

# Mentorship and Advising Statement for Graduate Students

Patrick Davies

Welcome to our lab! And thanks for your potential interest in our lab! To maximize transparency, my goal in this document is to provide you with as much information as possible about my research, training goals, expectations for students, and my mentoring styles and practices. Warning: some may understandably find the details nauseating; but at least you know in advance what you might be getting yourself into 😊.

*Please note that this document reflects my personal opinions only. They may not reflect those of the other faculty in the Department of Psychology or the University of Rochester.*

## **The nature of relationship between my research and student research interests**

My research area is focused on understanding the course, antecedents, and sequelae of children's patterns of social, emotional, and physiological functioning within developmental, family, and ecological contexts. As a key part of my research program, I focus on understanding the mediating mechanisms and moderating conditions underpinning associations among domains of family functioning and children's psychological adjustment. We study a wide range of different family characteristics (e.g., constructive and destructive interparental conflict, parental child-rearing practices, family cohesion, family instability), mediating and moderating characteristics (e.g., child emotional reactivity to stressors and challenges; child temperament; child cognitive representations of family qualities, social relationship qualities; child cortisol, respiratory sinus arrhythmia, and pre-ejection period activity), and sequelae (e.g., externalizing problems, internalizing symptoms, callousness, prosocial behavior, cognitive abilities). As another key part of my research program, I am interested in identifying new ways of characterizing children's temperament characteristics and their implications for understanding their susceptibility to family characteristics and trajectories of psychological and physiological functioning. The various research aims are all nested within a broader emphasis on understanding children's development in the context of families from diverse racial, social, and economic backgrounds.

Therefore, I expect that graduate students in my lab will have a strong interest in conducting research in one or more of the substantive areas in our lab. In addition, I expect that students will have a substantial appreciation and interest in developmental theory, methodological diversity and rigor, and powerful and flexible analytic approaches for testing research questions. However, there is variability from student to student in the theories, methodological approaches, and analytic models that they find most useful in formulating and testing research questions.

Therefore, my goal is to be as flexible as possible in helping students identify, understand, and utilize theory, methodology, and statistics in their research. In other words, my aim is to encourage students to draw on theories, methodologies, and analytic approaches they find most interesting and useful. For example, in the domain of theories, interests of my students include (but are not limited) emotional security theory, psychological versions of life history theory, evolutionary models of temperament, attachment theory, social information processing theory, and neurobiological models.

Learning how to conduct cutting edge research also hinges on acquiring and refining methodological and analytic skills. Toward this goal, I emphasize the value of using multiple

methods, informants, and levels of analysis in my research with graduate students. Within this training emphasis, students are encouraged to adopt methodological approaches that best correspond with their perspectives and research questions. For example, in developing their independent research programs, students can choose to delve more deeply into acquiring and refining skills in any number of methodologies including observational assessments, survey development, q-sorts, physiological measures, and structured, semi-structured, and/or clinical interviews. Likewise, students are encouraged to focus on levels of analysis that best fit their interests. These may include a targeted or combined focus on ecological, family, relationship, individual psychological attributes, and physiological levels (e.g., cortisol, pre-ejection period, respiratory sinus arrhythmia) of analysis. Finally, students in the lab are expected to acquire a versatile array of advanced statistical skills for testing multivariate and developmental questions (e.g., prospective mediational models, moderator analyses, blends of mediation and moderation; latent growth curve and difference score models, latent profile analyses). As a mentor, I work with students to develop plans for mastering and implementing statistical approaches that are of greatest interest and value to their research questions.

### **My broad training goals and boundaries**

Consistent with the R1 status of the University of Rochester and the emphasis of the Developmental Psychology Program, **my lab is designed to advance training of the next generation of developmental scientists and scholars**. Although I commonly encourage my students to consider the clinical, public health, and public policy implications of their work to maximize the utility of their research, **I do not train students who are interested in clinical, scientist-practitioner, or public policy careers**. More specifically, my research or expertise does not provide students with experience or skills in developing or testing clinical intervention or prevention programs. Therefore, other programs and labs are much better suited to the goals of prospective students who are interested in testing clinical interventions or pursuing clinical or public policy careers. Similarly, although learning to disseminate knowledge as presenters and instructors is a key part of becoming a scholar, my lab places strong emphasis on producing science. Learning to produce and disseminate science involves acquiring distinct sets of skills that are not necessary for training the next generation of teachers. Prospective students who are solely focused on becoming course instructors will likely find our emphasis on developing a strong research program a hindrance in their career path. As a result, other programs are likely better suited to prospective students interested in academic careers that do not involve research activities. Taken together, it is in the best interest of students to know with a highest level of confidence that they have a strong interest and ability to pursue a scientific career on focal topic(s) in the lab.

