

Celebration of **Research** 2026



BROWN
Division of Research

Celebration of
Research
2026



Tuesday, September 15, 2026
3-5 p.m. | Sayles Hall

Welcome

Wendy Schiller, *Deputy Provost*; Alison S. Ressler *Professor of Political Science*

Remarks and Presentation of Awards

Greg Hirth, *Vice President for Research and Professor of Earth,
Environmental and Planetary Sciences*

The 10th Annual Brown University Research Achievement Awards	4
Salomon Research Award Recipients	12
Research Seed Award Recipients	15

Reception



2026

Research Achievement Award

RECIPIENTS

Early Career Research
Achievement Awards

Mid-Career Research
Achievement Awards

EARLY CAREER RESEARCH ACHIEVEMENT AWARDS

Justin Berk, M.D., MPH, MBA

Associate Professor of Pediatrics
and Medicine



HOSPITAL-BASED RESEARCH FACULTY

Dr Justin Berk's research advances evidence-based healthcare for justice-involved populations by integrating addiction medicine, implementation science and correctional care. He developed a novel partially randomized preference trial for carceral settings, published on hepatitis C treatments in jails, and coined the concept "prison implementation penalty." He has published over 75 peer-reviewed works in top journals such as JAMA and The New England Journal of Medicine, and he leverages his research to evaluate medical education as a host of the popular podcasts "The Curbsiders" and "The Cribscribers." In recognition of his impactful scholarship, Berk received the ASCI Young Physician-Scientist Award, the Lifespan Bruce M. Selye Award for Excellence in Research, the NIDA Young Investigator Award and the Jeremiah Barondess Fellowship in the Clinical Transaction. He was also inducted into the Society for Pediatric Research and appointed to the NIH Justice Community Opioid Innovation Network.

Jillian E. Beveridge, Ph.D.

Associate Professor of Orthopaedics



HOSPITAL-BASED RESEARCH FACULTY

Jillian Beveridge's research focuses on knee joint injuries, specifically anterior cruciate ligament (ACL) tear, and the structural, functional and neuromuscular changes that lead to early-onset posttraumatic osteoarthritis. She uses a variety of advanced quantitative and biomechanical imaging techniques coupled with electromyography to detect protective joint movement signatures across preclinical animal models and human clinical trials. She currently directs a multi-center, R01-funded study evaluating patient outcomes after ACL surgery in collaboration with the Multicenter

Orthopaedics Outcomes Network Knee Group In recognition of her innovative translational scholarship, Beveridge received the Journal of Orthopaedic Research Early Career Award, and her work was featured as a cover article in the journal Bioengineering She also serves on national NIH study sections and holds high-impact editorial board memberships

Brendan Keith, Ph.D.

Morton E. Gurtin Assistant Professor
of Applied Mathematics

PHYSICAL SCIENCES

Brendan Keith's research advances scientific computing by combining optimization theory with numerical methods for partial differential equations to solve complex engineering problems A leading example is his pioneering work on the proximal Galerkin finite element method for enforcing inequality constraints, which has recently helped resolve longstanding open problems in computational mechanics His research has been published in leading journals, including Foundations of Computational Mathematics In recognition of his contributions, Keith was named the inaugural Morton E. Gurtin Assistant Professor of Applied Mathematics at Brown University His honors include a 2023 DOE Early Career Research Award, a 2025 Sloan Research Fellowship, a 2025 Langtangen Prize and selection to Popular Science magazine's "Brilliant 10" list He also serves as director of the \$5 million DOE-funded Center for Information Geometric Mechanics and Optimization



George Lisi, Ph.D.

Associate Professor

LIFE SCIENCES AND PUBLIC HEALTH

George Lisi's research utilizes nuclear magnetic resonance (NMR) spectroscopy to resolve the atomic-level structures and dynamics of enzymes critical to human health and disease His laboratory pioneered NMR studies on the large CRISPR-Cas9 genome editing machine, revealing the impact of single atoms on its



domain flexibility, nucleic acid recognition, DNA editing, and off-target cleavage behaviors. His NMR studies of the inflammatory cytokine macrophage migration inhibitory factor visualized its fleeting pathological structure, facilitating the design of therapies for hereditary childhood diseases. These and other foundational biophysical insights have appeared in more than 60 publications in journals including *Nature Communications*, *Science Advances*, *Nature Catalysis*, *PNAS* and *Nucleic Acids Research*. His work has been funded by major grants from the NIH, as well as an NSF CAREER Award and CRISPR Innovator Award.

