Press Release

For Immediate Release

Marquis Who's Who Honors Yonina Eldar, PhD, for Expertise in Electrical Engineering and Higher Education

Yonina Eldar, PhD, leads cutting-edge research at Weizmann Institute of Science and Northeastern University

BOSTON, MA, March 6, 2026, Yonina Eldar, PhD, has been selected for inclusion in Marquis Who's Who. As in all Marquis Who's Who biographical volumes, individuals profiled are selected on the basis of current reference value. Factors such as position, noteworthy accomplishments, visibility, and prominence in a field are all taken into account during the selection process.

Dr. Eldar is an internationally recognized researcher in electrical engineering, with a career marked by groundbreaking research, interdisciplinary collaboration and a commitment to translating theory into impactful real-world applications.

She currently serves as the Aoun Chair Professor of Electrical and Computer Engineering at Northeastern University in Boston and as Professor of Mathematics and Computer Science at the Weizmann Institute of Science in Rehovot, Israel, where she holds the Dorothy and Patrick Gorman Professorial Chair. At Weizmann, she founded and heads the Signal Acquisition Modeling Processing and Learning (SAMPL) Lab and established the Center for Biomedical Engineering, uniting clinicians, scientists and engineers to explore how signal processing, artificial intelligence and hardware innovation can enhance medical diagnostics, imaging and scientific discovery. The center spans theoretical research and practical implementation, reflecting Dr. Eldar's dedication to bridging academic innovation with tangible societal impact. Unlike many academic laboratories, her group advances projects from mathematical theory through hardware implementation and clinical collaboration, ensuring real-world deployment of sensing, imaging and communication technologies. In recent years, her research has expanded to model-based artificial intelligence, developing interpretable and resource-efficient AI methods that integrate domain knowledge with deep learning to enable reliable sensing, imaging and communication under hardware and data constraints. Her guiding scientific principle is to extract maximal information from signals using minimal resources, enabling the miniaturization, accessibility and broader deployment of advanced technologies. Prior to joining Weizmann, Dr. Eldar served on the faculty of the Technion – Israel Institute of Technology from 2002 to 2019, rising from senior lecturer to full professor and holding the Edwards Chair in Engineering. Throughout her career, she has maintained strong international collaborations, serving as Visiting Professors at MIT and Stanford University, Visiting Scientist at the Broad Institute, Visiting Research Collaborator at Princeton University, Adjunct Professor at Duke University, Distinguished Visiting Professor at Tsinghua University, Advisory Professor at Fudan University and Visiting Professor at leading institutions worldwide.

In addition to her academic appointments, Dr. Eldar has contributed her expertise as a consultant across academia, industry and government. Her consulting engagements have included Mitsubishi Electric Research Laboratories and MIT Lincoln Laboratory in the United States; Elbit Systems, Rafael Advanced Defense Systems and Israel's Ministry of Defense; Intel Corporation; Texas Instruments; Lumotive; Orbotech; Nuance; Scopio; Dewpoint; SignaLife; and additional technology companies in the fields of signal processing, radar, communications, artificial intelligence and advanced imaging. She also provides expert consulting in complex legal and intellectual property matters. Dr. Eldar also serves on the Board of Directors of Arbe Robotics Ltd.

She has authored over 1,000 scientific publications and 11 books, holding 36 patents. She is a Fellow of IEEE and EURASIP, a member of the Israel Academy of Sciences and Humanities and Academia Europaea, and has served on the Board of Governors of both the IEEE Signal Processing Society and the IEEE Aerospace & Electronic Systems Society as well as on numerous IEEE award and technical committees. She currently serves on multiple IEEE committees, including the IEEE Integrated Sensing and Communication Emerging Technology Initiative, the IEEE Founders Medal Committee, the IEEE Kiyo Tomiyasu Award Committee, and several technical committees within the Signal Processing and Aerospace & Electronic Systems Societies. Her work has been supported by multiple major international grants, including two European Research Council (ERC) awards.

Highly educated in her field, Dr. Eldar earned bachelor's degrees in physics and electrical engineering from Tel Aviv University and a PhD in electrical engineering from the Massachusetts Institute of Technology in 2002. She later completed the 8400 Health Network Leadership Program at Harvard Business School and the Lahav Executive Education Program for Directors and Executives at Tel Aviv University.

Throughout her career, Dr. Eldar has been deeply engaged in professional leadership and advisory roles. She has served on advisory boards including the American College of Greece, the Cambridge Centre for Data-Driven Discovery, the Technology Innovation Institute in Abu Dhabi, the Bioconvergence Program, and MARIE, and co-chaired the InterAcademy Partnership's COVID-19 Advisory Group. She has served as Editor-in-Chief of Foundations and Trends in Signal Processing since 2013.

Civically, Dr. Eldar has demonstrated a longstanding commitment to shaping national policy and structural reform to improve gender equity in higher education. Since 2017, she has established and chaired the national committee for promoting gender fairness in higher education in Israel and has led initiatives aimed at increasing representation and opportunity for women in science and engineering.

Among Dr. Eldar's most notable scientific achievements is her pioneering work on sub-Nyquist sampling and compressed sensing, fundamentally changing how information can be acquired and processed efficiently. Her contributions have significantly influenced the design of analog-to-digital converters and modern radar and communication systems, enabling reduced power consumption, faster acquisition and improved resolution with fewer resources. In addition, her recent contributions to integrated sensing and communications and model-based AI have helped shape next-generation 6G systems, near-field communication technologies and intelligent radar platforms. She has also developed non-contact vital-sign monitoring using radar for remote patient care and advanced portable ultrasound technologies designed to expand global access to medical diagnostics.

Recognized with numerous international honors, Dr. Eldar is the recipient of the 2025 Israel Prize in Engineering Research, the IEEE Kiyo Tomiyasu Award, the IEEE Signal Processing Society Technical Achievement Award, the IEEE/AESS Fred Nathanson Memorial Radar Award, the Landau Prize in Mathematics, and multiple best paper awards, among many other distinctions. She has been recognized as a Highly Cited Researcher by Clarivate/Web of Science for multiple consecutive years.

She credits her success to exceptional mentors, collaborators, colleagues and students who have inspired her throughout her career. Dr. Eldar's passion for mathematics, physics and engineering, combined with resilience, persistence and a commitment to work-life balance, has driven her pursuit of both fundamental research and its translation into practical solutions that address real-world challenges.

Looking ahead, Dr. Eldar plans to expand her research center and international partnerships to accelerate the development of deployable sensing and imaging technologies that directly address pressing medical and societal challenges. She is particularly committed to advancing solutions that can operate in resource-limited settings, bringing

reliable diagnostics and intelligent sensing to regions with limited medical infrastructure and to technical domains that have historically lacked access to advanced tools.

She also seeks to broaden participation in science and engineering by cultivating a more diverse research community, mentoring emerging leaders from varied backgrounds, and fostering hands-on collaboration between academia, industry, and clinical partners. Through this integrated approach, she aims to translate rigorous research into practical systems that measurably improve lives across diverse populations.

About Marquis Who's Who®:

Since 1899, when A. N. Marquis printed the First Edition of Who's Who in America®, Marquis Who's Who® has chronicled the lives of the most accomplished individuals and innovators from every significant field of endeavor, including politics, business, medicine, law, education, art, religion and entertainment. Who's Who in America® remains an essential biographical source for thousands of researchers, journalists, librarians and executive search firms around the world. The suite of Marquis® publications can be viewed at the official Marquis Who's Who® website, www.marquiswhoswho.com.