

Department of Immunology faculty take seriously their roles in mentoring trainees to develop into independent scientists and equipping them for success beyond their PhD/fellowship training. Strategically, accomplishing these goals requires a mentorship plan that aligns with, and enhances, faculty's own requirements to write scientific proposals and to conduct research that will make tangible contributions to science and to society at large. Graduate students and Fellows play absolutely critical roles in carrying out this research and achieving these goals.

Faculty will contribute to trainee professional development and steadfastly encourage, mentor, and support their progress to the PhD degree or successful fellowship period. They will help set goals and support you as you achieve these goals. *However, faculty cannot do the work for you. It is important that trainees take ownership of their experience and fully engage in the fundamental activities and behaviors that underscore achievements worthy of the PhD degree or fellowship period.*

Expectations of Trainees

In general, trainees (graduate students and fellows) are expected to:

- Learn how to plan, design, and conduct high quality scientific research
- Learn how to present and document scientific findings
- Be honest, ethical, and enthusiastic
- Be engaged within the research group
- Treat colleagues, lab funds, and equipment with respect
- Take advantage of professional development opportunities
- *Obtain a Ph.D. degree*
- *Work hard, persevere, and understand that though the path to scientific discovery may come with setbacks, the reward is well worth any temporary struggle*

As a graduate student, you should:

- Acknowledge that the primary responsibility for the successful completion a PhD degree and fellowship lies with the trainee. This will require commitment to classroom and laboratory work, and conducting oneself with a high level of professionalism, self-motivation, engagement, scientific curiosity, and ethical standards.
- Meet regularly to update your mentor on the progress and results of activities and experiments. Regular meetings are an opportunity to also communicate new ideas about your work and challenges that you are facing. Trainee must come prepared, with appropriate work products, for meetings with their mentor. It is important to remember that faculty cannot address or advise about issues that they are not aware of.
- Maintain detailed, organized, and accurate laboratory records and follow all laboratory and departmental SOPs for data management. Be aware that your notes, records and all research data are the property of your graduate mentor. Research data must be made available to your mentor at their request. It is important to remember that providing research data is an important component of transparency and ethical conduct in research.
- Students should be knowledgeable of the policies, deadlines, and requirements of the graduate program, the graduate school, and the university. Comply with all institutional policies, including academic program milestones, laboratory practices, and rules related to chemical safety, and biosafety.

- Students must adequately prepare for annual thesis committee meetings and submit all documents to the committee on time. Understand that failure to do so is failure to meet the minimum academic standards of the Department of Immunology PhD program. Comply with the directives (timelines, inquiries, request for additional documents, etc.) outlined by thesis committee meetings and if needed, discuss with the committee in advance if directives or timelines need to be revised. Understand that failure to do so is evidence of a lack of responsibility and accountability to your progress towards the PhD degree.
- Strive to be the very best lab citizen. Take part in shared laboratory responsibilities and use laboratory resources carefully and economically. Maintain a safe and clean laboratory space. Be respectful, tolerant of, and work collegially with all laboratory colleagues. Respect individual differences in values, personalities, work styles, and theoretical perspectives.
- Help other lab members with their projects and support/train lab members as needed. Training new scientists is a valuable experience, and learning how to effectively train others is also an important training opportunity for yourself.
- Develop expert understanding of fundamental background literature and keep up with new publications. Understanding both the background and current developments in your field is essential for you to play an active role in guiding your own research and acquiring the expertise that is distinguished by the PhD degree.
- Be responsive to advice and constructive criticism. Feedback from mentors, colleagues, and committee members is intended to facilitate improvement, not reflect personal animus.
- Be a good collaborator. Effective collaboration is an extremely important component of our research mission, however trainees should communicate with their PIs prior to initiating formal collaborations to ensure adequate time is available. Collaborations are more than just publishing papers together, they demand effective and frequent communication, mutual respect, trust, and shared goals and can be mutually beneficial both for the lab and the scientific endeavor.
- Challenge yourself by presenting your work at meetings and seminars as early as you can and by preparing scientific articles that effectively present your work to others in the field.
- Communicate promptly. Academic science moves quickly and there are times when your input will be needed urgently. Timely replies to email and lab-specific communication tools is not just polite, but necessary for our enterprise to function. If you will be unable to answer emails or will need more time to research an answer you should communicate this immediately.
- Strive to meet deadlines: this is the only way to manage progress. For graduate trainees, time must be balanced between research, class, and time spent on outreach or teaching. As long as you are meeting expectations, you can largely set your own schedule. It is your responsibility to talk with your faculty mentor if you are having difficulty completing your work. Remember that all of us are “new” at various points in our careers. If you feel uncertain, overwhelmed, or want additional support, please overtly ask for it.
- Actively cultivate professional development. Duke has outstanding resources in place to support professional development for trainees. Take full advantage of these resources; becoming a successful scientist involves more than just research. You are expected to make continued progress in your development as a teacher, as an ambassador to the general public representing

the University and your discipline, with respect to your networking skills, and as an engaged member of broader professional organizations.

Expectations of faculty mentors:

- Faculty mentors will work tirelessly for the good of the entire lab group. The success of every lab group member is a top priority, regardless of their individual personal strengths and weaknesses, or career goals.
- Faculty will advocate for their trainees. If trainee have a problem, they should feel comfortable discussing it with their faculty mentors who will try their best to help solve it.
- Faculty mentors will be available for regular meetings and informal conversations. Faculty will make every attempt to be available for “drop in business”.
- Faculty are allies for trainees and will help trainees navigate their training period. As stated above, trainees are responsible for keeping up with deadlines and being knowledgeable about program requirements, however, faculty members are available to help interpret and provide advice.
- Faculty mentors and trainee should be able to discuss difficult subjects, such as persistent disagreements with lab mates, faculty, or other matters that significantly impact daily trainee responsibilities. Indeed, there may be times when difficult conversations are necessary. However, trainee should know they can approach other faculty members, especially committee members, the department chair, or Duke’s ombudsperson for help in navigating these situations.
- Faculty will lead by example and facilitate training in complementary skills needed for success beyond the PhD/fellowship period, such as oral and written communication skills, project management, mentoring/training, and professionalism.
- Faculty will strive to be supportive, equitable, accessible, encouraging, and respectful. They will try their best to understand the unique situations each trainee may find themselves in, and mentor them accordingly. Faculty are expected to foster trainee professional confidence by encouraging critical thinking, skepticism, and creativity.
- Faculty have made a commitment to trainee education and training. They are expected to provide ongoing advice and guidance as part of career development.