

The Institute of
Environmental and
Human Health

The Institute of Forensic Science



"On The Move" Newsletter

INSIDE THIS ISSUE:

Fall & Spring Graduates

Student News

Faculty News

Spring Banquet

Staff News

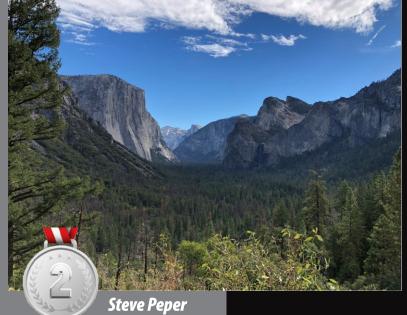
External Research Funding Accomplishments

Alumni News

External Research Proposals Pending

Chairman's Note









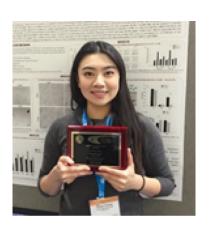
Yu-Wei Chang Awarded 2019 Horn Professors Graduate Achievement Award

ENTX graduate student Yu-Wei Chang, Ph.D. is one of two winners of the prestigious award established by the Paul Whitfield Horn Professors at Texas Tech University to recognize and reward outstanding research or creative activity performed by graduate students while at Texas Tech University.



Our Graduates Excel

Yu-Wei Chang, Ph.D. received the Renal Toxicology Award at the 2019 Society of Toxicology annual meeting.
This is the second time she was selected for this award.



ENTX GRADUATES

*EHH Graduates - Fall 2018

Juliette Jordan, Ph.D. Michelle McManus, Ph.D. Kelsey Thompson, Ph.D. Jaclyn Cañas-Carrell, advisor Jaclyn Cañas-Carrell, advisor Greg Mayer, advisor

*FS Graduates - Fall 2018

Thy Nguyen, M.S. Amanda Patrick, M.S. Madeline Scotch, M.S.

Paola Prada-Tiedemann, advisor Paola Prada-Tiedemann, advisor Megan Thoen, advisor

*EHH Graduates - Spring 2019

Kendall Blanchard, M.S. Yu-Wei Chang, Ph.D. Lucy Lim, Ph.D. Audrey Martinez, M.S. Katy Shaw, Ph.D. Ron Kendall, advisor K.P. Singh, advisor David Klein, advisor Ernest Smith, advisor David Klein, advisor

*FS Graduates - Spring 2019

Katie Blanar, M.S. Kierstyn Evans, M.S. Nataly Gomez, M.S. Kiana Holbrook, M.S. Jennifer Raymer, M.S.

Megan Thoen, advisor Megan Thoen, advisor Paola Prada-Tiedemann, advisor

Paola Prada-Tiedemann, advisor Paola Prada-Tiedemann, advisor

* EHH Environmental and Human Health Focus

* FS Forensic Science Focus

ENTX New Students - Spring 2019

*EHH *FS

Peillin Jiang [Ph.D.] Caitlin Cranston [M.S.]



Student News

Congratulations Kendall Blanchard

upon being awarded the TTU Graduate School Outstanding Thesis Award for 2019 in the category of Biology/Life Sciences. Truly an "Outstanding" accomplishment.





Ph.D. student, Armando Elizalde-Velazquez awarded Graduate Student Award

Armando Elizalde-Velazquez was awarded one of the 2019 Graduate Student Awards in Environmental Chemistry from the Division of Environmental Chemistry of the American Chemical Society.



Dr. Prada-Tiedemann and Students present at the 71st Annual Meeting of the American Academy of Forensic Sciences in Baltimore, MD.

ENTX Forensic Science students, Katie Blanar, Kierstyn Evans, and Kiana Holbrook traveled to the 71st Annual Meeting of the American Academy of Forensic Sciences in Baltimore, MD. The American Academy of Forensic Sciences is a multi-disciplinary professional organization that provides leadership to advance forensic science and its application to the legal system.



ENTX students participated in the Texas Tech Annual Biological Sciences Symposium (TTABSS)

Kendall Blanchard, Cassie Henry, and Katy Shaw recruited at the event, and other ENTX students presented.

Narayan Archarya was awarded 2nd Place Presentation in the category of Graduate Poster.

