

PHT180 News: Spring 2025

New Research Awards



PI: Yong Tai Wang, Dean, College of Health Sciences and Technology

Sponsor: NYS Office of Mental Health/Monroe County Office of Mental Health

Project: Tai Chi Exercise for Improving Physical/Mental Health and Pain Reduction for Older Adults in Monroe County

The goals of this project are: 1) to offer Tai Chi exercise for older adults in Monroe County to improve their physical and mental health, pain reduction, and reduce opioid use; and 2) to provide students in the College of Health Sciences with Experiential Learning in which the students will learn TC10 and teach it.



ALFRED P. SLOAN
FOUNDATION

PI: Kristoffer Whitney, Associate Professor, Department of Science, Technology, and Society

Sponsor: Alfred P. Sloan Foundation

Project: Blue Oikos: Biomedicine, Fisheries Science, and the Horseshoe Crab

The goal of this project is to complete a book-length account of the biomedical use of American horseshoe crabs to produce Limulus Amebocyte Lysate (LAL) - a compound used to detect the presence of potentially deadly toxins in all intravenous drugs, vaccines, and medical devices and a vital (if largely unknown) part of global public health infrastructure. This monograph will explore the history of LAL, its global implications, and the

contemporary biopolitics around crab conservation and synthetic replacements for LAL in the pharmaceutical industry.

Welcome New Affiliates!



Janet Lighthouse

Assistant Professor
Biomedical Sciences Program

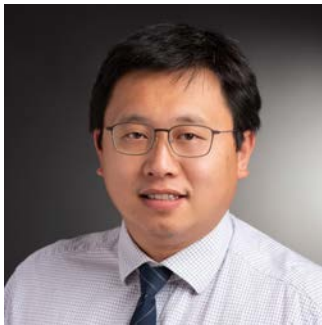
Research Areas: C.elegans, metabolism, oxidative stress, SGLT2 inhibitors, contractility



Nonhle Channon Mdziniso

Assistant Professor
School of Mathematics and Statistics

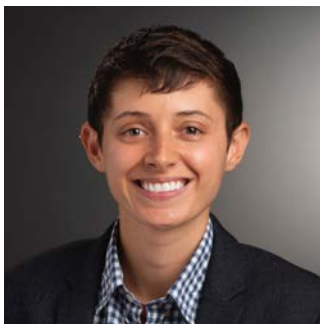
Research Areas: Probability distributions theory and applications, survival analysis, statistical modeling; parametric and nonparametric regression, data mining, machine learning



Chao Peng

Associate Professor
School of Interactive Games and Media

Research Areas: Game technology for health, gamification, VR for therapy training and rehab, real-time sensory tracking, interactive simulations, visual computing solutions for health

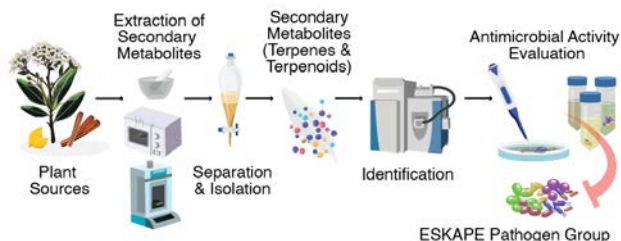


Crista Wadsworth

Assistant Professor
School of Life Sciences

Research Areas: Antibiotic resistance, microbial evolution, adaptation to novel environments, speciation, genomics

Illustrations

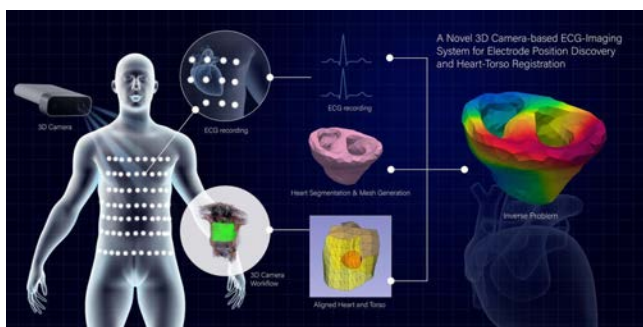
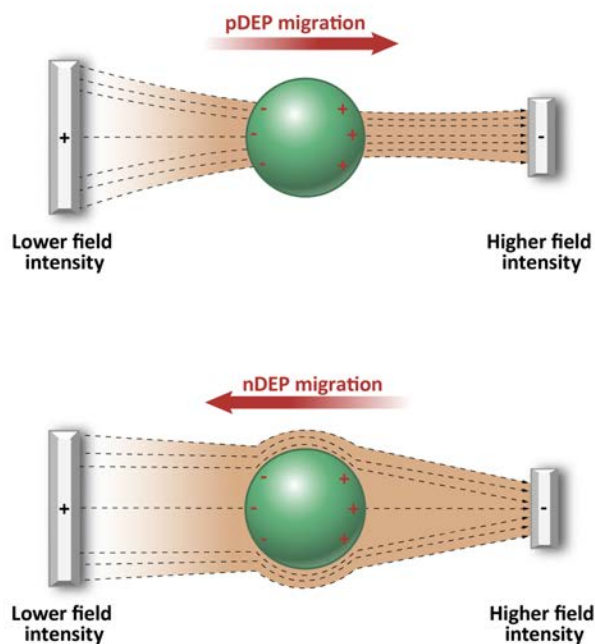


