



Institute of Plant Breeding, Genetics and Genomics

College of Agricultural & Environmental Sciences
UNIVERSITY OF GEORGIA

**PBGG would like to extend a very warm welcome
to our new graduate students for FALL 2024:**

Abigail Burch

Tanner Hamerling

Rose Muruo

Tosin Olorunwo

Pallavi Rathore

Achyut Duwadi

Forrest Hanson

Zack Myers

Anne Collart Pavia

Leah Tomey



Abby Burch

PHD student

Ms. Abby Burch is a PhD student in IPBGG and lab manager working with Dr. Josh Clevenger at HudsonAlpha Institute of Biotechnology – Wiregrass. Her work includes leading the community-led molecular breeding program, including genotyping and selection using low coverage whole genome sequencing and back cross selection in peanut varieties.

She obtained her Bachelor of Science degree from Troy University (2018) in Biology with a concentration in Biomedical Sciences. She worked in medicine before taking the position with HudsonAlpha – Wiregrass (2023) where she fell in love with the world of plant breeding.

Abby's lab and office are located in Josh Clevenger's lab at HudsonAlpha in Alabama. Please help us welcome her to

IPBGG! Her email address is Abigail.Burch@uga.edu.



Achyut Duwadi
PHD student

Mr. Achyut Duwadi began his PhD in Plant Breeding, Genetics, and Genomics in August 2024. He is a research assistant in Dr. Patrick Corner's lab, focusing on GBS mapping of black rot resistance in Muscadine germplasm, mapping quantitative traits in bi-parental mapping populations, and analyzing pecan scab resistance.

Previously, during his MS degree at Missouri State University under Dr. Hwang's supervision, Achyut studied cold hardiness and disease resistance traits in wine grapes, leading to the discovery of a resistant locus. He also worked on identifying markers for marker-assisted selection.

Achyut earned his bachelor's degree in agriculture from the Agriculture and Forestry University in Nepal. Outside the lab, he enjoys outdoor activities such as trekking, hiking, and playing soccer.

Please join us in welcoming Achyut to IPBGG! His lab is located on the Tifton campus in the Horticulture building, Rm 222. His email is Achyut.duwadi@uga.edu.



Tanner Hamerling
MS student

Mr. Tanner Hamerling is a Research Assistant in the IPBGG Master's program for 2024. Under Dr. John Ruter, his responsibilities include breeding for compactness and flower color in mountain mint and serving as the student curator for UGA's trial gardens. Tanner received his Bachelor of Science degrees in Horticulture, with a concentration in production systems and entrepreneurship, and Plant Biology from North Carolina State University in 2024.

His previous employment experience includes a summer internship with Bailey Innovations in Georgia as a plant breeding and production intern in 2024, serving as an undergraduate lab and field technician for the Sweetpotato breeding program at NC State University from 2022 to 2024, completing a plant curation internship with the Arnold Arboretum of Harvard University in Massachusetts in 2023, and undertaking a research internship with the Mountain Crop Improvement Lab focusing on tissue culture propagation strategies at NC State University in 2022.

Let's welcome Tanner to IPBGG! His lab is located at Miller Plant Sciences Room 1102, and his email is Tanner.Hamerling@uga.edu



Forrest Hanson
PHD student

Mr. Forrest Hanson is a PhD Graduate Research Assistant in the IPBGG studying in Dr. Zenglu Li's soybean breeding lab.

He holds a Bachelor of Science degree in Crop and Weed Science from North Dakota State University (NDSU; 2022) and a Master of Science degree from NDSU (2024), specializing in cultivar yield analysis, cultivar development, and genetic diversity quantification of the NDSU soybean breeding program.

Forrest's previous work experience involves crop scouting for an independent agronomist (2017-2021) as well as work as an undergraduate research assistant for NDSU's durum wheat breeding (2020) and soybean breeding (2022) programs.

Please help welcome Forrest to IPBGG! His workspace is located in CAGT Room 202 and his email is Forrest.Hanson@uga.edu.



Rose Muruo
PHD student

Ms. Rose Muruo is a Research Assistant in the IPBGG Ph.D. program working with Dr. Peggy Ozias-Akins and Dr. Akshaya Biswal. Her work will focus on peanut breeding with a key emphasis on peanut transformation for disease resistance.

Rose received her Master of Science in Biotechnology (2022) and Bachelor of Science in Biotechnology (2015) from Kenyatta University, Kenya. Her MSc thesis involved developing transgenic maize that is tolerant to drought stress.

Prior to joining UGA, she was working as a research assistant at the International Potato Center (CIP), Kenya, where she was involved in the development of transgenic potatoes that are resistant to late blight. Her experience also includes a laboratory technician role she held at the Institute of Biotechnology Research at JKUAT Nairobi and several research internships that honed her molecular biology skills. Rose is eager to apply her genetic engineering expertise to advance peanut breeding.