Armando Elizalde-Velazquez was awarded 1st Place Oral Presentation in the category of Toxicology.







Ph.D. student, Christiana Wittmaack

was selected to review abstracts for the World Marine Mammal Conference in Barcelona Spain this December.



ENTX was well represented at the 18th Annual Graduate School Poster Competition.

Presenters included: Naveen Kumar, Armando Elizalde-Velazquez, Narayan Archarya, Nataly Gomez, Kiana Holbrook, Katy Shaw & Kierstyn Evans

Judges include: Olushola Awoyemi, Naveen Kumar & Dr. Paola Prada-Tiedemann Moral Support: Dr. Jaclyn E. Cañas-Carrell

Naveen Kumar was awarded 1st Place and Narayan Archarya was awarded 2nd Place in the Environmental Science poster category.

2019 ENTX

Student Association Officers:

President: Kalin Skinner
Vice-President: Narayan Acharya
Treasurer/Secretary: Connor Harwood
Public Relations Officer: Charles Oludare
Green Committee Chair: Jessica Herzog
Welcoming Committee Chair: Caleshia Summers

2019 Forensic Science Society Officers:

President: Maureen Oliva Vice President: Annelise Bell Treasurer: Rachel Barnard Secretary: Caitlin Cranston VP of Fundraising: Yaireth Castro

Faculty Sponsor: Dr. Paola Prada-Tiedemann/

Dr. Megan Thoen

2019 ENTX LE-SETAC Officers:

President: Cassie Henry Vice-President: Brett Henry Treasurer: Alyssa Hay SORC Rep: Audrey Willis





Dr. Prada-Tiedemann, student Kiana Holbrook and forensic science program alumni Lauren Alejandro participated in the 2nd annual University of Texas Forensic Science event to highlight the forensic science education in our department across the forensic science community in the State of Texas.



Ph.D. student, Lihua Lou received the 2019 Summer Thesis/Dissertation Research Award. She also earned a Study Abroad Competitive Scholarship for Summer 2019, and won the 2019 Graduate School Traveling Award.



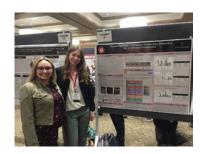
Tingzeng Wang, undergraduate researcher in Dr. Degeng Wang's lab, won a TTU TrUE Undergraduate Scholar Project Funding Award for his research into human gene expression regulation.

Student News

Ph.D. Student, Olushola M. Awoyemi was recently awarded a Love of Learning Award from The Honor Society of Phi Kappa Phi, the nation's oldest and most selective collegiate honor society for all academic disciplines. Awoyemi is one of 100 recipients nationwide to receive the award.



Ph.D. Student, Olushola M. Awoyemi has been awarded a Texas Tech University Doctoral Dissertation Completion Fellowship through the Graduate School.



Dr. Prada-Tiedemann and Pi2 Scholar Program undergraduate student Emily Deruyter presented at the 2019 Texas Tech University Undergraduate Research conference (TTU URC)

Their project titled: "Forensic Taphonomy - A Perspective of Active Odor Chemicals in Dry vs. Submerged Decomposition".



Fengqian Chen Awarded 1st Place at 2018 Arts and Humanities Research Conference.

She presented in the Health and Well-Being section of the conference on how CRISPR-carrying nanoparticles edit the genome.

Ph.D. student, James Ayodeji was awarded a Graduate Fellowship Water Conservation Research Scholarship.



Annual Texas Tech Arbor day

Cassie Henry, Katherine Shaw, Nicole Dennis, Narayan Acharya, participated.



(Undergraduate)

expression regulation

The Department of Environmental Toxicology



Summary of Student Awards, Grants, Fellowships and/or Scholarships:

