

Hinton Lab

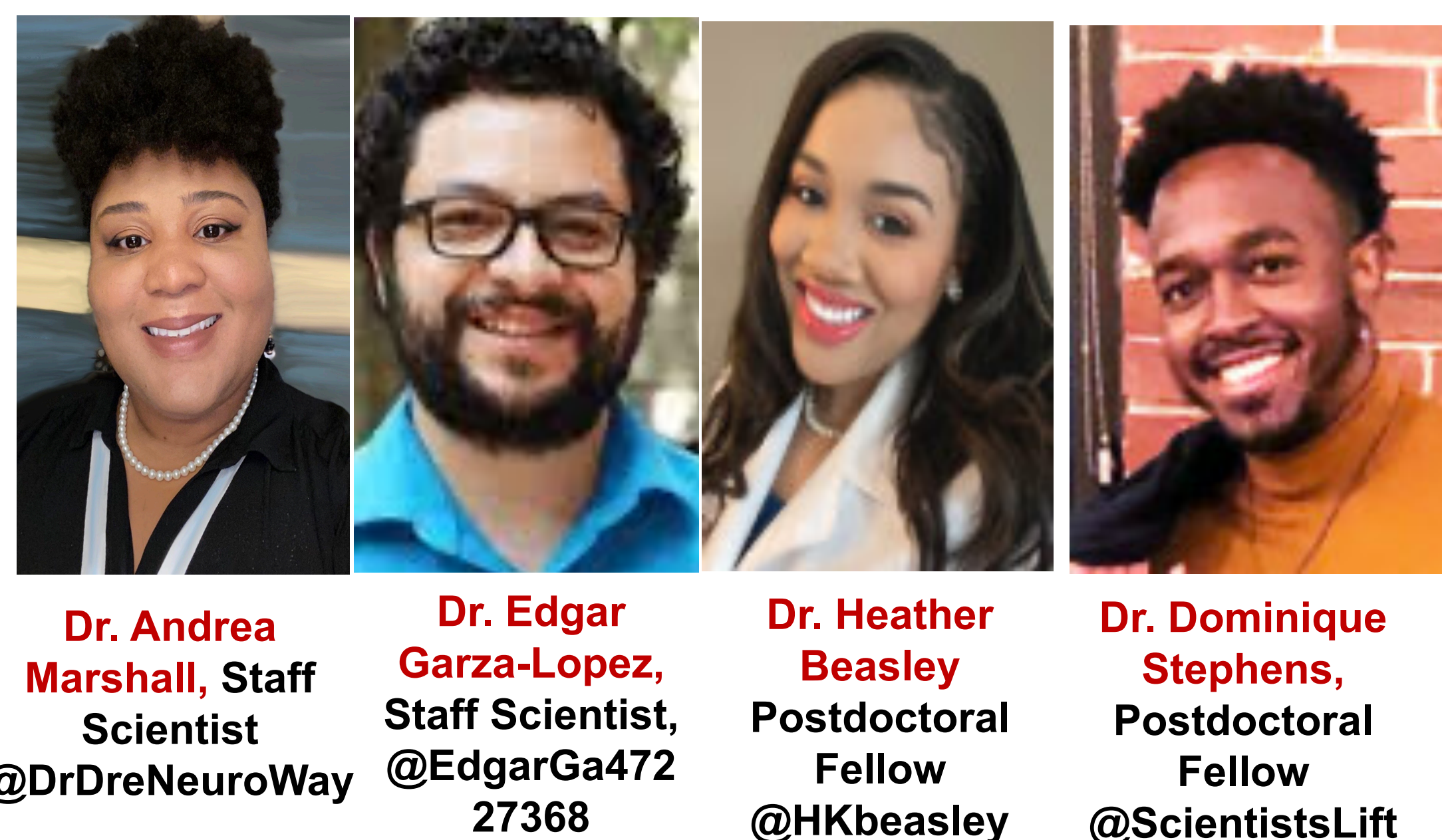
Assistant
Professor (Tenure
Track), Molecular
Physiology &
Biophysics,
Vanderbilt
University



We are a diverse group of scientists with a **research vision** of using a broad range of tools to explore mechanisms that regulate molecular transfer between and changes in morphology of the mitochondria and endoplasmic reticulum (ER) and how these mechanisms are altered during the pathophysiological states of diabetes, obesity, and cardiovascular disease.



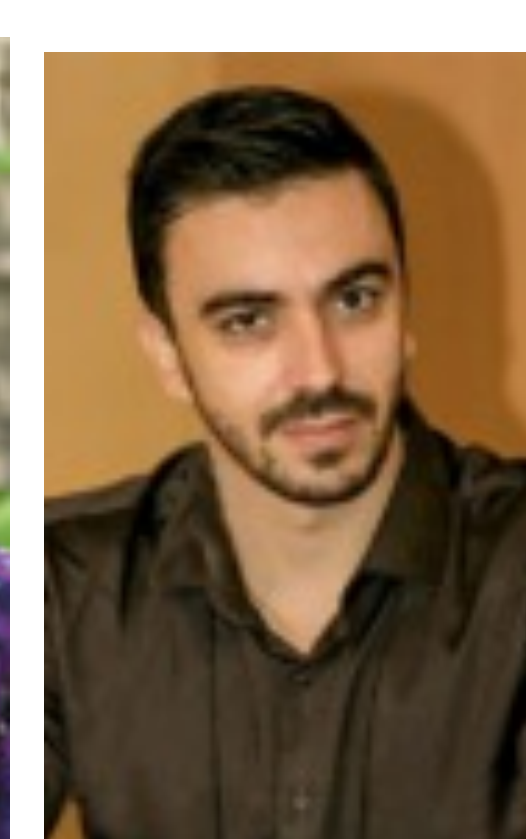
Our Laboratory



Dr. Andrea Marshall, Staff Scientist
@DrDreNeuroWay
Dr. Edgar Garza-Lopez, Staff Scientist, 27368
@EdgarGa472
Dr. Heather Beasley, Postdoctoral Fellow
@HKbeasley
Dr. Dominique Stephens, Postdoctoral Fellow
@ScientistsLift