However, I also understand that student interests and career goals sometimes change over the course of graduate school. If this occurs, I strive to support students in assessing if (and how) we can modify program, department, and lab resources and goals to meet their changing plans. For example, students who have developed a considerably stronger interest in teaching over research may still find the resources and opportunities in the department fit their goals. Therefore, we work together to find a plan that will best fulfill the changing career goals, whether it involve continuing in the program or seeking out alternative opportunities in other programs or departments.

### **My process of reviewing graduate applications for the developmental psychology program**

Consistent with the Developmental Psychology Program, I evaluate applications holistically.

Therefore, I do not use numerical screening criteria or cutoffs (e.g., GPA thresholds). In accord with the holistic review process, reporting GREs is not required. In fact, I would recommend that applicants only take the exam and report the scores if they are confident it helps to bolster their application. Likewise, publication(s) or presentation(s) are not requirements for admission.

Instead, my focus is on deciphering how your scientific, academic, and extracurricular skills, experiences, and knowledge coalesce to demonstrate your potential and passion for pursuing a scientific or academic career focused on childhood socio-emotional processes and developmental psychopathology. In this context, GPA is one part of a much broader profile of application materials. Given the emphasis on scientific training in our program and lab, experience and skills at different research stages is an important consideration in the review process. These include experience developing a research project, collecting data, coding interview or observational data, conducting statistics, and preparing scientific manuscripts, though even strong applicants may not have experience in all these stages. Therefore, I carefully consider your personal statement, research and academic (e.g., teaching and/or service) activities on your CV, and any writing samples that may be submitted. In personal statements, I am particularly interested in understanding how you arrived at the decision to pursue a Ph.D. in Developmental Psychology, with a focus on conducting research in social developmental psychopathology. Please see remaining sections of my advising statement for more details about processes and procedures in my lab.

## **My mentoring philosophy**

You can expect from me that I will make every effort to respect and support you in your graduate school journey. Students differ from each other in their needs and goals and each student's needs also naturally change over their graduate school career and beyond. Therefore, successful mentoring requires identifying and tailoring resources and advising to the changing needs of each individual student. Creating a safe, supportive environment where students feel comfortable sharing their ideas, perspectives, and feelings is clearly a necessary condition for learning. So, beyond my goal of striving to work with students to co-create a secure climate for learning, my primary, interrelated aims are to serve as:

1. **Educator:** teaching mentees critical research, statistical, and professional development skills
2. **Advisor:** guiding our collaborative programs of research
3. **Idea generator:** getting creative with mentees to develop innovative studies and projects

In these roles, my overarching objective is to work together as allies to develop each student's own distinct scientific and professional identity. Simply serving as an apprentice who follows the same footsteps as mentors is not a particularly rewarding experience for students or me as a mentor. So, I strive to create an environment where students are treated as junior colleagues and our overlapping and distinct interests create a synergistic learning environment that facilitates student development of their own research program and trajectory.

I also assume that students are enrolling in the program to learn, grow, and improve as a scientist and scholar. So, a central part (if not the most central part) of my role as a mentor is to serve as a "challenger" who identifies students' zones of proximal development and provides scaffolding for ways to further improve professional skills and products. Because learning and improving is a critical part of becoming professionals, scholars, and scientists, I put a great deal of time and effort

into this role. Therefore, I do not simply serve as a cheerleader who uniformly showers students with endless praise. My philosophy is that investment and effort in students as a mentor requires balancing the communication of the strengths of their work with suggestions for further improving their scientific and writing skills. Therefore, students who find my mentoring philosophy to be a good fit with their attributes tend to be open, receptive to feedback, persistent, and ego-resilient.

