallavicini, MG, Kirpotini DB, Benz, CC. Enhanced pharmacodynamic and antitumor properties of a histone deacetylase inhibitor

encapsulated in liposomes or ErbB2-targeted immunoliposomes. Clinical Cancer Research. 2005 May 1;11(9):3392-401, 2005.

Li, KL, Wilmes, LJ, Henry Rg, Pallavicini MG, Park JW Hu-Lowe DD, McShane TM, Shalinsky DR, Fu YJ, Brasch RC, Hylton NM. Heterogeneity in the angiogenic response of a BT474 human breast cancer to a novel vascular endothelial growth factor-receptor tyrosine kinase inhibitor: assessment by voxel analysis of dynamic contrast-enhanced MRI. J Magn Reson Imaging. 2005 Oct 22(4):511-9, 2005.

Wang H, Qian WJ, Mottaz HM, Clauss TR, Anderson DJ, Moore RJ, Camp DG 2nd, Khan AH, Sforza DM, Pallavicini M, Smith DJ, Smith RD. Development and evaluation of a micro- and nanoscale proteomic sample preparation method. J Proteome Res. 2005 Nov-Dec 4(6):2397-403.

Patwardhan AJ, Strittmatter EF, Camp DG 2nd, Smith RD, Pallavicini MG. Quantitative proteome analysis of breast cancer cell lines using 18O-labeling and an accurate mass and time tag strategy. Proteomics. 2006 May;6(9):2903-15, 2005.

Patwardhan AJ, Strittmatter EF, Camp DG 2nd, Smith RD, Pallavicini MG.. Comparison of normal and breast cancer cell lines using proteome, genome, and interactome data. J Proteome Res. 2005 Nov-Dec;4(6):1952-60.

Park CC, Zhang H, Pallavicini M, Gray JW, Baehner F, Park CJ, Bissell MJ. Beta1 integrin inhibitory antibody induces apoptosis of breast cancer cells, inhibits growth, and distinguishes malignant from normal phenotype in three dimensional cultures and in vivo.
Cancer Res. 2006 Feb 1 66(3):1526-35.

Sanchez M, Weissman IL, Pallavicini M, Valeri M, Guglielmelli P, Vannucchi AM, Migliaccio G, Migliaccio AR Differential amplification of murine bipotent megakaryocytic/erythroid progenitor and precursor cells during recovery from acute and chronic erythroid stress.
Stem Cells. 2006 Feb 24(2):337-48.

Wilmes LJ, Pallavicini MG, Fleming LM, Gibbs J, Wang D, Li KL, Partridge SC, Henry RG, Shalinsky DR, Hu-Lowe D, Park JW, McShane TM, Lu Y, Brasch RC, Hylton NM. AG-013736, a novel inhibitor of VEGF receptor tyrosine kinases, inhibits breast cancer growth and decreases vascular permeability as detected by dynamic contrast-enhanced magnetic resonance imaging. 2007 Magnetic Resonance Imaging. 25(3):319-27.

NON-PEER REVIEWED PUBLICATIONS

Pallavicini MG, Cohen AM, Dethlefsen LA, Gray JW. Dispersal of solid tumors for flow cytometer (FCM) analyses. In: Buchner TH, Gohde W, Schuman J, eds. Pulse Cytophotometry Part III. Ghent, Belgium: European Press; 1978:473-482.

Gray JW, Pallavicini MG. Quantitative cytokinetic analyses reviewed. In: Rotenberg M, ed. Biomathematics and Cell Kinetics. New York, NY: Elsevier/North-Holland Biomedical Press; 1981:107-123.

Wurm FM, Gwinn KA, Papoulas O, Pallavicini MG, Kingston RE. Use of transfected and amplified drosophila heat shock promoter construction for inducible production of toxic mouse c-myc proteins in CHO cells. In: Spier RE, Griffiths JB, eds. Modern approaches to animal cell technology. New York, NY: Butterworth Publishers; 1987:215-241.

Pallavicini MG. Characterization of cell suspensions from solid tumors. In: Kallman RF, ed. Rodent Tumor Models in Experimental Cancer Therapy. New York, NY: Pergammon Press; 1987:76-81.

