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Chemical Engineering and Materials Science
Civil and Environmental Engineering
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Education

PhD, California Institute of Technology, 1992.
Environmental Engineering & Science
Minor: Applied Biology
Dissertation Title: Detection and Partitioning of Bacteriophage in Natural Aquatic Environments
Advisor: Lidstrom, M. E., List, E. J.

MS, California Institute of Technology, 1990.
Major: Environmental Engineering & Science
Advisor: Lidstrom, M. E.

BS, With Distinction, Stanford University, 1985.
Major: Geology

Professional Positions

Department Chairperson, Dept. of Chemical Engineering and Materials Science, (September 2002 - June 2009).
Professor, Civil and Environmental Engineering, UC Irvine (2009-2010).
Professor, Chemical Engineering and Materials Science, UC Irvine (2001-2010).
Associate Professor, Chemical Engineering and Materials Science, UC Irvine (1999-2001).
Associate Professor, Civil and Environmental Engineering, UC Irvine (1997-1999).
Assistant Professor, Civil and Environmental Engineering, UC Irvine (1991-1997).
Chair Professor of Hydrology and Water Resources, University of Melbourne. (June 15, 2010 - Present).
Visiting appointment in the Department of Civil and Environmental Engineering, during the UCI academic summers of 2010, 2011, and 2012.
Seismic Analyst, Unocal Corporation. (January 1985 - August 1987).

Research Interests

Coastal Water Quality, Environmental Dispersion of Pathogens, Fate and Transport Modeling;
Environmental Microbiology

Awards and Honors

Croucher Lecture, University of Hong Kong. (May 11, 2010).
Appreciation Award, Graduate Student Association, Chemical Eng. and Materials Science. (2009).
Science Advisory Board, U.S. Environmental Protection Agency (Drinking Water Panel). (2002 - 2009).
Croucher Lecture, University of Hong Kong Advanced Study Institute on Nearshore Coastal Water Quality Research. (December 14, 2009).

Chancellor's International Lecture, University of Melbourne. (September 3, 2009).
 Grand Rounds Lecture, UCI Medical School. (October 24, 2007).
 Finalist, Dean of Engineering, College of Engineering, University of Hawaii (Manoa Campus). (2006).
 Conservator of the Year, Bolsa Chica Conservancy (with commendations from City of Huntington Beach, County of Orange, California Legislature, California Senate, and US Congress). (2002).
 Commencement Speaker for Schools of Engineering and Social Ecology, UC Irvine. (2001).
 Honorary Member, Golden Key International Honor Society. (2001).
 W.M. Keck Fellow Award, Chapman University. (2000).
 National Science Foundation Early Career Award. (July 1995 - June 2000).
 Distinguished Assistant Professor Award for Teaching, UCI Academic Senate. (1998).
 Outstanding Assistant Professor Award, School of Engineering. (1994).
 Most Outstanding Professor, School of Engineering Senior Undergraduates. (1993).
 Faculty Research Fellowship, UC Irvine. (1992).
 National Research Service Award Fellowship, National Institutes of Health. (1989 - 1991).
 Caltech Institute Fellowship. (1987 - 1988).
 Honorable Mention, NSF Graduate Fellowship Competition, National Science Foundation. (1987).

RESEARCH

Publications

Instructor's Manuals

- Grant, S. B., Duong, M. (1995). Laboratory Manual for Environmental Microbiology.

Journal Articles, Peer-Reviewed

- Grant et al. Taking the 'waste' out of 'wastewater' to meet water needs. *Science*. (Invited Review Article).
- Grant, S. B., Stewardson, M. J., Marusic, I. (2012). Effective Diffusivity and Mass Flux across the Sediment-Water Interface in Turbulent Streams. *Water Resources Research*, 48(W05548).
- Bailey, M. M. Natural Attenuation of Sewage Contaminated Shallow Groundwater and Implications for Coastal Water Quality. *Environmental Science and Technology*.
- Bailey, M. M., Cooper, W. J., Grant, S. B. (2011). In situ disinfection of sewage contaminated shallow groundwater: A feasibility study. *Water Research*, 45, 5641-5653.
- Grant, S. B., Marusic, I. (2011). Crossing Turbulent Boundaries: Interfacial Flux in Environmental Flows. *Environmental Science and Technology*, 45, 7107-7113. (Feature Article).
- Grant, S. B., Litton, R. M., Ahn, J. H. (2011). Measuring and modeling the flux of fecal bacteria across the sediment-water interface in a turbulent stream. *Water Resources Research*, 47, W05517.
- Ho, L. C., Litton, R. M., Grant, S. B. (2011). Anthropogenic Currents and Shoreline Water Quality in Avalon Bay, California. *Environmental Science and Technology*, 45, 2079-2085.

47. Grant, S. B., Sanders, B. F. (2010). The beach boundary layer: A framework for addressing recreational water quality impairment at enclosed beaches. *Environmental Science and Technology*, 44, 8804-8813.
46. Litton, R. M., Ahn, J. H., Sercu, B., Holden, P. A., Sedlak, D. L., Grant, S. B. (2010). Evaluation of chemical, molecular, and traditional markers of fecal contamination in an effluent dominated urban stream. *Environmental Science and Technology*, 44, 7369-7375. (featured in Chemical and Engineering News).
45. Surbeck, C. Q., Jiang, S. C., Grant, S. B. (2010). Ecological control of fecal indicator bacteria in an urban stream. *Environmental Science and Technology*, 44, 631-637.
44. Clark, C. D., De Bruyn, W. J., Jakubowski, S. D., Grant, S. B. (2008). Hydrogen peroxide production in marine bathing waters: Implications for fecal indicator bacteria mortality. *Marine Pollution Bulletin*, 56, 397-401.
43. Clark, C. D., Litz, L. P., Grant, S. B. (2008). Salt marshes as a source of chromophoric dissolved organic matter (CDOM) to Southern California coastal waters. *Limnology and Oceanography*, 53, 1923-1933.
42. Jeong, Y., Sanders, B. F., McLaughlin, K., Grant, S. B. (2008). Treatment of dry weather urban runoff in tidal marshes: A longitudinal study of the Talbert Marsh, southern California. *Environmental Science and Technology*, 42, 3609-3614.
41. McLaughlin, K., Ahn, J. H., Litton, R. M., Grant, S. B. (2007). Use of Salinity Mixing Models to Estimate the Contribution of Creek Water Fecal Indicator Bacteria to an Estuarine Environment. *Water Research*, 41, 3595-3604. (special issue on Microbial Source Tracking).
40. Ahn, J. H., Grant, S. B. (2007). Size distribution, sources, and seasonality of suspended particles in southern California marine bathing waters. *Environmental Science and Technology*, 41, 695-702.
39. Grant et al. (2006). Response to comment on "Coastal water quality impact of storm runoff from an urban watershed in southern California". *Environmental Science and Technology*, 40, 3441-3442.
38. Jeong, Y., Sanders, B. F., Grant, S. B. (2006). The information content of high frequency environmental monitoring data signals pollution events in the coastal ocean. *Environmental Science and Technology*, 40, 6215-6220.
37. Surbeck, C. Q., Jiang, C., Ahn, J. H., Grant, S. B. (2006). Flow fingerprinting of fecal pollution and suspended solids in storm water runoff from an urban coastal watershed. *Environmental Science and Technology*, 40, 4435-4441.
36. Pednekar, A. M., Grant, S. B., Jeong, Y., Poon, Y., Oancea, C. (2005). Influence of climate change, tidal mixing, and watershed urbanization on historical water quality in Newport Bay, a saltwater wetland and tidal embayment in southern California. *Environmental Science and Technology*, 39, 9071-9082.
35. Jeong, Y., Grant, S. B., Ritter, S., Pednekar, A., Candelaria, L., Winant, C. (2005). Identifying pollutant sources in tidally mixed systems: case study of fecal indicator bacteria from marinas in Newport Bay, southern California. *Environmental Science and Technology*, 39, 9083-9093.

