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Statement of Expectations for Graduate Students (rev 6-6-21)

My graduate students, post-doctoral research associates, and I study the legacy of early caregiving experiences prospectively in the context of a variety of landmark longitudinal studies of human development, collectively spanning the entire life course. As just a few examples, I serve as a Principal Investigator of (a) the Minnesota Longitudinal Study of Risk and Adaptation, (b) the NICHD Study of Early Child Care and Youth Development, and (c) the Minnesota Twin Registry. We also conduct retrospective, occasionally longitudinal studies focused on how adults talk about their childhood experiences, sometimes with the benefit of longitudinal data preceding our adult assessments and occasionally in the context of studies in which our first contact with participants (and their romantic partners) is in the adult years. Finally, we actively look for opportunities to leverage existing datasets and the scientific literature itself to conduct traditional and Individual Participant Data meta-analyses (quantitative reviews) as well as various secondary analyses of large datasets, some of which are publicly available and some of which we gather from and with other developmental scientists.

I expect new students intending to work in my *Relationships Research Laboratory* to have scholarly interests that overlap with my own interests pertaining to development and interpersonal relationships, and find that I am particularly well-suited to serve as a graduate or post-doctoral mentor to students who (a) wish to investigate the long-term legacy of early observed caregiving into the adult years and/or (b) are interested in how adults talk about and mentally process (cognitively represent) their early caregiving experiences (i.e., adult attachment research). I work collaboratively with many scholars and attempt to include my students in these collaborations as well.

Statement of the challenge of graduate mentorship. Effective mentorship of graduate students in particular is beset by a very real and growing tension in our field between two moral imperatives.

On the one hand, psychological science is currently being conducted in the shadow of a "replication crisis" in which key findings in the field have proven difficult or impossible to reproduce across labs. In my view, the only viable solution to this particular challenge for those of us who tend to study between-person associations (i.e., individual difference studies) is to conduct large sample (adequately powered and reasonably precise) studies moving forward that simultaneously retain the high quality measurement that is the hallmark of developmental science (along with improving our causal inferences by design when and where possible and appropriate given the state of knowledge in a given sub-domain). A back-of-the-envelope power analysis calculation reveals that it is simply not rational to expect to detect as statistically significant associations in the population of the magnitude developmental scholars routinely regard as "non-trivial" or larger in magnitude ($rs \geq |.10|$) with sample sizes smaller than about 600-800 participants. As such, except when it is practically impossible to do so—or if the goal is to leverage the best existing data on a topic relevant to the lab that may fall short of these standards—we design and attempt to acquire funding only for studies that are at least minimally powered to detect small or larger population effects (that is, studies that produce relatively precise and therefore replicable estimates of the effects of interest, without sacrificing quality measurement). Thus, one moral imperative is that I—and by extension my students—have a responsibility to conduct and report findings that are likely to replicate, which requires us to go beyond the status quo in an area of research that has for too long relied on relatively small sample studies (that is, studies that are underpowered and therefore unlikely to replicate). Fortunately, we in the lab have access to (and are

actively building on) some of the largest longitudinal studies of parent-child attachment ever conducted, which makes adequately powered work possible even for graduate students, albeit with hard work on the part of the entire team.

On the other hand, expectations for graduate students as regards publication records—simply to acquire an R1-type post-doc—have since I acquired my first job as an Assistant Professor become frankly unrealistic and overly focused on the *quantity* of publications as a means of gauging productivity and estimating future promise. One of my graduate advisors once reported to me receiving Assistant-level job offers fresh out of graduate school (with no published papers yet) that he "had not applied for" and I got my first job at the University of Illinois with about four and a half publications (my first significant paper in a top tier outlet was accepted the day I interviewed at Illinois). Those days are long gone. Today, it is not uncommon for competitive students on the R1 track to have already published 10-12 or more refereed articles, several in top tier outlets, by the time they earn their PhDs (this is just short of the standard articulated to me as an Assistant Professor for the achievement of tenure only about 15 years ago). In short, as a graduate mentor, I have the moral imperative to be sure that, at the end of their graduate careers, there is a non-trivial chance (with hard work) that my students can transition to a job in the field, whether an Assistant Professorship or—more likely—a post-doc.

In short, I operate under two moral imperatives working in opposition. I have a responsibility to the field, to those who fund our research, and to myself and my research team to produce the highest quality developmental science on the legacy of early interpersonal experiences, and I increasingly expect my students to work harder to produce the large sample, high quality measurement studies that this requires. Likewise, I have a responsibility to be sure that my students are productive enough to ensure that they will have competitive records when they search for jobs. For this reason, I tend to work with a relatively small team of students and provide a great deal of input into their work. I likewise expect in my most successful students a commitment to producing the highest quality research and a willingness to spend the time necessary to produce it.