Dr. Zer Vue, Postdoctoral Fellow, @ZerVue



Dr. Estevao Scudese, Visiting Postdoc, @DrScudese



Dr. Prassanna Katti, Visiting Faculty Scholar
@KattiiPrasanna



Dr. Clintoria Williams, Visiting Faculty Scholar
@Clintoria



Amber Crabtree, Graduate Student
@CrabRoll



Chanel Harris, Graduate Student



Kit Neikirk, Postbacc, @NeikirkKit



Sasha Manus, Postbacc



Larry Vang, Research Technician



Dr. Neng Vue, Scientific Artist

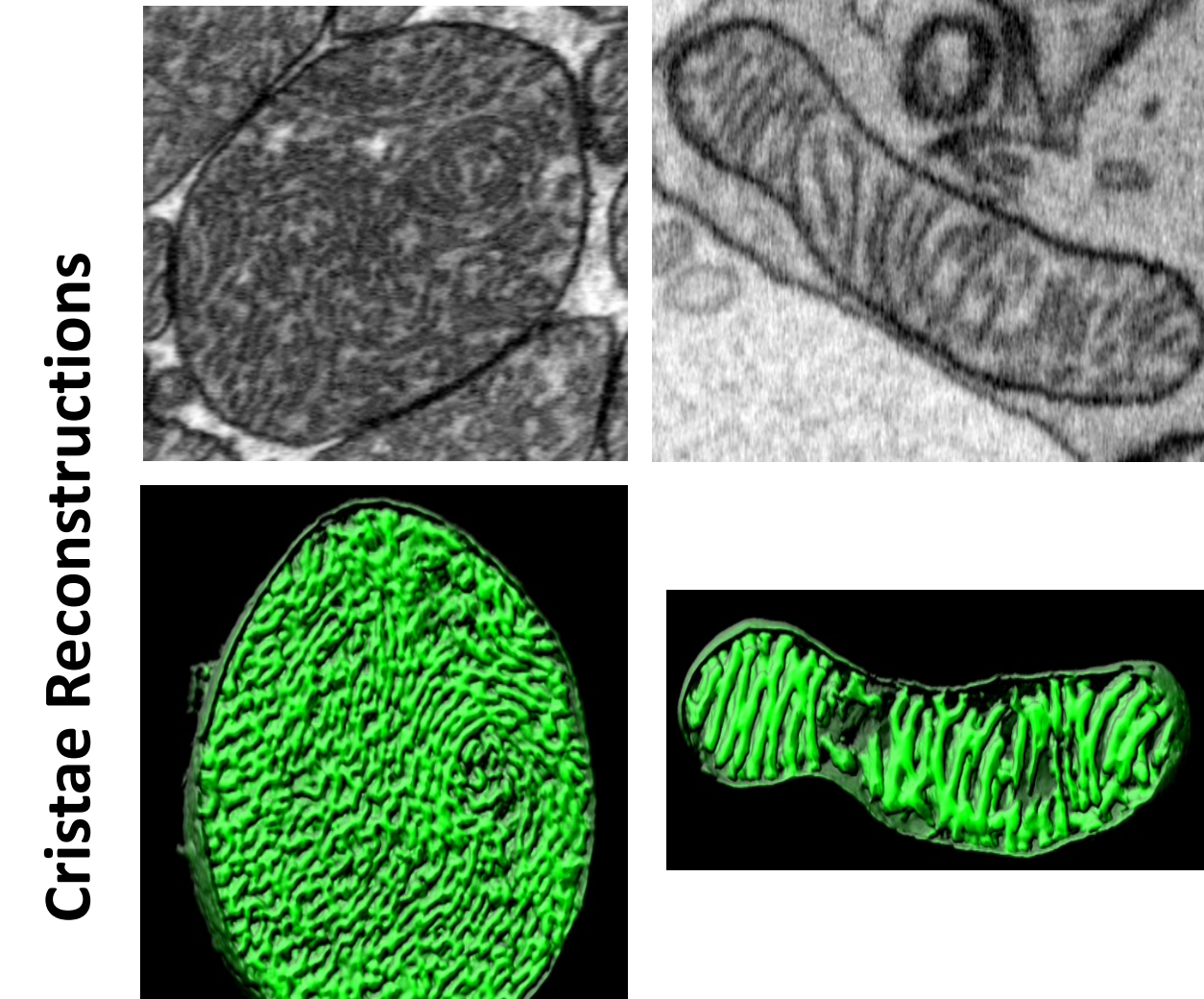
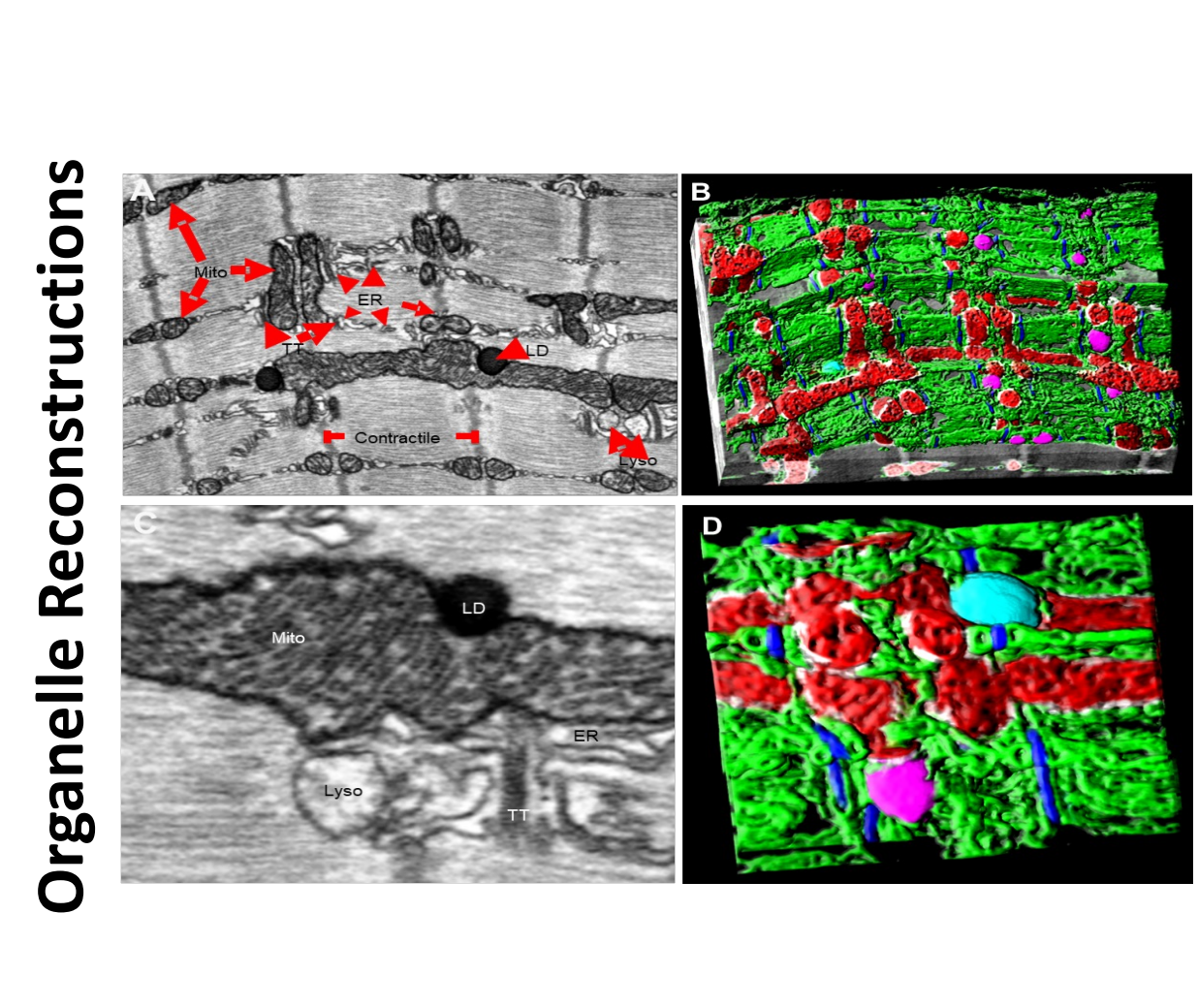
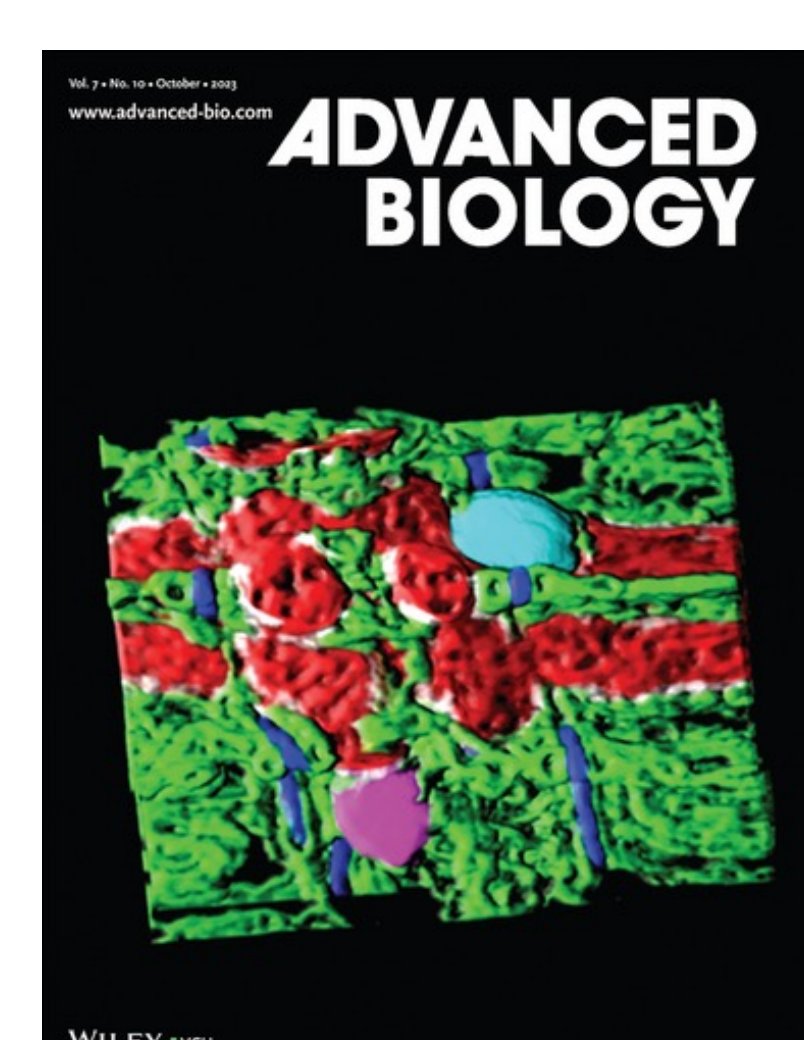
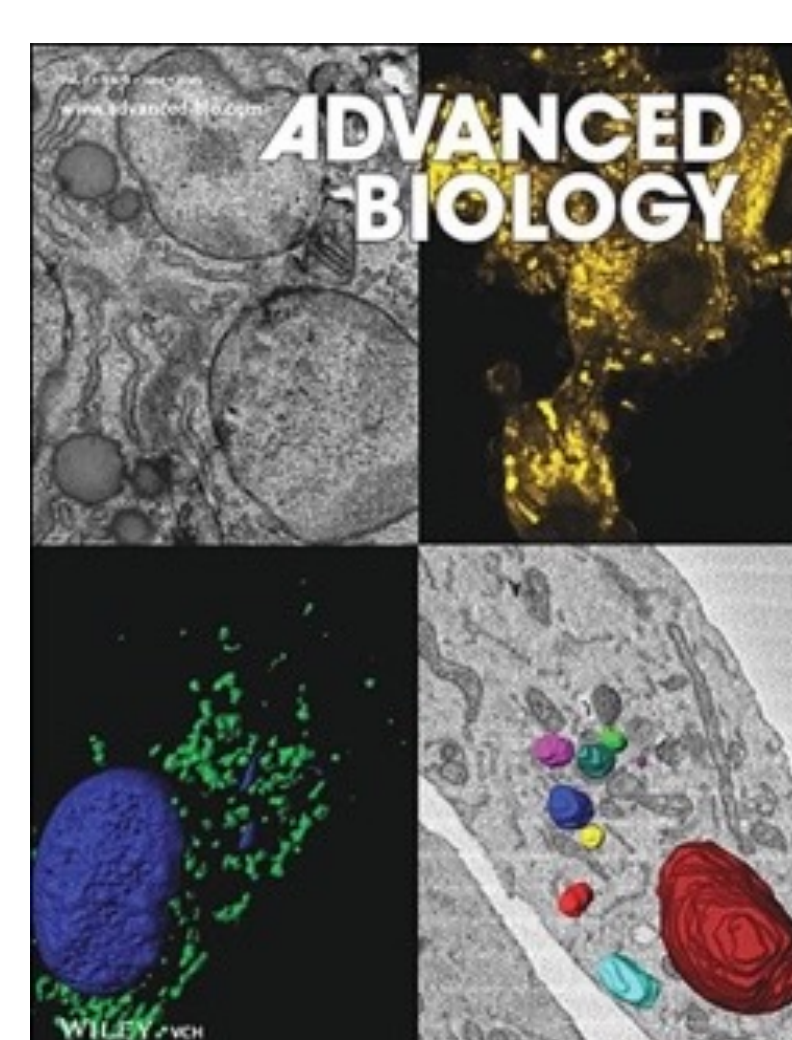


