Mentoring philosophy

My top mentoring priority is to provide an open, affirming, and encouraging environment that promotes recruitment and training of a diverse scientific workforce. With guidance, each trainee who joins our research community collaborates with me to create a holistic, individualized plan for scientific and personal development. Each plan includes a focus on critical thinking and cultivating an ethical, rigorous approach to science. Each plan also includes training in science communication, both written and in speech. Training plans are also customized and modified over time based on the priorities and goals of trainee and mentor. We return to training plans and discuss mentoring approaches frequently, with opportunities for self-evaluation and feedback. In parallel, I work with trainees to create a research plan that explores novel aspects of regeneration using planarian flatworms. This plan is also revisited, with continued efforts to create and execute both short- and long-term goals for each project. I view trainees as true collaborators, both scientifically and in crafting and implementing each training plan. Mentoring in my laboratory, thus, is trainee-focused and ever evolving as each trainee progresses toward independence.

Commitment to inclusion

Members of the laboratory share a commitment to creating a welcoming training environment. In the first 5.5 years of the groups' existence, the lab recruited and trained a very talented group of scientists from a range of backgrounds and lived experiences. 19/25 lab members identify as women and 13/25 identify as a member of one or more groups historically excluded from or otherwise underrepresented in STEM (e.g., Latino/a, Black, biracial, first-generation). Training opportunities supported by the lab also reflect a shared value of inclusive training; examples include the Summer Undergraduate Research Experience in Neuroscience at UGA, Short-term Experience for Underrepresented Persons at UGA via University of Alabama at Birmingham, and Young Dawgs program, through which the lab hosted a student from Clarke Central High School, a majority-minority and Title I school in our community.

So that I can provide leadership as we fulfill our shared commitment to inclusion, I have received a Certificate in Diversity and Inclusion and I also engage in ongoing training on best practices and evidence-based approaches in mentoring and inclusion (e.g., CIMER mentoring training, safe space training, implicit bias training). Lab members are also encouraged to attend similar mentoring training when they become mentors in the lab. Evidence-based approaches to mentoring include: development of tools to provide structure; creating a community of socioemotional support; creating an anchoring relationship (Ragins, et al 2015); providing structured career development opportunities; and seeking feedback on trainee needs. Examples of inclusive mentoring practices employed in the laboratory include: adopting a cohort model; diversity, equity, and inclusion-focused lab meetings and discussion; frequent invitation of speakers to UGA who are members of groups historically marginalized in STEM; and supporting STEM inclusion efforts of trainee groups aligned with our efforts (e.g., participating in mentoring events and research panels for the Minority Science Student Association).

Current group and welcoming an FFIRE scholar

Our laboratory currently includes 6 Ph.D. students, 2 outgoing undergraduate students, 2 incoming undergraduate students, and 1 technician. Our highly collaborative group would help the scholar to acclimate to Athens and UGA and would train the scholar in planarian biology and techniques. I expect that, in return, the scholar's leadership in the laboratory would help students better understand postdoctoral fellowships and future career paths. The scholar's project would be designed to complement ongoing work in the lab, while still resulting in establishment of an independent research program.

FFIRE Training Plan

General training activities:

- Lab members meet one-on-one with me each week and additionally as needed to discuss experimental plans, results, troubleshooting, career development, writing, project development, and/or other topics. Trainees also meet individually with me at the beginning of each semester to create a list of experimental and career-development goals for that term.
- Each January, each lab member completes an Individual Development Plan (based on the Vanderbilt University plan) and meets with me to discuss long-term training goals and plans.
- Trainees participate in weekly group-wide laboratory meetings; the structure of these meetings varies but includes research presentations (2x/year for each trainee), journal club (1-2x/year for each trainee), career development activities (e.g., practicing elevator pitches, writing an abstract, storyboarding a paper), and continuing training in ethics (e.g., citation practices, use of generative AI in writing).
- Trainees also participate in an annual Career Development Week. 4-6 speakers are invited to talk via Zoom about their STEM jobs and career paths (e.g., industry, teaching, consulting, policy, post-docs). Trainees also complete wide-ranging career development activities from a long list of options and engage in a good-natured competition to make the experience fun.
- Beyond our laboratory, trainees participate regularly in multi-group or center meetings that include: weekly “DevTalks” series, Neuroscience Program weekly journal club, and Regenerative Bioscience Center weekly meetings. Trainees are encouraged to present once per year in one of these venues.
- Trainees can choose from a wide selection of weekly campus seminars on topics in Cellular Biology, Genetics, and Neuroscience; trainees are encouraged to attend 1-2 of these seminars each week. Trainees also help host 1-2 invited speakers per year and can set up one-on-one meetings with the speakers whose work most closely aligns with theirs.
- The laboratory also participates in Spring and Fall Developmental Biology Alliance Symposia, an annual Neuroscience Symposium, an annual Cellular Biology Retreat, and an annual Regenerative Bioscience Center Symposium; most trainees in the laboratory attend each of these events and have opportunities to present posters or talks to campus audiences at least twice through these events.
- Trainees each mentor at least 1 undergraduate student or series of rotation students during their time in the lab.
- Trainees attend 1-2 regional, national, or international conferences each year to present their work.
- All trainees complete responsible conduct of research training and safety training as required.

Training activities specific to the FFIRE scholar:

- We will create a postdoctoral mentoring committee of experts, who will meet formally at least once per year for formal scientific and professional feedback and mentoring.
- We will identify at least one additional formal mentor (in addition to the committee) to will be selected to meet specific personal or professional needs of the trainee (e.g., first gen, mother-scholar, or teaching-focused professional).
- We will identify at least 2 specific technical training opportunities based on the needs and goals of the scholar. These opportunities could include a short course, collaboration, and/or visit to another laboratory.
- We will identify at least 2-3 additional professional training opportunities based on the needs and goals of the scholar. These opportunities could include teaching a course, collaborating on a Biology Education Research project, attending a science communication workshop, designing an outreach event, leadership role, and/or completing an internship.