| Narayan Archarya [Ph.D.] | Graduate Student Research Poster Competition of TTU Graduate School 2019 (2nd place - Environmental Sciences category) Texas Tech Annual Biological Sciences Symposium Poster Competition 2019 (2nd place - Graduate Research category) |
|--|---|
| Olushola Awoyemi [Ph.D.] | Received Love of Learning Award from the Honor Society of Phi Kappa Phi Awarded a TTU Doctoral Dissertation Completion Fellowship through the Graduate School |
| James Ayodeji [Ph.D.] | Graduate Fellowship: Water Conservation Research Scholarship Summer Thesis/Dissertation Research Award 2019 |
| Kendall Blanchard, M.S. | TTU Graduate School Outstanding Thesis Award for 2019 in the category of Biology/Life Sciences |
| Yu-Wei Chang, Ph.D. | Horn Professors Graduate Achievement Award 2019 Renal Toxicology Award from Society of Toxicology (second time selected) Research on effects of arsenic in kidney disease featured by Healio Nephrology News & Issues (Contributed with K.P. Singh) |
| Fengqian Chen [Ph.D.] | Presented at Health and Well-Being section of the Arts and Humanities Research Conference (1st place) |
| Armando Elizalde-Velazquez [Ph.D.] | Graduate Student Award in Environmental Chemistry from the Division of Environmental Chemistry of the American Chemical Society Texas Tech Annual Biological Sciences Symposium Oral Presentation in the category of Toxicology (1st place) |
| Naveen Kumar [Ph.D.] | Graduate Student Research Poster Competition of TTU Graduate School 2019 (1st place - Environmental Sciences category) |
| Lihua Lou [Ph.D.] | Summer Thesis/Dissertation Research Award 2019 Study Abroad Competitive Scholarship for Summer 2019 Graduate School Travel Award 2019 |
| Kalin Skinner [Ph.D.] | Graduate Student Research Support Award 2019 |
| Tingzeng Wang | TTU TrUE Undergraduate Scholar Project Funding Award for his research into human gene |

Christiana Wittmaack Selected to review abstracts for the World Marine Mammal Conference in Barcelona Spain this **[Ph.D.]** December 2019



Faculty News

Two Texas Tech researchers working toward universal flu vaccine

Thanks to a five-year grant from the National Institute of Allergy and Infectious Diseases (NIH), two Texas Tech University researchers, Dr. Harvinder Gill and Dr. Steve Presley, widely known for their work in immunotherapy and infectious diseases are working towards as influenza vaccine.



Dr. Paola Prada-Tiedemann awarded the 2019 Outstanding Woman Leader (OWL) Award

Each year, West Texas - Association of Women in Science (WT-AWIS) awards the Champion of Women (C.O.W.) Award and Outstanding Woman Leader (O.W.L.) Award, recognizing those who are active supporters of women in science, and who have demonstrated their commitment to the education, training and mentoring of women, as well as to overall gender equity in science.



Dr. Ramkumar Received the 2018 Sir J. C. Bose Memorial Science Award

In a gathering of about 1000 people (college students, faculty, general public and visitors), that included people from India, USA and Italy, Dr. Ramkumar was



presented the Sir J. C. Bose Memorial Science Award for the year 2018, in Coimbatore, India. The award function attracted public media as well. The group of award winners were from varied fields of science such as alternative medicine, bio imaging, astro sciences, engineering from India, Italy and USA.

Dr. Céline Godard-Codding, Develops New Method to Detect Whale Hormones



Dr. Céline Godard-Codding, associate chair of the Department of Environmental Toxicology and an associate professor of endangered species toxicology at TIEHH, is leading a worldwide research effort to study the health of the western gray whale, a critically endangered species found only along Russia's Pacific coast, and has developed a new method that could impact the entire field along the way.



Congratulations

to Dr. Degeng Wang's Lab! They were awarded a NIH grant for their research on Complexity of Gene Expression Regulation and Its Intrinsic-ness to Cellular Operation.

We aim to combine CRISPR/Cas9 genome editing, nano-technology and chemical genetics to set a new paradigm for studying protein kinases, open up opportunities to answer previously impossible questions and provide a nurturing platform for the next generation of biomedical researchers. Additionally, Akt1 and Akt2, the target for drug and therapeutic development for multiple human diseases, will be used as our initial model. This project will identify their respective spectrum of substrates to help guide further development and improvement efforts.

Low Levels of Arsenic may Cause Kidney Disease, but Existing Drug could Become Key Treatment. The research on the effects of arsenic in kidney disease by Kamaleshwar P. Singh, Ph.D. and research assistant, Yu-Wei Chang, Ph.D., has been featured by Healio Nephrology News & Issues.



Faculty News

Dr. Steve Presley and Dr. Jaclyn Canas-Carrell were recognized during the 2019 President's Excellence award ceremony.