David Meyers, Ph.D.

Associate Professor of Health Services,
Policy and Practice

LIFE SCIENCES AND PUBLIC HEALTH



David Meyers's research focuses on payment and delivery reform within the U.S. healthcare system, with a specific emphasis on the Medicare Advantage program. His work has exposed how private insurers exploit payment rules to extract billions in additional federal spending, which has directly informed federal legislation such as the Veterans' Health Care Act. Additionally, his studies on Medicare's star-rating system influenced the development of a health equity index, while his groundbreaking NIH-funded research established the largest national cohort of transgender Medicare beneficiaries to analyze care disparities. In recognition of his prominent leadership in health policy, Meyers received the American Journal of Managed Care Seema S. Sonnad Emerging Leader in Managed Care Research Award. He has published over 150 peer-reviewed articles in high-impact journals, including *JAMA* and *Health Affairs*, and frequently briefs congressional committees as an expert on managed care policy.

Gabriel de Avilez Rocha, Ph.D.

Vasco da Gama Assistant Professor
of Early Modern Portuguese History

HUMANITIES AND SOCIAL SCIENCES



Gabriel de Avilez Rocha's pioneering research reinterprets the rise of imperial power in the early modern Atlantic and Lusophone worlds by centering environmental history, marginalized people and everyday struggles. His forthcoming book, "The Atlantic Acceleration: Empires and Uprisings from the Oceanic Commons," draws from original archival research and interdisciplinary methods to examine how enslaved people, maroons and commoners participated in shared ecologies and shaped the emergent Atlantic links between Africa, the Caribbean, Brazil and Iberia in the 15th and 16th centuries. Additionally, Rocha has co-edited issues for renowned international journals such as *Itinerario* and *Revista Tempo*. In recognition of his innovative scholarship, Rocha won the Lester J. Cappon Award from the Omohundro Institute for his 2025 essay in the *William and Mary Quarterly*. Rocha also received a prestigious Mellon New Directions Fellowship to fund his next project on shipwrecks in the South Atlantic.

Monica Martinez Wilhelmus, Ph.D.

Thomas J. and Alice M. Tisch Assistant
Professor of Engineering

PHYSICAL SCIENCES



Monica Martinez Wilhelmus studies transport phenomena at the intersection of fluid mechanics, oceanography and biology — how mass, momentum and energy move through environmental systems, and how organisms both shape and are shaped by the flows around them. In the Arctic, her lab develops algorithms that track individual ice floes across satellite imagery, treating the ice as a tracer for the ocean eddies beneath it and recovering the small-scale dynamics that current climate models cannot resolve. In the water column, she analyzes how swimming organisms interact with the fluid around them and translates those mechanisms into engineered systems, including Pleobot, a krill-inspired underwater robot developed by her group. Most recently, she has taken up breastfeeding as a physics problem, using reduced physical models to ask what

drives milk flow, what impedes it, and what could make the practice more sustainable for women — a question of obvious consequence that has rarely been posed in mechanical terms Her work has been supported by an Office of Naval Research Young Investigator Award and by NASA, and she was selected for the National Academy of Engineering's 2025 Frontiers of Engineering Symposium

MID-CAREER RESEARCH ACHIEVEMENT AWARDS

Javier Gómez-Serrano, Ph.D.

Professor of Mathematics

PHYSICAL SCIENCES



Javier Gómez-Serrano is a renowned mathematician pioneering the integration of artificial intelligence into mathematical research His work operates at the intersection of fluid mechanics and computer-assisted proofs, notably utilizing physics-informed neural networks (PINNs) to discover unstable singularities in complex fluid equations In a separate breakthrough, he collaborated with Google DeepMind on AlphaEvolve, an AI model that automates mathematical and algorithmic discovery Beyond AI and fluids, his research spans spectral geometry, exploring the ancient questions of studying the resonances of polygonal drums Internationally recognized, Gómez-Serrano has received a European Research Council grant, the R E Moore Prize and the 2025 Mathematical Congress of the Americas Prize His innovations are frequently featured in prominent publications, including Quanta Magazine and El País

Stephen E. Kidd, Ph.D.

