Cumulative Summary of *Nu Rho Psi* Chapter Activity Grants 2015-2023

2015-2016

- **Northeastern University** [β in MA; faculty advisor: Dr. Jade Zee] to purchase equipment and supplies in support of their "neuroscience of addiction" community outreach program for Boston's inner-city youth, who are at a higher than average risk of developing a substance use disorder.
- **Oberlin College** [δ in OH; faculty advisor: Dr. Jan Thornton] to support an undergraduate course titled: "The and Neurobiology of Addiction" and the *Nu Rho Psi* students in that course who will collectively design and produce a workshop that will teach students at the Langston Middle School about brain development and drugs of abuse.
- St. Mary's College of Maryland [β in MD; faculty advisor: Dr. Aileen Bailey] to produce videos that will be used in a peer-to-peer mentoring program designed to teach high school students as well as teen offenders from the local "Teen Drug Court" about drug-induced brain changes and how those brain changes set up adolescents for drug craving, addiction and relapse.

2016-2017

- **Trinity College** [α in CT; Erin Aisenberg/Dr. Sarah Raskin faculty advisor] to provide partial funding of the Brain Injury Alliance of Connecticut social.
- Weber State University [α in UT; Zoee Miller/ Dr. Lauren Fowler faculty advisor] to buy educational materials in support of a Traumatic Brain Injury (TBI) emphasis during the 2016 Brain Awareness Week.
- **Georgia State University** [β in GA; Nick Bello/Dr. Michael Black faculty advisor] to provide support for the first *Nu Rho Psi* Atlanta Neuroscience Symposium.
- **Northeastern University** [β in MA; Margee Kyada/Dr. Jade Zee faculty advisor] to purchase a Spiker box and dissection kit in support of Brain Awareness Week TBI educational outreach.

- **Georgia State University** [β in GA; Stephanie Ross/Dr. Michael Black advisor]. To fund the second annual Atlanta *Nu Rho Psi* research conference (benefits other chapters including Emory University, and Agnes Scott College)
- **Trinity College** [α in CT; Thomas Hum-Hyder/Dr. Sarah Raskin advisor]. To fund "Building on the Spectrum" Lego volunteer event to benefit Autism Families CONNECTicut
- **University of Arizona** [α in AZ; Alison Comrie/Dr. Leslie Tolbert advisor]. To fund "Rockin' for Rett" 5K Family Fun Run and information booth.
- **University of Tennessee, Knoxville** [β in TN; Emalie McMahon/Dr. Jim Hall advisors]. To fund a 5K run and speaker. Family Event during Autism Awareness Month.

2018-2019

- **Baldwin Wallace University** [α in OH, Jacqueline Morris- advisor] Funding to increase the number and sophistication of demos used as outreach tools in their Brain Fairs. Specifically, activities that communicate microglia's function as resident nervous system macrophages will be developed.
- **Rutgers University** [β in NJ, Kasia Bieszczad- advisor] Funding to support a new podcast series call 'Brainstorm' to be broadcast on campus and in their local community via their campus radio station. Podcasts topics include "Fear, Memory and Music" as well as "A lesson from glial cells in team-work".
- Transylvania University [γ in KY, Margaret Upchurch- advisor] Funding to create an informational poster campaign using the motto "What if half of your brain was missing?" to educate the public about the importance of glial cells. A glial cell informational event with guest speaker is also planned to raise funds for the National Multiple Sclerosis Society.
- **Trinity College** [α in CT, Sarah Raskin- advisor]. Funding for a speaker series that highlights glial research and to begin a student-patient service project to enable MS patients to receive music or pet therapy.

2019-2020

- Boston College [ɛ in MA, Michael McDonald- advisor] Boston College speakers with the topic of brain/machine interface, Undergraduate/graduate research presentation event in partnership with Friendship Works a local elder isolation group
- **Rutgers University** [β in NJ, Mimi Phan- advisor] Funding to support an undergraduate research symposium during brain awareness week as well as a mini-symposium that will include other local Nu Rho Psi chapters.
- **Skidmore College** [β in NY, Christopher Vecsey- advisor] Funding to Bring in an external speaker, Julie Pilitsi, M.D, Ph.D. Department of Neurosurgery, Albany Medical College, to talk about Parkinson's & Deep Brain Stimulation.

