

Why Hearing Research Matters for Individuals and Communities

April 15, 2021, 10 a.m. Eastern Daylight Time / 9 a.m. Central Daylight Time; ZOOM Webinar

Sponsored by the Association of Retired Rice University Faculty. Register. <https://www.ARRUF.rice.edu>

This conference promotes multidisciplinary awareness and collaboration among researchers interested in hearing loss and hearing health equity. It also previews for individuals and community members research paths that can lead to more comprehensive, equitable hearing health solutions.

Hearing loss, which affects many older adults, attracts multiple research approaches. As with Covid-19, intersecting contextual factors--from

nutrition to access to medical care—affect individuals’ and communities’ hearing health. Broad awareness affords more comprehensive research designs and actionable outcomes.

ARRUF’s half-day webinar features four promising researchers and their research directions. Students, faculty, administrators, as well as healthcare professionals and members of the public are invited to REGISTER and attend.

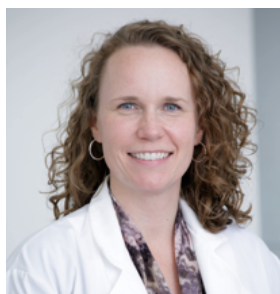
9:00 a.m. CDT



Dr. Seiichi Matsuda,

Dean of Graduate and Post-Doctoral Studies, E. Dell Butcher Professor of Chemistry; Professor of Biochemistry & Cell Biology, Rice University.

Welcome

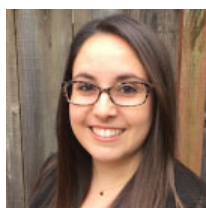


Kelly King, Ph.D.

Principal Guest Speaker. Program Manager, National Institute on Deafness and Other Communication Disorders.

Adult Hearing Healthcare: Public Health Challenges, Progress, and Opportunities

9:45 a.m.
CDT



Stephanie Leal,

Ph.D., Assistant Professor, Department of Psychological Sciences, and Director of the Neuroscience of Memory & Aging Laboratory, Rice University.

The Aging Brain: Examining Memory Changes in Aging and Alzheimer’s Disease



Jennifer Deal, Ph.D.

Assistant Professor, Dept. of Epidemiology, and Dept. of Otolaryngology-Head and Neck Surgery; Associate Director for Academic Training, Cochlear Center for Hearing and Public Health; Johns Hopkins Bloomberg School of Public Health.

Hearing Loss and Dementia in Older Adults

10:30 a.m.
CDT

BRIEF FIFTEEN MINUTE BREAK

10:45 a.m.
CDT



Carrie Nieman, M.D.,

M.P.H. Johns Hopkins University Medical School, Assistant Professor of Otolaryngology, Dept. of Head and Neck Surgery.

Advancing Equity in Hearing Care: Community-Delivered Hearing Care from Research to Impact



Robert Raphael, Ph.D.,

Associate Professor, Department of Bioengineering and Principal Investigator, Rice University/Baylor College of Medicine Neuroengineering IGERT, Rice University.

Engineering Research Approaches to Age-Related Hearing Loss

11:30 a.m.
CDT

Responding to Disparities in Hearing Health



Alex Byrd, Ph.D., Vice

Provost for Diversity, Equity, and Inclusion, Associate Professor of History, Rice University.



Kirsten Ostherr, Ph.D.,

MPH, Gladys Louise Fox Professor and Chair, Dept. of English, and Founding Director, Rice Medical Humanities Program.



Jan Odegard, Ph.D.,

Acting Interim Director, the ION Center, Houston, and former Associate Director of Research Computing, Rice.



Melia Bonomo, Ph.D.,

Post-Doctoral Fellow, Department of Bioengineering, Rice University.

Event Concludes at noon CDT

The Association of Retired Rice University Faculty aspires to transform traditional retirement through innovation and collaboration. Monthly meetings featuring conversations with university leaders and ARRUF members, lunches, receptions, and field trips emphasize collegiality. Smaller interest groups keen to explore nature, travel, and the arts arrange attendance at special events, afterparties, and a range of enjoyable activities. Sponsoring conferences, especially on topics relevant to longevity and retirement allows ARRUF members to keep up with innovative research and new directions. ARRUF.invites@rice.edu

Selected Background Information on Speakers at Today's Conference

Melia Elizabeth Bonomo, Ph.D. Postdoctoral Research Associate, Department of Bioengineering, Rice University. In a study published this month in *Physics* 13,50, Bonomo and colleagues at Houston Methodist Hospital used functional magnetic resonance imaging (fMRI) to create "brain maps" to predict how some types of music worked better for certain injured patients, using network theory to explain new neuronal connections.

