Awards and Recognition

University Distinguished Research Professor Dr. Richard Dixon was honored with the UNT President’s Citation and the Texas Governor’s Commendation following his election to the Royal Society.

Sujata Agarwal and Devasantosh Mohanty, graduate students in the labs of Drs. Pamela Padilla and Jyoti Shah, respectively, were finalists at UNT’s 3MT® Competition for students pursuing a PhD degree. This 3 Minute Thesis competition challenges students to consolidate their ideas and research discoveries so they can be presented concisely to a non-specialist audience in 3 minutes. In her presentation “Treat Diabetes with Sunshine”, Sujata discussed her discoveries on the impact of vitamin D on controlling diabetes. Devasantosh (Dev) Mohanty’s presentation “Immunized Plants: An Answer to Global Hunger” highlighted his work on a plant-derived diterpenoid that functions as an immune booster to protect plants against a broad-spectrum of diseases. Dev’s presentation won the People’s Choice Award, which included a $1,000 cash prize.

New Faculty

Dr. Mauricio Antunes joined the Department of Biological Sciences and the BioDiscovery Institute as an Assistant Professor in September 2018. Dr. Antunes’ research centers around the development and application of tools from the emerging field of synthetic biology to engineer plants with novel traits that function in a predictable and tunable manner to improve bio-productivity.

Dr. Ana Paula Hoeinghaus joined the Department of Biological Sciences in September 2018 as a Lecturer cum advisor. She completed her PhD in Biology from the University of North Texas. Dr. Hoeinghaus currently teaches Biodiversity and Animals Environmental Science. Dr. Hoeinghaus brings her teaching and research expertise to the position of Advisor/Lecturer in Ecology and Environmental Science here at UNT.

Dr. Jessica Moore joined the Department of Biological Sciences in September 2018 as a Lecturer cum advisor. She received her PhD in Biology from University of Texas-Austin where she worked on gene regulation in Drosophila. Dr. Moore completed post doc tenures at Rutgers University and Jake Gittlen Cancer Research Institute at Penn State College of Medicine, where she supervised a medium-scale zebrafish mutagenesis project, to identify novel cancer genes. Dr. Moore brings her teaching and research expertise to the position of Advisor/Lecturer in Genetics, Cell Biology and Molecular Biology here at UNT.
News

University Distinguished Research Professor Dr. Jyoti Shah was appointed Interim-Chair of the Department. Dr. Shah took over the reins of the department on September 1, 2018 from Dr. Art Goven who admirably served the department, the college and the university in an administrative role for over 12 years. Thank you Dr. Goven for your service to UNT.

Thesis and Dissertations

Andrea Venable successfully defended her PhD dissertation in Biology. Her major professor is Dr. Brian McFarlin, Professor in the Department of Kinesiology, Health Promotion, and Recreation, and the Department of Biological Sciences. The title of her dissertation was “Implications of Diet in Cardiovascular Disease Risk: Postprandial Changes in Circulating Monocytes and Endotoxemia”.

Ashok Subedi successfully defended his PhD in Biology. His major professor is Dr. Jannon Fuchs, Professor in Biological Sciences. The title of his dissertation was “The Role of Primary Cilia in the Oligodendrocyte Lineage”.

Clinton Onyemaechi successfully defended his MS thesis in Biology. His major professor is Associate Professor Dr. Dane Crossley. The title of his thesis was “Autonomic Nerve Activity and Cardiovascular Function in the Chicken Embryo (Gallus Gallus)”

Danielle Levitt successfully defended her PhD in Biology. Her major professor is Dr. Jakob Vingren, Professor in the Department of Kinesiology, Health Promotion, and Recreation, and the Department of Biological Sciences. The title of her dissertation was “Resistance Exercise and Alcohol: Combined Effects on Physiology and Performance.”

Emma Barnes successfully defended her MS thesis in Environmental Science. Her major professor is Dr. Aaron Roberts, Professor in Biological Sciences. The title of her thesis was “Producing a film on oil spill research for the public.”

Griffith Davis successfully defended his PhD dissertation in Biology. His major professor is Dr. Amie Lund, Assistant Professor in Biological Sciences. The title of his dissertation was “Exposure to Nanomaterials Results in Upregulation of Inflammatory and Atherosclerotic Signaling Pathways in the Vasculature”.

Jason Magnuson successfully defended his PhD in Biology. His major professor is Dr. Aaron Roberts, Professor in Biological Sciences. The title of his dissertation was “Effects of Deepwater Horizon Crude Oil on Visual Function in Telosts”.

Richard Hale successfully defended his PhD dissertation in the area of Biochemistry and Molecular Biology. His major professor is University Distinguished Teaching Professor Dr. Lee Hughes. The title of his dissertation was “Isolation and Genomic Characterization of 45 Novel Bacteriophages Infecting the Soil Bacterium Steptomyces griseus”.

Extramural Grants and Contracts

Developing and characterizing soybean cultivars with increased oil while maintaining protein and yield. SmithBucklin. Co-PI: Ana Paula Alonso (University of North Texas, $126,320); PI: McHale (The Ohio State University); other co-PIs: Bacon (University of Arkansas), Chen (Missouri University), Clemente (University of Nebraska-Lincoln), Mian (USDA-ARS); $483,451 total funding.

Transforming row crops to express condensed tannins. Grasslanz Technology Ltd, New Zealand. PI: Dr. Richard A. Dixon. $120,000.

Environmental flow regime assessment and development of a monitoring framework. Texas Water Development Board. Co-PI: David Hoeinghaus; PI: Winemiller (TAMU) and other Co-PIs Perkin and Moore (TAMU), Hardy and Schwalb (TX State), Trungale (Trungale Engineering & Science), Buzan (Freese & Nichols, Inc.); $240,000

Plant enzyme structure, design and engineering toward synthesis of bio-based products. Conagen Inc. PI: Xiaoqiang Wang, $17,000.


Recent Publications


Book Published


Seminars/Talks

A putative resistance gene RESISTANCE TO Myzus persicae (RMP) is required for the plant defense against the green peach aphid. Oral Presentation by Moon Twayana at Botany 2018, Rochester, Minnesota, United States of America. Co-authors: Hossain Mondal and Jyoti Shah

Actin cytoskeleton dynamics and plant defense against insects that feed from the phloem. UNT BioDiscovery Institute -seminar, Sept 17, 2018. Talk by Dr. Jyoti Shah.
Active Learning Across an Entire Microbiology Course: A View from the Trenches. American Society for Microbiology Conference for Undergraduate Educators, Austin, TX, July 27, 2018. Invited talk by Dr. Lee Hughes.


Do we know all the players in monolignol biosynthesis? Lignin Gordon Research Conference, Stonehill College MA, August 6, 2018. Talk by Dr. Richard A. Dixon.


Conference Presentations


