Therapeutic Sciences Graduate Program

BROWN
Division of Biology and Medicine

November 2023, Issue 3

TSGP News:

Congratulations!

Andrew Howes successfully defended his PhD dissertation on November 6th. Congratulations, Dr. Howes!

Federica Accornero, PhD, has joined TSGP as a new trainer. She serves as Associate Professor of Molecular Biology, Cell Biology and Biochemistry at Brown and will be meeting with our first-year students this month. The Accornero Lab aims at understanding the mechanisms underlying heart and skeletal muscle diseases with the goal of developing new therapeutic strategies for myopathies. The group is particularly interested in targeting RNA-binding proteins to modulate the expression of pathologic genes during stress challenges. Welcome, Dr. Accornero!

In the Spotlight:

PhD student Dominique Walker received a travel award to attend the Annual Biomedical Research Conference for Minoritized Scientists. Dominique will be traveling to Phoenix, AZ this month to give an oral presentation at the conference. Safe travels, Dom!

UPCOMING EVENTS

2023 - 2024 TSGP Seminar Series

Natalie Artzi, PhD

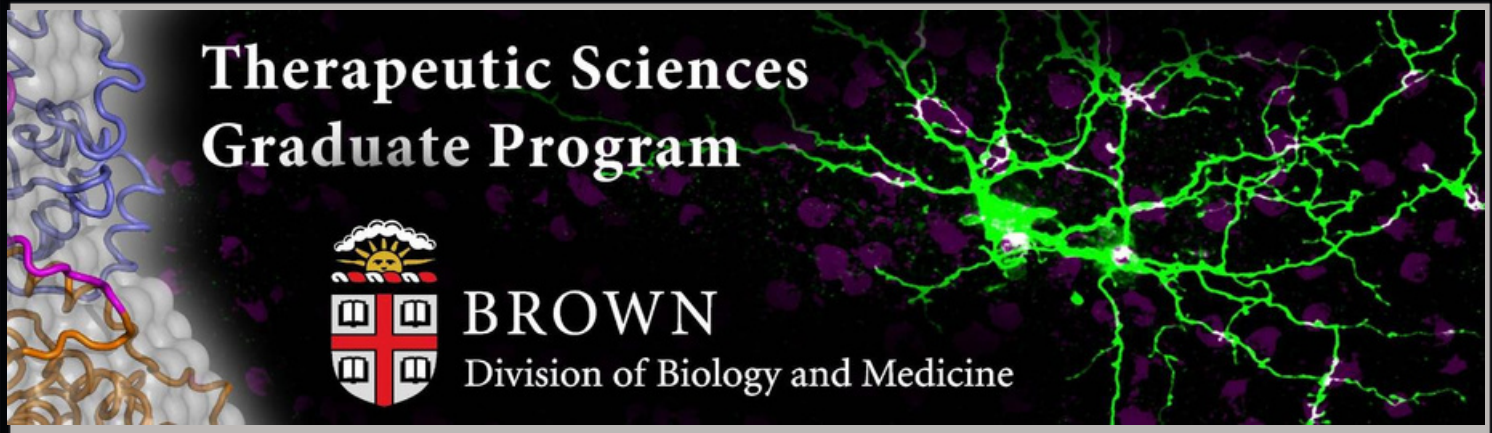
"Biomaterials for delivering on the promise of immunotherapy."

Friday, December 8, 2023
12:00 PM EST
Laboratories for Molecular Medicine (LMM 107)
70 Ship Street, Providence, R.I.

Associate Professor of Medicine, Harvard Medical School
Principal Research Scientist, Massachusetts Institute of Technology
Associate Faculty, Wyss Institute for Biologically Inspired Engineering
Associate Member of the Broad Institute of Harvard and MIT
Researcher, Department of Medicine, Brigham and Women's Hospital
Co-founder, BioDevekr

Abstract:

Immunomodulatory therapies have advanced to clinical trials over the past decade for the treatment of a range of diseases and disorders, from cancer to diabetes to transplant rejection. However, the efficacy of these therapies remains limited, as challenges associated with off-target drug toxicity, poorly controlled drug pharmacokinetics, and an incomplete understanding of real-time therapy responses prevent effective therapeutic windows from being realized. Here, we highlight some of our work on the design, fabrication, and characterization of biomaterial-based delivery technologies for the controlled delivery of immunotherapies and for the non-invasive monitoring of their associated immune responses for the treatment of cancer and autoimmune disease. We show that the design of materials and their delivery context can influence therapeutic outcomes and alter the spatiotemporal characteristics of the incited immunomodulatory responses. By adroitly designing and utilizing our material delivery platforms, we can deliver immunotherapies with tailorable pharmacokinetics and enhanced efficiency to improve long-term therapeutic outcomes and tolerability, and enable studying basic questions in immunobiology as we seek to generate a 'living' therapeutics.



PhD Thesis Defense Presentation

Caitlin Hopkins

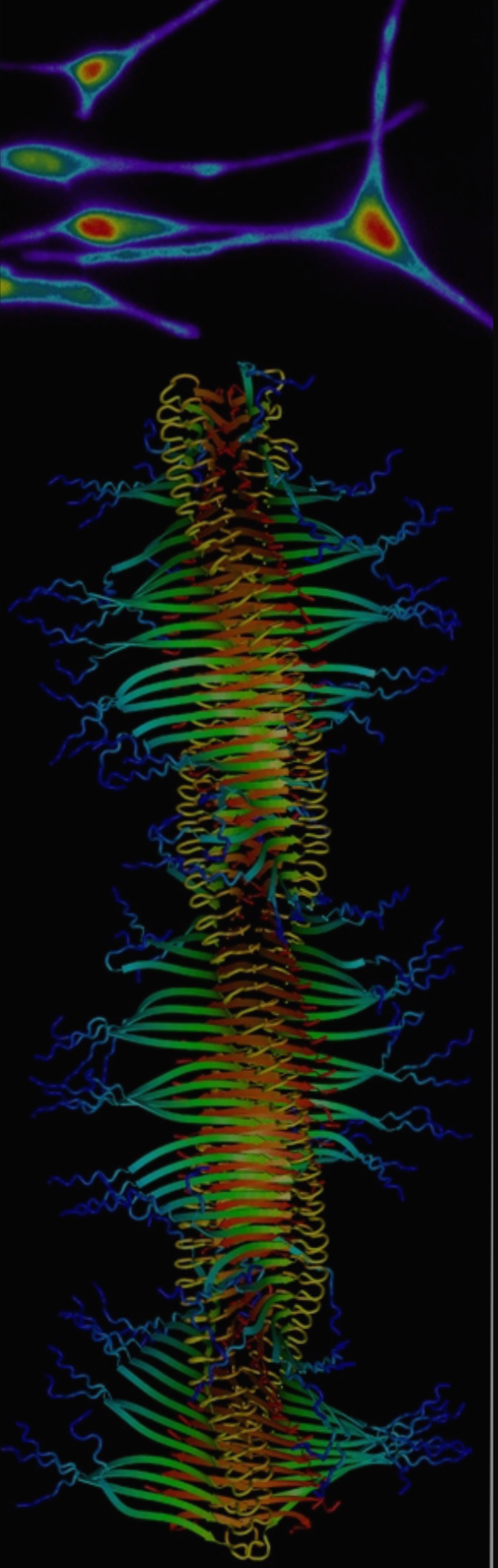
Advisor: Dr. Jeffrey Morgan

"TGF-β1 requires IL-13 to sustain collagen accumulation and increasing tissue strength and stiffness."

Friday, December 15, 2023
10:00 AM EST

Location: Barus and Holley 190

Via Zoom: https://brown.zoom.us/j/94319551926



Training Opportunities for TSGP Trainers

These trainings are all designed to help faculty become effective research mentors. Please see the links below!

- https://ctsi.umn.edu/training/mentors/mentor-training
- https://advancectr.brown.edu/events-training/mentoring-training-program (Also please get in touch with Emily Mercer (emily_mercer@brown.edu) regarding the Advance-CTR Mentoring Training Program dates)
- https://cimerproject.org/training/
- https://www.training.nih.gov/events/

If you have something you wish to highlight in the newsletter, please email ruth_mattson@brown.edu


HAPPY
THANKS
GIVING