- **Georgia State University** [β in GA, Michael Black- advisor] The GSU Nu Rho Psi Chapter's request would support their recurring annual event: *The Atlanta Neuroscience Symposium* as a virtual event. The virtual week-long conference was a collaboration with other Atlanta area Nu Rho Psi Chapters (Emory University and Agnes Scott). The 2020-21 event would showcase research in the Atlanta area on a range of neuroscience topics, including cognitive, molecular, systems engineering, and neuro-ethics in relation to the annual theme: *The Gut-Brain Connection*.
- Lake Forest College [γ in IL, Jean-Marie Maddux- advisor] The Nu Rho Psi chapter organized a campaign to educate Lake Forest Students and various community groups about the importance of maintaining a healthy gut and how a balanced microbiome can

help maintain a healthy mind. Informative campus posters emphasized the importance of a healthy diet and how immunosuppressive disorders such as celiac and Crohn's adversely affect the brain. A nutritionist would be invited to offer a public lecture regarding the importance of a well-balanced diet, and a series of group discussions were planned with student at a local grade school regarding the importance of diet in maintaining a healthy brain.

- **Loras College** [γ in IA, Sarah Cassella- advisor] Loras College developed and deployed across campus and the neighboring Chicagoland community, information to highlight the importance that sound nutrition and a balanced microbiome have in promoting both a healthy body and mind. In the spring, they planned a Zoom virtual speaker presentation on the importance of good nutrition on brain plasticity or mood/depression. A Zoom presentation on the importance of diet and nutrition at a local grade school that incorporated small group discussions.
- **SUNY Old Westbury** [ε in NY, Lorenz Neuwirth- advisor] The award was to provided support to support student awards for their virtual poster presentations by student participants at the 2nd Annual Advancing Cross-Disciplinary Outreach in Neuroscience (*AXON*) virtual conference. The theme of the *AXON* conference was *The Gut:Brain Connection*. Old Westbury students as well as students from Drew University (Nu Rho Psi α in NJ) and Rutgers University (Nu Rho Psi β in NJ), were collaborative organizers and participants.

- Christopher Newport University [β in VA, Darlene Mitrano advisor] The CNU chapter of Nu Rho Psi hosted a series of neuroscience seminars and activities during March of 2022 (Brain Awareness Month) to bring awareness of the neuroscience research regarding identity and bias in the CNU community. The seminars incorporated both relevant neuroscience research as well as speakers with personal experience with these biases. For example, empirical research such as that by Mattan et al. (2018) were the focus of discussions and students were encouraged to take one or more established implicit association test (e.g., Harvard Implicit Association Test).
- Georgia State University[β in GA, Michael Black- advisor] The GSU Chapter requested funds to virtually present their annual Atlanta Neuroscience Symposium, the first of which was held in 2016. The symposium is a collaboration with other organizations in the Metro-Atlanta region on multiple neuroscience-related topics. Included this year's virtual event (Nu Rho Psi Week) were a variety of bi-weekly online virtual sessions lead by renowned researchers in the neuroscience community that will speak on various topics related to the Nu Rho Psi annual theme.
- **SUNY Old Westbury** [ε in NY, Lorenz Neuwirth- advisor] The award was to provided support to support student awards for their virtual poster presentations by student participants at the 3rd Annual Advancing Cross-Disciplinary Outreach in Neuroscience (*AXON*) virtual conference. The theme of the 2022 *AXON* conference was *The*

Neuroscience of Identity and Bias. Old Westbury students as well as student members of the Nu Rho Psi chapters at Rutgers University (Nu Rho Psi β in NJ), were collaborative organizers and participants and intended to expand participation in the virtual event to include student members of Nu Rho Psi at a broader range within the northeast region, including Connecticut College (CT), as well as Susquehanna University, SUNY Binghamton and Union College (NY).

• Wayne State University [β in MI, Thomas Fisher -advisor] The Wayne State University Chapter proposed a mental health event, entitled "Calm Your Brain with Nu Rho Psi". The event consisted of a series of meditation and mindfulness exercises, a movement exercise, and art therapy experiences adapted from the Mindfulness-Based Stress Reduction (MBSR) curriculum. The goals of the various public speaker presentations and experiential programs includes the general promotion of means to promote mental health and help reduce stigma that surrounds mental illness with the Wayne State community. Funding will also be used towards a subscription to a mindfulness meditation app that will be gifted to one of the attendees as the end of the event.

