

Three UTSW faculty elected to National Academy of Sciences

April 28, 2026

To the UT Southwestern Community:

We are very pleased to share that today three UT Southwestern faculty members were elected to the National Academy of Sciences (NAS), one of the highest honors bestowed upon scientists in the United States. Please join us in congratulating **Elizabeth Chen, Ph.D.**, **Ralph DeBerardinis, M.D., Ph.D.**, and **Joel Elmquist, D.V.M., Ph.D.**, on this recognition of their outstanding contributions to biomedical science.

Dr. Chen, Professor of Molecular Biology and Cell Biology, is being recognized for her fundamental discoveries defining how cells fuse during development. Utilizing model systems ranging from fruit flies to vertebrates, she has used genetic, cell biological, biochemical, and biophysical approaches to define actin-driven invasive structures, demonstrating specialized fusion sites that enable cells to merge. Her work has established a conceptual framework for understanding cell-cell fusion in fertilization, muscle development, tissue regeneration, and immune function and how its dysregulation contributes to human disease. Unraveling the mechanisms of cell fusion could provide new therapeutic options for a range of conditions, from congenital myopathy to infertility. Dr. Chen is a member of the Development and Cancer Research Program at the Harold C. Simmons Comprehensive Cancer Center and the Hamon Center for Regenerative Science and Medicine.

Dr. DeBerardinis, Director of the Eugene McDermott Center for Human Growth and Development and Professor of Pediatrics, is an international leader in cancer metabolism research. His work has reshaped the understanding of how tumors and genetic diseases reprogram metabolic pathways. He also serves as Director of the Genetic and Metabolic Disease Program and Professor in Children's Medical Center Research Institute (CRI) at UT Southwestern. He has pioneered methods to study metabolism directly in patients with cancer, leading to the landmark discovery that certain cancers can use lactate as a fuel source, challenging long-standing assumptions in the field. These advances have opened new avenues for diagnostics and therapies across multiple cancers and inherited metabolic disorders. Dr. DeBerardinis is also a member of the National Academy of Medicine (NAM) and has been a Howard Hughes Medical Institute Investigator since 2018. He holds the Eugene McDermott Distinguished Chair for the Study of Human Growth and Development and the Philip O'Bryan Montgomery, Jr., M.D. Distinguished Chair in Developmental Biology, and he is a Sowell Family Scholar in Medical Research.

Dr. Elmquist, Professor of Internal Medicine, Pharmacology, and Psychiatry and Director of the Center for Hypothalamic Research, is recognized for transformative insights into how the brain regulates energy balance, glucose metabolism, and body weight. Using advanced genetic and neurobiological tools, his research has identified key neural circuits and hormones, including leptin and melanocortin pathways, that link the central nervous system to obesity, diabetes, and metabolic disease. This work has helped establish the brain as a critical driver of whole-body metabolic health and a potential target for new therapies. As Vice Chair of Research in the Department of Internal Medicine, he supports and promotes high-impact research activity

among faculty and trainees as well as develops strategies for recruitment, retention, and development of scientists and physician-scientists. He holds the Carl H. Westcott Distinguished Chair in Medical Research and the Maclin Family Distinguished Professorship in Medical Science, in Honor of Dr. Roy A. Brinkley.

[With today's elections](#), UT Southwestern now has 27 NAS members, more than any institution in Texas and the most in UT Southwestern's history. Their achievements exemplify our institution's commitment to advancing discovery and improving health for all.

Daniel K. Podolsky, M.D.

President

UT Southwestern Medical Center

W. P. Andrew Lee, M.D.

Executive Vice President for Academic Affairs and Provost

Dean, UT Southwestern Medical School