2023 Award and Prize Recipients

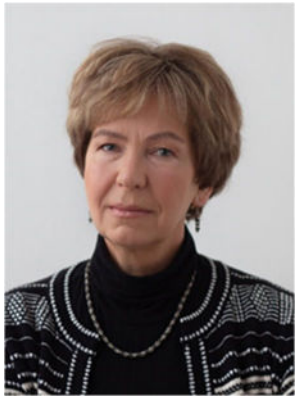
Mark F. Hamilton is the recipient of the 2023 Gold Medal of the Acoustical Society of America (ASA). His citation reads: "For contributions to theoretical nonlinear acoustics, education, and for service to and leadership of the society." The Gold Medal is presented annually to a member of the ASA, without age limitation, for contributions to acoustics.

Dr. Hamilton earned his M.S. and Ph.D. in Acoustics at The Pennsylvania State University. He has served on the faculty of The University of Texas at Austin (UT Austin), Department of Mechanical Engineering, since 1985, and is a member of the Graduate Studies Committee in the Department of Electrical and Computer Engineering. He is also Research Professor at Applied Research Laboratories at UT Austin.

Dr. Hamilton conducts research in the area of physical acoustics, particularly nonlinear acoustics. His current research interests include acoustic radiation force, linear and nonlinear shear wave beams in tissue, focused nonlinear surface waves in crystals, wave interactions in jet noise, and acoustic vortex beams.

He is actively involved in the ASA. He has served for over two decades as Associate Editor of the Journal of the ASA covering the fields of physical and nonlinear acoustics. He was elected and served as a member of the Executive Council, as Vice President, and as President. He served on the Governing Board of the American Institute of Physics and as President of the International Commission for Acoustics.

Dr. Hamilton is a Fellow of the ASA. He was awarded a Packard Fellowship for Science and Engineering by the David and Lucile Packard Foundation, a Presidential Young Investigator Award by the National Science Foundation, the Pi Tau Sigma Gold Medal by the American Society of Mechanical Engineers, the R. Bruce Lindsay Award by the ASA, and the Helmholtz-Rayleigh Interdisciplinary Silver Medal by the ASA.



Vera A. Khokhlova is the recipient of the Helmholtz-Rayleigh Interdisciplinary Silver Medal in Biomedical Acoustics and Physical Acoustics of the Acoustical Society of America (ASA). Her citation reads: "For contributions to the application of nonlinear acoustics to medical ultrasound." The Helmholtz-Rayleigh Interdisciplinary Silver Medal is presented to individuals for contributions to the advancement of science, engineering, or human welfare through the application of acoustic principles, or through research accomplishment in acoustics.

Dr. Khokhlova earned her M.S in Physics, and Ph.D. and D.Sc. in Acoustics from M.V. Lomonosov Moscow State University (MSU), Moscow, Russia. She is an Associate Professor at the Department of Acoustics, Physics Faculty of MSU and also affiliated with the Center for Industrial and Medical Ultrasound (CIMU), Applied Physics Laboratory, University of Washington, Seattle, WA.

Her research interests are in the fields of nonlinear acoustics, therapeutic ultrasound including metrology and bioeffects of high-intensity focused ultrasound fields, kidney stone fragmentation by ultrasound waves, nonlinear problems in aeroacoustics, wave propagation in inhomogeneous media, nonlinear wave modeling, and ultrasound imaging methods in medicine.

Dr. Khokhlova is a Fellow of the ASA and Chair of the ASA Committee on International Research and Education. She has served on the ASA Executive Council, the Board of the Russian Acoustical Society, and the Board of the International Society for Therapeutic Ultrasound.

Julianna C. Simon is the recipient of the 2023 R. Bruce Lindsay Award of the Acoustical Society of America (ASA). Her citation reads "for contributions to the understanding of ultrasound-induced mechanical bioeffects and their clinical applications." The R. Bruce Lindsay Award is presented in the spring to a member of the Society who has been active in the affairs of the Society and has contributed substantially, through published papers, to the advancement of theoretical or applied acoustics, or both.

Dr. Simon earned her B.S. in Bioengineering from Washington State University, Pullman and her Ph.D. in Bioengineering from the University of Washington, Seattle. She is an Assistant Professor in the Graduate Program in Acoustics with courtesy appointment in Biomedical Engineering at The Pennsylvania State University, University Park, PA.

Her research interests include using ultrasound to treat collagenous tissues such as tendons, diagnosing and treating heterotopic ossification with ultrasound, evaluating the distribution of bubble nuclei for acoustic cavitation in tissues, and determining the influences of respiratory gases on kidney stone detection with ultrasound. She is author or coauthor of over 30 publications in 20 different journals.

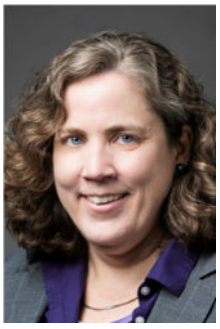
Dr. Simon currently serves as chair of the Archives and History Committee. She is the recipient of a National Science Foundation Early CAREER Award.

Bertrand Delgutte is the recipient of the William and Christine Hartmann Prize in Auditory Neuroscience. The Prize recognizes and honors research that links auditory physiology with auditory perception or behavior in humans or other animals.

Dr. Delgutte earned a Ph.D. in Electrical Engineering from the Massachusetts Institute of Technology and Doc. ès Sci. in Neuroscience from the Université Pierre et Marie Curie, Paris. Dr. Delgutte is Professor of Otolaryngology, Head and Neck Surgery at Harvard Medical School and Senior Scientist in the Department of Otolaryngology at Massachusetts Eye & Ear, Boston, MA.

His research investigates how the auditory system processes sounds, with the goals of understanding the neural basis of auditory perception and improving hearing aids and cochlear implants using an interdisciplinary approach combining neurophysiological, computational and behavioral techniques. Dr. Delgutte's ongoing research focus is on the neural mechanisms that allow us to effortless compensate for the severe distortion in speech and other sounds caused by reverberation in everyday acoustic environments.

Dr. Delgutte is a Fellow of the Acoustical Society of America.



Kathleen Wage is the recipient of the 2022 Rossing Prize in Acoustics Education. The Prize honors an individual who has made significant contributions in acoustics education, through distinguished teaching, creation of educational materials, textbook writing, and other activities.

Dr. Wage earned S.M., EE, and Ph.D. degrees in Electrical Engineering from the Massachusetts Institute of Technology and Woods Hole Oceanographic Institution. She is Professor in the Electrical and Computer Engineering Department of the Volgenau School of Engineering at George Mason University.

Her research interests include signal and array processing, underwater acoustics, ocean acoustic tomography, and engineering education. She is passionate about teaching and has created major instructional materials improving acoustic signal processing education. Her YouTube channel has attracted over four thousand subscribers.

Dr. Wage was awarded the Mac Van Valkenburg Award recognizing her outstanding contributions to teaching and the Harriett B. Rigas Award recognizing her significant contributions to electrical engineering education both by the IEEE Education Society.

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