34. Ahn, J., Grant, S. B., Surbeck, C., DiGiacomo, P., Nezlin, N. (2005). Coastal water quality impact of storm runoff from an urban watershed in southern California. *Environmental Science and Technology*, 39, 5490-5953.
33. Grant, S. B., Kim, J. H., Jones, B. H., Jenkins, S. A., Wasyl, J., Cudaback, C. (2005). Surf zone entrainment, alongshore transport, and human health implications of pollution from tidal outlets. *Journal Geophysical Research-Oceans*, 110:C10025.
32. Kim, J. H., Grant, S. B., Sanders, B. F., McGee, C. D., Largier, J. L. (2004). Locating sources of surf zone pollution: a mass budget analysis of fecal indicator bacteria at Huntington State Beach, California. *Environmental Science and Technology*, 38, 2626-2636.
31. Reeves, R. L., Grant, S. B., Mrse, R. D., Oancea, C., Sanders, B. F., Boehm, A. (2004). Scaling and management of fecal indicator bacteria in runoff from a coastal urban watershed in southern California. *Environmental Science and Technology*, 38, 2637-2648.
30. Kim, J. H., Grant, S. B. (2004). Public mis-notification of coastal water quality: A probabilistic analysis of posting errors at Huntington Beach, California. *Environmental Science and Technology*, 38, 2947-2505. (highlighted on cover; featured in the front section of the journal; featured on National Public Radio's "All Things Considered"; featured in US News and World Report; featured in Scientific American).
29. Boehm, A., Fuhrman, J., Mrse, R. D., Grant, S. B. (2003). A tiered approach for identification of a human fecal pollution source at a recreational beach: Case study at Avalon Bay, Catalina Island, California. *Environmental Science and Technology*, 37, 673-680.
28. Boehm, A. B., Grant, S. B., Kim, J. H., Mowbray, S. L., McGee, C. D., Clark, C. D., Foley, D. M., Wellman, D. E. (2002). Decadal and shorter period variability of surf zone water quality at Huntington Beach, California. *Environmental Science and Technology*, 36, 3885-3892. (featured on cover).
27. Redman, J. A., Grant, S. B., Estes, M. K. (2001). Resolving microscale and macroscale heterogeneity in pathogen filtration. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 191, 57-70.
26. Boehm, A. B., Grant, S. B. (2001). A steady-state model of particulate organic carbon flux below the mixed-layer and application to the joint global ocean flux study. *Journal Geophysical Research-Oceans*, 106(31), 31227-31237.
25. Grant, S. B., Poor, C., Kim, J. H. (2001). Kinetic theories for the coagulation and sedimentation of particles. *Journal of Colloid and Interface Science*, 238, 238-250.
24. Sanders, B. F., Green, C. L., Chu, A., Grant, S. B. (2001). Case study: modeling tidal transport of urban runoff in channels using the finite volume method. *ASCE Journal of Hydraulic Engineering*, 127(10), 795-804.
23. Grant, S. B., Sanders, B. F., Redman, J. A., Kim, J. H., Mrse, R., McGee, C. D., Gardiner, N., Jones, B. H., Sveikovskiy, J., Leipzig, V., Brown, A. (2001). Generation of enterococci bacteria in a coastal salt water marsh and its impact on surf zone water quality. *Environmental Science and Technology*, 35, 2407-2415.
22. Redman, J. A., Grant, S. B., Olson, T. M., Estes, M. K. (2001). Pathogen filtration,

- heterogeneity, and the potable reuse of wastewater. *Environmental Science and Technology*, 35, 1798-1805.
21. Chin, C. J., Yiacoumi, S., Tsouris, C., Relle, S., Grant, S. B. (2000). Secondary-minimum aggregation of superparamagnetic colloidal particles. *Langmuir*, 16, 3641-3650.
 20. Relle, S., Grant, S. B., Tsouris, C. (1999). Diffusional coagulation of superparamagnetic particles in the presence of an external magnetic field. *Physica A: Statistical Mechanics and its Applications*, 270, 427-443.
 19. Boehm, A. B., Poor, C., Grant, S. B. (1999). Particle coagulation and the memory of initial conditions. *Journal Physics A: Mathematical and General*, 31, 9241-9254.
 18. Redman, J. A., Grant, S. B., Olson, T. M., Adkins, J. M., Jackson, J. L., Castillo, M. S., Yanko, W. A. (1999). Physicochemical mechanisms responsible for the filtration and mobilization of a filamentous bacteriophage in quartz sand. *Water Research*, 33, 43-52.
 17. Boehm, A. B., Grant, S. B. (1998). The influence of coagulation, sedimentation, and grazing by zooplankton on phytoplankton aggregate distributions in aquatic systems. *Journal of Geophysical Research: Oceans*, 103(C8), 15601-15612.
 16. Relle, S., Grant, S. B. (1998). A one-step process for particle separation by magnetic seeding. *Langmuir*, 14(9), 2316-2328.
 15. Walker, H. W., Grant, S. B. (1998). Influence of surface charge and particle size on the stabilization of colloidal particles by model polyelectrolytes. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 135, 123-133.
 14. Redman, J. A., Grant, S. B., Olson, T. M., Hardy, M. E., Estes, M. K. (1997). Filtration of recombinant Norwalk virus particles and bacteriophage MS2 in quartz sand: importance of electrostatic interactions. *Environmental Science and Technology*, 31(12), 3378-3383.
 13. Duong, M. H., Penrod, S. P., Grant, S. B. (1997). Kinetics of p-Nitrophenol degradation by *Pseudomonas* sp. ATCC29354: an experiment illustrating bioremediation. *Journal of Chemical Education*, 74, 1451-1454.
 12. Penrod, S. P., Olson, T. M., Grant, S. B. (1996). The deposition kinetics of two viruses in packed beds of quartz granular media. *Langmuir*, 12(23), 5576-5587.
 11. Walker, H. W., Grant, S. B. (1996). Factors influencing the flocculation of colloidal particles by a model anionic polyelectrolyte. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 119(2-3), 229-239.
 10. Grant, S. B., Pendroy, C. P., Mayer, C. L., Bellin, J. K., Palmer, C. J. (1996). Prevalence of Enterohemorrhagic *Escherichia coli* in raw and treated municipal sewage. *Applied and Environmental Microbiology*, 62(9), 3466-3469.
 9. Walker, H. W., Grant, S. B. (1996). Role of polymer flexibility in the stabilization of colloidal particles by model anionic polyelectrolytes. *Journal of Colloid and Interface Science*, 179, 552-560.
 8. Walker, H. W., Grant, S. B. (1996). The coagulation and stabilization of colloidal particles by adsorbed DNA block copolymers: the role of polymer conformation. *Langmuir*, 12(13), 3151-3156. (featured on cover).