Let's welcome Rose to IPBGG! Her work space is in Tifton at NESPAL Rm. 306, and her email is rose.muruo@uga.edu

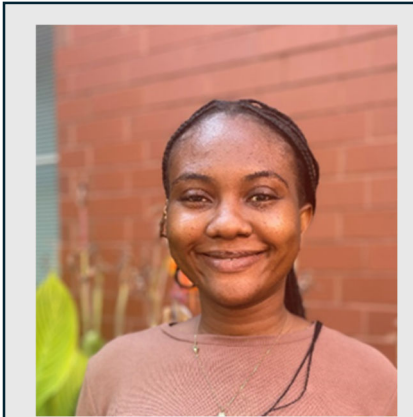


Zachary Myers
PHD student

Mr. Zack Myers is a student in the IPBGG PhD program, with Dr. Josh Clevenger serving as his major professor. He works in the Genomic Innovation Lab at HudsonAlpha Institute for Biotechnology conducting genotyping and trait discovery analyses on a variety of plant species. HE is interested in developing software tools to assist with trait mapping for breeders and other researchers.

Zack received a BS in Ecology and Evolutionary Biology from the University of California, Santa Cruz. He is a computational biologist with HudsonAlpha, and was previously a data wrangler with the ENCODE Data Coordination Center at Stanford University and a zoology lab technician at NASA-Ames Research Center.

Please help us welcome Zack to IPBGG! His email is Zachary.Myers1@uga.edu



Tosin Olorunwo
MS student

Ms. Tosin Olorunwo is a Research Assistant in the IPBGG Masters Program beginning Fall 2024, working with Dr. Esther van der Knapp.

Tosin's work includes Genetic characterization of fruit flavor in tomato. She received her Bachelor of Science degree at the Federal University Oye Ekiti in Crop Science and Horticulture in 2021.

Let's welcome Tosin to the Institute! Her lab is located in CAGT Room 124 in Athens and her email is tro25729@uga.edu.



Anne Pavia
PHD student

Mrs. Anne Collart Pavia is a Graduate Research Assistant in Dr. Robin Buell's lab where she is pursuing her Ph.D. in the IPBGG. She is using newly developed multi-omics approaches for a NIH project to identify and study genes and regulatory elements in the biosynthetic pathway that encode for natural medicinal compounds. The goal is to inform biosynthesis methods to sustainably produce these therapeutically active compounds.

Anne earned her B.S. in biochemistry with a minor in biology at Ave Maria University in South Florida. She was involved in a variety of undergraduate research projects, including biochemistry of the role of TREM2 in Alzheimer's disease (Dr. James Vranish); pharmaceutical

drug design for Alzheimer's disease (Dr. Anthony Barbosa); and ionic liquids (Dr. Patrick Hillesheim) where she worked for several years in the development, crystallography, and surface analysis of task-specific ionic liquids. Anne rediscovered her love of agriculture and genetics while working at Lipman Family Farms in R&D. After two years as a tomato breeding and plant pathology lab tech, she decided to pursue her graduate degree in Dr. Buell's lab at the University of Georgia.

Let's welcome Anne to PBGG! Her lab is located in CAGT 240 and her email is anne.collart@uga.edu



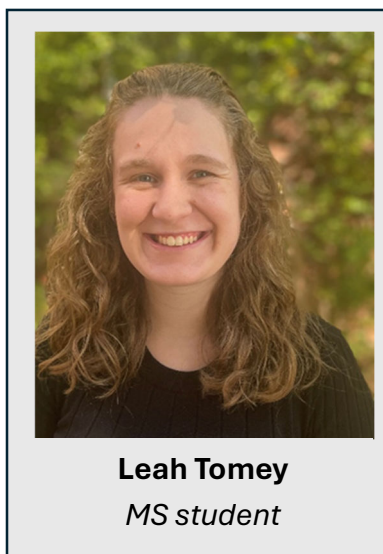
Pallavi Rathore
PHD student

Ms. Pallavi Rathore joins IPBGG this Fall as a PhD student in Dr. Cecilia McGregor's lab. Her research focuses on host-resistance and cultivar phenotyping against cucurbit anthracnose, specifically identifying sources of resistance in cucumber and watermelon. This work is crucial for developing robust cultivars and improving disease resistance in cucurbit crops.

Growing up in India where agriculture plays a central role in the economy, Pallavi was constantly surrounded by conversations about crop yields, pest issues, and cultivation practices. She has vivid memories of visiting cotton and sugarcane fields and learning about concepts like breeding and disease resistance, which sparked her interest in plant genetics.

Pallavi majored in Agriculture (Hons.) and specialized in Plant Breeding and Genetics at Punjab Agricultural University (PAU), India, followed by a MS in Plant Sciences with a concentration in Biotechnology at Tennessee State University.

Now at UGA, she is excited to apply her skills and knowledge in Dr. McGregor's lab. Please join us in welcoming Pallavi to PBGG! Her lab is in Pallavi.rathore@uga.edu.



Leah Tomey
MS student

Ms. Leah Tomey is a Graduate Research Assistant working on her Master's degree in Plant Breeding, Genetics, and Genomics. She is working in Dr. Robin Buell's lab on the Minimal Plant Genome project.

Leah received her Bachelor of Science in Biology with minors in Genetics and Applied Biotechnology from UGA (2024). While at UGA, Leah worked for Dr. Robin Buell as an Undergraduate Research Assistant, and this is where she developed an interest in plant genomics and the Minimal Plant Genome project.

Please welcome Leah to IPBGG! Her workspace is located at the CAGT 240 and her email is leah.tomey@uga.edu