My responsibilities as a graduate advisor/research mentor:

1. I do not work with more students than I am capable of providing high quality mentorship to. I am fiercely loyal to students who show a commitment to conducting the highest quality science on development and interpersonal experiences and who have also shown a commitment to making contributions to the lab in order to make our science possible. I see it as my job to stay up at night worrying about whether I am doing everything I can to ensure that my students have every opportunity to land the jobs they deserve based on their efforts in graduate school.
2. I am highly responsive to email and other communications. I respond to most email in minutes or hours and almost never more than 24 hours after a message is sent, except in rare occasions. I likewise strive to turn around drafts of papers my students and I are working on together for publication within 24 to 48 hours, though I rarely require as much as one week to do so.
3. I meet with my students once a week *one-on-one*, typically for an hour during the academic year (and at my and the student's discretion in a modified manner in the summer months), and expect students to send a brief agenda for this meeting and any other (brief) reading materials (i.e., no more than 1 page) to me via email at least **24 (business) hours in advance**, not counting weekends and/or holidays. (Longer documents, including papers written by students, must be shared with me at least 48 business hours in advance of any meeting, not counting weekends

and/or holidays). I have developed over time a philosophy of incrementalism born out of the experience that it is only possible to successfully complete large sample, methodologically intensive studies and build highly programmatic research if at least a little (and ideally more) is accomplished each and every day at work. Moreover, meetings are only useful insofar as they enhance, rather than undermine those productivity goals.

4. I provide a variety of data-related opportunities to my students, offering access to those who qualify (see below) to what I view as among the highest quality landmark studies of human development, along with opportunities to collaborate with other leading scholars in the field who can "fill in" for my limitations in expertise as a scholar. I likewise offer students (as my mentors did for me) the opportunity to actually build on and extend landmark studies with additional data collections, as funding allows.

5. I also offer access to a laboratory filled with a wide range of methods (and relevant expertise) for acquiring multi-level data on human development, including equipment for acquiring surface measures of physiology (EEG, ERP, autonomic reactivity), anthropometric and physical health-related data collection equipment, tools for acquiring and processing observational data, etc. Though I regard all small sample research as inherently "pilot data" for the kinds of larger sample studies we pursue focally in the laboratory, I strongly encourage collection of such data by graduate students so that students develop the skills they need to collect data when they must manage their own labs. I am also willing to work on smaller scale work of this sort with an eye toward dissertation research, though I generally encourage students to use as the foundation for their theses the larger samples studies to which they make substantive contributions over the course of their graduate careers.

6. For full time students in the lab, it is my responsibility to help students create in short order a "pipeline" of semi- or actually programmatic research, leveraging all of the data at our disposal, so that students can simulate the (in my view) optimal post-PhD scenario of having research at each stage in the research "life-span" from the initial inception of a study through to publication. This provides graduate students with *experience* with programmatic research at every stage of the research pipeline while also positioning them well to graduate with the sort of publication record that will allow them to continue along their chosen path (e.g., R1 assistant professor, small liberal arts college teaching professor, etc.).

7. A final note on *diversity, inclusion, and equity*: Issues around diversity, inclusion, and equity cut across all of the activities and initiatives of the Relationships Research Laboratory. For example, they are reflected in: (a) the substantive questions my lab has pursued and currently pursues (including issues of generalizability of attachment-related antecedents and consequences; correlates of the Black-White achievement gap; correlates of ethnic and racial identity; and the experiences of individuals in a diverse variety of adult romantic relationships), (b) my approach to selection of UGRAs (we welcome all Psychology and Developmental Psychology majors or minors who are willing to participate [up to total student caps established each semester in advance in consultation with graduate students to maximize the quality of our directed research experience]), (c) my efforts to study a diverse range of cohorts and to add diversity to older cohorts no longer representative of the current population, and (d) my service on grant study section panels and as an Editor of various journals including *Child Development*, contexts in which I strongly support representation of a diverse range of views. I have and will continue to work with a diverse set of graduate students broadly interested in development and

interpersonal relationships and I pledge to continue to routinely invite their input about diversity, inclusion, and equity issues in the laboratory in one-on-one and in laboratory meetings, with the caveat that the buck ultimately stops with me on these issues as its Director.