Professor of Classics

HUMANITIES AND SOCIAL SCIENCES



Stephen Kidd's research integrates cultural history with philosophical analysis to address vital questions in ancient Greek literature, aesthetics, literary theory and the philosophy of art. His foundational book "Nonsense and Meaning in Ancient Greek Comedy" redefined cultural debates about meaning by asking why audiences so often find comedy to be "nonsense." His book "Play and Aesthetics in Ancient Greece" transformed scholarly understanding regarding the pleasures of art by showing the differences between ancient and modern understandings of play. And his recent monograph "Lucian on Reading, Performing, and the Difference" showed, through close readings of the second century C.E. author Lucian of Samosata, how reading changes readers in unexpected ways. Additionally, he has published nearly two dozen peer-reviewed articles in prestigious venues.

Anne CC Lee, M.D., MPH

Levinger Family Professor of Pediatrics

HOSPITAL-BASED RESEARCH FACULTY



Dr. Anne CC Lee's research focuses on reducing global mortality and improving health outcomes for mothers, newborns and children through enhanced perinatal care. As the founding director of the Brown Global Alliance for Infant and Maternal Health Research, she implements complex, population-based international studies. Lee has published over 150 peer-reviewed papers in high-impact journals, including the Lancet, BMJ and JAMA Pediatrics. Her scientific expertise has been sought by international bodies, leading technical groups for the World Health Organization and serving on the National Academy of Sciences committee that produced the report "Developing a Framework to Address Legal, Ethical, Regulatory, and Policy Issues for Research Specific to Pregnant and Lactating Persons." In recognition of her prominent leadership, Lee was inducted into the prestigious American Society for Clinical Investigation in 2024. She also maintains extensive research funding from the NIH, the Gates Foundation and Wellcome Leap.

Jane Metrik, Ph.D.

Professor of Behavioral and Social Sciences,
Professor of Psychiatry and Human Behavior

LIFE SCIENCES AND PUBLIC HEALTH



Jane Metrik is a pioneering expert in translational behavioral pharmacology, renowned for advancing the global understanding of cannabis's impacts on alcohol use, psychiatric comorbidities and driving impairment. Twenty years ago, she established Brown University's first human cannabis administration laboratory. Her groundbreaking portfolio includes conducting the first balanced-placebo cannabis study to isolate pharmacological effects from expectancies, developing cannabis cue reactivity paradigms, and providing the first experimental evidence that cannabis acutely reduces alcohol consumption. Additionally, her research clarifies complex links between cannabis use disorder, PTSD and mood disorders to inform effective clinical interventions. As a prominent global leader, she has secured nine federal awards, including six NIH R01s and VA grant awards, contributing to a total of 24 federally sponsored projects. She serves as president of the Research Society on Marijuana, successfully translating rigorous science into international evidence-based guidelines and clinical standards.



2026

Salomon Research Award

RECIPIENTS

Visit go.brown.edu/2026SalomonAwardees
for research project abstracts.

ARTS AND HUMANITIES

Poetry Jamaica Voiced

PI: Kwame Dawes, *Professor of Literary Arts*

Publication Subvention for Russian Translation of The Orchestral Revolution

PI: Emily Dolan, *Professor of Music*

“High Performance” as Archive and Method: Curatorial Research,
Transregional Exchange and the History of Performance Art

PI: Leon J Hilton, *Associate Professor of Theatre Arts and Performance Studies*

A Night at The Box: Preserving San Francisco Queer Nightlife History, 1987-1998

PI: Madison Moore, *John Atwater and Diana Nelson Assistant Professor of the Arts*

The Mountains We Climb: Recording Project

PI: Eric Nathan, *Associate Professor of Music*

Third-Worldist Poetics: Palestine, Cuba, Algeria

PI: Maru Pabon, *Assistant Professor of Comparative Literature*

She Flickered In and Out of History

PI: Elisa Giardina Papa, *Assistant Professor of Modern Culture and Media*

The Balikbayans: Stories of Returning and Creating Home

PI: Grace Talusan, *Assistant Teaching Professor of English*

Alhaydrulujya (The Hydrology)

PI: Jacinda Townsend, *Vartan Gregorian Assistant Professor of Literary Arts*

SOCIAL SCIENCES

A Multimedia Community-Driven Dictionary of A'ingae

PI: Scott AnderBois, *Associate Professor of Linguistics*

Between Two Singapores: Unsettling Settler Romances and the Labor
of Imagination in Western Michigan and Southeast Asia