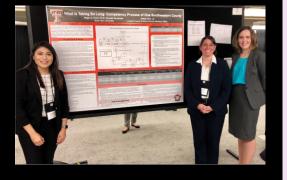
Dr. Presley was awarded for his engaged scholarship activities with public health

communities. TTU is emphasizing the importance of this new aspect of academic activity and encouraging faculty/staff and students to consider this greater outreach opportunity.

Dr. Jaclyn Cañas-Carrell was awarded for her excellence in research professorship. This prestigious award recognized Jaclyn's important contributions and future commitment to research excellence.

Dr. Megan Thoen Presents Research at Annual Meeting of the American Psychology-Law Society

Dr. Megan Thoen, TTU McNair Scholar Genesis Hernandez, and Ms. Ashley Davis of the Lubbock County Criminal District Attorney's Office presented their research entitled, "What is Taking So Long: Competency Process of One Southwestern County," at the annual meeting of the American Psychology-Law Society, Portland, OR.



Dr.'s K.P. Singh and Degeng Wang were Selected for the TTU Proposal Assistance Program Awards

Dr. Singh's application for Targeting Oxidative Stress-Induced Epigenetic Reprogramming in Fibrotic Disease has been selected as an awardee for the Proposal Assistance Program. Congratulations!

Dr. Wang's application for Complexity of Gene Expression Regulation and Its Intrinsic-ness to Cellular Operation has been selected as an awardee for the Proposal Assistance Program. Congratulations!

Congtratulations and best wishes to Dr. Kathy Sperry, Professor of Practice, upon her retirement after 29 years of service to Texas Tech University. Dr. Sperry was the founding Director of the Institute for Forensic Science (IFS) in 2002. She successfully solicited the initial funding to establish the IFS from the U.S. Department of Justice for training for rural law enforcement relative to forensic sciences. Ultimately a Masters of Science degree program in Forensic Sciences was established, and the first class of graduate students matriculated in 2006. In 2010 she was appointed the Director of the Forensics Graduate Program in addition to being the Director of the IFS.

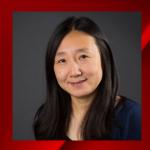
"A Dual Toxicology and Endocrinology Approach to Advance Marine Protected Species Health Assessment."

> Dr. Céline Godard-Codding traveled to La Paz, Mexico for an invited seminar at the Centro Interdisciplinario de Ciencias Marinas of the Instituto Politécnico Nacional (CICIMAR-IPN), La Paz,



B.C.S., Mexico, titled "A Dual Toxicology and Endocrinology Approach to Advance Marine Protected Species Health Assessment." While in La Paz, Céline met with collaborators to discuss their research projects on the toxicology of the great white shark, the whale shark, and the manta ray. Céline is currently serving as co-advisor on one PhD and one Master's student in Mexico.





Guest Speaker,
Dr. Lu Yu
ENTX ALumni
Principal Toxicologist
for Phillips 66



FS Outstanding Master's Student Award Presented to Nataly Gomez



FS Outstanding Master's Student Award Presented to Kiana Holbrook



Outstanding T.A. of the Year Award: Caleshia Calvin



Lab Safety Compliance Award: Kiana Holbrook



Lab Safety Outstanding Personal Protective Equipment Award: Christiana Wittmaack



Proper Planning Prevents Poor Performance Award: Eric Peterson



Lab Safety Award: Terrell Hillard



EHH OUTSTANDING Doctoral Student Award Presented to Yu-Wei Chang



EHH OUTSTANDING
Doctoral Student
Award Presented to
Cassie Henry



EHH Outstanding Master's Student Award Presented to Kendall Blanchard



EHH Outstanding Master's Student Award Presented to Cassandra Schmitt



Outstanding Faculty Member of the Year Award: Dr. Jordan Crago



Outstanding Staff Member of the Year Award: Brad Thomas



Staff News

Staff Member of the Semester



Mike Wages, Technician II Congratulations!

New Employee



Gary Reid, New QA/Safety Manager

New Research Staff



Miller



Maya Bastille

Samantha

Shannon Moore

External Research Project Funding Accomplishments!