## **What you can expect from me in my mentoring practices**

My general philosophy translates to several specific mentoring practices. Students can specifically expect the following from me as a mentor:

1. **Regular Individualized Meetings:** My lab does not have a layered hierarchy where students have to resort to getting help from senior students or post docs. I deliberately limit the number of students I accept into the lab (i.e., typically between 2 and 4) to ensure that I can provide individualized training to my students. I meet with each of my students individually on a regular basis. “Regular basis” depends on the needs and requests of each student. Typically, students opt for weekly hour-long individual meetings with me that can be cancelled if they do not have anything to discuss. I also make every effort to accommodate students who may need to meet more frequently when they need extra help.
2. **Regular Research Group Meetings:** My students and I also meet in regular group settings. During active project periods, we commonly meet in groups to discuss, refine, and implement data collection and coding (e.g., observational and interview assessments) procedures on studies. Frequency may range from weekly to monthly depending on project activities. In addition, we meet in larger group settings through: (a) student research presentations with Melissa Sturge-Apple’s lab (monthly); (b) Mt. Hope Family Center developmental psychopathology brown bag presentations (monthly); (c) Developmental Psychology Program presentations (monthly); and (d) other department wide colloquia series.
3. **Feedback:** Receiving feedback for improving skills and products is a life-long experience in scientific, professional, and academic forums. To address this goal, I provide extensive feedback on student work. Part of this feedback will consist of identifying strengths of your writing and ideas. However, I also operate from the belief that providing feedback on how to improve reflects greater investment and confidence in a student’s future than solely being a cheerleader. Therefore, I am also committed to providing constructive suggestions for making student ideas and written work even better. My focus is not with grammar or details of APA style. Instead, I aim to provide feedback on how students can improve how they frame ideas, develop compelling and thoughtful justification for their arguments and conclusions, and organize multifaceted research problems in a clear, integrative, and theoretically deep way. Typically, students can expect that I will provide them feedback on papers within days to a week. In rare cases, it may require two weeks or possibly more (e.g., personal or family emergencies).
4. **Support and Respect:** Every student has a right to learn in a climate that is free from harassment, discrimination, intimidation, and micro-aggressions. Therefore, I value creating a safe, inclusive, and comfortable learning environment for my students.

5. **Transparency:** I strive to be as open, direct, and constructive in my communications with students regarding my expectations, their performance, and professional issues (e.g., work/life balance, autonomy, ways to impose structure in unstructured environments, career paths). As part of this communication approach, I discuss and seek input from students on opportunities they have for becoming involved as authors on collaborative papers and presentations. During this reciprocal, collaborative process, we work together to determine a mutually acceptable authorship order based on well-defined roles and responsibilities on the project. In cases where roles on a paper change substantially over the course of the project, we continue to have collaborative and open conversations around if and how to flexibly and fairly adjust authorship order to correspond with the changing responsibilities.
6. **Flexibility:** Each student has their own unique experiences, talents, challenges, and personal lives. Therefore, whenever possible, I also aim to flexibly tailor my mentorship style and practices to fit best support each student and their individual circumstances.
7. **Accountability:** I strive to be accountable for my actions as a mentor. If I fall short of any of these aims and practices, I am committed to correcting and adjusting my advising practices.
8. **Funding:** Students are guaranteed a stipend for five years contingent on satisfactory progress in the lab and program. Students who are on paid research assistantships (RA) are expected to work approximately 20 hours per week on the team project. Whenever possible, I try to provide students with options of RA activities that best fit their interests. Students on teaching assistantships (TA) generally spend an average of 13 hours per week on teaching activities and are also expected to spend 8 to 10 hours per week on lab activities. Lab activities for TAs and RAs vary but may include running family visits, devising or implementing coding systems for observational or interview tasks, preparing protocols and procedures for data collection, conducting literature searches, running statistical analyses, or assisting with grant applications or scientific manuscripts. Finally, students who receive their support through fellowships are also expected to be engaged in the lab, but generally have full latitude to decide how they want to allocate their time. Students in my lab have received fellowships from the federal government (e.g., National Research Service Award from the National Institutes of Health) and private foundations (e.g., International Society for Human Ethology). I also provide advisement, feedback, and support for students who plan to submit fellowship applications. Beyond the academic year stipend, paid summer RAs are also typically available in the lab; though they are contingent on lab funding and cannot be guaranteed.
9. **Scholarly Opportunities:** As a mentor, I provide students with numerous opportunities for conducting and publishing research. As a case in point, my students have wide access to multiple data sets derived from large multi-method and longitudinal studies on topics related to developmental psychopathology. More specifically, our lab is a primary home for 9 large federally funded projects. So, in the context of our lab (i.e., 2 to 4 students in any given year), there are ample opportunities for students to test a wide array of research questions without having to be concerned about competing for resources with other students or faculty.