Alex Byrd, Ph.D., Vice Provost for Diversity, Equity, and Inclusion, Associate Professor of History, Rice University. His study of free and forced transatlantic black migration in the period of the American Revolution, *Captives & Voyagers*, won the 2009 Wesley-Logan Prize in African diaspora history. He was recognized by the Minnie Stevens Piper Foundation as one of 2020's top 10 teachers in Texas. He is also a four-time recipient of the George R. Brown Award for Superior Teaching and is co-chair of Rice's Task Force on Slavery, Segregation and Racial Injustice.

Jennifer Deal, Ph.D. Assistant Professor, Dept. of Epidemiology, and Dept. of Otolaryngology-Head and Neck Surgery; Associate Director for Academic Training, Cochlear Center for Hearing and Public Health; Johns Hopkins Bloomberg School of Public Health. Her research focuses on hearing healthcare disparities and dementia.

Kelly King, Au.D., Ph.D., Principal Guest Speaker. Program Manager, National Institute on Deafness and Other Communication Disorders. Division of Scientific Programs. The NIDCD's intramural research program conducts basic and clinical research in human communication. Its Hearing and Balance Program supports projects concerned with psychoacoustics, hearing aids, cochlear implants, clinical assessment and management.

Stephanie Leal, Ph.D., Assistant Professor, Department of Psychological Sciences, and Director of the Neuroscience of Memory & Aging Laboratory, Rice University. Ph.D. in Psychological & Brain Sciences from Johns Hopkins University. Her research focuses on how neurobiological mechanisms underlying episodic memory processing are altered in aging and disease states.

Dr. Seiichi Matsuda, Ph.D. Dean of Graduate and Post-Doctoral Studies, E. Dell Butcher Professor of Chemistry; Professor of Biochemistry & Cell Biology, Rice University. Responsible for the oversight of all of Rice's graduate programs, Dean Matsuda has been a member of the Rice faculty since 1995 and is a recipient of the George R. Brown Award for Superior Teaching. Dean Matsuda conducts research on terpenoids, the most numerous and structurally diverse group of small molecules synthesized by plants.

Carrie Nieman, M.D., M.P.H. Johns Hopkins University Medical School, Assistant Professor of Otolaryngology, Dept. of Head and Neck Surgery. She is the co-founder of Access HEARS, a nonprofit committed to the delivery of affordable, accessible hearing care. Nieman works across disciplines and translates research and approaches in gerontology, social design, behavioral intervention research, community-based participatory research and human factors to advance hearing health equity and bring innovation to underserved communities.

Kirsten Ostherr, Ph.D., M.P.H., Gladys Louise Fox Professor and Chair, Dept. of English, and Founding Director, Rice Medical Humanities Program and the Medical Futures Lab, a collaborative center bringing together faculty from Rice, Baylor College of Medicine and UT Health to study new ways of understanding medicine.

<http://giving.rice.edu/stories/changing-the-patient-experience-a-qa-with-the-director-of-the-medical-humanities-program-kirsten-ostherr>

Jan Odegard, Ph.D., Since January, 2021, Acting Interim Director, for the ION Center, Houston. Former Associate Vice President for Research Computing, Rice University, Dr. Odegard served 18 years as executive director of Rice's [Ken Kennedy Institute](#), which fosters collaborations to solve critical global challenges through innovative computing that harnesses the transformative power of data.

Robert Raphael, Ph.D., Associate Professor, Department of Bioengineering and Principal Investigator, Rice University/Baylor College of Medicine Neuroengineering IGERT, Rice University. Raphael's team studies a unique membrane protein in sensory hair cells, [prestin](#), which converts electrical signals into mechanical motions, enabling humans to hear high frequencies. His collaborations advance understanding of optical stimulation of neurons, three-dimensional cell culture, and cancer cells.