Bryanna Shao, Research Intern, @bryanna_ys

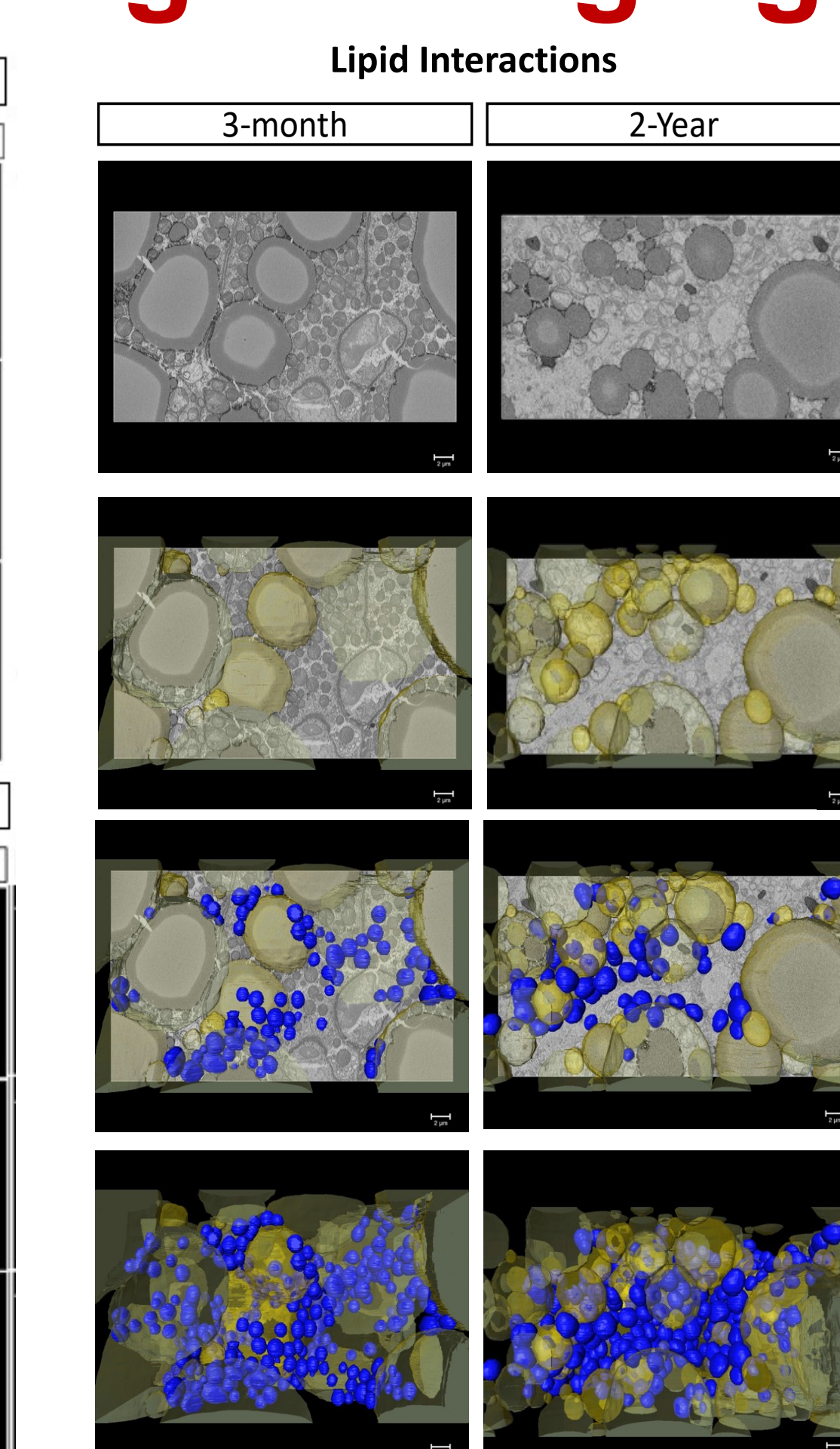
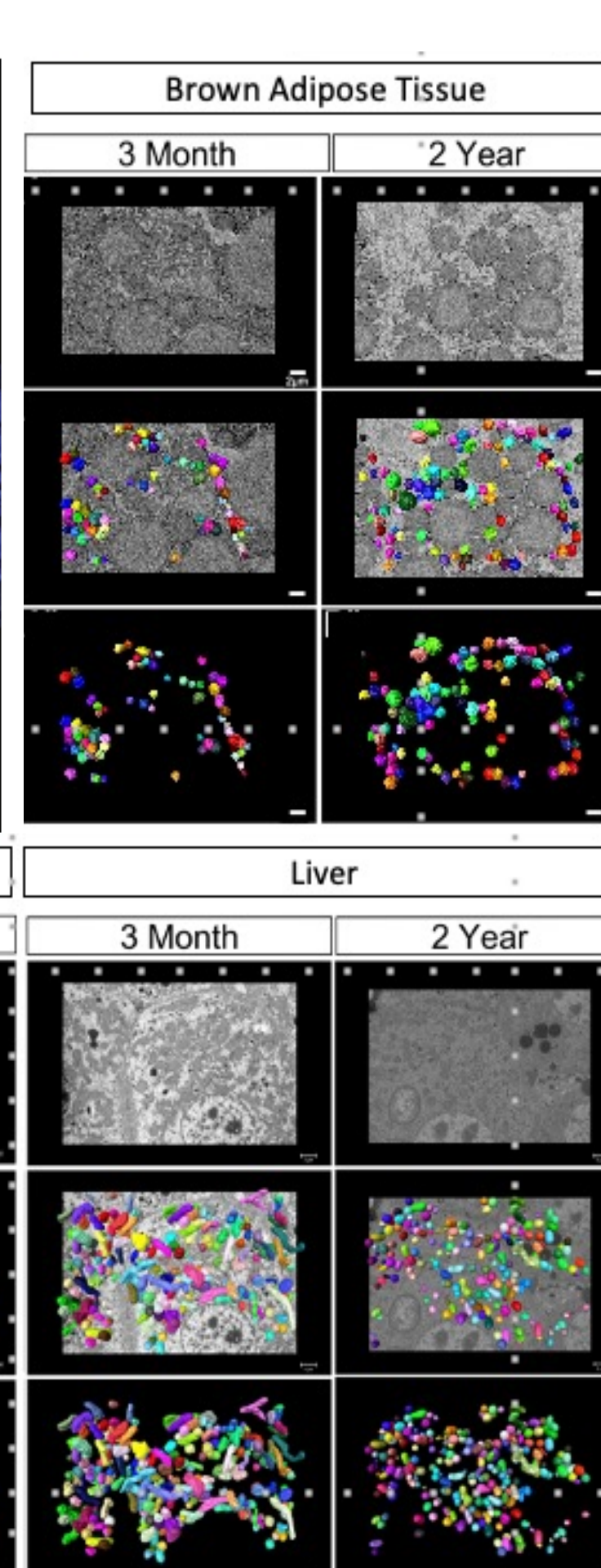