## What I expect from my students:

1. **Intrinsic Motivation:** I expect my students to get their nerd on and be passionate about conducting research on the topics examined in the lab. Science, in my opinion, is a calling and not a job. Students in the lab do not punch a clock 9-5 Monday through Friday. Because the time commitment is more extensive than a typical job, intrinsic interest, and commitment to training in developmental science is a key part of success in graduate school.
2. **Active Engagement:** I expect my students to be actively engaged in learning opportunities and scholarly activities in the lab, program, and department. This involves attending regular individual meetings, research group meetings (i.e., joint lab meetings with Melissa Sturge-Apple's lab, Mt. Hope Family Center Brown Bags, Developmental Program Brown Bags), and Departmental presentations (e.g., research colloquia; presentations on diversity, equity, and inclusion topics). I also expect students to be engaged in training (e.g., working actively with undergraduate students in the lab), mentorship (e.g., co-mentor a McNair or honors thesis student), and service (e.g., departmental committees) activities in some capacity during their graduate school years. Finally, outside of structured learning activities, my expectation is that students will be heavily involved in research activities, reading research in their areas to stay up to speed on the state of the literature, and working on analyses and manuscript preparation.
3. **Cooperation:** It takes a village to raise a scientist. Students are a central part of this village and benefit from receiving support from each other. Therefore, I expect students in the lab to be supportive colleagues to other students. In some cases, this may involve providing advice and encouragement to each other (especially more senior students who can serve as bigger siblings to junior students). When students have some overlapping interests, it may also involve collaborating on papers and presentations.
4. **Teamwork:** We generally take team science approach in our lab. This means that graduate students, staff, and faculty cooperate on large team projects. More specifically, we conduct large, longitudinal projects that are generally funded by the federal government. Through this cooperative arrangement, students are able to collect and/or access rigorous data sets that allow them to authoritatively test research questions that they would not otherwise be able to do on their own. As a result, the team science approach is designed to directly benefit students. Student effort on these projects will vary depending on the funding of students (see Funding section in previous page for details).
5. **Concrete Academic Products:** Publications and presentations are critical to virtually all (if not all) of the career paths of my students. Therefore, I expect students to work on manuscripts throughout their graduate careers as both a lead author and a co-author. This should not only consist of completing manuscripts associated with program milestones (i.e., two-year thesis, review paper for qualifying exam, and either a large dissertation or a multi-study dissertation) but also additional papers in collaboration with me and/or other lab members. Typically, I begin offering students opportunities to become involved as an author on manuscript(s) in their first year or beginning of their second year in the lab. Students are

also expected to attend and present at multiple conferences throughout their graduate careers. I try to carefully select and offer the manuscript and presentation opportunities to students based on their progress on other projects and milestones and their interest. In many cases, I err on the side of providing too many opportunities so that students have the latitude to choose for themselves what is most valuable and interesting for them. Therefore, I make every effort to make sure that students feel comfortable declining opportunities in a judgement free space.

6. **Independence:** Beyond our regular individual and group meetings, I respond quickly to student questions via e-mail (generally within hours or a day) and do my best to schedule quick meetings with students when they have urgent questions. Students are also welcome to walk in with questions when I am in my office. However, my expectation is that students will be able to structure their time and work practices without daily input from me. I also expect that students will take the initiative to track their progress in meeting program requirements and milestones and structure the agenda of what they would like to discuss at our individual meetings. The ability to independently organize work time to achieve higher-order goals is essential for most (if not all) career paths of my students. Therefore, I provide students with a significant amount of autonomy to structure their own daily activities. This also means that I do not micro-manage the daily activities of my students. For example, I do not provide daily or weekly “to do” lists for students to check off and I generally do not provide repeated reminders to students about upcoming deadlines. The process of students increasingly holding themselves accountable and adjusting practices when they do not meet their short-term goals is an essential step toward successfully navigating and capitalizing on the benefits of autonomy as a professional.
  
7. **Time Management:** Although students in the lab are expected to take the initiative to be engaged in and committed to their training, I expect and encourage students to have a personal life (e.g., seeing family and friends, hobbies, doing non-work activities) outside of graduate school. Achieving a good work/life balance can be facilitated by continually developing strategies for working more efficiently. I recognize that this is a challenging and gradual process. So, if students find it helpful, I am happy to have conversations about ways to increase work efficiency.