

# Re-Inventing the Nation's Urban Water Infrastructure Graduate Education Programs



OUR GOAL: Our graduates have exceptional technical abilities; approach problems at a systems level; understand design thinking and the innovation process; are creative, adaptive, and entrepreneurial; work well in diverse teams; and are globally aware.

OUR STRATEGY: Immerse students in the Engineering Research Center (ERC) culture, stressing a foundation of exceptional technical training, enriched by exposure to innovation & entrepreneurship in the water sector; leadership and creativity development; industry interactions; and international experiences.

#### FOUNDATION OF EXCEPTIONAL TECHNICAL TRAINING

ReNUWIt institutions are top engineering schools in the West. We enhance our graduate students' already strong technical training through rejuvenated curricula, comentoring, targeted workshops and seminars, and immersion in the innovation ecosystem. We emphasize systems-level approaches, multi-disciplinary collaborations, and research on multiple planes of the ERCs' three-plane diagram.

# INNOVATION & ENTREPRENEURSHIP IN THE WATER SECTOR



2014 ReNUWIt Perfect Pitch finalists and judges



ReNUWIt team wins \$10k in UC-Berkeley Big Ideas competition

Recognizing that many aspects of innovation and entrepreneurship in the water sector are unique,

- Partner with groups like Epicenter and Imagine H2O to lead workshops
- Encourage students to enter business plan competitions
- Incorporate innovation and entrepreneurship into our curricula

## LEADERSHIP & CREATIVITY



Closed student session at ReNUWIt Annual Meeting



Mentoring REUs, RETs, SCCOREs, and Young Scholars sharpens skills

We provide many avenues for students to develop skills in leadership and creativity, including:

- Students for Urban
  Water Infrastructure
  Reinvention (SUWIR)
  manage funds and run a
  seminar series
- Students serve as mentors in summer and academic year programs
- Communication and leadership workshops

#### INDUSTRY INTERACTIONS



Meeting with LA Dept of Water & Power (LADWP)



Advancing the U thrust with East Bay MUD

Interacting with IAB members is a vital part of our students' education, highly valued by students and industry alike.

- Most ReNUWIt project teams include an IAB member
- Students present posters at IAB meetings
- IAB members give SUWIR seminars
- Students organize field trips to IAB facilities

## INTERNATIONAL EXPERIENCES



Students learn advanced microbiology techniques in the UK



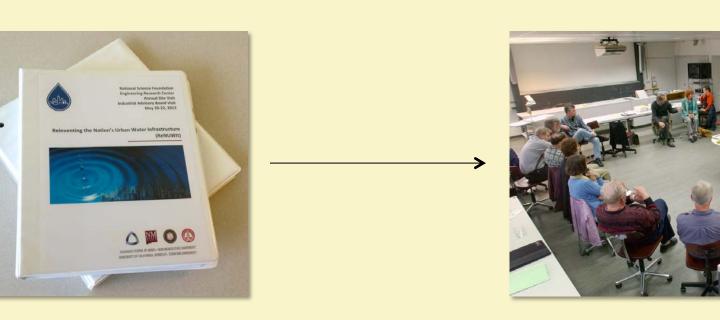
STREAM Challenge Week at Cranfield Univ.

- Our students gain international perspectives and experiences through:
- Working with our international partners
- Research exchanges with international partners
- Participation in international conferences
- US/UK Exchange and STREAM-ReNUWIt Transatlantic Water Research Network



This 1-credit seminar focuses on identifying diffusion pathways for specific ReNUWIt technologies. Students on all four campuses work together to create briefs that include innovation context, regulatory issues, key stakeholders, and market analysis. The briefs inform 1.5-day workshops with selected IAB members, innovation partners, regulators, and potential investors. Following the workshops, students write up the findings in a report.





**Briefs** 



Workshops



Report

**Photo Panel**: The Fall 2014 Technology Diffusion Pathways Seminar focuses on open water wetland cells, like this ReNUWIt test bed at Discovery Bay (top). Students at the different campuses connect via videoconferencing to share ideas (middle). Class research culminates in 1.5-day workshops with various stakeholders (bottom).



For more information on ReNUWIt's Education and Outreach programs, please visit: www.renuwit.org/education







