2024-2025 EAGLETON SCIENCE AND POLITICS FELLOWS

Science for the Common Good

Executive Science Fellows

ELLENORE CRAINE, PhD

University of Alabama at Birmingham – Biochemistry

NJ Department of Environmental Protection
Supervisor: Lori Lester, Chief, Bureau of Risk Analysis
Area of Impact: Designing a protocol for the identification and replacement of lead service lines

WALKER GOSRICH, PhD

University of Pennsylvania, Mechanical Engineering

NJ Office of Innovation
Supervisor: Graham Simpson, Data & Policy Team
Area of Impact: Policy research and analysis to inform state AI regulation and support enforcement of existing regulations and responsible implementation of AI

UCHENNA ORJI, MD

Rutgers Robert Wood Johnson Medical School

NJ Department of Education
Supervisor: Luiz Pereira, Director, Office of Student Support Services
Area of Impact: Develop training modules to help educators and staff better identify and report cases of child abuse and neglect

JUSTIN WANG, PhD

The Scripps Research Institute – Molecular and Cell Biology

NJ Department of Children and Families
Supervisor: Pamela Lilleston, Director, Office of Applied Research & Evaluation
Area of Impact: Evaluating policy strategies to reduce child poverty and conducting a quarterly research seminar for child welfare experts

Legislative Science Fellows

SADIE NOVAK, PhD

Syracuse University – Chemistry

NJ Senate Majority Office
Supervisor: Matthew Peterson, Associate Executive Director/General Counsel
Area of Impact: Senate Environment and Energy Committee; Policy research and analysis of resilient beach management strategies and DIY plug-in solar panels

JULIA PALMUCCI, PhD

Duke University – Molecular Genetics and Microbiology

NJ Assembly Minority Office
Supervisor: Natalie Ghaul, Legislative Director, Assembly Minority Office
Area of Impact: Providing informed and objective analysis of proposed legislation for Assembly members, with a particular focus on health, science, and technology issues

Climate Action Science Fellows

FLORENCE DOU, PhD

University of Washington – Inorganic Chemistry

NJ Board of Public Utilities
Supervisors: Bence Oliver, Deputy Director of Distributed Energy and Diane Watson, Research Scientist
Area of Impact: Solar for All (deploying solar for low-income and disadvantaged communities) and the Competitive Solar Incentive Program (grid supply solar and non-residential solar)

AILEEN EAGLETON, PhD

Dartmouth College – Materials Chemistry

NJ Board of Public Utilities
Supervisor: Jonathan Gordon, Deputy Director, Office of Clean Energy and Equity
Area of Impact: Urban Heat Island Pilot Program: addressing heat effects in overburdened municipalities by implementing interventions like cool roof and pavement coatings

Executive Science Fellows

ELLENORE CRAINE, PhD

Dr. Ellenore Craine is an analytical biochemist with a background in neuroscience, biochemistry, and immunology. She earned her BS in Neuroscience from Rhodes College and her Ph.D. in Biochemistry and Molecular Genetics from The University of Alabama at Birmingham. Over the last several years of her scientific career, she has trained in proteomics and glycomics analysis, where she studied O-glycosylation patterns of the antibody IgA1 in the context of the autoimmune disease, IgA Nephropathy. During this time, she developed a mass spectral workflow to analyze the glycoprofiles in the IgA1 hinge region, which enabled the first direct assessment of serum IgA1 O-glycoform phenotypes found in IgA Nephropathy patients. Her pioneering methods could potentially serve as an alternative noninvasive diagnostic screening tool for IgA Nephropathy, potentially improving care for thousands of at-risk patients.

WALKER GOSRICH, PhD

Walker Gosrich earned his PhD at the University of Pennsylvania studying artificial intelligence (AI) and robotics in 2024. While at Penn, he led the Penn Science Policy and Diplomacy Group (PSPDG), which works to engage scientists with science policy, diplomacy, and communication throughout Philadelphia. His policy work has spanned AI equity in housing and lending, generative AI policy, the spread of disinformation online, and other topics such as gerrymandering and equitable tree-cover. Walker earned his bachelor's degree in Mechanical Engineering from the University at Buffalo, and originally hails from upstate New York. In his spare time, he sings with the Chestnut Street Singers in Philly and is often outdoors exploring local parks.