- **DePaul University** [η in IL, Dorothy Kozlowski advisor] Nu Rho Psi, in partnership with DePaul's fitness and recreation center, will host a tailored workshop called "Fit By Design," which will teach DePaul students, faculty, and staff about the impact that nutrition has on the brain, discuss common myths and science-based evidence for the impacts of diet on cognition, along with a beginner-friendly aerobic workout class. Workshops like this utilize the SPARK principle that pairs education with exercise to enhance engagement and learning of topics. Attendees will gain an understanding of how the brain processes nutrients and the role diet and exercise play in fueling the brain to perform tasks. We will also hold a guest lecture and Q&A moderated by Nu Rho Psi members where members of the community, including students, staff, and faculty, will be able to hear from a speaker whose research is centered around the topic of Exercise and the Brain, followed by a reception where guests can convene to discuss what they learned and connect with members of the community. We are considering Dr. J. Leigh Leasure, professor and director of the Brain Health & Plasticity Lab at University of Texas at Austin, to be the speaker. Dr. Leasure's work focuses on Exercise-driven neuroplasticity, which would be the topic considered for this lecture.
- Lake Forest College [γ in IL, Paul Henne advisor] We plan to host "Mind in Motion," an educational fitness workshop on campus in which all students and faculty would be invited to engage in activities designed to enhance our understanding of the benefits of exercise on the brain and the body. We plan to invite Dr. Jeffrey Damaschke, the Chair of the Department of Physical Therapy at Rosalind Franklin University and Lake Forest College professor. Dr. Damaschke has extensive knowledge of the impacts of exercise on the body and actively promotes lifestyle medicine in his work and teaching. Attendees will be invited to participate in the following physical activities: volleyball, soccer, and a relay race. We will have attendee's sign-up for teams prior to the event and will include rounds in which students compete against faculty. In addition to physical exercises,

attendees will also have the option of participating in various brain exercises, including science and exercise-themed crossword puzzles, word searches, and trivia. Attendees will leave the event with a thank-you card, which also contains information from research articles that provide evidence about the benefits of exercise on the brain.

- University of North Carolina -Chaple Hill [\alpha in NC, Monica Gaudier-Diaz advisor] The Nu Rho Psi Chapter Activity Grant to engage our community in lessons about "Exercise and the Brain." In Spring 2024, the University of North Carolina hosts a Science Expo, which is one of the biggest science celebrations in North Carolina. The event is hosted at Morehead Planetarium and Science Center and is attended by students, families, and residents. We plan to have a booth at this event with a theme of "Mind in Motion" to discuss the neuroscience and psychology behind exercise, stretching, and meditation. Specifically, we will use trivia questions to teach facts and research on how brain health is associated with and influenced by physical activity. Correct answers will be incentivized by spinning a wheel to earn a prize. We will need to purchase prizes and booth decorations to encourage participation, and especially educational resources (e.g. when we teach "exercise has been shown to increase the size of the hippocampus," it would be useful to have a small model of the brain to show children where the hippocampus is located).
- Northern Kentucky University [δ in KN, Christine Curran advisor] Chapter Activity Grant to promote exercise and the brain during Brain Awareness Week (March 11-17, 2024). Our chapter will host a promotional booth the entire week in the Student Union. During this time, we will share promotional literature with a daily theme including brain puzzles, brain health, and mental health awareness. The theme for our booth this entire week will be "Exercise and the brain," emphasizing the importance of physical activity and brain health. We will feature the benefits of getting outdoors and will include tri-fold brochures featuring local hiking trails, exercise routes, and other outdoor fitness activities available on campus.
- **Skidmore College** [β in NY, Chris Vecsey advisor] We propose to host Dr. Swathi Gujral from the University of Pittsburgh to speak on her research in exercise on the brain, coinciding with this year's Nu Rho Psi theme. Dr. Gujral is an Associate Professor of Psychiatry who has published numerous articles on exercise and rest-active rhythms on cognitive function, particularly in disease states like depression and dementia. She also was a presenter at a Society for Neuroscience panel on "Exercise in Brain Health and Disease" in 2022. Dr. Gujral has agreed to give a lecture this winter/spring. In this talk, Dr. Gujral will describe her lab's research, methodologies, and novel findings. She will also describe in detail how exercise impacts the neural circuitries of depression and dementia as well as the benefits of using exercise as a treatment for these disorders.
- **DePaul University** [η in IL, Dorothy Kozlowski advisor] Nu Rho Psi, in partnership with DePaul's fitness and recreation center, will host a tailored workshop called "Fit By Design," which will teach DePaul students, faculty, and staff about the impact that nutrition has on the brain, discuss common myths and science-based evidence for the impacts of diet on cognition, along with a beginner-friendly aerobic workout class.

Workshops like this utilize the SPARK principle that pairs education with exercise to enhance engagement and learning of topics. We will also hold a guest lecture and Q&A moderated by Nu Rho Psi members where members of the community, including students, staff, and faculty. We are considering Dr. J. Leigh Leasure, professor and director of the Brain Health & Plasticity Lab at University of Texas at Austin, to be the speaker. Dr. Leasure's work focuses on Exercise-driven neuroplasticity, which would be the topic considered for this lecture.