Congratulations to the ENTX faculty members who have been awarded external research project funding as the Principal Investigator so far during 2019:

- Dr. Seshadri Ramkumar was awarded \$10,000 from Cotton Incorporated for the project entitled New Markets for Low Micronaire Cottons.
- *Dr. Seshadri Ramkumar* was awarded \$11,000 from Cotton Incorporated for the project entitled Environmentally Friendly Processing of Cotton for Value Added Products.
- Dr. Steve Presley was awarded \$200,797 from the U.S. Centers for Disease Control and Prevention and the Texas Department of State Health Services for the project entitled Public Health Emergency Preparedness.
- Dr. Degeng Wang was awarded \$84,146 from the National Institute of General Medical Sciences, National Institutes of Health for the project entitled To Combine CRISPR/Cas9 Genome Editing, Nanotech and Chemical Genetics Toward in vivo Protein Kinase Analysis.
- Dr. Seshadri Ramkumar was awarded \$25,000 from Cotton Incorporated for the project entitled Exploring New Opportunities for Low Micronaire Cotton.
- Dr. Paola Prada was awarded \$4,400 from the Center for Transformative Undergraduate Experiences (TrUE) for High Impact Practice Grant entitled An Undergraduate Research Team Design for the Generation of Forensic Decomposition Odor Studies – Females in Forensics.

Alumni News

Professor named national fellow for scientific contributions

Cotton truly has been an important fiber for East Carolina University's Baohong Zhang. After spending his academic career studying the fiber, Zhang's hard work paid off this



week as the Thomas Harriot College of Arts and Sciences Distinguished Professor was named a fellow to the American Association for the Advancement of Science.

- Jessica (Mauricio) Price new job with TX Dept. of State Health Services.
- Kelsey Thompson starting postdoc at Harvard.



Mrs. Priscilla Reid, the Law Enforcement Officer Training Coordinator for the Institute for Forensic Sciences (IFS), passed away on the 23rd of April 2019. Priscilla joined the IFS in 2013 and brought extensive real world law enforcement and investigative expertise and experience to the program. Before joining the IFS, she had almost 40 years of service with the U.S. Navy Civil Service, U.S. Naval Reserve, and the San Diego, CA Sheriff's Department. Priscilla will be dearly missed by all that knew and worked with her.





External Research Proposals Pending

Best wishes for success to the ENTX faculty members who have submitted research project proposals so far during 2019:

- *Drs. Jordan Crago and Ernest Smith* submitted a research project funding proposal to the National Science Foundation entitled NRT-HDR: Data Analytics in Convergence Research of Wildlife, Environmental, and Computational Sciences and Engineering.
- Dr. Jaclyn Canas-Carrell submitted a research project funding proposal to the National Science Foundation entitled Better Teachers, Better Students: Institutional Transformation through the TTU-STEM Teaching, Engagement & Pedagogy (TTU-STEP) Program.
- **Dr. Degeng Wang** submitted a research project funding proposal to the National Institutes of Health entitled Functional and Mechanistic Study of the Complexity of Gene Expression.
- Dr. Jaclyn Canas-Carrell submitted a research project funding proposal to the National Science Foundation entitled Building Capacity: Transforming Cultural Competencies to Improve STEM Student Persistence and Retention at new Hispanic-Serving Institutions.
- *Drs. Todd Anderson, Jaclyn Canas-Carrell and Phil Smith* submitted a research project funding proposal to the Project Poverty entitled Lubbock Environmental Action Project (LEAP).
- Dr. Todd Anderson submitted a research project funding proposal to the U.S. Department of Defense SERDP entitled
 Development, Assessment, and Calibration of Passive Samplers for measuring Per- and Polyfluoroalkyl Substances (PFAS) in
 Ground and Surface Waters.
- *Dr. Steve Presley* submitted a research project funding proposal to the Texas Department of State Health Services entitled Insecticide Resistance Testing of Texas Aedes aegypti and Aedes albopictus Populations.
- **Dr. Ron Kendall** submitted a research project funding proposal to Park Cities Quail Inc. entitled Anthelmintic Drug Treatment for Northern Bobwhite Quail (Colinus virginianus) Infected with Parasites.
- **Dr. Greg Mayer** submitted a research project funding proposal to the National Institute of Justice, U.S. Department of Justice entitled A Potential Decomposition Clock: The Novel Use of Larval Masses as Cadaveric Odor and Microbial Sample Sources.
- *Dr. Steve Presley* submitted a research project funding proposal to the Texas Department of State Health Services entitled Influenza Surveillance.
- *Dr. Todd Anderson* submitted a research project funding proposal to the U.S. Environmental Protection Agency entitled Addressing Environmental Concerns in Vieques, Puerto Rico through Community Participatory Research.
- **Dr. Phil Smith** submitted a research project funding proposal to the Atlas Sand Company entitled Locating the Dunes Sagebrush Lizard with Environmental DNA.
- *Dr. Phil Smith* submitted a research project funding proposal to the Atlas Sand Company entitled Methods for Creating or Enhancing Habitat for Dunes Sagebrush Lizard.
- **Dr. Phil Smith** submitted a research project funding proposal to the Atlas Sand Company entitled Dunes Sagebrush Lizard Road Ecology.
- *Dr. Phil Smith* submitted a research project funding proposal to the Atlas Sand Company entitled Characterization of the Chemical Environment of the Dunes Sagebrush Lizard.
- *Dr. Jaclyn Canas-Carrell* submitted a research project funding proposal to the Cooperative State Research Education and Extension Service, U.S. Department of Agriculture entitled Scholars for Tomorrow in Rural Agribusiness and Nutrition (STRAN).