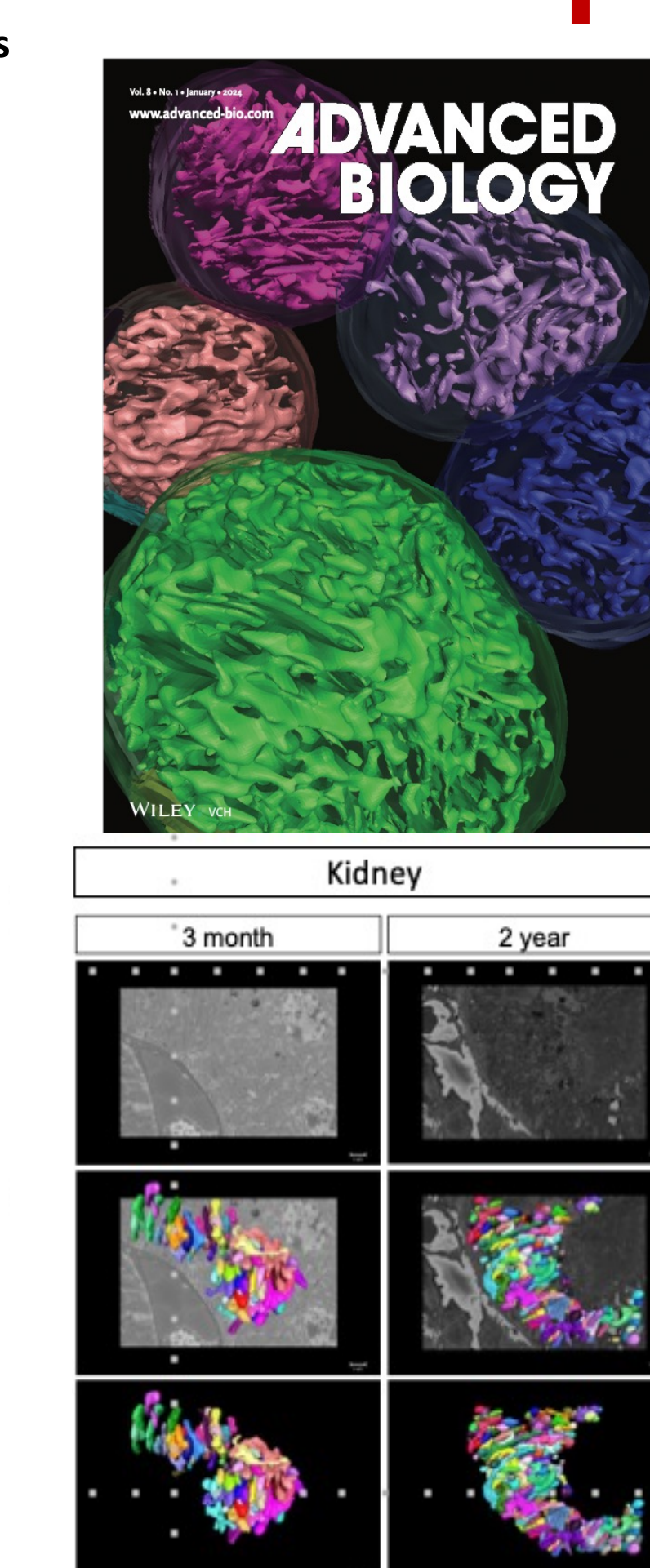
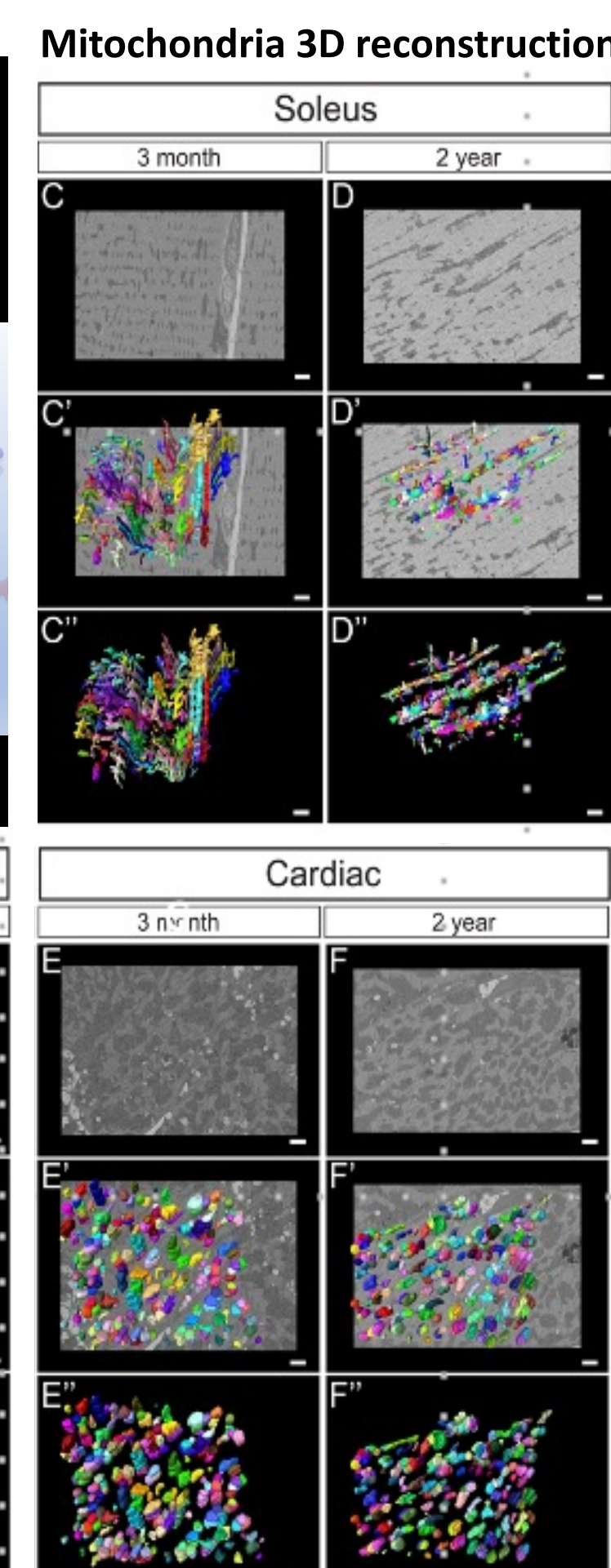
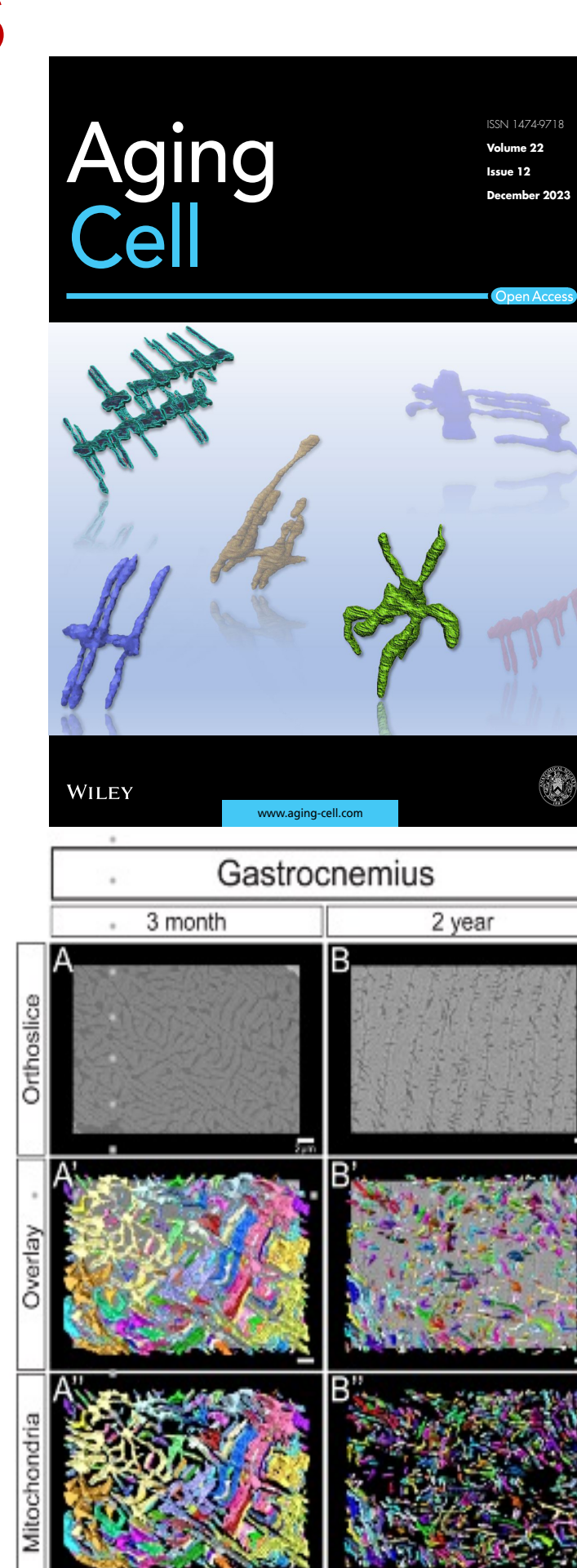


