DREXEL UNIVERSITY
College of
Engineering

From Seed to Harvest:
2024-2025 Donor-Sponsored Faculty Fellowship Showcase Agenda

Monday, May 5, 2025, 1:00 PM – 4:00 PM
Hill Conference Room, LeBow Engineering Center Room 240

1:00 pm - 1:10 pm: Opening Remarks (Interim Dean Kapil Dandekar & Interim Vice Dean for Research, Innovation, and Faculty Advancement Jin Wen)

1:10 pm – 2:15 pm: New Fellow Recipient Presentations & Past Fellow Poster Pitches

Themes: Health, Wellness, and Medicine & Renewable Energy and Power

New Fellow Recipient Presentations
(15 mins per presentation including Q&A)

Yue (Luna) Zheng, PhD (Longsview Fellow)
Integrating Soft Robotic Hands into Mobile Manipulation Systems for Smart Living
Collaborator: Lifeng Zhou, PhD

James Tangorra, PhD (Grimes Family Faculty Awardee)
Sensorimotor Control in Older Adults While Cycling in Real-World and Virtual Reality Environments
Collaborator: Sudeshna Chatterjee, PhD

Jill Wenderott, PhD (Carleone Faculty Awardee)
Accelerating Synthesizability of Beyond-Binary Mixed Anion Materials
Collaborators: Yong-Jie Hu, PhD; Kaidi Xu, PhD

Jill Wenderott, PhD (Longsview Fellow)
AI for Lab Notebooks: Supplanting Manual Entry with a Virtual Lab Assistant
Collaborator: Shadi Rezapour, PhD

Past Fellow Poster Pitches
(1 min per pitch)

Ania Baetica, PhD (Carleone Faculty Awardee)
Control and engineer T cell fates with precision biomaterials
Collaborator: Xiao Huang, PhD

Wes Chang, PhD (Longsview Fellow)
Decoupling Ultrasonic Transmission of Heterogeneous, Composite Battery Electrode Layers Informed by Sparse Coding
Collaborator: Edward Kim, PhD

Wei-Heng Shih, PhD (Longsview Fellow)
Aqueous Non-toxic ZnS quantum dots as gene delivery vehicle for DNA vaccine
Collaborators: Elias El Haddad, PhD; Michele Kutzler, PhD; & Wan Y. Shih, PhD

2:15 pm - 2:35 pm: Coffee Break & Poster Viewing

2:35 pm - 3:40 pm: New Fellow Recipient Presentations & Past Fellow Poster Pitches

Themes: Resource Stewardship and Sustainability & Smart Cities

New Fellow Recipient Presentations
(15 mins per presentation including Q&A)

Amanda Carneiro Marques, PhD (Longsview Fellow)
Understanding the Impacts of Circular Water Strategies on Flood Mitigation and Climate Resilience for Urban Communities
Collaborator: Fernanda Campos da Cruz Rios, PhD

Miguel Pando, PhD (Longsview Fellow)
Enhanced 3D Printing of Low-Carbon, Eco-Friendly, Earth-Based Matrices Using Biopolymers, Fibers, and AI-Based Optimization
Collaborators: Ivan Bartoli, PhD; Arvin Ebrahimkhanlou, PhD

Caroline Schauer, PhD (Grimes Family Faculty Awardee)
Materials in Chocolate Waste Stream
Collaborators: Jonathan Deutsch, PhD; Rachel Sherman

Lifeng Zhou, PhD (Carleone Faculty Awardee)
Foundation Models for Fast Perception, Planning, and Control of Autonomous Vehicles
Collaborator: Kaidi Xu, PhD

Past Fellow Poster Pitches

(1 min per pitch)

Arvin Ebrahimkhanlou, PhD (Carleone Faculty Awardee)
Looking Underground: AI-based Digital Twins for Underground Excavation and Development
Collaborators: Ivan Bartoli, PhD; Simi Hoque, PhD; Miguel Pando, PhD; & Nicholas Jushchyshyn, MFA

James Lo, PhD (Longsview Fellow)
Application of Large Language Models (LLMs) for Knowledge Seeking in Building System Design and Operation
Collaborator: Yuan An, PhD

Josh Snyder, PhD (Longsview Fellow)
Grid-Scale Long-Term Energy Storage and Anthropogenic Carbon Remediation with an Aqueous Bicarbonate/Formate-Proton Battery
Collaborator: Michel W. Barsoum, PhD

3:40 pm – 4:00 pm: Coffee Break & Poster Viewing