Alison Murray
Short Biography
October, 2013

Dr. Alison Murray has led a research program at DRI since 2001 focused on utilizing genomics tools and bioinformatics to study free-living and symbiotic aquatic (or ice-associated) microorganisms to better understand the interactions of organisms and ecosystems in numerous habits. Her program benefits from utilization of an integrative approach to studying microbial diversity, activity, community structure (and variations), and ecosystem function to understand capabilities of organisms and communities that inhabit natural, often extreme, environments. Dr. Murray received a B.S. in Biochemistry in 1989 from California Polytechnic University; an M.S. in molecular and cellular biology from San Francisco State University in 1995; and a Ph.D. in ecology, evolution, and marine biology from the University of California, Santa Barbara in 1998. She was a Postdoctoral Research Associate in the Center for Microbial Ecology at Michigan State University before joining DRI as an Assistant Research Professor in 2001. Dr. Murray was promoted to Associate Research Professor at DRI in 2006, and Research Professor in 2013. Dr. Murray was a Senior Visiting Fellow with the School of Biotechnology and Molecular Sciences at the University of New South Wales in Australia in 2010–2012 and in 2011, was a Visiting Professor at the University Pierre et Marie Curie in Paris, France. Dr. Murray's research has taken her on more than 25 research expeditions to study the microbial plankton of the Southern Ocean and ice-covered lakes in Antarctica, ice covered lakes of the Arctic tundra, symbioses in deep sea hydrothermal vents of the East Pacific rise and coastal Antarctica, and microbial mat communities of Yellowstone National Park. Since arriving at DRI, Dr. Murray has been a PI or Co-PI on eight National Science Foundation (NSF) awards, two NASA awards, three genome sequencing projects, and five DRI awards which have resulted in publication of more than 40 peer-reviewed papers. She has delivered a total of more than 47 invited talks during her career at DRI, 20 of which were presented outside the United States. Dr. Murray, her students, and collaborators have presented 25 contributed talks and 48 posters at national and international meetings. Dr. Murray was lead author on a research paper recognized in the top 10 articles in the Proceedings of the National Academy of Sciences in 2012; the results of this paper were reported in more than 400 news outlets across the world. Dr. Murray has been recognized with the Nevada System of Higher Education Rising Researcher Award (2009), the Peter B. Wagner Award at DRI (2006), and a Distinguished Alumni Award from the Tiburon Center for Environmental Sciences (2005).

BIOGRAPHICAL STATEMENT

Katherine M. Hertlein, Ph.D., is an Associate Professor in the Marriage and Family Therapy Program at the University of Nevada, Las Vegas. She received her master's in marriage and family therapy from Purdue University Calumet and her doctorate in human development with a specialization in marriage and family therapy from Virginia Tech. Across her academic career, she has published over 40 articles, 6 books, and over 25 book chapters. She has co-edited a book on interventions in couples treatment, interventions for clients with health concerns, and a book on infidelity treatment. Recently, Dr. Hertlein published *Systemic Sex Therapy* and *A Clinician's Guide to Systemic Sex Therapy*. These two books are used in over 20 couple and family therapy training programs around the country. In 2009, *Systemic Sex Therapy* was nominated for a Professional Health Book Award through the Society for Sex Therapy and Research (SSTAR). Dr. Hertlein has also produced the first multitheoretical model detailing the role of technology in couple and family life. She presents nationally and internationally on sex, technology, and couples. She was a keynote speaker at the Alaska Association for Marriage and Family Therapy Conference in October 2011 presenting her model of treatment for problems related to technology, as well as a 2-day keynote speaker at the North Carolina Psychological Association Conference in September in 2012 on technology and couples. Dr. Hertlein has also been awarded the Greenspun College of Urban Affairs Outstanding Research Award in 2009, the Greenspun College of Urban Affairs Outstanding Teaching Award for 2007, and the Supervisor of the Year from the Nevada Association for Marriage and Family Therapy in 2013.

Regent's Rising Researcher Award

Biography

Dr. Kam K. Leang received his B.S. and M.S. degrees in Mechanical Engineering from the University of Utah in 1997 and 1999, respectively, and his Ph.D. degree in Mechanical Engineering from the University of Washington (Seattle, Washington) in December 2004. He joined the Department of Mechanical Engineering at the University of Nevada, Reno as an Assistant Professor in July 2008. Between August 2005 and May 2008, he was an Assistant Professor in the Mechanical Engineering at Virginia Commonwealth University (Richmond, VA). Dr. Leang was promoted to an Associate Professor in 2011 and tenured in 2013. His work is funded by federal agencies including the National Science Foundation, Department of Defense, and NASA, as well as industry. His core research interests include: modeling and precision control of electroactive (smart) material actuators (piezoelectrics and electroactive polymers); nanopositioning and scanning probe microscopy; and design and control of unmanned autonomous systems. In the five years he has been at UNR, Professor Leang published 32 journal papers in highly respected journals, completed one book, secured over $4.3M in research funding, been recognized as an excellent teacher and mentor, provided significant service to both our profession and UNR, and received a 2013 College of Engineering Faculty Excellence Award, recognizing his outstanding contributions that have had a transformative impact on the Mechanical Engineering Department and the College of Engineering at UNR. In 2012, he became an Associate Editor of two journals: IEEE Control Systems Magazine and IEEE/ASME Transactions on Mechatronics. Professor Leang is also active in community outreach and received a $1.2M National Science Foundation GK-12 award in 2011 to promote STEM awareness in K-12 schools. He is a member of ASME and IEEE.

Regent's Rising Researcher Award

Dr. Justin Huntington joined DRI in 2009 as an Assistant Research Hydroclimatologist, and received his doctorate in Hydrology from the University of Nevada, Reno, in 2011. Since joining DRI, Dr. Huntington has developed a successful water resources research program, published 14 peer reviewed papers, and has been awarded more than $2 million in external research funding from federal agencies and private companies, including U.S. Bureau of Reclamation, U.S. Geological Survey, U.S. Bureau of Land Management, NASA, and Google. He is a member of the NASA/U.S. Geological Survey Landsat Science Team. Dr. Huntington is a member of seven University of Nevada, Reno, atmospheric and hydrologic science graduate student committees.

Dr. Huntington's research interests are centered on hydrologic systems. He specializes in evaluating irrigation water use and requirements through the use of satellite remote sensing, and hydrologic modeling. His research focuses on developing and applying tools to evaluate and resolve water-related issues, such as regional and field scale estimation of water consumption to support water rights and modeling efforts, and soil-water-plant-atmospheric interactions.

Last fall, Dr. Huntington and DRI colleagues were awarded a grant by the BLM for $850,000 to evaluate the spatial and temporal variability of groundwater dependent ecosystems in Nevada as they relate to changes in climate, land, and water management. Currently he is working on completing a U.S. Bureau of Reclamation project evaluating climate change impacts on irrigation water demands for seven major western U.S. river basins.