

# 2024 Charles S. Peirce Interdisciplinary Graduate Fellowship Recipients



After an extensive and highly competitive selection process, we are thrilled to announce the recipients of the Charles S. Peirce Interdisciplinary Graduate Fellowships for the year 2024.

Out of numerous outstanding applications, two individuals have stood out for their exemplary projects and dedication to highlighting the interdisciplinary nature of scientific innovation.

Each fellowship comes with a grant of \$5000.-, a testament to our Institute's recognition of the value and potential impact of their work. With this year's selection The Institute for Studies in Pragmaticism emphasizes the importance of HEALTH RESEARCH and contributes to TTU's objectives of transdisciplinary and transformational One Health project.

## Shadi Nejat

Nutritional Biochemistry & Physiology

***Genetic Deletion of the Heat Shock Protein DNAJB3 Exacerbates Diet-Induced Obesity and Associated-Metabolic Dysfunctions***

In recent years, scientific research has increasingly illuminated the intricate connection between biological disorders, inflammation, and the development of various diseases, with obesity emerging as a focal point of investigation. This intersection is not merely a theoretical curiosity but rather a vital area of study with profound implications for public health. Understanding the importance of studying biological disorders that lead to inflammation, particularly in the context of obesity, is instrumental in unraveling the complexities of disease progression and developing effective interventions. With her study on Genetic Deletion of the Heat Shock Protein DNAJB3 Exacerbates Diet-Induced Obesity and Associated-Metabolic Dysfunctions, Shadi Nejat contributes to a deeper understanding of the environmental and biological variables that can trigger, exacerbate, or mitigate diseases.



## Bradley Vigil

Mathematical Neuroscience

***The Shape Of Childhood Epilepsy. Pragmaticism In Interdisciplinary Mathematical Neuroscience Research.***

The interdisciplinary research seeks to develop robust theories and models, employing a fusion of mathematical modeling, differential equations, computational topology, and data science. This comprehensive approach aims to understand the mathematical properties and structures inherent in complex systems, providing a unique lens through which to examine childhood epilepsy and its neurodegenerative counterparts. This exploration not only promises to deepen our knowledge of neurological conditions but also exemplifies the transformative potential of humanities for multidisciplinary research in addressing some of the most complex challenges facing our world today.