PI: Joshua Babcock, *Assistant Professor of Anthropology*

Njavara: Indigenous Knowledge, Standardization and Resilience

PI: Xan Chacko, *Assistant Teaching Professor of Science, Technology and Society*

Building Better Brains: (Un/)Desirable Futures, Disability and the Development of Neurotechnologies

PI: Kim Fernandes, *Assistant Professor of Anthropology*

Subterranean Awakening: Historical Consciousness and Multispecies Habitability in Times of Earthquakes (1897-1950)

PI: Aparajita Majumdar, *Assistant Professor of History and Environment and Society*

Latino London: Migration, Community Formation, and Transatlantic Latinidad

PI: Mark Ocegueda, *Assistant Professor of History*

PHYSICAL SCIENCES

Designing and Probing Light-Induced Quantum Phases in 2D Heterostructure: Toward the Supersolid Phase of Excitons

PI: Yusong Bai, *Assistant Professor of Chemistry*

Generating Essential Pilot Data for External Grant Proposals Using the New Uplc-Orbitrap Mass Spectrometer

PI: Yongsong Huang, *Professor of Earth, Environmental and Planetary Sciences*

Fingerlike Protrusions in Bacterial Swarm Front Caused by Fracture Mechanics

PI: Jay X Tang, *Professor of Physics, Professor of Engineering*

PUBLIC HEALTH

Finding Interpretability in Genetic Association With Latent Brain Imaging Phenotypes

PI: Zhijin Wu, *Professor of Biostatistics*

BIOLOGICAL AND LIFE SCIENCES

How the Brain Organizes Emotion Knowledge

PI: Oriol FeldmanHall, *Professor of Cognitive and Psychological Sciences*

The Role of Growth Cone Membrane Potential in Axon Guidance

PI: Alexander Jaworski, *June G. Zimmerman Associate Professor of Brain Science*



2026

Research Seed Award

RECIPIENTS

Visit go.brown.edu/2026SeedAwardees
to learn more about the Seed Awardees.

BIOLOGICAL AND LIFE SCIENCES

Strain-Resolved Skin Microbiome Metabolism as a Therapeutic Target in Acne Vulgaris

PI: Peter Belenky, *Associate Professor of Molecular Microbiology and Immunology*

Co-PI: Eunyoung Cho, *Associate Professor of Epidemiology, Associate Professor of Dermatology*

Neuroimmune Interactions in Neurodevelopmental Disorders

PI: Carlos Aizenman, *Professor of Neuroscience, Professor of Brain Science*

A Whole-Brain Investigation of Representational Drift and a Link to Abstraction

PI: Apoorva Bhandari, *Assistant Professor of Cognitive and Psychological Sciences (Research)*

Human-Animal Collaboration as a Model for Human-Robot Collaboration

PI: Daphna Buchsbaum, *Associate Professor of Cognitive and Psychological Sciences*

Co-PI: Stefanie Tellex, *Professor of Computer Science*

Leveraging Electronic Health Records and Artificial Intelligence for Pediatric Psychiatry Emergency Services

PI: Elizabeth Chen, *Associate Professor of Medical Science*

Co-PI: Kathleen Donise, *Professor of Psychiatry and Human Behavior*

Determining Host Factors Required for Trypanosoma Cruzi Cellular Invasion

PI: Christopher de Graffenried, *Associate Professor of Molecular Microbiology and Immunology*

Co-PI: Sanghyun Lee, *Assistant Professor of Molecular Microbiology and Immunology*

Closing the Mental Health Treatment Gap for Youth With Tuberculosis: A Participatory Approach

PI: Alethea Desrosiers, *Associate Professor of Psychiatry and Human Behavior (Research)*

Visualizing How Dynamic Molecular Interactions Control Transcription in Flies

PI: Nicolas Fawzi, *Professor of Medical Science*

Co-PI: Erica Larschan, *Professor of Molecular Biology, Cell Biology and Biochemistry*

Neural Circuit and Computational Mechanisms of Learning in Dynamic Sensory Environments

PI: Alexander Fleischmann, *Provost's Professor of Brain Science*

Co-PI: Matt Nassar, *Associate Professor of Neuroscience, Associate Professor of Cognitive and Psychological Sciences*

Microglial Klf2 Deficiency and Its Pharmacologic Restoration in Alzheimer's Disease

PI: Yu-Wen Alvin Huang, *James and Dorothy Goodman Assistant Professor of Molecular Biology, Cell Biology and Biochemistry*