7. Grant, S. B., Poor, C., Relle, S. (1996). Scaling theory and solutions for the steady-state coagulation and settling of fractal aggregates in aquatic systems. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 107, 155-174.
6. Walker, H. W., Grant, S. B. (1995). The conformation of DNA block copolymer molecules adsorbed on latex particles as revealed by hydroxyl radical footprinting. *Langmuir*, 11(10), 3772-3777.
5. Penrod, S. L., Olson, T. M., Grant, S. B. (1995). Whole particle microelectrophoresis for small viruses and colloids. *Journal of Colloid and Interface Science*, 173, 521-523.
4. Grant, S. B. (1995). Inactivation kinetics of viral aggregates. *ASCE Journal of Environmental Engineering*, 121(4), 311-319.
3. Duong, M. H., Grant, S. B., Lidstrom, M. E. (1994). Transfer solvent chemistry affects mixed-phase hybridization. *Analytical Biochemistry*, 220, 431-433.
2. Grant, S. B. (1994). Virus coagulation in aqueous environments. *Environmental Science and Technology*, 28, 928-933.
1. Grant, S. B., List, E. J., Lidstrom, M. E. (1993). Kinetic analysis of virus adsorption and inactivation in batch experiments. *Water Resources Research*, 29, 2067-2085.

Newspaper Articles

2. Grant, S. B. (2002). Runoff is Far Greater Threat To Coast than Sewage Plume. *Los Angeles Times*. (Op/Ed Piece in Sunday LA Times).
1. Grant, S. B., Grant, L. (1999). An All Points Bulletin: Coast Must Be Cleared. *Los Angeles Times*. (Op/Ed Piece in Sunday LA Times).

Research Reports

8. Grant et al. (2010). *Avalon Bay Water Quality Improvement Project, Catalina Island, California*. State of California Water Quality Control Board. 100..
7. Grant, S. B., Jiang, C., Sanders, B. F., McLaughlin, K., Ahn, J. H., Litton, R. M., Ho, L., Moore, D. (2009). *Newport Bay Fecal Indicator Bacteria Source Identification Project*. UC Irvine, Chemical Engineering and Materials Science. 333..
6. Grant, S. B., Mrse, R., Jensen-Mullin, C., Bachman, M., Boehm, A., Fuhrman, J., Jones, B. (2006). *Sources and mitigation of water quality impairment in Avalon Bay, Catalina Island*. City of Avalon and the State Water Resources Control Board.. (includes appendix).
5. Grant, S. B., Rekhi, N., Pise, N. R., Reeves, R. L., Matsumoto, M., Wistrom, A., Moussa, L., Bay, S., Kayhanian, M. (2003). *A review of the contaminants and toxicity associated with particles in stormwater runoff*.. (includes appendix).
4. Grant, S. B., Sanders, B., Boehm, A., Arega, G., Ensari, S., Mrse, R., Kang, H., Reeves, R., Kim, J. H., Redman, J., Jiang, S., Chu, W., Choi, S., Clark, C., Litz, L., Sutula, M., Noblet, J., Sobsey, M., McGee, C. (2002). *Coastal Runoff Impact Study (UCI-CRIS), Phase II: Sources and dynamics of fecal indicator bacteria in the Lower Santa Ana River Watershed*. National Water Research Institute.. (Technical Completion Report).

3. Grant, S. B., Webb, C., Sanders, B., Jones, B., Boehm, A., Kim, J., Redman, J., Chu, A., Mrse, R., Gardiner, N., Brown, A. (2000). *Huntington Beach Water Quality INvestigation Phase II: An Analysis of Ocean, Surf Zone, Watershed, Sediment, and Groundwater Data Collected from June 1998 through September 2000*. National Water Research Institute..
2. Grant, S. B., Sanders, B. (2000). *Tidal Transport of Bacteria Between The Talbert Watershed and the Ocean*. National Water Research Institute.. (Technical Completion Report).
1. Grant, S. B. (1994). *Microorganism Detection by Multiple Non-Specific Oligonucleotide Probes, or "Gene Probe Spectroscopy"*. UC Water Resources Center.. (Technical Completion Report).

Technical Reports

2. Grant, S. B. (2008). *2008 Academic Plan: UCI Chemical Engineering and Materials Science*. UC Irvine..
1. Grant, S. B. (2005). *Achieving Excellence at the Intersection of Chemical Engineering and materials Science*. UC Irvine.. (Academic Plan for the Department of Chemical Engineering and Materials Science).

Presentations Given

Grant, S. B., Osher Lifelong Learning Institute, "The Beach Boundary Layer and Recreational Water Quality at Enclosed Beaches," UCI Extension, UC Irvine, CA. (September 30, 2010).

Grant, S. B., "The Beach Boundary Layer and Recreational Water Quality at Enclosed Beaches," Department of Civil and Environmental Engineering, University of Melbourne, Victoria (Australia). (September 9, 2010).

Grant, S. B., "The Beach Boundary Layer and Recreational Water Quality at Enclosed Beaches," Department of Civil and Environmental Engineering, Monash University, Victoria (Australia). (July 20, 2010).

Grant, S. B., Croucher Lecture, "Measuring and Modeling the Flux of Bacteria Across the Sediment-Water Interface in a Turbulent Stream," Department of Civil and Environmental Engineering, University of Hong Kong, Hong Kong (China). (May 11, 2010).

Grant, S. B., Croucher Lecture, "The Beach Boundary Layer and Recreational Water Quality at Enclosed Beaches," Department of Civil and Environmental Engineering, University of Hong Kong, Hong Kong (China). (May 10, 2010).

Grant, S. B., State of California Beach Water Quality Work Group, "Newport Bay Fecal Indicator Bacteria Source Identification Project," State Water Board, Southern California Coastal Water Research Project, Costa Mesa, CA. (February 3, 2010).

Grant, S. B. (Author), Litton, R. (Presenter), 2010 Ocean Sciences Meeting, "Enhancing the predictive capabilities of a water quality model that assesses the fecal impairment of recreational waters by incorporating stratified random sampling design into the model development," American Geophysical Union, Portland, OR. (February 2, 2010).

- Grant, S. B., Croucher ASI on Nearshore Coastal Water Quality, "Beach Water Quality Forecasting: Challenges and Opportunities," University of Hong Kong, Hong Kong (China). (December 16, 2009).
- Grant, S. B. (Plenary Lecturer), "Cleaning Up Urban Rivers and Streams: Case Studies from California and Australia," Chancellor's International Lecture, University of Melbourne, Victoria (Australia). (September 3, 2009).
- Grant, S. B., National Beaches Conference, "Tidal Saltwater Wetlands and Coastal Water Quality," U.S. Environmental Protection Agency, Huntington Beach, CA. (April 21, 2009).
- Grant, S. B., "Tidal Saltwater Wetlands and Coastal Water Quality," Department of Civil and Environmental Engineering, University of Southern California, Los Angeles, CA. (October 23, 2008).
- Grant, S. B., "Sources and Nearshore Transport of Coastal Pollution," U.S. National Science Foundation, Office of Cyberinfrastructure, Washington D.C.. (October 10, 2008).
- Grant, S. B., "Tidal Saltwater Wetlands and Coastal Water Quality," Scripps Institution of Oceanography, UC San Diego, La Jolla, CA. (October 1, 2008).
- Grant, S. B., "Tidal Saltwater Wetlands and Coastal Water Quality," School of Engineering, University of Melbourne, Victoria (Australia). (August 8, 2008).
- Grant, S. B., "Fecal Bacteria Source Tracking in the Middle Santa Ana River," Riverside Middle Santa Ana River Source Tracking Committee, Riverside, CA. (June 5, 2008).
- Grant, S. B., "Tidal Saltwater Wetlands and Coastal Water Quality," Department of Biology, California State University, Los Angeles, CA. (May 6, 2008).
- Grant, S. B., "Tidal Saltwater Wetlands and Coastal Water Quality," Department of Civil and Environmental Engineering, University of Connecticut, Storrs, CT. (May 1, 2008).
- Grant, S. B., "Sources and Transport Pathways of Urban Coastal Pollution," Department of Chemical and Environmental Engineering, UC Riverside, Riverside, CA. (November 30, 2007).
- Grant, S. B. (Plenary Lecturer), Grand Rounds, UCI Medical School, "Exposure patterns and health effects associated with swimming and surfing in polluted marine waters," UC Irvine, CA. (October 24, 2007).
- Grant, S. B., "Sources and Transport Pathways of Urban Coastal Pollution," Department of Geography and Environmental Engineering, Johns Hopkins University, Baltimore, MD. (June 6, 2007).
- Grant, S. B. (Keynote Speaker), American Geophysical Union Annual Meeting, "Exposure patterns and health effects associated with surfing and swimming in polluted marine waters," Acapulco (Mexico). (May 22, 2007 - May 24, 2007).
- Grant, S. B., Workshop on Pathogen Transport in the Environment, "Pathogen transport in coastal systems," Michigan State University, Lansing, MI. (April 20, 2007).
- Grant, S. B., Newport Bay Fecal Coliform TMDL Technical Advisory Committee, "Sources of Fecal Indicator Bacteria Pollution in Newport Bay," Newport Beach, CA. (April 13, 2007).

