

## NWRI Fellowships Announced: Inaugural Ronald B. Linsky Fellow Awarded

The National Water Research Institute (NWRI) is pleased to announce that it has awarded 11 new graduate students with NWRI Fellowships. For the upcoming academic year, a total of 19 students are currently receiving NWRI fellowship funding, representing 15 U.S. universities.

Every summer, NWRI awards over \$100,000 in new fellowships to support master's or doctoral graduate research related to water resources. The research pertains to NWRI's mission, which is to create new sources of water through research and technology and to protect human health and the environment.

The inaugural Ronald B. Linsky Fellowship for Outstanding Water Research – consisting of \$20,000 a year for 2 years – was awarded to **Douglas Call**, an M.S./Ph.D. candidate in Environmental Engineering at Pennsylvania State University; his advisor is Dr. Bruce Logan. Call's research is on accelerating the use of microbial fuel cells, a breakthrough technology for generating electricity and treating biodegradable organic matter in wastewater. Not only would this research provide the water community with an efficient approach to treating wastewater, but it can also make it possible for wastewater treatment plants to produce their own electricity.

“Doug Call is an outstanding choice for the Ronald B. Linsky Fellowship, based on his multi-disciplinary background and on his research addressing both water quality and the need to develop a clean and renewable energy source,” said Jeff Mosher, NWRI's Executive Director.

The Ronald B. Linsky Fellowship was named in honor of NWRI's late Executive Director, who worked as a biology teacher, oceanographer, Sea Grant director, and private consultant for the United Nations and others before becoming NWRI's founding director in 1991. Funding for this fellowship is provided by Mrs. Patricia Linsky, Dr. and Mrs. David Hsu, and Dr. Stephen Lyon, as well as by the Joan Irvine Smith/Athalie R. Clarke Foundation.

Several other students received partnership fellowships, such as the two students who received \$10,000-a-year NWRI-AMTA Fellowships for Membrane Technology. **Eva Steinle-Darling** of Stanford University is examining the extent to which reverse osmosis and nanofiltration membranes are effective in removing perfluorochemical contaminants from recycled water, while **Kendra Coylar** of the University of Colorado at Boulder, proposes using membrane separation processes to recycle water back to bio-refineries, thereby conserving water and improving the economics of producing biofuel. Funding for these fellowships was provided in part by the American Membrane Technology Association (AMTA), which is dedicated to solving water supply and quality issues through the widespread application of membrane technology ([www.amtaorg.com](http://www.amtaorg.com)).

The NWRI-MWH Fellowship for Advanced Water/Wastewater Treatment Technologies was awarded to **Manish Kumar** of the University of Illinois at Urbana-Champaign, who is developing biomimetic polymeric membranes to remove dissolved contaminants from drinking water (these membranes are expected to be both energy efficient and economical). Funding for this \$10,000-a-year fellowship was provided in part by the engineering consulting firm, MWH, which focuses on water, wastewater, and hazardous waste ([www.mwhglobal.com](http://www.mwhglobal.com)).

**Nancy Lin**, a student at the University of California, Los Angeles, was the first recipient of the \$10,000-a-year NWRI-Southern California Salinity Coalition (SCSC) Fellowship, which rewards

research addressing the critical need to remove or reduce salts from water supplies and to preserve water resources in Southern California. Lin's research is focused on developing a new class of membranes with low mineral scaling propensity and bio-adhesion resistance, with the goal of decreasing the cost of desalination. Funding for this fellowship is provided by SCSC, a nonprofit dedicated to managing salinity in Southern California ([www.socalsalinity.org](http://www.socalsalinity.org)).

Six additional students received \$10,000 NWRI Fellowships, including:

- **Brian Badgley** of the University of South Florida is investigating the ecology of *E. coli* strains that persist in vegetated aquatic habitats in the subtropics and their potential for reintroduction into the water column.
- **Katherine Benko** of the Colorado School of Mines is evaluating the suitability of a novel integrated membrane system using ceramic membranes to treat co-produced water (the byproduct of oil and gas extraction).
- **Christine Davis** of Virginia Tech is formulating a model to predict contaminant removal and particle destabilization during coagulation, a process used for drinking water treatment.
- **Anne Eischeid** of Duke University, using molecular biology, is investigating the effectiveness of traditional and new ultraviolet technologies on adenoviruses, which cause respiratory and gastrointestinal illness in humans.
- **Luke MacDonald** of Princeton University is evaluating the ability of iron oxides to trap phosphate and arsenic as an inexpensive, long-term pollution management strategy.
- **Erin Towler** of the University of Colorado at Boulder is identifying potential vulnerabilities that utilities may encounter because of climate change and determining possible adaptation strategies.

Funding for these fellowships comes in part from NWRI's Corporate Associates program, which was developed to foster collaboration and coordination among researchers and real-world practitioners in the water industry. NWRI's Corporate Associates include Boyle Engineering Corporation, Cargill, Inc., Carollo Engineers, CDM, Kennedy/Jenks Consultants, MWH, and Malcolm Pirnie, Inc.

NWRI's Fellowship program is also supported by private foundations, such as the C.W. & Modene Neely Charitable Foundation, which focuses on supporting projects to alleviate human suffering, as well as NWRI's member agencies in collaboration with the Joan Irvine Smith/Athalie R. Clarke Foundation. NWRI is grateful for the support of these partners.