Co-PI: Mukesh Jain, *Senior Vice President for Health Affairs, Senior Associate Provost for Life Sciences, Dean of Medicine and Biological Sciences*

Mechanistic Basis of Sex Differences in Alzheimer's Disease

PI: Erica Larschan, *Professor of Molecular Biology, Cell Biology and Biochemistry*

Artificial Intelligence-Enabled Clinical Decision Support for Maternal and Newborn Health

PI: Anne CC Lee, *Levinger Family Professor of Pediatrics*

Co-PI: Methodius Tuuli, *Chace-Joukowsky Professorship in Obstetrics and Gynecology*; Jennifer Unger, *Associate Professor of Obstetrics and Gynecology*; Ying Ma, *Edens Family Assistant Professor of Healthcare Communications and Technology, Assistant Professor of Biostatistics*

Targeting TrkB Signaling for Neuroprotection in a Preterm-Equivalent Rat Model of Severe Hypoxic-Ischemic Brain Injury

PI: John Marshall, *Professor of Medical Science*

Co-PI: Xiaodi Chen, *Associate Professor of Pediatrics (Research)*

Co-I: Lanlan Zhou, *Assistant Professor of Pathology and Laboratory Medicine (Research)*

Role of ER Membrane Contact Sites in Synapse Formation and Plasticity

PI: Kate O'Connor-Giles, *Provost's Professor of Brain Science*

Food as Medicine Ontology (FAMO): A Computable Knowledge Infrastructure to Integrate Traditional Dietary Therapies Into Modern Clinical Care

PI: Neil Sarkar, *Associate Professor of Medical Science, Associate Professor of Health Services, Policy and Practice*

Co-Is: Elizabeth Chen, *Associate Professor of Medical Science, Associate Professor of Health Services, Policy and Practice*; Bryce Perler, *Assistant Professor of Medicine, Clinician Educator*; Mariah Stump, *Assistant Professor of Medicine, Clinician Educator*

Investigation of Environmental Exposures and Apobec-Mediated Mutations for a Rhode Island High-Risk Bladder Cancer Cohort: Translational, Behavioral and Mechanistic Analysis

PI: Robert Sobol, *Dean's Professor of Cancer Research*

Co-PI: Dragan Golijanin, *Director, Minimally Invasive Urology Institute*
Director of Genitourinary Oncology, The Miriam Hospital

Impact of Normal and Slow Aging on Transfer RNA Modifications

PI: Marc Tatar, *Professor of Biology*

Co-PI: Juan Alfonzo, *Professor of Molecular Biology, Cell Biology and Biochemistry*

A Pilot Study of Sleep Behavior and Neurophysiology in Adolescents with Psychosis-Spectrum Conditions

PI: Elizabeth Thompson, *Assistant Professor of the Practice in Cognitive and Psychological Sciences, Assistant Professor of Psychiatry and Human Behavior (Research)*

Co-I: Jared Saletin, *Associate Professor of Psychiatry and Human Behavior*

HUMANITIES AND SOCIAL SCIENCES

The Role of Neural Replay in Building Cognitive Maps for Social Navigation

PI: Apoorva Bhandari, *Assistant Professor of Cognitive and Psychological Sciences (Research)*

Validating an Iterative Annotation Pipeline for Segment-Level Spoken Corpora

PI: Uriel Cohen Priva, *Associate Professor of Linguistics*

Tech Boom or Bust? The Impact of Data Center Expansion on Air Quality and Student Outcomes

PI: Matthew Kraft, *Professor of Education*

Co-I: Samantha B Kane, *Postdoctoral Research Associate in Education Policy*

Temporal Governance Under Algorithmic Control: Time Use, Caregiving and Asset Formation in Immigrant Gig Households

PI: Laura Lopez-Sanders, *Associate Professor of Sociology*

Edward Mitchell Bannister: A Black Artist in 19th Century New England

PI: Dietrich Neumann, *Christopher Chan and Michelle Ma Professor of History of Art and Architecture, Professor of Italian Studies, Professor of Urban Studies*

Social Contexts and Women's Life Course Health

PI: Susan Short, *Robert E. Turner Distinguished Professor of Population Studies*

Welfare, Security, Representation: What Drives Women's Political Preferences?