- Grant, S. B. (Author), Pednekar, A. (Presenter), Annual Conference, "California sustainable watershed/wetland information manager," California Stormwater Quality Association, Sacramento, CA. (September 25, 2006).
- Grant, S. B., Avalon City Council, "Causes and remediation of fecal indicator bacteria impairment in Avalon Bay, Catalina Island," Avalon, Catalina Island, CA. (August 17, 2006).
- Grant, S. B., Hydrology and Hydraulics Technical Group, "CalSWIM: California Sustainable Watershed/Wetland Information Manager," American Society of Civil Engineers, Irvine, CA. (April 29, 2006).
- Grant, S. B., National Water Research Institute Research Advisory Board, "Continuing Project Review: Dynamics of point and non-point source fecal pollution from an urban watershed in southern California," Reno, NV. (April 29, 2006).
- Grant, S. B., Ocean Science Meeting, "Concentration fingerprinting fecal indicator bacteria sources in a coastal wetland," American Society of Limnology and Oceanography, Honolulu, HI. (February 22, 2006).
- Grant, S. B., Legislator Briefings on Science and Policy, "Public mis-notification of coastal water quality," COMPASS and Sea Web, Panel: Protecting California's Ocean and Coast, State Capital Building, Sacramento, CA. (February 2, 2006).
- Grant, S. B. (Keynote Speaker), Western Regional Meeting, "Integrating molecular biology, physical oceanography, and remote sensing technology to illuminate the sources and pathways of urban coastal pollution," American Chemical Society, Anaheim, CA. (January 23, 2006).
- Grant, S. B., "Future of engineering in today's society," School of Engineering, University of Hawaii, Honolulu, HI. (January 7, 2006).
- Grant, S. B., Wetlands Advisory Board, "Dynamics of point and non-point source fecal pollution in an urban watershed in southern California," City of San Diego, San Diego, CA. (November 15, 2005).
- Grant, S. B., Research Advisory Board Meeting, "Continuing Project Review: Dynamics of point and non-point source fecal pollution from an urban watershed in southern California," National Water Research Institute, Costa Mesa, CA. (October 15, 2005).
- Grant, S. B., California Clean Beaches Initiative, "Mixing and swash zone water quality in tidal embayments: contrasting case studies at Avalon Bay and Newport Beach," State of California Water Board, Dana Point Ocean Institute, Dana Point, CA. (August 16, 2005).
- Grant, S. B., Annual Meeting, "Impact of stormwater runoff on coastal water quality," American Chemical Society, Panel: Environmental Colloids Session, San Diego, CA. (April 25, 2005).
- Grant, S. B. (Author), Pednekar, A. (Presenter), World Water and Environmental Research Congress, "Water quality in a tidal saltwater wetland: influence of climate change, tidal mixing, and watershed urbanization," American Society of Civil Engineers, Anchorage, AK. (March 18, 2005).
- Grant, S. B. (Author), Jeong, Y. (Presenter), Ocean Science Meeting, "Fisher information and analysis of complex environmental signals in coastal water quality monitored at Newport Bay, California," American Society of Limnology and Oceanography, Salt Lake City, UT. (February 25, 2005).

- Grant, S. B., Borchardt Conference on Advancements in Water and Wastewater Treatment, "Water Quality Impact of Storm Water Runoff from the Santa Ana River, southern California," College of Engineering, University of Michigan, Ann Arbor, MI. (February 23, 2005).
- Grant, S. B., Annual Meeting, "Now-casting coastal water quality," National Council on Water Quality Monitoring, San Jose, CA. (December 7, 2004).
- Grant, S. B., California Beach Water Quality Work Group, "Impacts of Storm Water Runoff on Coastal Water Quality," Southern California Coastal Water Research Project, Westminster, CA. (November 16, 2004).
- Grant, S. B., Research Advisory Board Meeting, "Continuing Project Review: Dynamics of point and non-point source fecal pollution from an urban watershed in southern California," National Water Research Institute, Chicago, IL. (October 15, 2004).
- Grant, S. B., National Beaches Conference, "Public mis-notification of coastal water quality," U.S. Environmental Protection Agency, San Diego, CA. (October 13, 2004).
- Grant, S. B., Water Quality Stakeholders Group, "Research update: stormwater runoff from the Santa Ana River," County of San Bernadino, San Bernadino, CA. (October 5, 2004).
- Grant, S. B., Urban Runoff Roundtable, "Urban runoff: a landside perspective," National Water Research Institute, Irvine, CA. (August 4, 2004).
- Grant, S. B., CallT2 Hydrology Workshop, "Combining molecular biology, physical oceanography, and remote sensing technology to illuminate the sources and pathways of urban coastal pollution," CallT2, San Diego, CA. (May 17, 2004).
- Grant, S. B., Newkirk Lecture, "Surf zone pollution: science, sources, and public notices," Newkirk Center for Science and Society, UC Irvine, Irvine, CA. (May 6, 2004).
- Grant, S. B., Orange County Younger Members Forum, "Troubled Waters: Our Ocean Our Beaches," American Society of Civil Engineers, Irvine, CA. (April 27, 2004).
- Grant, S. B., Research Advisory Board Meeting, "Continuing Project Review: Dynamics of point and non-point source fecal pollution from an urban watershed in southern California," National Water Research Institute, Costa Mesa, CA. (April 24, 2004).
- Grant, S. B., "Combining molecular biology, physical oceanography, and remote sensing technology to illuminate the sources and pathways of urban coastal pollution," Department of Environmental Engineering Science, Caltech, Pasadena, CA. (April 7, 2004).
- Grant, S. B., Ocean Science Meeting, "Public mis-notification of coastal water quality," American Society of Limnology and Oceanography, Honolulu, HI. (February 16, 2004).
- Grant, S. B., "Combining molecular biology, physical oceanography, and remote sensing technology to illuminate the sources and pathways of urban coastal pollution," Department of Civil and Environmental Engineering, UC Davis, Davis, CA. (February 5, 2004).
- Grant, S. B., "Combining molecular biology, physical oceanography, and remote sensing technology to illuminate the sources and pathways of urban coastal pollution," Department of Chemical Engineering, UCLA, Los Angeles, CA. (January 30, 2004).

