

## TTDGRA Awardees 2023 - 2026

| PI                 | PI Rank             | Department   | College/ School            | Proposal Title  |
|--------------------|---------------------|--|----------------------------|---|
| Bing Zhang         | Professor           | Physics and Astronomy                                | Science                    | Multi-Messenger Astrophysics  |
| Samantha John      | Assistant Professor | Brain Health   | Integrated Health Sciences | Methods and Models of Accelerated Aging and Alzheimer's Disease   |
| H. Jermey Cho      | Assistant Professor | Mechanical Engineering                               | Engineering                | Solar-powered water harvesting from dry desert air  |
| Yan Zhou           | Assistant Professor | Physics and Astronomy                                | Science                    | Development of Quantum InterConnects - A key step towards quantum advantage.                              |
| Jenny Kent         | Assistant Professor | Physical Therapy                                     | Integrated Health Sciences | Monitoring the terrain underfoot: a means to characterize daily activity and mobility in older adults     |
| Jee Park           | Assistant Professor | Civil and Environmental Engineering and Construction | Engineering                | Enabling Computers to Read and Interpret Historical Civil Engineering Reports                             |
| David W. Hatchett  | Professor           | Chemistry and Biochemistry                           | Science                    | Electrochemical Recovery of Strategic Materials using Ionic Liquid Systems                                |
| Allyson Hindle     | Associate Professor | Life Sciences  | Science                    | Molecular candidates to unravel hypoxia tolerance and the dive response in seals                          |
| Brenna Renn        | Assistant Professor | Psychology   | Liberal Arts               | Developing a Geriatric Mental Health Clinical Research Infrastructure via Community-Academic Partnerships |
| Elisabeth Hausrath | Professor           | Geoscience   | Science                    | Lost minerals: Evidence of past water, pH, and temperature on Mars from minerals that have dissolved away |
| Helen J. Wing      | Professor           | Life Sciences  | Science                    | CTP, a protein ligand needed for bacterial virulence  |

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| Erica Marti          | Assistant Professor | Civil and Environmental Engineering and Construction     | Engineering                | Optimization and regeneration potential of eco-friendly biochar for water remediation  |
| Martin R. Schiller   | Professor           | Life Sciences  | Science                    | Defining the contributions of epistasis to the clinical interpretation of genetics in diagnostics  |
| Elizabeth Ann Stacy  | Associate Professor | Life Sciences  | Science                    | Detection and prediction of drought-stress response in economically important plant species using machine learning to mitigate the impacts of drought associated with climate change |
| Dustin Hines         | Assistant Professor | Chemistry and Biochemistry                               | Science                    | Electrochemical quantification of reactive oxygen species and neurotransmitters for new applications in clinical research  |
| Eakalak Khan         | Professor           | Civil and Environmental Engineering and Construction     | Engineering                | Deepening Understanding of Wastewater Surveillance through Principles and Advances in Environmental Engineering Using SARS-CoV-2 Virus and Antibiotics as Model Markers              |
| Marie-Odile Fortier  | Assistant Professor | Civil and Environmental Engineering and Construction     | Engineering                | Sustainability of Hydrogen as a Water Carrier with Energy Benefits   |
| Christopher Johansen | Assistant Professor | Social and Behavioral Health                             | Public Health              | Increasing Physical Activity Behavior Change among Latinos using the Multi-Theory Model  |
| Szu-Ping Lee         | Associate Professor | Physical Therapy   | Integrated Health Sciences | Enhancing Motor Function in Individuals with Lower Limb Amputation   |
| Kara Radzak          | Associate Professor | Kinesiology and Nutrition Sciences                       | Integrated Health Sciences | Holistic Health and Fitness for Future Military Leaders  |
| Bradley Marianno     | Assistant Professor | Educational Psychology, Leadership, and Higher Education | Education                  | Effective and Equitable School Boards in the United States Project   |

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| Michael Nussbaum       | Professor           | Educational Psychology, Leadership, and Higher Education | Education                  | Exploring the Intersection of Science Discussions and the Ideas and Needs of Emergent Multilingual Learners in the Amplify Science Curriculum |
| Ashkan Salamat         | Associate Professor | Physics and Astronomy                                    | Science                    | The synthesis of metal superhydrides through extreme temperature/pressure conditions: towards room temperature superconductivity              |
| Sara K Rosenkranz      | Associate Professor | Kinesiology and Nutrition Sciences                       | Integrated Health Sciences | A Multi-level, Multi-Behavioral Pilot and Feasibility Trial for Reducing Cardiometabolic Risk in Employees Working from Home                  |
| Jinyoung Kim           | Associate Professor | Nursing  | Nursing                    | Current Sleep Health and the Risk of Alzheimer's Disease in Shift Workers   |
| Jennifer F Byrnes      | Assistant Professor | Anthropology   | Liberal Arts               | Named and Unnamed: A Social Autopsy of Nevada's Missing and Unidentified.   |
| Rachael Robnett        | Associate Professor | Psychology   | Liberal Arts               | Interpersonal Dynamics in STEM Research Apprenticeships   |
| Brach Poston           | Associate Professor | Kinesiology and Nutrition Sciences                       | Integrated Health Sciences | Non-Invasive Brain Stimulation of the Cerebellum to Improve Motor Skill in Older Adults   |
| Jin Ouk Choi           | Associate Professor | Civil and Environmental Engineering and Construction     | Engineering                | A novel opaque building envelope characterizing technologies  |
| Hyunhwa Lee            | Associate Professor | Nursing  | Nursing                    | Home-based and Mobile App-guided Dual-Task Exercise for Cognition and Functional Capacity   |
| Beiyu Lin              | Assistant Professor | Computer Science   | Engineering                | Artificial Intelligence based Auditory Scene Identification   |
| Erin Hannon            | Associate Professor | Psychology   | Liberal Arts               | Individual Differences in Affective Sound Processing During Development   |
| Jan "Matt" B. Pedersen | Associate Professor | Computer Science   | Engineering                | Utilizing Process-Oriented in Data-Intensive Physics Applications   |

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| Jun Kang  | Associate Professor | Chemistry and Biochemistry     | Science         | Development of Novel Cancer Reagents and Strategies to Target SOX2-dependent Cancers |
| Ann Vuong | Assistant Professor | Epidemiology and Biostatistics | Public Health   | Early life exposure to flame retardants and kidney function in adolescence           |