Harmony Wong created an illustration for **Andre Hudson** for his publication in *ACS Bio & Med Chem Au* titled "Unlocking the Potential of Brazilian Plant Terpenes to Combat Antimicrobial Resistance."

<https://pubs.acs.org/doi/10.1021/acsbioimedchemau.5c00069>

Bryona Hamilton created an illustration for **Blanca Lapizco-Encinas** for her publication in *Electrophoresis* titled "Dielectrophoresis in Carcinoma Diagnosis: Recent Developments and Applications."

<https://analyticalsciencejournals.onlinelibrary.wiley.com/doi/abs/10.1002/elps.8127>



Sophia Chen designed a graphic for **Linwei Wang** for a publication in *JBHI* titled "A Novel 3D Camera-Based ECG-Imaging System for Electrode Position Discovery and Heart-Torso Registration."

<https://ieeexplore.ieee.org/document/10811007>

Affiliate Highlights

Several PHT180 affiliates were inducted into the yearly class of **PI Millionaires** for surpassing \$1 million in sponsored research awards. Congratulations!

- ♦ **Cory Crane**, Associate Professor, Behavioral Health
- ♦ **Lishibanya Mohapatra**, Assistant Professor, School of Physics and Astronomy
- ♦ **Lu Sun**, Professor, Department of Civil Engineering Technology
- ♦ **Qian Xue**, Associate Professor, Department of Mechanical Engineering

PHT180 affiliates were awarded **Seed Funding** for their proposals from Sponsored Research Services' Grant Writers' Boot Camp.

- ♦ **Krittika Goyal**, Assistant Professor, Department of Manufacturing and Mechanical Engineering Technology

♦ **MD Ahasan Habib**, Assistant Professor, Department of Manufacturing and Mechanical Engineering Technology

♦ **Ji Hwan Park**, Assistant Professor, School of Interactive Games and Media

Other Awards and Honors

♦ **Lea Michel** (Professor, School of Chemistry and Materials Science) received the 2025 Eisenhart Award for Outstanding Teaching for her commitment to mentorship, diversity, and hands-on learning in the classroom and the lab.

<https://www.rit.edu/news/michel-works-bring-inclusivity-classroom-and-lab>

♦ **Eva Navarro** (Professor, School of Interactive Games and Media)

- Received the distinguished Alumni Ambassador Award from Universidad de Alicante, Spain. <https://www.evanavarro.org/press-and-media>

- Selected for the list of 100 Brilliant Women in AI Ethics - 2025 by Women in AI Ethics. <https://www.rit.edu/news/eva-navarro-among-list-100-brilliant-women>

PHT180 Affiliates in the News

♦ **Amlan Ganguly** (Department Head, Department of Computer Engineering) was featured on RIT Research Minute for his work in DNA computing.

<https://www.rit.edu/spotlights/rit-research-minute-dna-computing>

♦ **Krittika Goyal** (Assistant Professor, Department of Manufacturing and Mechanical Engineering Technology)

- Published an article in The Conversation on biomimetic skin phantoms and wearable devices. <https://theconversation.com/skin-phantoms>

- Featured in Spectrum News for her biomimetic skin phantoms research.

<https://spectrumlocalnews.com/nys/rochester/news/2025/04/07/>

♦ **Eva Navarro** (Professor, School of Interactive Games and Media) was featured on Episode 3 of the Trailblazing Women at RIT Podcast Series by AdvanceRIT.

<https://www.rit.edu/advance/podcast/faculty-spotlight/>

♦ **Linwei Wang** (Professor, Department of Computing and Information Sciences PhD) was featured on RIT Research Minute for her work using AI-powered digital twins to improve outcomes for heart conditions.

<https://www.youtube.com/watch>

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