- Grant, S. B., Research Advisory Board Meeting, "Progress Report: UCI Urban watershed runoff studies (Phase III)," National Water Research Institute, Airlie Conference Center, Warrenton, VA. (October 17, 2003).
- Grant, S. B., "Locating and Quantifying Sources of Surf Zone Pollution," Donald Bren School of Environmental Management, UC Santa Barbara, CA. (January 27, 2003).
- Grant, S. B., "Locating and Quantifying Sources of Surf Zone Pollution," Department of Civil and Environmental Engineering, UC Davis, Davis, CA. (January 21, 2003).
- Grant, S. B., "Ocean monitoring and surf zone water quality," Southern California Association of Governments, Panel: Water Policy Task Force, Los Angeles, CA. (December 12, 2002).
- Grant, S. B., "Ocean Water Quality in Surf City: A Scientific Perspective," Water Advisory Committee of Orange County, Fountain Valley, CA. (November 1, 2002).
- Grant, S. B., Water Quality of Lakes, Rivers, and Coastal Zones, "Decadal and shorter period variability of fecal pollution at Huntington Beach, California," American Society of Limnology and Oceanography, UC Irvine, CA. (June 14, 2002).
- Grant, S. B., Workshop on Particles and Polymers Near Interfaces: Fundamentals and Applications, "Role of Interfacial Forces in the Transmission of Pathogens in the Environment," Oud Poelgeest, The Netherlands. (March 23, 2002 - March 26, 2002).
- Grant, S. B. (Author), Clark, C. (Presenter), Ocean Sciences Meeting, "Diurnal photochemical and biological processes of CDOM in southern California coastal waters," American Geophysical Union, Honolulu, HI. (February 11, 2002 - February 15, 2002).
- Grant, S. B. (Author), Boehm, A. (Presenter), Ocean Sciences Meeting, "Long and short term variability in ocean water quality at Huntington Beach, CA," American Geophysical Union, Honolulu, HI. (February 11, 2002 - February 15, 2002).
- Grant, S. B. (Author), Clark, C. (Presenter & Author), Ocean Sciences Meeting, "Variability of hydrogen peroxide, a CDOM photochemical product, in the surf zone," American Geophysical Union, Honolulu, HI. (February 11, 2002 - February 15, 2002).
- Grant, S. B. (Author), Redman, J. (Presenter), Annual Meeting, "Influence of Heterogeneity on Virus Filtration in Porous Media," American Geophysical Union, Panel: Pathogen Transport, San Francisco, CA. (December 10, 2001 - December 15, 2001).
- Grant, S. B., Urban Watershed Conference, "Urban Watershed Impacts on Coastal Beaches," National Water Research Institute, Costa Mesa, CA. (October 17, 2001 - October 19, 2001).
- Grant, S. B., UCI CEO Roundtable Retreat, "The Policy and Perception of Beach Water Quality," UCI Advancement. (June 7, 2001).
- Grant, S. B., UCI Chancellor's Club Lecture Series, "Pollution in the Surf: the Science and Perception of Beach Water Quality," UC Irvine, CA. (May 16, 2001).
- Grant, S. B., Charge Inversion Workshop, "DNA as a model polymer for coagulation studies," Theoretical Physics Institute, University of Minnesota, Minneapolis, MN. (May 11, 2001 - May 13, 2001).
- Grant, S. B., "The Policy and Perception of Beach Water Quality," Department of Civil and Environmental Engineering, UCLA, Los Angeles, CA. (January 16, 2001).

- Grant, S. B., W.M. Keck Lecture Series, "The Policy and Science of Clean Beaches: Lessons from Huntington Beach," Chapman University, Chapman, CA. (November 28, 2000).
- Grant, S. B., "The Sun, The Moon, and Bacterial Pollution at Huntington Beach," Department of Chemical and Environmental Engineering, UC Riverside, Riverside, CA. (June 6, 2000).
- Grant, S. B., City Council, "Ocean Water Quality: Problems and Progress," City of Laguna Beach, Laguna Beach, CA. (March 9, 2000).
- Grant, S. B., USC Sea Grant Blue Ribbon Peer Review Panel, "Tidal Transport of Bacteria Between the Talbert Watershed and the Ocean," National Water Research Institute, Orange County, CA. (March 1, 2000).
- Grant, S. B., Annual Meeting, "Experimental evidence for the universality of particle flocculation," American Chemical Society, Anaheim, CA. poster. (March 21, 1999).
- Grant, S. B. (Author), Boehm, A. (Presenter), Annual Meeting, "Influence of coagulation, sedimentation, and grazing by zooplankton on phytoplankton aggregate distribution below the mixed layer," American Chemical Society, Anaheim, CA. (March 21, 1999).
- Grant, S. B., Annual Meeting, "Particle coagulation and the memory of initial conditions," American Chemical Society, Anaheim, CA. poster. (March 21, 1999).
- Grant, S. B., Annual Meeting, "The effects of biofilms on the filtration of recombinant Norwalk virus particles in capillary columns," American Chemical Society, Anaheim, CA. (March 21, 1999).
- Grant, S. B., Annual Meeting, "The filtration of a filamentous bacteriophage in quartz sand," American Chemical Society, Anaheim, CA. Poster. (March 21, 1999).
- Grant, S. B., "Virus Filtration and Water Reuse: From Microscale Phenomena to Field-Scale Observations," Department of Civil and Environmental Engineering, UC Berkeley, Berkeley, CA. (October 30, 1998).
- Grant, S. B., "Drinking Water Pollution and Your Health," St. Mark Presbyterian Church, Newport Beach, CA. (September 13, 1998).
- Grant, S. B., National Research Council/Water Science and Technology Board, "Virus Filtration and Water Reclamation," National Academy of Sciences, Beckman Academy of Sciences, Irvine, CA.. (February 2, 1998).
- Grant, S. B. (Author), Redman, J. (Presenter), Fall Meeting, "Physicochemical mechanisms governing virus filtration," American Geophysical Union, San Francisco, CA. (December 9, 1997).
- Grant, S. B., CEE Affiliates Quarterly Meeting, "Future of Water Reuse in Orange County," Department of Civil and Environmental Engineering, UC Irvine, CA. (November 4, 1997).
- Grant, S. B., Workshop on Coastal Pollution, "Biological indications of coastal pollution," National Science Foundation, Milwaukee, WI. (October 17, 1997).
- Grant, S. B. (Author), Relle, S. (Presenter), 47th Canadian Chemical Engineering Conference, "A theoretical model for particle separation by magnetic seeding," Canadian Chemical Engineering Society, Edmonton, Alberta (Canada). (October 8, 1997).