PI: Poulami Roychowdhury, *Associate Professor of Sociology and International and Public Affairs*

Co-PIs: Yamini Aiyar, *Visiting Professor of the Practice of International and Public Affairs*; Bhanu Joshi, *Research Affiliate, Saxena Center, Brown University*

PHYSICAL SCIENCES

Dynamics of Offshore Wind Turbines

PI: Kenny Breuer, *Professor of Engineering*

Co-PIs: Baylor Fox-Kemper, *Professor of Earth, Environmental and Planetary Science*; Brad Marston, *Professor of Physics*

Phytoplankton Responses to Environmental Gradients: Modeling and Observations

PI: Mara Freilich, *Thomas J. and Alice M. Tisch Assistant Professor of Earth, Environmental and Planetary Sciences and Applied Mathematics*

Towards a Foundational Model for Theoretical Physics: Exploring Beyond-the-Standard-Model Theory Space with Reinforcement Learning and Transformers

PI: Loukas Gouskos, *Associate Professor of Physics*

Co-PIs: Stephon Alexander, *Professor of Physics*; Savvas Koushiappas, *Professor of Physics*

Impact of Non-Newtonian Droplets: Spreading and Rebound

PI: Daniel Harris, *Associate Professor of Engineering*

Co-PI: Chase Gabbard, *Hope Street Postdoctoral Fellow*

NEST-AI: Integrating Environmental Sensing and AI for Urban Heat Decision Support

PI: Meredith Hastings, *George Ide Chase Professor of Physical Sciences*

Co-PI: Manu DiLorenzo, *Albert Davis Mead Professor of Earth, Environmental and Planetary Sciences*; Stephen Bach, *Associate Professor of Computer Science*; Katelyn Moretti, *Associate Professor of Emergency Medicine*

Disentangling Mechanisms for a Warm-Wet Pliocene Climate in Western North America

PI: Daniel Ibarra, *Manning Assistant Professor of Earth, Environmental and Planetary Sciences and Environment and Society*, *Assistant Professor of Engineering*

Monochromated STEM EELS of in situ intercalated 2D materials bilayers

PI: Matthias Kuehne, *Assistant Professor of Physics*

ExoTherm-X: Clean Heat Chemistry for a Circular Metal Economy and Sustainable Energy

PI: Feng Lin, *Brown Professor of Engineering*

Co-PIs: Yue Qi, *Joan Wernig Sorensen Professor of Engineering*; Xiaowen Zhan, *Senior Research Associate in Engineering*

Protecting Radio Astronomy From Satellite Constellations: A Data-Driven Approach for Removing Contaminating Signals

PI: Jonathan Pober, *Associate Professor of Physics*

Co-PI: Stephen Bach, *Associate Professor of Computer Science*

Advancing EV-Grade Si Anodes: New Electrolyte Chemistries to Enable Mechanically Robust Interphases

PI: Brian Sheldon, *Professor of Engineering*

Co-PI: Feng Lin, *Professor of Engineering*

Nanoengineered Platforms for Next-Generation Antifungal Therapeutics

PI: Anita Shukla, *Elaine I. Savage Professor of Engineering*

Co-PI: Richard Bennett, *Charles A. and Helen B. Stuart Professor of Molecular Microbiology and Immunology*, *Chair of Molecular Microbiology and Immunology*

Visualization of Microplastics and Lung Cell Function in Idiopathic Pulmonary Fibrosis Using Advanced Optical Vibrational Imaging

PI: Emily Sprague-Klein, *Assistant Professor of Chemistry*

Co-PI: Sharon Rounds, *Professor of Pathology and Laboratory Medicine, Professor of Medicine*

Multimodal Learning to Harness InSAR Time Series for Studying Coastal Subsidence

PI: Chen Sun, *Assistant Professor of Computer Science*

AI-Assisted Aging-In-Place Sensor Testbed

PI: Kimani Toussaint, *Thomas J. Watson Sr. Professor of Science, School of Engineering*

Co-PIs: Rebecca Hubbard, *Professor of Public Health*; Haneesh Kesari, *Associate Professor of Engineering*; Benjamin Kimia, *Professor of Engineering*; Louise Manfredi, *Associate Professor of the Practice of Engineering*; Peipei Zhou, *Assistant Professor of Engineering*; Diana Freed, *Assistant Professor of Computer Science and Data Science*

Enhancing NASA's Refractory Alloy Design Capabilities Through High-Dimensional Phase Diagrams Calculations