A note from the Chair ...

Greetings alumni, colleagues and friends:

The preceding pages of this newsletter are packed full of the many individual and team academic and professional accomplishments of our students, staff and faculty. I particularly want to acknowledge the 19 awards, grants, fellowships, and scholarships that were received by our graduate students this past semester. Congratulations to the ten new Department of Environmental Toxicology alumni who graduated in May, including three Ph.D. and two M.S. degrees in Environmental Toxicology, and five M.S. degrees in Forensic Sciences. I offer you all my best wishes for great success and happiness as you pursue the next chapter in your professional career.

One of the key metrics of the success of an academic department is the amount of external funding that is received by its faculty for research and other scholarly and creative efforts. Since the 1st of January 2019, ENTX faculty (including both Environmental and Human Health focused and Forensic Sciences focused) have been awarded more than \$351,000 to fund six research projects, while at least 16 new research funding proposals have been submitted to sponsors – truly a great start for the year. These significant and well-deserved awards and scholarly achievements also reflect the dedicated physical and technical support, and encouragement provided by the outstanding ENTX Staff – thank you.



It has been a very busy Spring 2019 semester with many exciting and successful events and accomplishments, but also sad and challenging personnel losses and transitions. Priscilla Reid passed away in April of this year, and is sincerely missed by all of us in the department that knew worked with her. Priscilla served as the Law Enforcement Officer Training Coordinator for the Institute of Forensic Sciences since 2013. Dr. Kathy Sperry (Professor of Practice) retired after 29 years of service at TTU, serving since 2002 as the founding director and in other faculty positions within the Institute for Forensic Sciences – thank you Kathy for your outstanding accomplishments, and best wishes for a wonderful future. Dr. David Klein (Associate Professor) has left ENTX and is pursuing other professional opportunities.

Please consider donating some money for an incoming M.S. student and an incoming Ph.D. student. We accept donations of any size. If all of our alums donated just \$20 (not \$20/month, but \$20 total for the year), we would have enough funds to cover the scholarships for 2 years. Our program and students need your support in any amount. Consistent contributions are the only way to make the alumni scholarships sustainable. The corporate support we have counted on for 15+ years to reward productive students has ceased, making alumni donations even more critical.

If you would like to donate please fill-out your check to "Texas Tech University" and mail it to Department of Environmental Toxicology (Attn: Tami James), Scholarship Fund, Box 41163, Lubbock, TX 79409-1163.

Best wishes to you and yours for a fun and relaxing summer.

Steve Presley, Ph.D.
Professor and Chair
Department of Environmental Toxicology
TTU College of Arts & Sciences

Newsletter compiled, produced and published by Julie Wheeler, Lori Gibler, and Brad Thomas

VISION STATEMENT

"We will be a leader in integrating research and education for environmental and human health sciences, and forensic sciences. Our department and institutes will contribute innovative solutions to real world problems by embracing disciplinary diversity, creating partnerships and committing to excellence."



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