Undergraduates

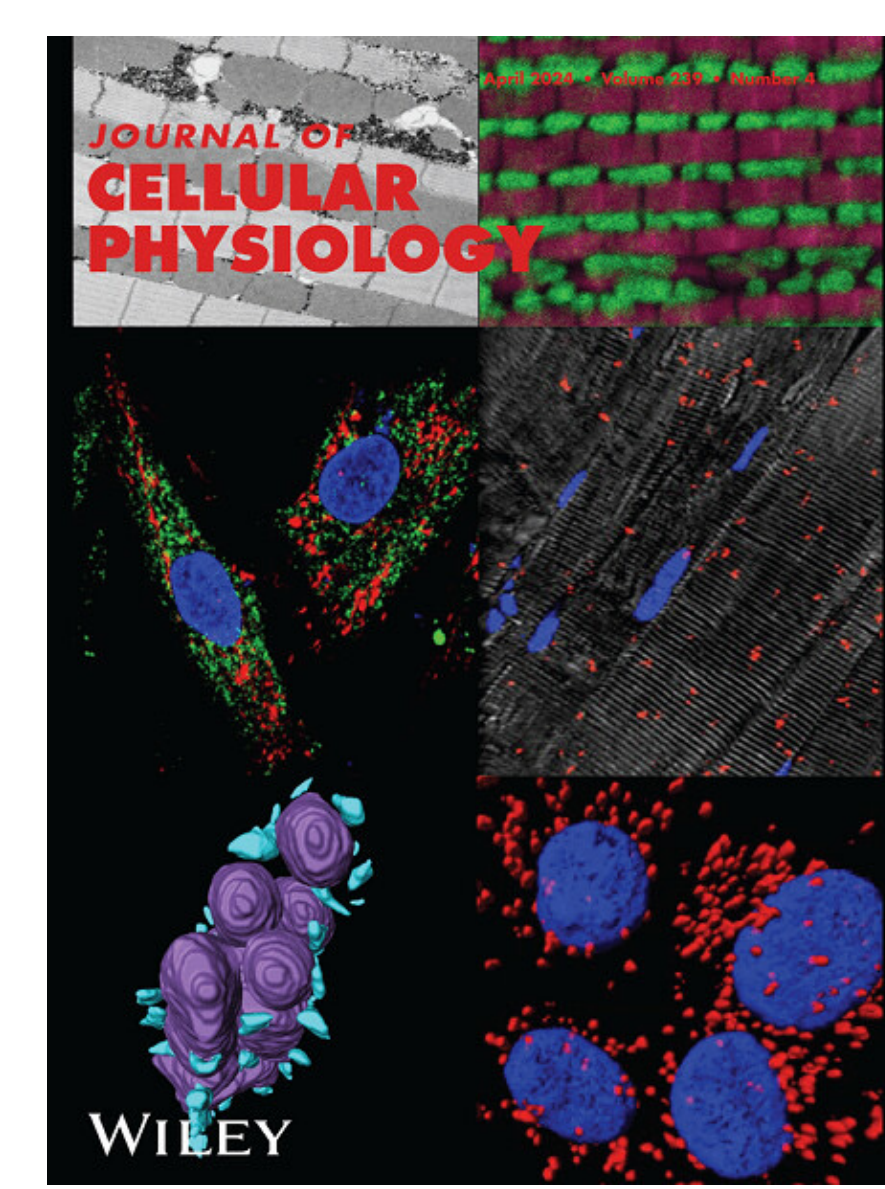
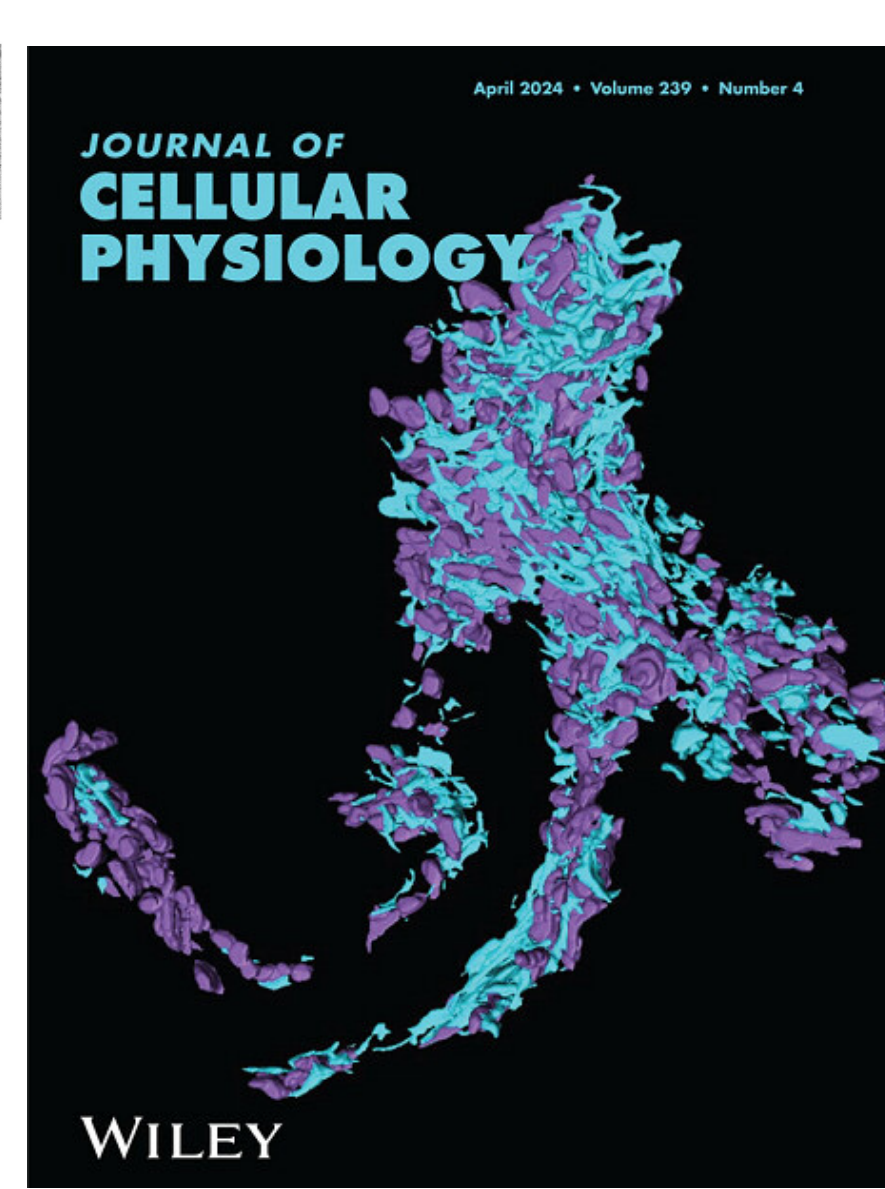
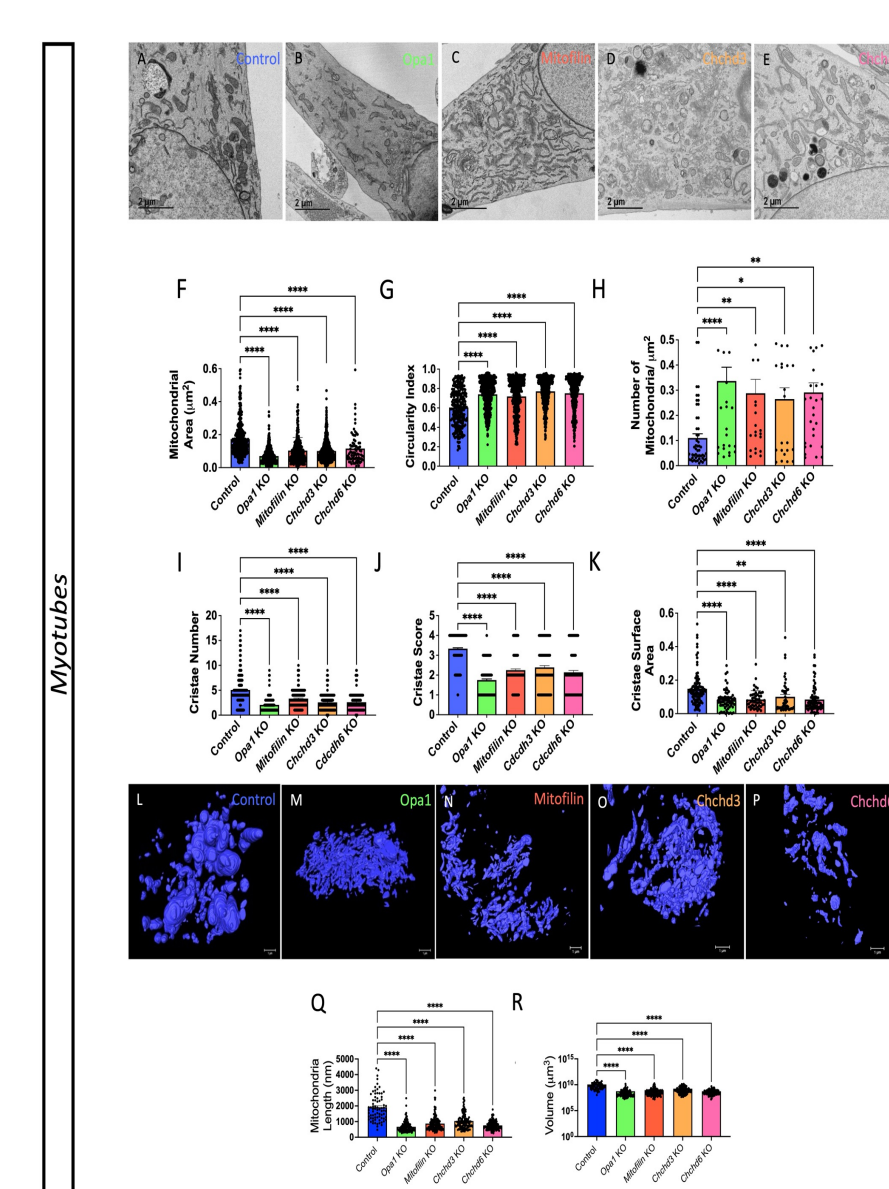
