



TEXAS TECH UNIVERSITY National Wind Institute™

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TTU WIND STUDENTS RECOGNIZED FOR EXCELLENCE

NWI is always very proud of our undergraduate and graduate students, but it's good to know that others recognize their level of educational excellence as well.

Two students in the NWI Wind Energy undergraduate program were recently awarded scholarships from the Gulf Coast Power Association. Denton Shaw and Austin Fincher were both selected and we appreciate the generosity of GCPA in supporting our great undergraduate students.

NWI Ph.D. student Pataya Scott was recently awarded a scholarship from the Federal Alliance for Safe Homes (FLASH). Congratulations, Pataya and thank you, FLASH!

NWI Post-Doctoral Research Associate Dr. Anitha Subbaraj was awarded first place in the poster contest of GroupNIRE's 2015 *Energy Resource Management Conference* held in September.



Pataya Scott



Denton Shaw



Anitha Subbaraj



Austin Fincher

STUDENT SPOTLIGHT: AMELIA WENNER (MS, 2015)

Amelia Wenner interned with Envision Energy Ltd, in Houston, Texas using skills that she learned in the Texas Tech Wind Energy program. Envision Energy is an innovative company and the 10th largest wind turbine manufacturer in the world, and with offices in Houston and San Francisco, along with other cities in China, Denmark and Germany.

“While working at a summer internship in the Technological Innovation team of Envision Energy, I was able to work with engineers to develop my own project involving three different wind farm assessment software packages: WASP, windPRO, and OpenWind, all software that I learned about (and to a small extent, used) at Texas Tech while taking classes from the Wind Energy program.

Possibly the most valuable skill that I developed at TTU was the ability to independently learn how to use software (such as Matlab or Latex) in order to achieve my goals, which translated very well during my time at Envision when I had a very short time to teach myself how to use the three new programs. “

Thank you for your time, Amelia.



NWI Researchers submit \$4M proposal to NSF

NWI Director Dr. Daan Liang and Dr. Kishor Mehta have submitted a proposal to the NSF in response to a solicitation for Natural Hazard Engineering Research Infrastructure (NHERI) Post-Disaster: Rapid Response Research. To form the multi-hazard facility that is the goal of the project, the proposal involves co-PIs, Dr. Henri Gavin from Duke University, Dr. Laurie Baise from Tufts University, and Dr. Walt Peacock from Texas A & M University.



The overall aim of the RAPID Center is to provide equipment, contacts, training, and other resources to investigator teams going to the field. A significant goal will also be to archive curated disaster field data in the Cyberinfrastructure Center (awarded to UT-Austin). These data collections will become a permanent source for advancing research in the impact of natural hazards.

The project has a five-year duration with a total budget of \$4M. It is a competitive proposal with the results likely to be announced in Spring 2016.

NWI GRANTS AND CONTRACTS — OCTOBER 2015

Investigator	Unit	Credit	Award Amount Credited	Title	Agency	Project Period
Boal, Clint	Coop. Fish and Wildlife Research Unit, CASNR	100%	\$85,217	Assessing Influences of Wind Energy Development on Breeding Swainson's Hawks	DOE/BWXT Pantex, LLC	03/04/14-03/16/2016

NWI RESEARCHERS SEEKING NEW PATHS TO STUDY WIND ENERGY



NWI Faculty affiliate Dr. John Schroeder, Research Associate Jerry Guynes, and Research Faculty Dr. Brian Hirth are working on developing software that will be implemented into the DOE-funded X-band radar system to be deployed at the NWI field in Spring 2016.

(Left) - NWI Research Faculty Dr. Brian Hirth works on the software development in NWI Building 250 at Reese Technology Center.

NWI SCHOLARLY UPDATE: NOVEMBER 2015

- Dr. Chris Pattison, NWI Assistant Director of Education, recently gave a series of presentations promoting NWI's undergraduate degree options to Dimmitt High School up in the Panhandle. Approximately 300 students from Dimmit and the surrounding areas attended the presentations.
- Dr. Chris Pattison also spoke about NWI's different educational programs in Amarillo at the Economic Development Board annual meeting with TTU's Russell Thomason and with representatives from GroupNIRE.
- NWI alumni Dr. Tanveer Islam, now Assistant Professor of Emergency Management at Jacksonville State University, has published a book, "Hazard Mitigation in Emergency Management" with publishers Butterworth-Heinemann/Elsevier. Dr. Islam was a student of Dr. Richard Peterson (ATMO) and Dr. Saif Haq (ARCH) and NWI's Dr. Kishor Mehta has written the Forward for the title.
- Wind Science and Engineering student Jingting Xiao gave his doctoral dissertation defense on Friday October 16. Dissertation title: *Nonstationary Wind Field Modelling and Simulation for Wind Loading Assessment*. Mr. Xiao was successful in his defense.
- Dr. Ernst Kiesling recently submitted a proposal to State Farm Insurance for a \$35,000 grant to develop an education/outreach program for storm shelter inspection quality.



(Above) Dr. M. Chris Pattison, Assistant Director of Education, NWI.



(Above) Professor Larry Tanner, NWI Research Assistant Professor.

OTHER SCHOLARSHIP ACHIEVEMENTS:

- Kiesling, E. W., J. Pirtle, and J. Waller (2015). "NSSA/ICC 500 – 2014 Storm Shelter Standard—Structural Provisions." *STRUCTURE magazine*. August.
- Marshall, T. P., J. Robinson, E. Kiesling, and L. Tanner (2015). "Damage Survey of the Mayflower-Vilonia Arkansas Tornado." Madison, WI: 27th Conference on Severe Local Storms, American Meteorological Society. November 2-7.
- Scott, P. L., and E. W. Kiesling, (2015). "Significant Changes in ICC 500 and FMA P-361." *ICC Building Safety Journal Online*. October.

CONFERENCES/WORKSHOPS ATTENDED:

- Dr. Ernst Kiesling attended a Leadership Partners Meeting of the Federal Alliance of Safe Homes (FLASH) on October 20 in Atlanta, GA.
- Professor Larry Tanner attended the Commercial UAV Expo 2015 on October 6-8 in Las Vegas, NE.
- Dr. Xingzhong Chen participated in the Future of Wind Engineering on October 19 at the ASCE headquarters in Reston, VA.
- Dr. Daan Liang participated in China Wind Power 2015 conference on October 14-16 in Beijing, China.

UPCOMING EVENTS:

NWI Ph.D. student Venkatesh Yadav Singarao will be defending his dissertation on Monday, November 16 at 2:30 p.m. in ECE 226. Title: *Improving Grid Frequency Response Using Wind Generation Resources*. Everyone is invited to attend.

If you are interested in having your latest scholarly endeavors featured in the next NWI newsletter, please forward your information (publications, proceedings, conference/workshop attendance, or other news etc.) to Liz Inskip-Paulk (email: Elizabeth.paulk@ttu.edu). Go Red Raiders!