

**General Rubric for Reviewing PhD Applications
Virginia Affect and Interoception Laboratory**

**Dr. Jennifer MacCormack
University of Virginia**

To improve transparency for graduate applicants applying to work with Dr. MacCormack in the Virginia Affect and Interoception Laboratory (VAIL), this document provides a loose set of criteria that we tend to evaluate in applications. This is not a formal, firm set of criteria, nor is this list meant to be exhaustive or prescriptive. Each application is unique with different strengths and weaknesses—and as such, applications are considered holistically.

Overall, we evaluate two key factors: (1) applicants' readiness to pursue a PhD and (2) applicants' fit with the research and training that can be offered in the VAIL and more generally in the Department of Psychology and Social Psychology Program at UVA. Readiness and fit can be demonstrated in several specific ways, which we describe below.

Well-articulated research interests that are aligned with at least one of the lab's research topics and aims. This can be most clearly stated in the personal statement. Research fit or alignment does not have to be an exact match, but we recommend that applicants provide a compelling case as to how they see their research interests aligning with, complementing, or synergizing with existing research in the lab.

- Please see the lab website for more information on the research topics we tend to investigate.
- Focusing on specific research topics in any lab tends to go in phases or arcs based on grant funding or past findings. It is especially helpful to pay attention to the lab's stated current projects.

Interest in learning and using research methods and skillsets offered in the lab. Doctoral training with the VAIL bridges multiple disciplines, methods, and data modalities. The specific methods and skills that students will gain depends on the research topics they are interested in pursuing. Applicants are strongly recommended to consider and state the types of methods they wish to learn or improve upon during their doctoral training and how these methods fit with their research interests.

- Please see the lab website for more information on the kinds of research methods we use.
- It may also be helpful to read recent publications from the lab to see what kinds of techniques and methods we have recently used.

Prior experience and skills that help showcase an applicant's fit and readiness to pursue a PhD in the VAIL or other concrete evidence that the applicant can master complex skills, manage multiple projects or goals, and be self-motivated or self-directed. No one size fits all and each applicant will be different with regards to specific experiences, skills, etc. We recognize that applicants will come from a diversity of backgrounds and levels of privilege, and that these factors can play a large role in how much experience or skills an applicant has been able to develop. Applicants who have faced barriers to gaining research experience and skills (e.g., first generation college students, applicants with disabilities, applicants from low-income backgrounds, non-traditional applicants, students from a college or university without access to research experience, etc.) are encouraged to discuss these barriers, if comfortable disclosing. *Areas that help showcase an applicant's experience and skills:*

- **Strong reasoning and writing skills.** In the online doctoral application form, applicants will have the option to upload a research writing sample. This is strongly encouraged. Ideal writing samples include a research paper submitted for a class (e.g., in psychology, neuroscience, philosophy, anthropology, etc.) or a senior honors thesis or similar capstone paper, if you completed one. In the very rare cases where applicants have a first-author working draft or publication of a peer-reviewed scientific manuscript, this is also welcome.
- **Prior training and experience with quantitative or statistical approaches—or at least an enthusiasm and strong interest in learning how to use quantitative methods to answer**

one's research questions. Applicants are strongly encouraged to explicitly state or describe their prior training and experience with quantitative or statistical approaches. This could be in the form of statistics or math coursework, research methods coursework, or better yet, actual analyses conducted for a research project. Be as specific as possible (e.g., correlational analyses, descriptive statistics, ANOVAs, regression, etc.). Prior statistical training and experience is not required but a willingness to learn is critical, given that quantitative methods are a fundamental part of psychological, biological, and neuroscience research.

- **Computational skills such as coding, research computing, or data management are a bonus—or at least a willingness to learn these as needed.** Data analyses in psychology are increasingly moving away from software such as SPSS and instead use R or other programming languages. Similarly, study design sometimes involves coding or administering questionnaires or behavioral tasks in Qualtrics, Inquisit, Eprime, PsychoPy, Matlab, etc. Many neuroimaging studies and analyses also use packages or coding with Python or Matlab. Applicants do not need to have prior experience in these areas, but if applicants do have relevant computational experience, this is a bonus that the applicant should highlight.
- **Any sort of experience with designing, conducting, and/or interpreting and presenting research.** Although prior research experience is technically not required, it is very difficult to evaluate applicants who have no research experience at all. Therefore, having at least some research experience is beneficial—and more research experience is better than less. In the personal statement, applicants are recommended to discuss the research projects or studies they assisted with, including study goals or aims, the applicant's specific role(s), responsibilities, and length of involvement, as well as a discussion of what the study found or hopes to find (if the research is ongoing). Please be detailed about specific methods, skillsets, and training learned or used as part of this project. If the applicant presented a project as a poster or some other oral presentation, this is also good to highlight.
- **Although any sort of prior research experience is useful, prior research experience that is already relevant to lab research topics is a bonus.** This could include prior experience with conducting research on a range of topics or methods as relevant to the VAIL, including but not limited to: emotional processes, stress, social behaviors, social dynamics, risk-taking, decision-making, morality, cardiovascular or autonomic physiology, inflammation, gut or metabolic processes, hormones, neuroscience or neuroimaging, interoception, body awareness, beliefs, knowledge or expertise, executive functioning, working memory, health, health inequities, wellbeing, risk and resilience, socioeconomic status, cross-cultural comparisons, emotional development, brain development, social development, cognitive development, interoceptive development, emotional aging, brain aging, social aging, cognitive aging, interoceptive aging, etc. Applicants do not need to have prior experience in these or similar areas, but if applicants do have relevant experience, this is a bonus that the applicant should highlight.

