### SELECTION OF SPONSOR AND INSTITUTION

### My goal in attaining this research-training grant is to establish myself as an independent scientist. The sponsorship of Dr. Chelsea Helion and Dr. Jason Chein and the resources of Temple University offer an ideal opportunity to pursue this goal by completing the proposed training plan in the F99 phase.

### Sponsors: Dr. Helion and Dr. Chein’s labs offers complementary training in social cognition, developmental neuroscience and neuroimaging that are crucial to my career development as a scientist.

### Dr. Chelsea Helion (Primary Sponsor): Dr. Helion is an expert in affective developmental neuroscience and quantitative methodologies, including Natural Language Processing, Multilevel Regression Modeling, and Bayesian Statistical Approaches. She has extensive experience in creating ecologically valid study design using naturalistic stimuli at multiple levels of analysis (e.g., neural, behavioral, physiological, self-report) and within multiple age cohorts across the lifespan (e.g., adolescents, adults). She has received grant funding from the NSF, NICHD, and private foundations for her work exploring affective self-regulatory strategy effectiveness among developmental populations and within quasi-naturalistic contexts. She has published 16 manuscripts (~990 citations; H-index: 11) and provided her expertise as a requested reviewer for several high-impact journals. In Dr. Helion’s four years as an Assistant Professor in the Cognition & Neuroscience and Social Areas in Temple University’s Department of Psychology, she has mentored 4 graduate students. Under her mentorship, her graduate students have won numerous honors, awards, and opportunities from organizations, including SPSP & SANS Poster Awards, SPSP 2022 & 2023 Travel Awards, an APA research award, and a prestigious Facebook 2022 Summer Internship. Dr. Helion also has mentored several undergraduate researchers, two of whom have won funding to conduct research within the SAN Lab through Temple’s competitive Diamond Scholars program, and five of whom have left to pursue research in doctoral and medical programs. Dr. Helion and I have collaborated on several projects and guidance has been indispensable to my development as an independent developmental affective neuroscience researcher. She has met with me weekly while working in her lab to discuss research progress, workshop ideas, teach statistical and neuroscientific methodologies, and offer guidance on professional development. She has demonstrated a clear commitment to my success as a researcher and her expertise makes her an ideal sponsor for my proposed project and training plan. Dr. Helion will be an excellent primary sponsor for my proposed research and training aims due to her demonstrated commitment to my growth as an independent computational neuroscientist. Finally, Dr. Helion has well-established relationships with the proposed co-sponsor.

### Dr. Jason Chein (Co-Sponsor): Dr. Chein is an expert on the social neurodevelopment of adolescents, especially as it relates to risk-taking and reward, whose research has received support from numerous organizations, including NSF, NIH, and several private entities. He has extensive experience in neuroimaging techniques as the current Director of Temple University’s Brain Research & Imaging Center (TUBRIC) and his involvement offers an ideal opportunity to utilize the resources that the center has at its disposal. He has published over 70 manuscripts and book chapters (>12,000 citations; H-index: 47) and his lent his expertise as an invited reviewer for numerous high-impact journals, popular media, and legal briefings related to adolescent neural development and decision making. Dr. Chein has an impressive track record of mentorship, having trained 14 graduate students, 02 of whom are current, 08 of whom have secured research positions in academia. His trainees have also secured numerous honors, and opportunities, having been selected to attend the prestigious University of Michigan fMRI Training Course, Neurohackademy, and Kavli Summer Institute in Cognitive Neuroscience. Dr. Chein has a strong working relationship with Dr. Helion and myself, having provided valuable insight in the development of the proposed project, as well as consulting on other projects in the past. Dr. Chein’s expertise in decision making and reward within developmental populations is crucial to any comprehensive understanding of socio-affective developmental phenomena, but also above and beyond that which I would be able to obtain over the course of my doctoral education without the assistance that an F31 would provide.

**Institution:** Temple is a Research I University with a full array of support services available as for the research team to complete the proposed project aims. The Department of Psychology excels as a regional and national leader in psychological research and in the training of psychology professionals. It fosters interdisciplinary research and collaboration with the Temple University Hospital and Neuroscience Program. Federal and state funding for research in the Department ranks in the top 25 of psychology departments nationally. The Department has a history of sponsoring high-quality F31 and F32 fellows. Past fellows have been well-supported by the department’s faculty and have gone on to pursue careers in psychology research and clinical psychology. Temple University is an ideal environment for my training.