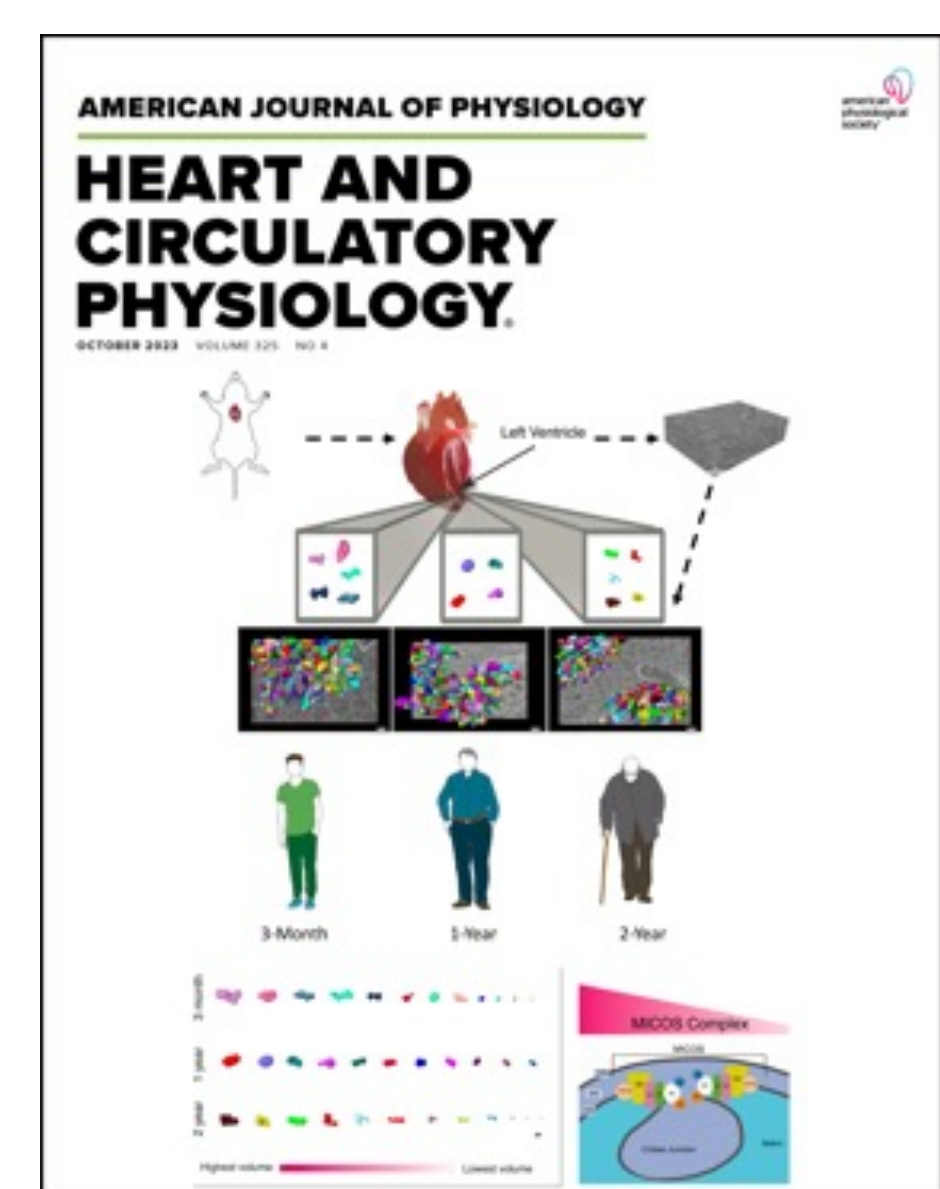
We have developed methods to optimally prepare and quantitatively define mitochondria and other organelles