Evidence of maturity, motivation, and persistence. Doctoral training takes on average 5 years. Furthermore, students who wish to pursue a career as a tenure-track faculty member often need to do a couple years of postdoctoral training before becoming a professor. Pursuing a PhD is not just “something to do” if one is unsure—but a long-haul, intensive, and transformative time of training which requires deep investment from the student, mentor, and local academic community. As such, we look for applicants who show that they are highly motivated and ready to pursue and persist in graduate training.

- **In the personal statement, applicants are recommended to explicitly provide concrete examples and discussion** of how they may show evidence of maturity, motivation, persistence, commitment, readiness, etc. For example, *maturity* might be revealed through applicants' self-insight, clarity about specific interests and goals, diversity of life experiences, or post-bacc experiences. *Motivation and commitment* may be revealed through applicants' conviction that a PhD is the ideal next step and that they are highly motivated and committed to pursuing doctoral

training. Evidence of *persistence* includes examples of problem-solving, overcoming setbacks or rejection, and consistency in prior roles or commitments.

Evidence of intellectual curiosity, abstract thinking, and a passion or enjoyment of learning and research. Much of a PhD and research-intensive careers are focused around thinking every day, asking novel questions or offering novel insights into a research gap, problem-solving, being able to engage with and become expert in the theories and methods of one's discipline, etc. Applicants who are intellectually curious, passionate about their research interests, and who enjoy lifelong learning and deep reflection may be particularly well-suited to pursuing a PhD.

- **In the personal statement, applicants are encouraged to discuss their research ideas and what excites them about their research topics of interest, the PhD experience, etc.** It can also be helpful for applicants to discuss what *aspects* of the research process they enjoy most (for example, maybe you really love integrating ideas from different disciplines or areas; maybe you actually enjoy doing research analyses; maybe you love writing; maybe you are obsessed with the brain, health, physiology, or some other area). Sharing this sort of information helps us gain a fuller understanding of an applicant as a person.
- **Although not required, it is also helpful if an applicant can show evidence of grappling with the research literatures, theories, or models relevant to their interests.** If there is space or it is relevant, applicants are encouraged to briefly discuss how they have engaged with or are interested in specific research literatures, theories, or models. For example: Do you have a specific paper or set of papers that really inspired your current interests? Are you already engaging with current studies and findings in the relevant research literature? Are there particular theories or models that the VAIL draws from (see our website) that you find particularly inspiring or complimentary to your research questions?
- **It may also be helpful for applicants to characterize their approach to thinking and problem-solving.** Some people tend to be very detail-oriented. Other people are idealists who think in terms of the big picture or theory. Some people prefer digging deeply into their niche area of interest and others crave lots of different topics and research areas. Some people are more philosophical or theoretical whereas others are more pragmatic, focused on concrete, real world applications. Maybe people prefer to synthesize ideas to create something new. Others enjoy fixing existing problems and tinkering to optimize and improve. All of these are valid ways to do science and to do a PhD. And these thinking styles are not mutually exclusive. Sharing these sorts of self-characterizations can help us gain a more holistic sense of applicants as a person and researcher overall.

Finally, we heavily weight applicants' letters of recommendation. We recommend that all applicants ask letter writers if they can provide a *strong* recommendation letter. Simply because someone agrees to write a recommendation letter does not mean it will necessarily be positive, strong, or supportive. For example, if you have had a mixed, tense, or difficult relationship with a letter writer, this may come across in the letter that they write. If a letter writer doesn't know you very well or only for a short period time, it is also hard for them to say much about you. Ideal letter writers are professors, research mentors, or similar professional or academic mentors who have gotten the chance to know you, observe the quality of your work, and who can speak to your readiness and abilities.

In conclusion, we want to reiterate that there is no one-size-fits-all set of prescriptive rules that all applicants must follow. Instead, we hope the above list helps shed light on the many dimensions we consider when evaluating PhD applicants' readiness and research/training fit. This list can also provide inspiration and guidance on what to discuss and highlight in your personal statement and other application materials. Ultimately, we hope this guide helps you build your strongest possible application. Best of luck!