USASP Leadership Academy (LA) Capstone Project (Revised)

Objective: The overarching objective of this capstone project is to prepare specific aims and a research strategy for an R01 application in the general area of studying difficulties in emotion regulation as a mechanism in the development and maintenance of chronic pain. This will require identifying collaborators at outside institutions and orienting to new methodological approaches (e.g., fMRI). Specific objectives within are outlined in the SMART goals below, and generally pertain to expanding my network of chronic pain and affective science researchers and generating novel ideas in methodological and content areas that are new to me.

Setting: My institution, Johns Hopkins, offers a rich network of collaborators and mentors, and I have formed several strong and productive relationships within particular domains, particularly studying psychological treatments for pain after major orthopedic trauma. However, I have a strong interest in elucidating the role of emotion regulation as a mechanism in the development and maintenance of chronic pain, and as a potential vehicle of change in clinical intervention. I aspire to build a program of research in this area and emerge as a leader in the field. In order to do this, I have identified a need to form collaborations external to my institution in related content area and methodology (e.g., affective science). Forming external collaborations, particularly as an early career research, and expanding methodological approaches can be difficult. Thus, I hope to harness the mentorship and accountability of the USASP LA to achieve these ambitious goals.

SMART Goals:

- 1. Arrange meetings with 5-7 leaders in pain to learn about their pathway to independence (e.g., K-to-R transition)
- 2. Generate a list of potential grant mechanisms to including
 - a. specific mechanisms (e.g., DOD PRORP, Katz R01)
 - b. funding priorities
 - c. examples of funded grants from NIH Reporter.
- 3. Generate a study plan, including:
 - a. a topic/reading list
 - strategic plan to attend scientific meetings within and outside of pain science (e.g., identify at least one relevant non-pain meeting to attend related to content or methodology)
 - c. a list of researchers in the field to discuss topic areas and/or methodologies.
- 4. Draft specific aims in time for review at the PURPOSE meeting (April 2025)

Note. This Capstone project is revised from the original submitted in January, 2024.