Pallavicini MG, Taylor IW, Vindelov LL. Preparation of cell/nuclei suspensions from solid tumors for flow cytometry. In: Melamed MR, Lindmo T, Mendelsohn ML, eds. Flow Cytometry and Sorting (ed 2). New York, NY: Wiley Liss; 1990:187-194.

Gray JW, Dolbeare F, Pallavicini MG. Quantitative cell cycle analysis. In: Melamed MR, Lindmo T, Mendelsohn ML, eds. Flow Cytometry and Cell Sorting (ed 2). New York, NY: Wiley- Liss; 1990:445-467.

Pallavicini MG, Litle VR, Mueller PM. Genotype and Phenotype Analyses of Micrometastases. In: Introduction to Fluorescence In Situ Hybridization: Principles and Clinical Applications Eds, Andreef M, Pinkel D,. John Wiley & Sons; NY, 1999 455.

INVITED SCIENTIFIC PRESENTATIONS

International

International Society for Analytical Cytology, Bergen, Norway, 1991
Stem Cell Involvement in Leukemia and Myelodysplasia. Paris, France, 1993
Fluorescence In Situ Hybridization in Human Malignancy, Villejuif, France 1995
Genotype/Phenotype Analysis of Micrometastases in Prostate Cancer, Rimini Italy, 1996
Stem Cells and Megakaryocytopoiesis, Paris, France, 1998
Antibody Generation using Epitope Trapping, Kannenaskis, Canada, 2000
Stem Cells and Leukemogenesis, Montpellier, France, 2000.
Proteomics in Cancer Research, Ottawa, Canada, 2001
Novel Methodologies in Proteome Research, Roche, Basel Switzerland, 2001
Breast Cancer Proteomics, Cardiff, Wales, 2003
Leukemia Proteomics, Paris, France, 2003
Stem Cell Protein Signatures, Naples, Italy, 2003
Transcriptome and Proteome Analysis of Breast Cancer and Leukemic Cells, Rome, Italy, 2003

National and Regional

International Congress on Xenotransplantation, Minneapolis, MN, 1991
Genetically Aberrant Cells in Bone Marrow; Geraldine Brush Cancer Res. Inst. 1992
Rare Metastatic Cells in Prostate Cancer, Stanford University, 1992
Fluorescence In Situ Hybridization Approaches to Detection of Micrometastases, NIH, 1992
Cancer Micrometastases: Biology, Methodology and Clinical Significance. Wash DC 1992.
Normal and Aberrant Hemopoiesis. Lawrence Berkeley Laboratory, CA, 1992
Molecular Cytogenetics in Cancer Diagnosis, New Orleans, 1993.
Hematopoietic Stem Cell Transplantation Washington DC 1993
Clinical Applications of Rare Event Detection. *First Distinguished Wallace Coulter Lecturer, International Society of Clinical Cytometry,* Charleston, SC, 1993
Hemopoietic Stem Cell Biology, National Advisory Council, National Institutes of Allergy and Infectious Disease, NIH, Washington DC 1993
Molecular Cytogenetic Analysis of Hematologic Malignancies Miami, 1996
Molecular Cytogenetics of Rare Tumors cells in Leukemia and Solid Tumors, Albuquerque, 1996
Genotypic analyses of Tumor Subpopulations in Marrow Aspirates, Stanford University, 1996
Hemopoietic stem cells:vivo biodosimeters of induced genomic damage Center for Environmental Biotechnology, Berkeley, 1996
Genotype/Phenotype Analysis of Low Frequency Tumor Subpopulations, Atlanta, 1997
Cytogenetically Aberrant Stem Cells In Acute Myeloid Leukemia, Seattle, WA 1997

