



OSA and IS&T Name Joseph Izatt the 2021 Edwin H. Land Medal Recipient

The Optical Society and Society for Imaging Science and Technology Honor Leader in Biomedical Imaging

WASHINGTON — The Optical Society ([OSA](#)) and the Society for Imaging Science and Technology ([IS&T](#)) are pleased to name **Joseph A. Izatt** of Duke University, USA the [2021 Edwin H. Land Medal](#) winner. Izatt is recognized for foundational contributions to the invention, development, and commercialization of optical coherence-based technologies for in vivo biomedical imaging, and for the education and mentoring of distinguished scientists and engineers.

“Joseph Izatt is a true leader in optical coherence-based imaging research whose entrepreneurial spirit and mentorship is emblematic of the Edwin Land Medal,” said 2021 OSA President Connie Chang-Hasnain, Whinnery Chair Professor Emerita of EECS at University of California, Berkeley, USA. “His trailblazing accomplishments have contributed to the development of technologies that will benefit society indefinitely.”

“The impact that Joseph Izatt has had on advancing optical coherence-based imaging to positively impact medical outcomes, especially in children, truly embodies the public spirit of Edwin Land,” said IS&T President Scott Silence, Program Manager/Director, Ribbon Ceramics at Corning Incorporated, USA. “His work also illustrates the unique value of deep academic and industrial connections, in keeping with the high standards of the Land Medal and with the mission of IS&T.”

Izatt is a pioneer in biomedical imaging, a successful entrepreneur and a dedicated teacher. Following postdoctoral work at the Massachusetts Institute of Technology, USA, he held positions at University Hospitals of Cleveland, USA and Case Western Reserve University, USA and co-founded Bioptigen. He is currently the Michael J. Fitzpatrick Professor of Engineering in the Edmund T. Pratt, Jr. School of Engineering. A highly cited author, Izatt has published over 200 technical papers and more than 350 contributed conference presentations, delivered 135 invited lectures and presentations, and holds over 75 US patents. He is a Fellow of OSA, the American Institute for Medical and Biological Engineering, the National Academy of Inventors and SPIE.

He has made fundamental contributions to many coherence-based optical imaging technologies, especially optical coherence tomography (OCT). His accomplishments include playing an integral role in the initial development of retinal OCT, anterior segment OCT, endoscopic OCT, OCT image processing and segmentation, OCT imaging in neonates and children, intrasurgical OCT and OCT-guided robotic ophthalmic surgery. His group also pioneered the combination of OCT and scanning laser ophthalmoscopy in a compact hand-held format, demonstrating the first in vivo imaging of photoreceptors in neonatal infant eyes. Izatt serves as a mentor and educator to a diverse group of students and collaborates with engineers, scientist and clinicians in academia and industry.

Established in 1992, the Edwin H. Land Medal recognizes pioneering work empowered by scientific research to create inventions, technologies and products. It honors Edwin H. Land for his unique career as scientist, technologist, industrialist, humanist and public servant. The medal is jointly presented by OSA and IS&T, and funded through the support of the Polaroid Foundation, the Polaroid Retirees Association and individual contributors, including Manfred Heiting, Theodore Voss and John J. McCann.

About The Optical Society

Founded in 1916, The Optical Society (OSA) is the leading professional organization for scientists, engineers, students and entrepreneurs who fuel discoveries, shape real-life applications and accelerate achievements in the science of light. Through world-renowned publications, meetings and membership initiatives, OSA provides quality research, inspired interactions and dedicated resources for its extensive global network of optics and photonics experts. For more information, visit osa.org.

About The Society for Imaging Science and Technology

IS&T is an international professional non-profit dedicated to keeping members and other imaging professionals apprised of the latest developments in the field through conferences, educational programs, publications, and its website. IS&T programs encompass all aspects of the imaging workflow, which moves from capture (sensors, cameras) through image processing (image quality, color, and materialization) to hard and soft copy output (printing, displays, image permanence), and includes aspects related to human vision, such as image quality and color. The Society also focuses on a wide range of image-related applications, including security, virtual reality, machine vision, and data analysis. For more information, visit imaging.org.

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