We use 3D reconstruction of mitochondria and cristae to show murine tissue-dependent changes in aging



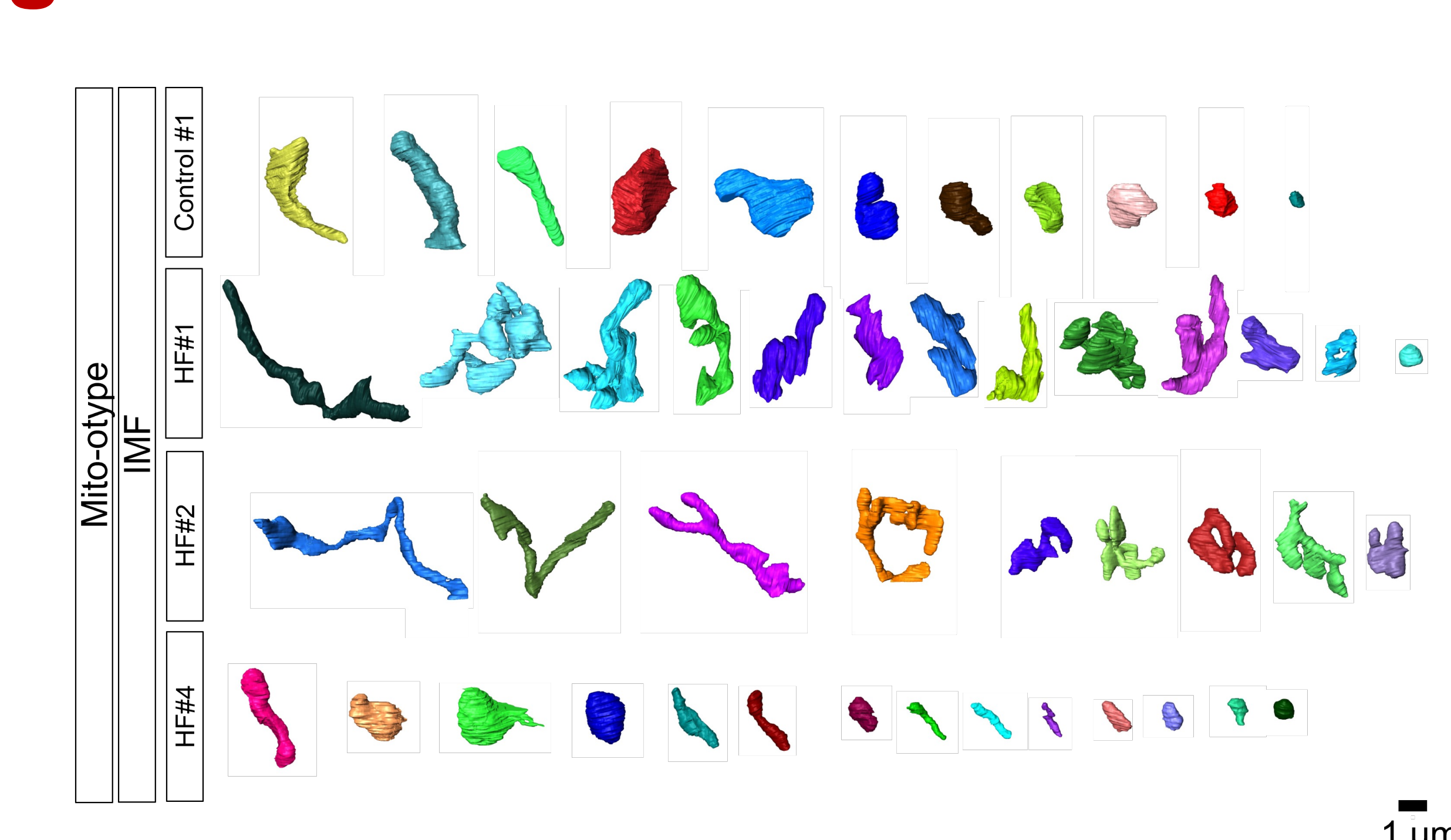
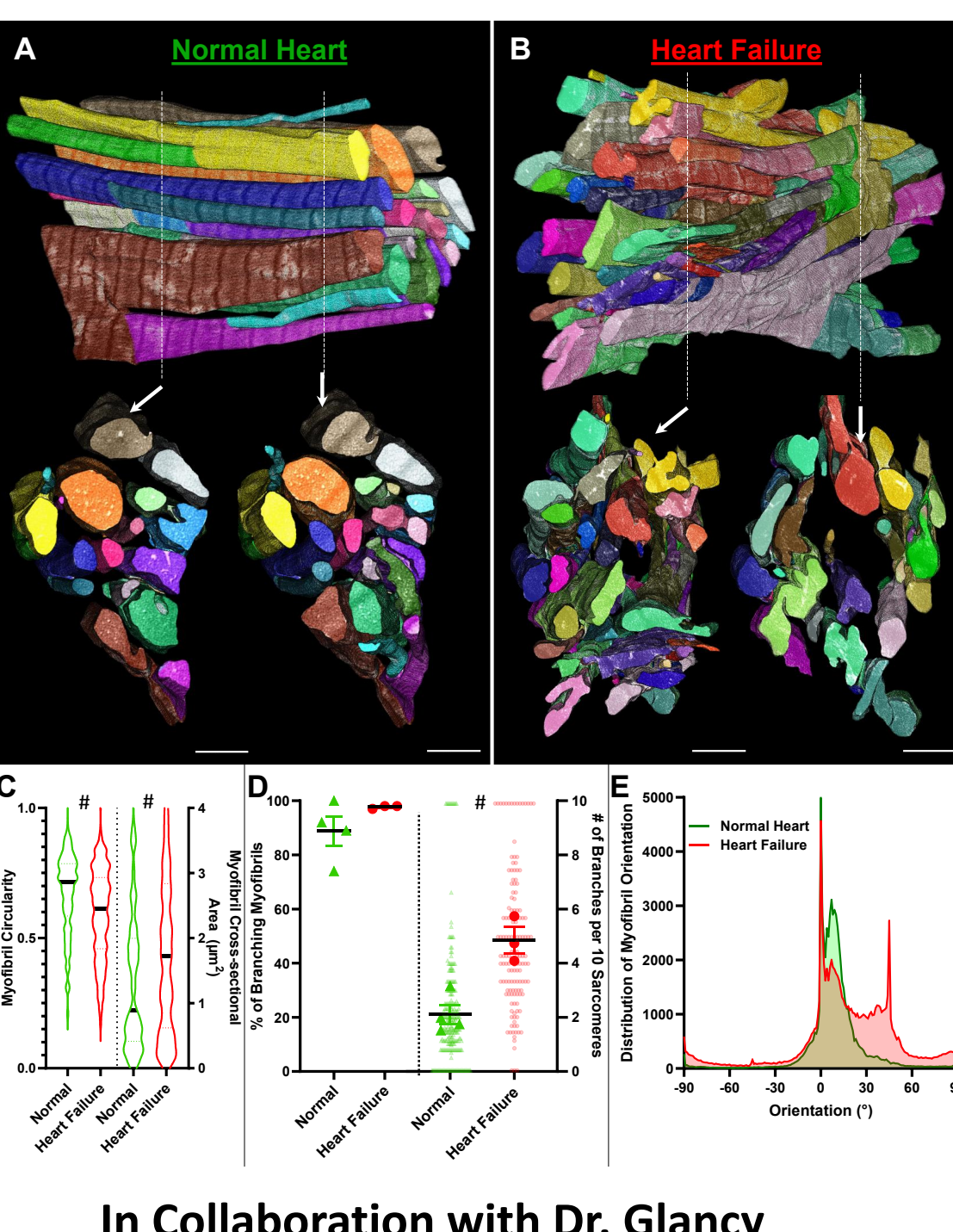
We are showing how the MICOS complex and OPA1 may be an effector in age-related mitochondria changes



We are leading diversity, equity, and inclusion across the country in STEMM through publications that propose solutions in career development and STEMM education



We are looking at how organelles and fibers 3D structure changes in human tissue and diseases



Effective Mentorship and broader participation in STEMM via data-backed techniques: Hinton Lab Undergraduate Awards