Propagation of Genetically Damaged Stem Cells, Lawrence Berkeley Laboratory, 1997
Leukemogenesis and Clonal Genetically Aberrant Stem Cells, UCSF, 1997
Identification of DNA Sequence Copy Number Changes in Malignancy, Miami Beach, 1998
Fetal Stem Cells and Gene Therapy, Bethesda, MD 1999
Environmentally Induced Genomic Aberrations, San Francisco State University, 2000
Molecular Diversity Libraries, NCI, Washington DC, 2000
Gel Array Pixelation: NCI, Washington DC, 2001
Leukemia Protein Signatures, San Diego, CA, 2002
Novel Mass Spectrometry-based Strategies to Identify Low Abundance Proteins in Leukemic Cells, Washington DC, 2002.
Stem Cells, Cancer and Stem Cell Fate Decisions, Cancer Center Symposium – UC Davis Keynote Speaker, 2005
Stem Cell Niches, UC Davis Stem Consortium, 2007
AICHE- Stem Cell Fate Decisions, 2008

TEACHING AND MENTORING

Lawrence Livermore National Laboratory (LLNL) (1978-1991)
As a national laboratory, LLNL, does not sponsor formal instructional programs. However, there are opportunities, many self-made, to participate in teaching. While at LLNL, I mentored undergraduate students from UC Berkeley in summer research internships in my laboratory, as well as post-doctoral fellows. I co-taught a course at California State University Hayward-extension equivalent for two years and was involved in the science-teacher education programs (LESSON) that LLNL sponsored for high school teachers.

University of California, San Francisco (1991-2002)
My teaching responsibilities at UCSF involved undergraduates, graduate students, post-doctoral fellows and residents. Undergraduate involvement included multiple summer internship opportunities that I provided for students from UC Berkeley, community colleges and private higher education institutions. I also participated in laboratory experiences and problem-based sections for medical students in the areas of genetics and hematologic malignancies. I was an advisor for graduate students in the Biomedical Sciences Graduate Program, numerous medical students and residents.

University of California, Merced (2002-present)
BIS 1 - Contemporary Biology- Summer 2004 (co-instructor with Mike Colvin- new course)
BIS 3 - Know Thyself: Molecular Basis of Health and Disease – Fall 2005 (new course)
BIS 90 – Stem Cells and Regenerative Medicine – Fall 2005
BIS 10 - Stem Cells, Genes and Development (co-instructor with Keith Alley; new course) – Spring 2006
Core 090X – Breast Cancer Biology – Spring 2006
Core 90x Teaching and Learning – Spring 2006
QSB 290 – Current Topics in Quantitative Systems Biology – Spring 2007
CORE 90X – Stem Cells and Regenerative Medicine – Spring 2007
Cancer Biology and Genetics - 2007 (new course)
4 freshman seminars 2005, 2006 (new)
Graduate Journal Club

Current UC Merced Students:
Graduate:
Basha Stankovich- PhD candidate: 2004
Heather Bryan- PhD candidate 2006
Eric Lau- PhD candidate 2007

Undergraduate:

Nathan Levy: February 2005 – June 2005
Esmeralda Aguayo: June 2005 – present
Raman Nazari: September 2005 – May 2006
Meg Grossman: May 2006 – August 2006
Sam Solis: June 2007 – July 2007
Patricia Soto: June 2007 – July 2007
Paulina Price: June 2007 – July 2007
Fatima Barragan: August 2006 – present
Aniket Sharma: August 2007 - present
Evelyn Damate: May 2008 – present
Demseen Danielson: September 2005 – December 2005
Thomas Giagou: September 2005 – December 2005
Solomon Estifanos: September 2006 – June 2007
Sara Zimmermann: May 2006 – June 2007
Vera Diaz: September 2007 – present
Yimdriuska Magan: September 2007 – present
Deven Roy: September 2007 – January 2008

A listing of students that have had research experiences in my laboratory follows:

Undergraduate

Trainee	**Status**	**Training Period**	**Current Position/Location**
E. Bower	Undergrad UCSC	1990-1992	Research Assistant, Biotech
M. Gonzalgo	Undergrad UCB	1991-1993	UCSF Med School Graduate; Urology Resident John Hopkins
M. White	Undergraduate UCSD	1991	Harvard Medical School
T. George	Undergraduate UCB UCSF Med Thesis	1990 1992-1993	UCSF Medical School Graduate, Private Practice
S. Khurana	Undergraduate UCB	1992	UCSD Medical School Graduate Private Practice
M. Constantino	Undergraduate UCB	1993	Medical School Graduate
A. Sheikh	Undergraduate UCB Honors Thesis	1995-1996	UCSF Medical School Grad. Ortho Surgery Boston
S. Thind	Undergraduate UCB Honors Thesis	1996-1997	USC Medical School
P. Abeyeta	Undergraduate UCB Honors Thesis	1995-1996	UCSF Medical School Graduate
R. Gilliland	Undergraduate, St. Mary's College	1996-1998	Dartmouth Medical School
C.F Chang	Undergraduate UCB	1993	Biotech
F. Macay	Undergraduate UCB	1996-1998	UCB undergraduate
L. Preza	Undergraduate, Skyline College	1996-1998	School of Pharmacy applicant

E. Yang	Undergraduate UCB	2000	UCB undergraduate
P. Sekella	Undergraduate Univ. Michigan	1999, 2000	University Michigan Graduate student
S. Vitko	Undergraduate UCSD	1998, 1999	Cell/Molecular Biology Graduate Program, SUNY
A. Kane	Undergraduate UCB	2000, 2001	UCB undergraduate
M. Miller	Undergraduate Redwood College	2001	Undergraduate
R. Thondapu	Undergraduate- Duke	2002	Medical School
Brian Carter	Undergraduate- UCSD	2003	UCSD
M. Lau	Undergraduate- UCB	2004	UCB

Graduate/Medical Students

Trainee	**Status**	**Training Period**	**Current Position/Location**
T. George	Medical Student, Honors Thesis, UCSF	1992-1993	UCSF Med School Graduate, Physician, Private Practice
C. Mars	Medical Student, UCSF	1992	Physician, Private Practice
D. Kelly	Post graduate Student Children's Hospital	1998-1999	Ph.D. Candidate Boston
K. Gregg	UCSF-CSUSF Joint MS/Ph.D. Program	2001-2003	Graduate student, Biological Sciences Graduate Program
A. Patwardhan	UCSF, Ph.D. program	2002-2005	Graduate student, Biomedical Informatics Graduate Program

Post Graduate (Postdoctoral Scholars, Residents)

Trainee	**Status**	**Training Period**	**Current Position/Location**
P. Matsson, Ph.D.	Postdoctoral Scholar	1985-1986	Director of Immunology, Pharmacia, Uppsala Sweden
L. Watson, M.D.	Postdoctoral Scholar	1989-1990	Associate Pathology Director American Labs , Las Vegas, NV
R. Amendola, Ph.D	Postdoctoral Scholar	1989-1990	Scientist, ENEA, Rome, Italy
C. Bethel, M.D.	Resident, UCSF	1991-1992	Chief, Pediatric Surgery UMDNJ, New Jersey
K. Miyashita, M.D.	Postdoctoral Scholar	1991-1992	Physician-Scientist, Staff, University of Tokyo, Japan
B. Mehrotra, M.D.	Postdoctoral Scholar	1992- 1993	Assistant Professor, Wayne State University Medical School