My expectations for graduate students:

1. My best graduate students are highly engaged in their graduate studies. They rarely if ever (but always, if necessary, proactively) cancel their weekly meetings with me and otherwise make the most of this weekly one-on-one time, they rarely if ever miss our weekly lab meetings, they rarely if ever miss the once-a-week departmental Brown Bag Colloquium series (on Thursdays around the noon hour), and they consistently attend and present lab data at meetings of scholarly societies, such as the *Society for Research in Child Development*.
2. My best students apologize when they have made a mistake, and expect the same of me.
3. My best students increasingly take responsibility for the trajectory of their substantive interests over the course of graduate school, bringing ideas to me for how we can use our shared resources to support the student's line of work. My goal is to provide the scholarly foundation to help students launch their own successful programs of research, not to produce a generation of "Mini-Mes". That said, my best students also trust my highly cultivated scientific instincts, and tend to defer to my experience in the field, especially in their early years in graduate school. That does not stop my students from making their case compellingly when they believe I am mistaken, which happens occasionally.
4. I expect graduate students to take on at least one significant lab responsibility **every semester** in our Relationships Research Laboratory. This might include being involved in the coding of the many hundreds of Adult Attachment Interviews and Attachment Script Assessments we acquire, with training provided at the expense of the laboratory, or (more commonly) leading undergraduates who transcribe these audiotaped narrative assessments. These lab commitments cumulatively provide invaluable experience with lab management at the same time that graduate students are helping acquire and process the large amount of data we need to keep our research enterprise moving forward.
5. More specifically, the minimal expectation I have for students who benefit from any of my lab's resources (regardless of whether students are supported by TAships, RAships, or Fellowships) is to work in my lab for the equivalent of 20 hours per week (50% time) 12 months each year. That said, almost to a person, I find that graduate students who think of their research commitments in terms of fulfilling minimal hours per week requirements are ultimately not likely to be successful in R1 (or equivalent) research careers. My very best students see graduate school as a central component of their lives, and find the work they do to be fulfilling (at least most of the time). In other words, I observe that the most successful students are those individuals who are totally committed to and even excited about spending a good deal of their week and often many weekend hours on graduate research and related work and have a great deal of capacity to delay gratification. Graduate school is not for everyone, nor should it be.
6. Please note that, with some rare exceptions typically involving formal collaborations I have with other faculty members, my lab primarily uses a mentor-mentee model of graduate education, though I am of course open to students working in other labs in their spare time. In this context, I want to be forthcoming that I have the education and professional expertise to mentor students toward careers emphasizing academic service, undergraduate and graduate education,

and scholarly quantitative research in a range of domains of social developmental science. I am happy for my students to leverage relevant expertise that I do not possess from others to provide an "on ramp" to careers in other domains and job sectors, and I support them in so doing.

7. I expect all students working in my lab to be HIGHLY conscientious, and to expect the same of me. Students who do not at least *aspire* to collect, reduce, and document data with the goal of producing near or actually perfect datasets will find my standards difficult to accept or achieve.

8. I expect all students to communicate often and effectively regarding their professional needs. I likewise expect students to respond promptly to all email that I or my faculty colleagues and other collaborators send, including (as appropriate) with a very brief response to "close the loop" (e.g., "Sounds good. I am on it."). There is often little reason why email cannot be addressed (again, even if briefly) within a few hours of receipt, with 24-48 hours being the outside window for a prompt response. My best students recognize that if they do not promptly engage with email, this will result in many missed scholarly opportunities. As noted in the musical "Hamilton", you (should) want to be in the room where it happens, and promptly returning email messages makes that more probable.

9. My best students tend to conceptualize their research questions within a falsificationist framework—that is, they seek where possible to frame their research questions in a manner in which two or more competing models are pit against one another rather than relying on weak inferential methods (most commonly, incorrectly assuming statistically significant effects in the hypothesized direction provide strong support for a given theory, as is common in much social science).

10. My students never present (or propose to present) data from my laboratory at conferences or in journals without fully vetting their presentations with me and (as necessary) my collaborators and all other potential co-authors in advance. Doing so is grounds for dismissal from the laboratory. I likewise promise to my students never to avoid publication or presentation of any "inconvenient" or "uncomfortable" result, provided the result was generated in a robust and replicable manner, and with my input from the beginning.

11. My students work with me to develop lab protocols that efficiently produce high quality data paths. When my students observe a means (including new technology) that might improve upon an existing data path, they alert me to this possibility promptly but ultimately defer to me as to whether the alternative should be implemented. Sometimes tried and true, even if old fashioned, is the better option.

12. My students discuss authorship with me (and I with them) in concrete terms and in an unambiguous manner early in the development of a set of ideas that might eventually prove publishable. They also recognize that, *if it was not written down, it did not happen*. As such, they email me after important conversations in which agreements were made, and I reply to those messages promptly to confirm or modify understandings about authorship. Of course, all authorships must meet APA criteria and all authorship plans are subject to abiding by the terms of those agreements in a prompt manner.

13. I serve primarily as a research advisor to my students. However, I find that my best students apply many of the themes described above to their graduate course work, in their required departmental teaching and TAing, etc. In short, my best students are well organized and

conscientious in all of these settings and treat others with the respect they themselves deserve and expect.

14. *There is no crying in developmental psychology*. *No crying*. There is, however, crying in the rest of our lives, and I will do my best to put you in contact with appropriate University support if you express to me difficulty in your personal life that is interfering with your professional goals. That said, your personal life is not, in the main, my business.