UCHENNA ORJI, MD

Dr. Uchenna Orji, MD, MPH, holds an MPH in epidemiology from Drexel Dornsife School of Public Health and a bachelor's degree in psychology from Princeton University. Uchenna graduated from Rutgers Robert Wood Johnson Medical School in May 2024. In his academic research, Uchenna has investigated epidemiological factors of school shootings and the effects of "stereotype threat" on Black college students. He has also conducted research with physicians at institutions like Gold Coast Spine in Australia and the Smilow Center for Translational Research at Penn Medicine. Uchenna has mentored students and advocated for student health during the COVID-19 pandemic and the 2013 meningitis B outbreak at Princeton University. His hands-on community health experience includes roles such as a scribe at a low-income health clinic and participation in initiatives like the Virtua Health Mobile Food Market in Camden. Uchenna has a special interest in and experience with teens, education, and mental health. Outside of his professional pursuits, Uchenna is passionate about playing sports, traveling, watching anime, and comedic writing.

JUSTIN WANG, PhD

Justin Wang holds a PhD in molecular and cell biology from the Scripps Research Institute, where he researched translational regulation and therapeutic targets for breast cancer. Previously, he worked at Kindred Biosciences developing quality assays to assess pet biologics. At Scripps, Justin engaged in educational outreach with the Community Teaching Lab, helped start a program for community college students, and interned with the Scripps Research Translational Institute to understand maternal health determinants. He also developed an interest in student advocacy and presided over the Scripps Graduate Student Council, working with Scripps administration to improve graduate student policies. Justin most recently joined the Board on Higher Education and Workforce at the National Academy of Sciences as a 2024 Mirzayan Fellow. There, Justin planned and executed programs related to well-being, mentorship, and professional development in academia; academic labor and unionization; minority-serving institutions; and students with disabilities.

Legislative Science Fellows

SADIE NOVAK, Ph.D.

Sadie Novak earned her PhD in Chemistry at Syracuse University, studying under Dr. James Hougland. Her research investigated the intracellular localization and trafficking mechanisms of ghrelin O-acyltransferase (GOAT), an enzyme that is involved in diverse physiological pathways and is a drug target for diseases such as diabetes, obesity, and addiction. During her training, she had the opportunity to teach and mentor a range of undergraduate, elementary, and high school students. Throughout her teaching, she centered the importance of accessibility in STEM education in her curriculum and methods, and she earned two teaching awards as a result. While at Syracuse University, she was also an organizer and contributed to the unionization of Syracuse Graduate Employees United with SEIU Local 200United in 2023. She continued her organizing work when she was elected to the Bargaining Committee and helped to negotiate and ratify the Union's first collective bargaining agreement in 2024. Her career goals seek to draw on her skills and experience gained as a researcher, teacher, and organizer and contribute to the creation of effective and accessible policy.

JULIA PALMUCCI, Ph.D.

Julia Rose Palmucci graduated magna cum laude from Gettysburg College with a Bachelor of Science in Biology in May 2018. Julia began her PhD at Duke University in the Department of Molecular Genetics and Microbiology in August 2018. Shortly after, she joined the laboratory of Dr. John Perfect to research fungal pathogenesis and novel antifungal therapies. During her graduate career Julia published a review on the complex relationship between anticancer therapeutics and fungal infections, and a research article investigating the influence of a ketogenic diet on antifungal drug efficacy. Julia has a passion for science policy and was elected the Director of External Advocacy for the Duke University Graduate and Professional Student Government in 2022, where she coordinated voter registration efforts and successfully advocated for a cost-of-living adjustment for doctoral student stipends. She defended her dissertation on novel antifungal therapeutic strategies in May 2024.

Climate Action Science Fellows

FLORENCE DOU, Ph.D.

Florence Dou was born and raised in Trinidad and Tobago. In 2016, she received her B.S. in Chemistry from Trinity College, where she worked as an undergraduate researcher synthesizing organometallic complexes as biomimetics of Alzheimer's plaque. Next, she worked at the Dana-Farber Cancer Institute, supporting several research projects on therapeutics discovery for metabolic disease. In 2023, she received her Ph.D. in Materials Chemistry from the University of Washington, where she studied semiconductor nanoparticles as photocatalysts for chemical manufacturing. She was also elected to several leadership positions such as Clean Energy Institute Research Fellow and Social Impacts Officer of Global Renewables Infrastructure Development. Her personal and professional background have bolstered her passion for climate justice and motivates her desire to work at the intersection of energy research and policy.

AILEEN EAGLETON, Ph.D.

Aileen Eagleton completed her Ph.D. in Chemistry at Dartmouth College in August 2023. Her research focused on developing scalable strategies for incorporating conductive nanomaterials onto fabrics to form electronic textile sensors capable of detection and remediation of environmental hazards. The technology she helped establish provides a platform for smart protective personal equipment and environmental monitoring. In addition to her research, Aileen served as a community organizer, advancing social justice initiatives such as establishing mutual aid networks to improve food and healthcare access for disadvantaged students and community members on campus.