

Getting their feet wet

YOUNG WATER RESEARCHERS LEARN THE ROPES, THANKS TO GRANTS

Writing a proposal for a competitive grant program can be complicated, but add in calculating indirect costs and securing a cost-share agreement, and the process of applying for a research grant could seem daunting for graduate students early in their careers.

Through the Texas Water Resources Institute's (TWRI's) Graduate Research Grant Program, partially funded by the U.S. Geological Survey (USGS), Texas university graduate students in water resources-related fields can learn how to apply for a competitive research grant and thereby learn vital practical skills, such as developing and following a budget.

In 2010, TWRI provided to 10 students a total of \$50,000 in grants; since 2001, TWRI has provided \$498,796 to support 104 students in water resources fields.

Helping student researchers acquire start-up funding for projects and training them in proposal writing are major goals of this USGS-funded program.

Fan-Wei Zeng, a Rice University graduate student in earth science, received a research grant in 2007 for her project *Carbon Isotopic Measurements of Dissolved Inorganic Carbon: A New Tool to Assess Groundwater-River Exchange in the Brazos River Basin*.

"Writing the proposal for the TWRI funds and then managing them herself were important experiences for Fan-Wei," said Dr. Caroline Masiello, assistant professor of earth science and Zeng's adviser. "This built her confidence in her ability to fundraise and to write about her work, and it has helped her really excel."

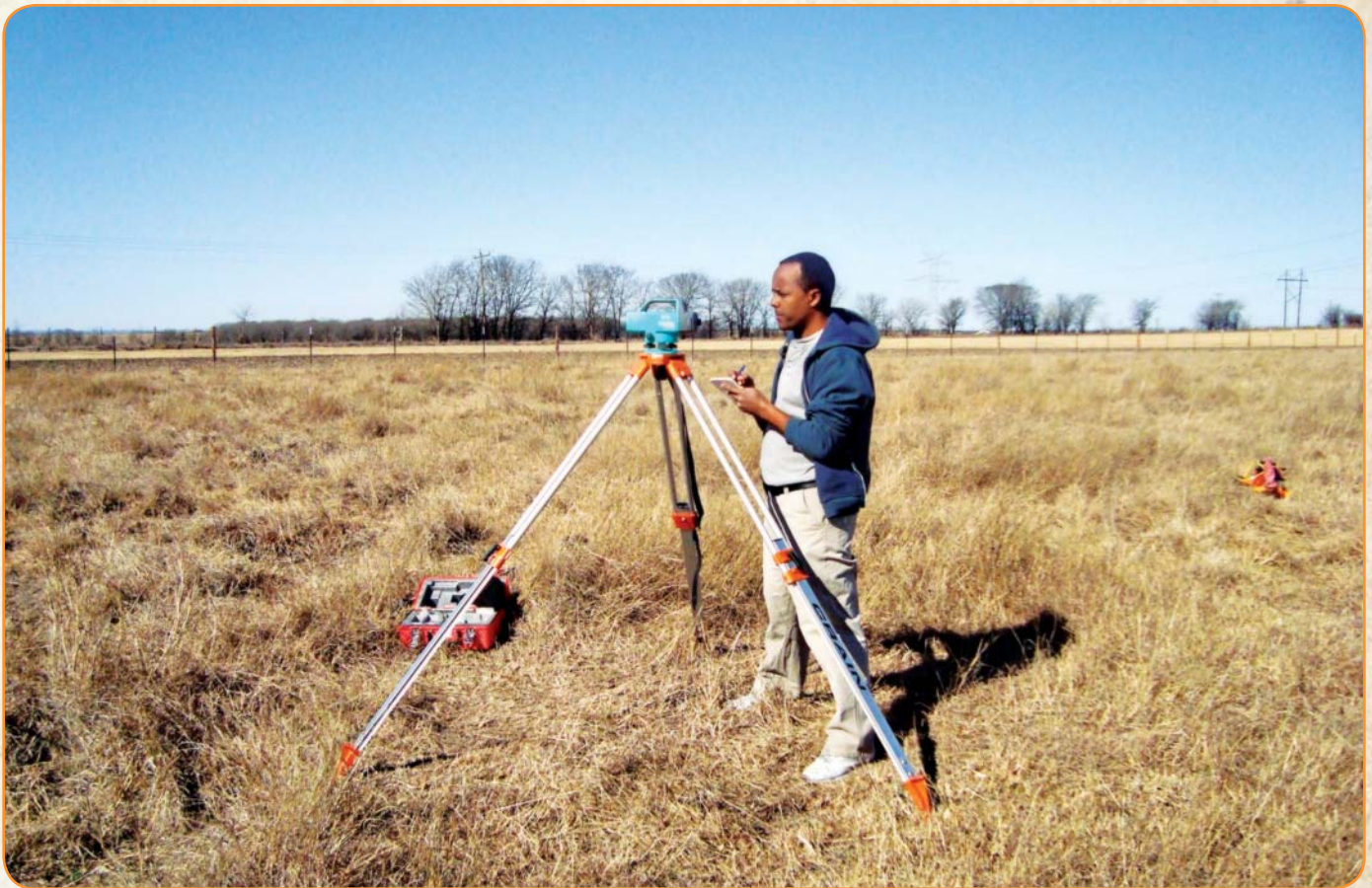
TWRI recently surveyed all advising professors of TWRI-USGS grant recipients from 2003 to 2007, and of the 41 responses received, 23 reported that their students' projects received additional funding from another source after receiving the TWRI grant. The total amount of follow-on funding was \$2,800,331—averaging about \$121,753 for each project. Several researchers said the grant was

important seed money and assisted their students in further funding the research projects.


After receiving her TWRI-USGS grant, Zeng received four more awards and fellowships, in 2008. "Fan-Wei was able to leverage a number of other awards based on data generated through her TWRI funding," Masiello said. "This was an important seed grant for her."

Many USGS-funded students continue their water-related work in academia or in research fields. Jon Goodall was a civil engineering graduate student at The University of Texas at Austin when he received a TWRI-USGS research grant in 2003 for his project *Coupling Modular Hydrologic Models with Geographic Information Systems (GIS)*. He is now an assistant professor of civil engineering at the University of South Carolina.

In 2009 Goodall received a National Science Foundation CAREER award for the project *Integrated Modeling for Watershed Management*.



TAKELA DINKA, A 2009–2010 GRANT RECIPIENT, CONDUCTS RESEARCH AT RIESEL, STUDYING SHRINK-SWELL SOIL HYDROLOGY.

The 2010–2011 grant recipients are examining such topics as the biological treatment of wastewater contaminated with estrogenic compounds and the effect of photovoltaic nanomaterial roofing on harvested rainwater quality. To learn more about their work, visit twri.tamu.edu/funding/usgs. 

MILLS SCHOLARSHIPS

Throughout the past three decades, the Texas Water Resources Institute (TWRI) has awarded Mills Scholarships with funds endowed by Mills Cox, former chair of the Texas Water Development Board. The scholarship program is open to graduate students at Texas A&M University, Texas A&M University at Galveston, and Texas A&M University at Qatar who are pursuing research in water-related studies.

In 2010, TWRI will provide to 16 students a total of \$24,000 in scholarships. Since 2001, 139 students have received funding from the Mills Scholarship program.

To learn more about the program and the funded students, visit twri.tamu.edu/funding/mills.