PI: Axel van de Walle, *Professor of Engineering*

Exothermic Carbon Capture Thermodynamics

PI: Axel van de Walle, *Professor of Engineering*

Electrochemical Destruction of Sorbent-Captured PFAS

PI: Joy Zeng, *Assistant Professor of Engineering*

Co-PI: Kurt Pennell, *250th Anniversary Professor of Engineering*

PUBLIC HEALTH

Evaluating Research Credibility in Alzheimer's Disease to Strengthen Evidence-Based Decision Making

PI: Sarah Ackley, *Assistant Professor of Epidemiology*

Key Personnel: Michael Flanders, *Senior Data Analyst, Center for Gerontology and Healthcare Research*

Why Aren't PCPs Taking New Patients? Leveraging AI to Address the Primary Care Crisis

PI: Michael Barnett, *Sorensen Family Provost's Professor of Health Services, Policy and Practice*

Key Personnel: Tamara Beetham, *Postdoctoral Research Associate in Health Services, Policy and Practice*

Improving Affordability and Generosity in Employer-Sponsored Health Insurance

PI: Jason Buxbaum, *Assistant Professor of Health Services, Policy and Practice*

Reducing Alcohol Consumption for Health Together: Pilot Testing a Brief Couples Alcohol Counseling Program Via Telehealth

PI: Christopher Kahler, *Professor of Behavioral and Social Sciences, Director of the Center for Alcohol and Addiction Studies, Professor of Psychiatry and Human Behavior*

Building a Cross-Campus Systems Science Platform for Alcohol-Attributable Cancer Prevention

PI: Aditya Khanna, *Associate Professor of Behavioral and Social Sciences*

Co-PI: Lauren Micalizzi, *Assistant Professor of Behavioral and Social Sciences*; Christopher Kahler, *Professor of Behavioral and Social Sciences*; Stephanie Graff, *Associate Professor of Medicine*; Thomas Trikalinos, *Director of the Center for Evidence Synthesis in Health, Professor of Health Services, Policy and Practice*; Margot Jackson, *Professor of Sociology, Director of Population Studies*

AI/ML-Enhanced Causal Inference for EHR

PI: Youjin Lee, *Manning Assistant Professor of Biostatistics*

Co-I: Rebecca Hubbard, *Carl Kawaja and Wendy Holcombe Professor of Public Health, Professor of Biostatistics and Data Science*

Real-Time Exposure to Anti-Immigrant Stressors and Its Effects on Behavioral Health Among Hispanic Youth in the Northeast

PI: Robert Rosales, *Assistant Professor of Behavioral and Social Sciences*

Co-Is: Robert Miranda Jr, *Professor of Behavioral and Social Sciences, Professor of Psychiatry and Human Behavior*; David G. Zelaya, *Assistant Professor of Behavioral and Social Sciences*

**Engaging Youth, Caregivers and Teachers for Suicide Prevention:
Developing and Implementing a Multi-Level Intervention in Rural China**

PI: Shufang Sun, *Associate Professor of Behavioral and Social Sciences,
Associate Professor of Psychiatry and Human Behavior*

**Assessing the Abuse Liability of a Hyper-Palatable Ultraprocessed Food
in People With vs. Without Affective Disorders**

PI: Jennifer Tidey, *Professor of Behavioral and Social Sciences,
Professor of Psychiatry and Human Behavior*

**Climate-Friendly, Healthy School Food Systems: Building an Integrated
Measurement and Intervention Platform with Rhode Island Districts**

PI: Alison Tovar, *Director of the Center for Health Promotion and Health Equity,
Associate Professor of Behavioral and Social Sciences*

Co-PI: Joseph Braun, *Professor of Epidemiology, Director of the Center
for Climate, Environment and Health*

**Preparing for Implementation of the Moms on the Move Intervention
Across Youth Sports Organizations**

MPI: Tayla von Ash, *Assistant Professor of Behavioral and Social Sciences;*
Ruben Martinez, *Assistant Professor in the Department of Psychiatry
and Human Behavior*

Key Personnel: Bess Marcus, *Professor of Behavioral and Social Sciences;*
Shira Dunsiger, *Associate Professor of Behavioral and Social Sciences, Associate
Professor of Biostatistics, Associate Professor of Psychiatry and Human Behavior*



BROWN
Division of Research

brown.edu/research

© Brown University 2026. All Rights Reserved.

Produced by the Division of Research

Office of University Communications | MP-4502DOR26