E. Grady, Ph.D.	Postdoctoral Scholar	1992-1993	Assistant Adjunct Prof, UCSF
V. Litle, M.D.	Resident UCSF Surgery	1993-1995	Physicians Faculty, University of Pittsburgh
R. Nath, M.D.	Postdoctoral Scholar	1993-1995	Postgraduate Researcher, UCSF
P. Mueller, M.D.	Postdoctoral Scholar	1994-1995	Physician, Germany
P. Matsson, Ph.D.	Postdoctoral Scholar	1985-1986	Director of Immunology, Pharmacia, Uppsala Sweden
L. Watson, M.D.	Postdoctoral Scholar	1989-1990	Associate Pathology Director American Labs , Las Vegas, NV
R. Amendola, Ph.D	Postdoctoral Scholar	1989-1990	Scientist, ENEA, Rome, Italy
C. Bethel, M.D.	Resident, UCSF	1991-1992	Chief, Pediatric Surgery UMDNJ, New Jersey
K. Miyashita, M.D.	Postdoctoral Scholar	1991-1992	Physician-Scientist, Staff, University of Tokyo, Japan
B. Mehrotra, M.D.	Postdoctoral Scholar	1992- 1993	Assistant Professor, Wayne State University Medical School
E. Grady, Ph.D.	Postdoctoral Scholar	1992-1993	Assistant Adjunct Prof, UCSF
V. Litle, M.D.	Resident	1993-1995	Physicians Faculty, University of Pittsburgh
R. Nath, M.D.	Postdoctoral Scholar	1993-1995	Postgraduate Researcher, UCSF
P. Mueller, M.D.	Postdoctoral Scholar	1994-1995	Physician, Germany
H. Avet-Loiseau, M.D.	Postdoctoral Scholar	1993-1994	Scientist, Laboratoire d'Anatomie Pathologique et d'Hématologie Clinique, Nantes, France
S. Tamaki, Ph.D.	Postdoctoral Scholar	1994-1997	Staff Scientist, Systemix, Palo Alto, CA
C. Quijano, M.D.	Postdoctoral Scholar	1984-1996	Physician, San Francisco
D. Ross, M.D., Ph.D	Resident	1998	Chief Scientific Officer, Applied Genomics, Mountain View, CA
S. Pedersen, Ph.D.	Postdoctoral Scholar	1996-1997	Genetics Department, Aarhus University, Denmark
R. Stull, Ph.D.	Postdoctoral Scholar	1996-2000	Scientist and Technology Core Director, PPD, Menlo Park, CA
C. Golden, M.D.	Postdoctoral Scholar	1996-1998	Pediatrician, Children’s Hospital Oakland

P. Kelley, M.D.	Postdoctoral Scholar	1996-1998	Assistant Professor St. Jude's Cancer Center, Memphis, TN
C. Golden, M.D.	Postdoctoral Scholar	1996-1998	Pediatrician, Children's Hospital Oakland
C. Giver, Ph.D.	Postdoctoral Scholar	1997-2000	Post-graduate Researcher, Atlanta University, GA
M. Tiirikainen, Ph.D.	Postdoctoral Scholar	1999-2001	Post-graduate Researcher, UCSF
M. Pauling, Ph.D.	Postdoctoral fellow	1999-2000	Staff Scientist, Genetastix, CA
K. Anh, M.D.	Resident	2000	Laboratory Medicine, UCSF
E. Geva. M.D.	Postdoctoral Scholar	2000-2001	Assistant Professor Tel Aviv University Israel
R. Laposa, Ph.D.	Postdoctoral Scholar	2001-present	UCSF Postdoctoral Scholar
S. Dutta	Postdoctoral Scholar	2002-2004	Research Scientist, Stanford

UNIVERSITY SERVICE AND OUTREACH

UCSF

Graduate Council; Member 1992-1991; Vice Chair (1994-1995); Chair (1996-1999)
UC-System-wide Council on Graduate Student Affairs (1996-1997)
Committee on Academic Personnel (2001-2002)
Academic Senate Coordinating Committee (1996-2001)
UCSF Division Academic Senate, Secretary (1999-2001)
Executive Committee, Academic Senate (1999-2001)
UC Merced Task Force, UCSF Academic Senate Representative (2000-2002)
Recruitments and Academic Advancement: (1998-2002); Ad Hoc Faculty Promotion Committee and Stewardship Reviews, Search Committees, UCSF, Radiology Chair, UCSF Librarian, Executive Vice Chancellor of Research
Mission Bay Campus Planning Committee (1997-1998)
Campus Animal Users Committee, Chair (1997-2002)
UCSF Cancer Center Animal Facility Faculty Oversight, Chair (1997-2002)
UCSF Animal Facility Building Planning Advisory Team (1998-2002)
UCSF IACUC Committee on Animal Research (2001-2002)
Coordinating Committee for Interschool Teaching, UCSF (1997-1999)
Advisor, UCSF Cancer Center/SFSU Joint Masters/PhD program (2001-2002)
UC Merced Science and Engineering Building Advisory Team (2000-2002)
Steering Committee Hematologic Malignancies (2000-2002)
Mentoring Program for Junior Faculty, Cancer Center UCSF (1998-2002)
Co-Director Protein Analyses Core, UCSF Cancer Center (2000-2002)