- Grant, S. B., 47th Canadian Chemical Engineering Conference, "The removal of fluidborne particles by coagulation: physical insights based on mathematical solutions," Canadian Chemical Engineering Society, Edmonton, Alberta (Canada). (October 8, 1997).
- Grant, S. B., Colloid and Surface Science Symposium, "Factors influencing the stabilization of particles by a model polyelectrolyte," American Chemical Society, Panel: Environmental Phenomena Program, University of Delaware, Newark, DE. (July 2, 1997).
- Grant, S. B., Colloid and Surface Science Symposium, "The importance of pore water pH in the transmission of Norwalk Virus through porous media studied using recombinant Norwalk Virus Particles," American Chemical Society, Panel: Environmental Phenomena Program, University of Delaware, Newark, DE. (July 2, 1997).
- Grant, S. B. (Author), Redman, J. (Presenter), UC Water Reuse Research Conference, "An Electrostatic Mechanism for the Filtration of a Filamentous Bacteriophage in Quartz Sand," UC Water Research Foundation, Monterey, CA. (June 6, 1997).
- Grant, S. B., UC Water Reuse Research Conference, "Recombinant virus particles and water reuse in the 21st century," UC Water Research Foundation, Monterey, CA. (June 6, 1997).
- Grant, S. B., "Virus Filtration and Water Reuse in the 21st Century," Department of Civil and Environmental Engineering, UCLA, Los Angeles, CA. (April 29, 1997).
- Grant, S. B., "Recombinant virus particles and water reuse in the 21st century," Department of Environmental Engineering Science, Caltech, Pasadena, CA. (January 16, 1997).
- Grant, S. B., 70th Colloid and Surface Science Symposium, "Scaling theory and solutions for the steady-state coagulation and settling of fractal aggregates in aqueous environments," American Chemical Society, Panel: Environmental Phenomena Program, Clarkson University, Potsdam, NY. (July 11, 1996 - July 16, 1996).
- Grant, S. B., 70th Colloid and Surface Science Symposium, "The coagulation and stabilization of colloidal particles by model anionic polyelectrolytes," American Chemical Society, Panel: Environmental Phenomena Program, Clarkson University, Potsdam, NY. (July 11, 1996 - July 16, 1996).
- Grant, S. B., 70th Colloid and Surface Science Symposium, "The deposition kinetics of two viruses in packed beds of quartz granular media," American Chemical Society, Panel: Environmental Phenomena Program, Clarkson University, Potsdam, NY. (June 11, 1996 - June 16, 1996).
- Grant, S. B., Symposium on Virus in Groundwater, "Norwalk Recombinant Virus-Like-Particles (rVLPs) for Studying Natural Groundwater Disinfection," National Water Research Institute/US Environmental Protection Agency, Washington D.C.. (March 10, 1996).
- Grant, S. B., The 1995 Water Seminar, "Gene Probe Spectroscopy: A New Approach for Detecting Microorganisms in Water Samples," National Water Research Institute/UC Water Resources Center, National Academies of Sciences, Irvine, CA.. (September 13, 1995).
- Grant, S. B., Annual Meeting, "Deposition mechanisms of Bacteriophage MS-2 and Lambda on ultra-pure crushed quartz," American Chemical Society, Panel: Division of Environmental Chemistry, Anaheim, CA. poster. (August 20, 1995 - August 25, 1995).

- Grant, S. B., Annual Meeting, "Effect of polyelectrolyte chain length on the stabilization of colloidal particles," American Chemical Society, Panel: Division of Environmental Chemistry, Anaheim, CA. poster. (August 20, 1995 - August 25, 1995).
- Grant, S. B., Annual Meeting, "Flocculation and stabilization of colloidal particles by adsorbed block copolymers: role of polymer conformation," American Chemical Society, Panel: Division of Environmental Chemistry, Anaheim, CA. poster. (August 20, 1995 - August 25, 1995).
- Grant, S. B., Annual Meeting, "Scaling theory and solutions for the steady-state coagulation and settling of fractal aggregates," American Chemical Society, Panel: Division of Environmental Chemistry, Anaheim, CA. poster. (August 20, 1995 - August 25, 1995).
- Grant, S. B., 69th Colloid Science Symposium, "DNA as a model polymer for adsorption studies," American Chemical Society, Panel: Biopolymers at Interfaces, University of Utah, Salt Lake City, UT. (June 11, 1995 - June 14, 1995).
- Grant, S. B., Municipal Water Quality Investigations, "DNA Diagnostics for Tracking Microbial Contaminants in the Environment," State of California Department of Water Resources, State Capital Building, Sacramento, CA. (September 1994).
- Grant, S. B., "Train-Loop-Tail Structure of Adsorbed Polymers as Revealed by Hydroxyl Radical Footprinting (HRF)," Department of Environmental Engineering Science, Caltech, Pasadena, CA. (June 1, 1994).
- Grant, S. B. (Author), Duong, M. (Presenter), Annual Meeting, "Microorganism detection by multiple non-specific oligonucleotide probes," American Society of Microbiology, Las Vegas, NV. poster. (May 26, 1994).
- Grant, S. B., Annual Meeting, "Determination of the conformation of adsorbed macromolecules by DNA footprinting," American Chemical Society, Panel: Division of Environmental Chemistry, San Diego, CA. poster. (March 13, 1994 - March 17, 1994).
- Grant, S. B., Annual Meeting, "Virus inactivation and coagulation in aqueous environments," American Chemical Society, Panel: Division of Environmental Chemistry, San Diego, CA. (March 13, 1994 - March 17, 1994).
- Grant, S. B., "Virus Adsorption at the Solid-Liquid Interface," Department of Civil and Environmental Engineering, University of Southern California, Los Angeles, CA. (February 1993).
- Grant, S. B., "Virus Adsorption at the Solid-Liquid Interface," Department of Civil and Environmental Engineering, UCLA, Los Angeles, CA. (November 1992).
- Grant, S. B. (Author), Walker, H. (Presenter), Fall Meeting, "Investigation of the effects of model polyelectrolyte coatings on colloid transport in porous media," American Geophysical Union, San Francisco, CA. poster. (October 27, 1992).
- Grant, S. B., "Detection and Partitioning of Viruses in Fluid/Solid Systems," Department of Environmental Engineering Science, Caltech, Pasadena, CA. (September 1992).
- Grant, S. B., Biotechnology Conference, "Estimating virus viability using a modified nucleic acid hybridization assay," American Society of Microbiology, New York, NY. poster. (June 27, 1991).

Grant, S. B., Biotechnology Conference, "Partitioning of bacteriophage in quartz/water systems," American Society of Microbiology, New York, NY. poster. (June 27, 1991).

Contracts, Grants and Sponsored Research

Fixed Price Contract

Grant, Stanley B. (Principal Investigator), "Contribution of marinas to fecal indicator bacteria impairment in Newport Bay, California," Santa Ana Regional Water Quality Control Board, \$126,096.00. (July 1, 2002 - September 1, 2003).

Grant, Stanley B. (Principal Investigator), "Source identification of fecal indicator pollution in Avalon Bay, California," LA Regional Water Quality Control Board, \$45,620.00. (September 1, 2001 - September 1, 2003).

Grant

Grant, Stanley B. (Co-Principal Investigator), Lopes, Crista (Principal Investigator), "SDCI Data New: Trust Management for Open Collaborative Information Repositories: The CalSWIM," NSF - National Science Foundation, \$194,801.00. (September 1, 2007 - August 31, 2011).

Grant, Stanley B. (Principal Investigator), "Avalon Bay Water Quality Improvement Study," California State Water Quality Control Board, Clean Beaches Initiative, \$506,994.00. (October 26, 2006 - July 1, 2010).

Grant, Stanley B. (Principal Investigator), Holden, Patricia (Co-Principal Investigator), Sedlak, David (Co-Principal Investigator), "Fecal Indicator Bacteria Source Tracking in the Middle Santa Ana River," National Water Research Institute, \$150,000.00. (April 1, 2007 - September 30, 2008).