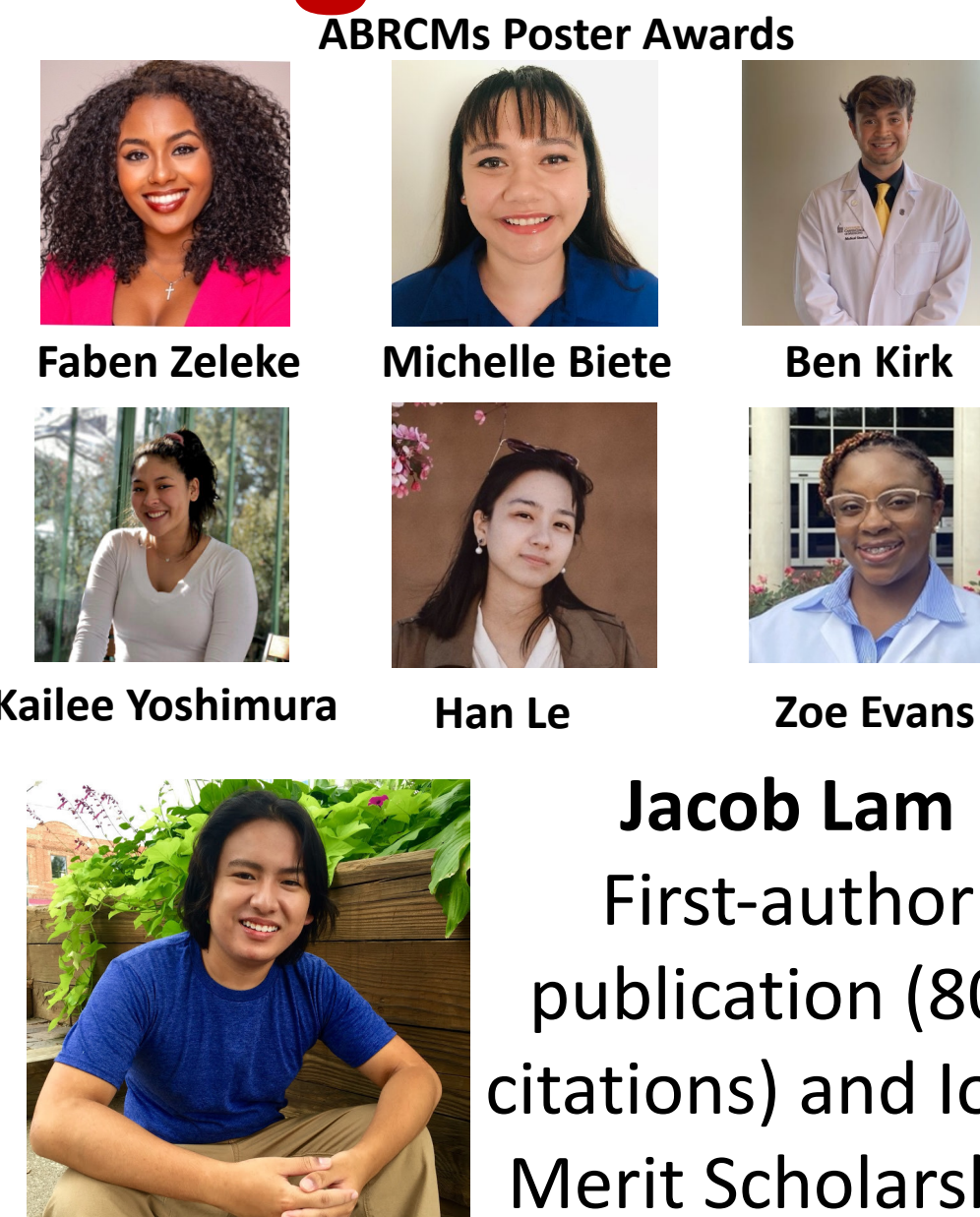
FULBRIGHT
U.S. Student Program

Margaret Mungai
Fulbright winner (Spain Research Award), ABRCMs Oral Presentation Award, Minority Health and Health Disparities International Research Training Award (Armenia), MD/PhD Training Program



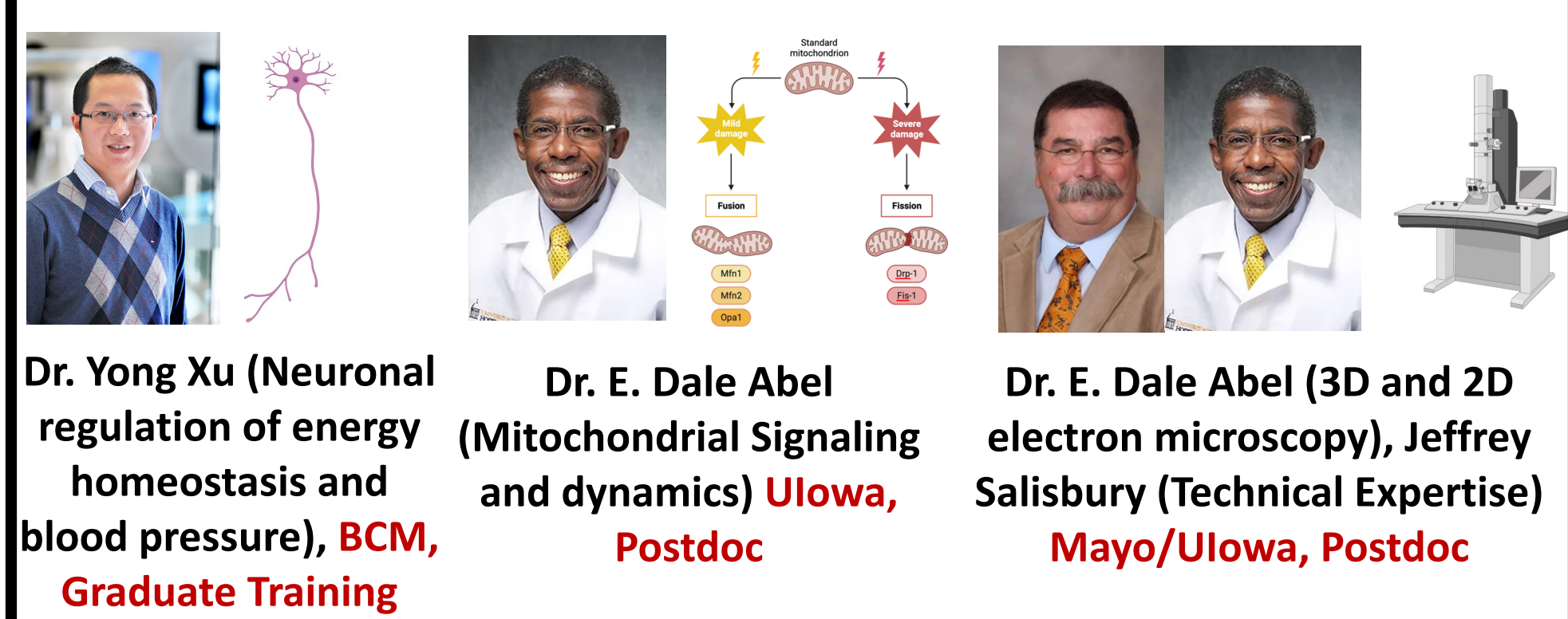
MARSHALL SCHOLARSHIPS

Kit Neikirk
Marshall Scholarship, 2nd Place Undergraduate Poster Award ASCB MAC/Education (2 times), ABRCMs Poster Presentation Award, Promega DOORs Scholar, Chancellor's Scholarship, 1st Place in Division for Translational and Clinical Pharmacology ASPET



Bryanna Shao
First-author publication

Dr. Hinton's Training



Dr. Yong Xu (Neuronal regulation of energy homeostasis and blood pressure), BCM, Graduate Training
Dr. E. Dale Abel (Mitochondrial Signaling and dynamics) UIowa, Postdoc
Dr. E. Dale Abel (3D and 2D electron microscopy), Jeffrey Salisbury (Technical Expertise) Mayo/UIowa, Postdoc

Collaborators: Long-Term



Project-Specific Funding Contact Us



Laboratory Social Media:
Lab X/Twitter: @AtHinton
Personal X/Twitter: @phdprotein86
LinkedIn: <https://www.linkedin.com/in/biogee>
k26/
Email: antentor.o.hinton@Vanderbilt.edu