UC MERCED (non-Dean)

Health Careers Day for Junior High & High School Students, UC Merced, Organizer (2004)

Community Forum Including High Schools – Stem Cells and Regenerative Medicine (2004)
Modesto Junior College, Stem Cell Biology Seminar Speaker (2004)
Castle Science on Saturday, Technology Lecture – Origins of Life, Seminar Speaker (2004)
Stem Cell Lecture, Bakersfield High School, (2006, 2007)
Science Math Initiative- Administrative Director (2005- present)

UC MERCED (Dean)

Founding Dean, School of Natural Sciences (2002 – Present)

PROFESSIONAL SERVICE AND ACTIVITIES

Reviewer: National Institutes of Health; National Cancer Institute, National Institute of Allergy and Infectious Disease. Member and chair for numerous scientific review panels for NIH to evaluate the scientific merit and infrastructure of intra-disciplinary Program Projects, Cancer Centers and Research Grants.

1987-1988	NCI; Member Cancer Therapeutics Program Project Review Parent Committee
1993-1997	NCI: Experimental Therapeutics Study Section, Member
1995-1999	Research America: lobby for research funding by meeting with state legislators
1999	American Cancer Society: lobby for research funding by meeting with state legislators
2000	National Cancer Institute Molecular Diversity Advisory Panel
2000	National Cancer Institute Hematologic Malignancies Advisory Group
2001	National Cancer Institute Innovative Technologies Scientific Advisory Panel
2002- 2004	National Institutes of Health – Ad Hoc Member for Grant Reviews
2002- 2005	National Cancer Institute Parent Committee for Cancer Program Projects. Parent Committee Member. 'On site' program reviews at 18 institutions. Chaired eight reviews

PROFESSIONAL SOCIETIES

1983-1985	Cell Kinetics Society, Councilor
1985-1987	Cell Kinetics Society, Treasurer
1990-1994	Bay Area Hemopoiesis Association, Founder
1993	International Society for Analytical Society, Strategic Planning Committee
1994-1998	International Society for Analytical Society, Councilor
1995-1998	International Society for Analytical Society Scientific Program, Scientific Program Co-Chair
1996-1998	American Society of Hematology, Subcommittee, Clinical Laboratory Scientific Program, Member
1998-present	International Society for Analytical Society, Executive Committee Member
1998-2002	International Society for Analytical Society, Treasurer
2002-2003	International Society for Experimental Hematology, Chair, Scientific Program, France
2002-2003	International Congress Society of Analytical Cytology, Chair, Scientific Program, France
2002-2004	International Society for Analytical Cytology (Cytometry), President-elect
2004-2006	International Society for Analytical Cytology (Cytometry), President

EDITORIAL BOARDS AND ADVISORY BOARDS

1995-present	Reviewer: Cancer Research, Leukemia, Leukemia Research, Blood, J. Histochemisty Cytochemistry, Cytometry, Radiation Research, Cancer Genetics, Environmental Mutagenesis, Proteomics, Cytometry, Experimental Hematology
1998-present	Leukemia Research Program Advisory Committee M.D. Anderson Cancer Center, Houston, TX

1998-2003	Cytometry, Editorial Board
2000-present	Fanconi Anemia Foundation Advisory Board, Member
2000-2002	Guest Editor Experimental Hematology Editor, Emerging Technologies Series, Experimental Hematology
2002-present	Member and Chair, External Advisory Board Pacific Northwest National Laboratory Center of Excellence-Proteomics- NCRR
2003- present	Acute Myelogenous Leukemia Program, M.D. Anderson Tumor Hospital and Cancer Research Institute

RESEARCH AND CREATIVE ACTIVITIES

Patents Pending/ Issued

1999	Interferon Regulatory Factors in the Diagnosis of Tumorigenicity Patent # 5,652,095
2001	Method for Gene ID and Function. Disclosure: Patent application pending
2001	Making Chimeric DNA Libraries Patent # 6,322,599
2001	Method of Isolating Monoclonal Antibody-expressed cDNA Binding Pairs Disclosure