Grant, Stanley B. (Principal Investigator), "Dynamics of source and non-point source pollution from an urban watershed in S. California," EPA - Environmental Protection Agency, \$26,574.00. (August 1, 2005 - July 31, 2008).

Grant, Stanley B. (Principal Investigator), "Dynamics of Point and Non-point Source Fecal Pollution from an Urban Watershed in Southern California," EPA - Environmental Protection Agency, \$99,861.00. (August 2005 - July 2007).

Grant, Stanley B. (Principal Investigator), Sanders, Brett (Co-Principal Investigator), Holden, Patricia (Co-Principal Investigator), "Dynamics of Point and Non-point Source Fecal Pollution from an Urban Watershed in Southern California," National Water Research Institute, \$375,000.00. (September 1, 2003 - April 9, 2007).

Grant, Stanley B. (Principal Investigator), Sanders, B F (Co-Principal Investigator), Jiang, S (Co-Principal Investigator), "Newport Bay Fecal Coliform Source Identification and Management Plan," State of California Water Quality Control Board, \$745,000.00. (February 15, 2005 - February 28, 2007).

Grant, Stanley B. (Principal Investigator), Sanders, Brett, Holden, Patricia, "Dynamics of point and non-point source fecal pollution from an urban watershed in Southern California," US Geological Survey National Institutes for Water Resources and the National Water Research Institute, \$534,045.00. (September 1, 2003 - February 28, 2007).

- Grant, Stanley B. (Principal Investigator), "Bacterial Sources Study in Western Region of Newport Bay," State of California, Water Resources Control Board, \$52,000.00. (June 2004 - March 2006).
- Grant, Stanley B. (Principal Investigator), "Forecasting Coastal Water Quality with Real-Time Sensor Webs," CA Regional Water Quality Control Board, \$39,000.00. (January 2005 - December 2005).
- Grant, Stanley B. (Principal Investigator), "California Sustainable Watershed/Wetland Information Manager (CalSWIM)," County of Orange, \$40,000.00. (October 2004 - October 2005).
- Grant, Stanley B. (Principal Investigator), Levin, Lisa (Co-Principal Investigator), Winant, Clinton (Co-Principal Investigator), Ambrose, Richard (Co-Principal Investigator), Sanders, Brett (Co-Principal Investigator), "Coastal water quality: The role of wetlands in mitigating the effects of urban and rural runoff," UC Marine Council Multi-Campus Competition, \$663,960.00. (July 1, 2002 - June 30, 2005).
- Grant, Stanley B. (Co-Principal Investigator), Sanders, Brett (Principal Investigator), Sobsey, Mark (Co-Principal Investigator), Horne, Alex (Co-Principal Investigator), Keller, Robin (Co-Principal Investigator), "Identification and control of non-point sources of microbial pollution," U.S. EPA-ORD-NCERQA STAR Competition, \$895,234.00. (August 2000 - January 2005).
- Grant, Stanley B. (Principal Investigator), Sanders, Brett F. (Co-Principal Investigator), "Coastal runoff impact study (UCI-CRIS), Phase III: Loading of fecal pollution from an urban watershed in Southern California," National Water Research Institute, \$50,000.00. (January 1, 2003 - December 30, 2003).
- Grant, Stanley B. (Principal Investigator), "Water Quality Impact of a Lagoon Breach," Southern California Edison, \$75,000.00. (October 1, 2002 - December 30, 2003).
- Grant, Stanley B. (Principal Investigator), Sanders, Brett (Co-Principal Investigator), "Huntington Beach Water Quality Investigation-Phase III," Orange County Sanitation District, \$100,000.00. (September 1, 2001 - August 31, 2002).
- Grant, Stanley B. (Principal Investigator), Sanders, Brett F. (Co-Principal Investigator), Jiang, Chenyang (Co-Principal Investigator), "Coastal runoff impact study (UCI-CRIS), Phase II: Sources and dynamics of pollutants in the Lower Santa Ana River Watershed," National Water Research Institute, \$447,811.00. (August 1, 2000 - May 1, 2002).
- Grant, Stanley B. (Principal Investigator), Bay, Steve (Co-Principal Investigator), Wistrom, Anders (Co-Principal Investigator), Matsumoto, Mark (Co-Principal Investigator), "Pollutants associated with stormwater runoff particle size distributions, Phase I," Caltrans, \$145,037.00. (February 1, 2001 - June 30, 2001).
- Grant, Stanley B. (Principal Investigator), "Microscale mechanisms involved in virus filtration," Arizona State University, \$50,000.00. (1999 - 2000).
- Grant, Stanley B. (Principal Investigator), Sanders, Brett F. (Co-Principal Investigator), "Coastal runoff impact study (UCI-CRIS), Phase I: Causes of surf zone pollution in Huntington Beach, California," National Water Research Institute, \$147,488.00. (November 11, 1999 - October 30, 2000).
- Grant, Stanley B. (Principal Investigator), "Coagulation and settling of particles in aquatic environments," NSF - National Science Foundation, \$350,000.00. (July 1995 - June 2000).

Grant, Stanley B. (Principal Investigator), Ogunseitan, Oladele A (Co-Principal Investigator), Estes, Mary (Co-Principal Investigator), "Norwalk Virus-Like Particles (VLPs) for studying natural groundwater disinfection," NSF - National Science Foundation, \$493,654.00. (November 1995 - October 1998).

Grant, Stanley B. (Co-Principal Investigator), Olson, Terese M (Principal Investigator), "An integrated course series in environmental chemistry and microbiology," NSF - National Science Foundation, \$30,711.00. (September 1994 - August 1996).

Grant, Stanley B. (Co-Principal Investigator), Olson, Terese M (Principal Investigator), Chrysikopoulos, Costas (Co-Principal Investigator), "Deposition mechanisms influencing virus transport in porous media," National Water Research Institute, \$137,000.00. (January 1993 - December 1994).

Grant, Stanley B. (Principal Investigator), "Investigations of polymer conformation and colloid stability using DNA as a model polyelectrolyte," NSF - National Science Foundation, \$161,421.00. (September 1992 - September 1994).

Grant, Stanley B. (Co-Principal Investigator), Olson, Terese M (Principal Investigator), "Investigations of the effects of polyelectrolyte coatings on colloid transport in porous media," DOE - Dept of Energy, \$105,358.00. (August 1992 - July 1993).

Grant, Stanley B. (Principal Investigator), "DNA-tagged latex particles as tracers for environmental contaminants," UC Faculty Research Grant, \$4,980.00. (July 1992 - June 1993).

Professional Service

Ad hoc Reviewer, Environmental Science and Technology (7 manuscripts); Sea Grant (1 proposal); Limnology and Oceanography (1 manuscript); Water Research (1 manuscript); National Science Foundation (1 proposal), Appointed, Pro Bono, International. (2010).

U.S. Environmental Protection Agency, Reviewer, Appointed, Compensated, National. (2010).

Ad hoc Reviewer, Environmental Science and Technology (3 manuscripts); Water Resources Research (1 manuscript); Limnology and Oceanography (1 manuscript); Journal of Geophysical Research-Oceans (1 manuscript); Water Resources (1 manuscript). (2009).

US EPA Science Advisory Board (Science and Technology Achievements Awards Panel), Member, Appointed, Compensated, National. (2004 - 2009).

US EPA Science Advisory Board (Drinking Water Panel), Member, Appointed, Compensated. (2003 - 2009).

NRC/NAE "Committee on Reducing Stormwater Discharge Contributions to Water Pollution", Member, Appointed, Pro Bono, National. (2006 - 2008).

