**FACILITIES AND OTHER RESOURCES**

Temple University is a major research institution with an internal structure that is conducive to research and a full array of support services available for me to complete the proposed study. The Psychology Department, housed in the College of Liberal Arts, excels as a national and international leader in psychological research and in the training of psychology professionals. The Psychology Department has an impressive record of sponsoring NIH F31 and F99 fellows. Past fellows have been well supported by the department’s faculty and have gone on to pursue careers in research and clinical psychology. Research, administrative, and clerical personnel from the Psychology Department draw upon other resources of the institution including the Office of Public Relations composed of communication experts and science writers, Center for Information Services, Office of the Vice President for Research & Graduate Studies, and the Managed Care Office. Administrative services in the College of Liberal Arts are also available for grant management.

This project will be conducted in the Department of Psychology on Temple University’s main campus. Behavioral data collection and imaging will take place on Temple main campus, where the Temple University Brain and Imaging Research Center (TUBRIC) is located, as well as my office space and the laboratory of Dr. Helion. As a member of Dr. Helion’s laboratory, I have access to a wide array of spaces, technological equipment, and resources to complete the proposed research.

Main Campus:

*Laboratory space and personnel:* Dr. Helion’s laboratory is located in the Psychology Department on Temple’s main campus. I have office space in Dr. Helion’s lab as well as full access to two rooms for controlled behavioral testing (each equipped with computers set up for experimental testing), and meeting spaces for small (4-6) and large (10-12) groups. In addition, the Psychology Department at Temple has conference space available for meetings and training sessions as needed upon request. There is strong technical support for software and hardware used in the labs, including a 96 CPU cores, 128GB RAM, 20 TB Ubuntu 20.04 machine designed for managing and analyzing fMRI data locally. All data will be stored within and analyses completed upon the computing resources located in the Helion lab. In addition to physical supplies, the SAN lab employs two lab managers who provide additional supervision to advanced undergraduates who serve as research assistants. The applicant will recruit up to eight undergraduate students and one lab manager whose primary responsibility will be to serve as research assistants on the proposed project.

*Mentorship*: In their role as sponsors for this project, Dr. Helion and Dr. Chein will facilitate project progress and training goals by being regularly available on Temple’s main campus in their respective offices (Dr. Helion: directly across the hall from the SAN Lab; Dr. Chein: one floor above the SAN Lab and in TUBRIC). I will meet with my sponsors during weekly one-on-one meetings and weekly lab meetings. Dr. Smith and Dr. Steinberg are also readily available with offices adjacent to Dr. Chein and Dr. Helion, respectively. I will meet with each monthly to discuss progress and receive training and guidance.

*Online computing cluster (OwlsNest):* Temple University computer services delivers a state-of-the-art telecommunication and data center infrastructure that provide the technical foundation for research operations. The Temple Tech Center, the largest student computing lab in the country, offers an incredible array of resources to the university and researchers with a 24-hour help desk. Given this resource, I will carry out neuroimaging analyses on a distributed computing system, with data stored on a 10-terabyte storage array maintained by the investigators at Temple University. Study personnel also will have access to Temple’s high-performance computing cluster, OwlsNest, and will be assisted by a capable information technology support staff. OwlsNest is a collection of six high-powered computing clusters sharing a common infrastructure and access to globally available network file systems. The infrastructure has been optimized for heavily computation-bound, tightly-coupled, parallel calculations, and is configured dynamically according to the distribution of current users to maximize computing power. It is capable of high throughput calculations and large data processing. Additionally, I have access to the University's extensive computer network and the Temple University Library System.