NSF Proposal Review Panel for MUSES: Material Use in Science, Engineering, and Society, Member, Appointed, Pro Bono, National. (2006).

Orange County Sanitation District, Advisor, Appointed, Pro Bono, Regional. (2001 - 2002).

Water Research Environment Foundation, Board of Advisors, Appointed, Pro Bono, National. (2001 - 2002).

UC Water Resources Center, Board of Advisors, Appointed, Pro Bono, State. (2000 - 2002).

National Water Research Institute, Panelist, Appointed, Pro Bono, National. (2000).

U.S. Environmental Protection Agency (Proposal Review Panel), Panelist, Appointed, Pro Bono, National. (2000).

Water Research Environment Foundation (Proposal Review Panel), Member, Appointed, Pro Bono, National. (1999 - 2000).

National Science Foundation (proposal review panel), Member, Appointed, Pro Bono. (1996).

Consulting

Government Agency, US Environmental Protection Agency, California. (October 5, 2010 - October 7, 2010).

Government Agency, California State Water Board, California. (May 25, 2010 - June 10, 2010).

Litigation/Expert Witness, Los Angeles County, Los Angeles. (April 14, 2009 - December 3, 2009).

Government Agency, California State Water Board, California. (March 8, 2009 - October 27, 2009).

Government Agency, City of Avalon/Calif State Water Board, California. (January 1, 2008 - December 30, 2008).

Government Agency, City of Avalon/California State Water Board, California. (June 18, 2007 - December 21, 2007).

TEACHING

Teaching Interests

Professor Grant teaches chemical engineering and environmental engineering courses at the undergraduate and graduate levels.

Special Pedagogical Activities

Medical - Grand Rounds, UC Irvine, (October 24, 2007).

Postdoctoral Research Supervision

June 2006 - September 2007, Youngsul Jeong, Supervisor

Current Position: Research Engineer, Q-Rapha, Inc. (Annandale, Virginia)

July 2007, Jong Ho Ahn, Supervisor

Current Position: Korea Environment Institute (Seoul, Korea)

October 2005 - February 2007, Karen McLaughlin, Supervisor

Current Position: Environmental Scientist, Southern California Coastal Water Research Project 2003 - 2004, Joon Kim, Supervisor

Current Position: Assistant Professor, Department of Environmental Science and Engineering, Guangju Institute of Science and Technology (South Korea)

2001 - 2003, Semsu Ensari, Supervisor

Current Position: Group Leader, Sr. Bioprocess Engineer, Ambrx (San Diego, CA)
2001 - 2002, Jeremy Redman, Supervisor
Current Position: Assistant Professor, Department of Civil and Environmental Engineering,
California State University Long Beach
2000 - 2002, Alexandria Boehm, Supervisor
Current Position: Associate Professor, Department of Civil and Environmental Engineering,
Stanford University
1996, Harold Walker, Supervisor
Current Position: Associate Professor, Department of Civil and Environmental Engineering, The
Ohio State University

Doctoral Committee

2008 - Present, Morgan Bailey, Chair
2005 - Present, Lin Ho, Chair
2006 - July 2010, Rachel Litton, Chair
Current Position: Assistant Specialist (without salary), UCI
July 2007, Abhishek Pednekar, Chair
Current Position: Process Engineer, Worley Parsons Resources and Energy, Monrovia, CA
July 2007, Cristiane Surbeck, Chair
Recipient: EPA STAR Graduate Fellowship, August 2005 to July 2007. Current Position:
Assistant Professor of Civil and Environmental Engineering, University of Mississippi
July 2007, Jong Ho Ahn, Chair
Current Position: Korea Environment Institute, Seoul, Korea
June 2006, Youngsul Jeong, Chair
Recipient: UC Marine Council Graduate Fellowship for NEOCO Research
Current Position: Research Engineer, Q-Rapha, Inc., Annandale, Virginia
June 2003, Joon Kim, Chair
Recipient: National Water Research Institute Graduate Fellowship; UC Marine Council Graduate
Fellowship
Current Position: Assistant Professor of Environmental Science and Engineering, Gwangju
Institute of Science and Technology (Korea)
June 2001, Jeremy Redman, Chair
Recipient UCI Regents Fellowship
Postdoctoral Fellow, Yale University
Current Position: Assistant Professor, Civil and Environmental Engineering, California State
University Long Beach
June 2000, Alexandria Boehm, Chair
Recipient UC Chancellor's Graduate Fellowship
UC Faculty Fellow (2000-2002)
Current Position: Associate Professor, Civil and Environmental Engineering, Stanford University
1998, Scarlet Relle, Chair
Recipient: UCI Graduate Opportunity Fellowship (1995-96); Visiting Student Fellowship, Institute
for Rock Magnetism, U of Minnesota (1996); Visiting Scholar, Oak Ridge National
Laboratories (1998)
Current Position: Part-time Instructor, California State Northridge
1996, Harold Walker, Chair
Recipient: Irvine Ranch Water District Fellowship (1995); Fluor Daniel Graduate Fellowship
(1996)
Current Position: Associate Professor of Civil and Environmental Engineering, The Ohio State
University

Doctoral Candidacy Committee

Jong Ahn, Chair

Lin Ho, Chair
Rachel Litton, Chair

Directed Individual/Independent Study

September 2008 - July 2010, Helen Sanchez, Advisor

Master's Thesis Committee

2007, Marc Esplugas, Chair
2005, Terrence Chen, Chair
June 2003, Ryan Reeves, Chair
1996, Samuel Penrod, Chair
1995, Christopher Pendroy, Chair

Undergraduate Research Supervision

June 2002 - July 2005, Scott Ritter, Chair

SERVICE

Department Service

Chair, Chemical Engineering Curriculum Committee. (January 1, 2011 - July 1, 2011).
Chair, Adhoc Review Committee for Tenure Case. (September 1, 2010 - March 1, 2011).
Chair, Department of Chemical Engineering and Materials Science. (2002 - 2009).
Chair, Merit and Promotion Committee. (1999 - 2001).
Chair, ABET Coordinating Committee. (1997 - 1999).
Member, Laboratory Committee. (1995 - 1999).
Member, Undergraduate Affairs Committee. (1995 - 1999).
Member, Faculty Search Committee. (1996).
Member, MSO Search Committee. (1996).
Member, Faculty Search Committee. (1994).
Member, Graduate Studies Committee. (1991 - 1994).

School/College Service

Member, Screening Committee--Assistant Dean Search. (1992 - Present).
Director, Interdisciplinary Environmental Engineering Program. (2001 - 2002).
Member, Screening Committee--Assistant Dean Search. (1993).

University Service

Member, UCI Graduate Council. (2001 - 2002).

Member, UC Water Resources Coordinating Board, Irvine Campus. (1999 - 2001).

Mentor, UC Leads Program. (2000).

Member, Committee on Undergraduate Scholarships and Financial Aid. (1997 - 1999).

Member, Environmental Engineering Curriculum Review Committee. (1995 - 1999).

Advisor, UCI Undecided/Undeclared Students. (1995 - 1999).

Mentor, Pregraduate Mentorship Program. (1993 - 1998).

Reviewer, Site Assessment Curriculum Review Committee-UCI Extension. (1992 - 1995).

Mentor, Summer Undergraduate Research Fellowship. (1992 - 1994).

School of Engineering Representative, UCI Academic Senate. (1991 - 1994).

Reviewer, UC Hazardous Material Training Manual. (1993).