



Carlos L. Arteaga, M.D., and David Mangelsdorf, Ph.D., elected to National Academy of Medicine

Oct. 21, 2024

To the UT Southwestern Community:

We are very pleased to share the news that earlier this morning two of our colleagues, **Carlos L. Arteaga, M.D.**, and **David Mangelsdorf, Ph.D.**, were formally elected to the National Academy of Medicine (NAM), one of the highest honors in health and medicine.

Dr. Arteaga, Director of the Harold C. Simmons Comprehensive Cancer Center and Associate Dean of Oncology Programs, is widely recognized for innovative breast cancer research that has led to the development of molecularly targeted therapies, including PI3K inhibitors for patients with breast cancer. Dr. Mangelsdorf, Chair of Pharmacology and Professor of Biochemistry, has made significant contributions to lipid biology, with discoveries that could lead to new therapies for diseases including diabetes, obesity, cancer, and parasitism.

Dr. Arteaga, who holds the Annette Simmons Distinguished University Chair in Breast Cancer Research, joined UT Southwestern in 2017 as Director of the Simmons Cancer Center, which is one of only 57 National Cancer Institute-designated Comprehensive Cancer Centers in the U.S. and the only one in North Texas. His laboratory-based translational research has contributed to the understanding of molecular pathways involved in breast cancer pathogenesis and drug resistance and the development of novel treatment strategies. Dr. Arteaga is credited with discovering the role of TGF β in breast cancer progression and as a therapeutic target. Additionally, his work contributed to the first FDA-approved combination of antiestrogens and PI3K inhibitors for treating ER-positive PIK3CA mutant breast cancers.

Dr. Arteaga is a research scholar for Susan G. Komen and a past President of the American Association for Cancer Research, the world's largest cancer research organization.

Dr. Mangelsdorf, also a member of the National Academy of Sciences (NAS) and a Howard Hughes Medical Institute Investigator (HHMI), was recruited to UT Southwestern in 1993 by the late Nobel Laureate and then-Pharmacology Chair Alfred G. Gilman, M.D., Ph.D., whom he later succeeded as Chair. Among his many achievements, Dr. Mangelsdorf uncovered several new molecules that activate so-called orphan nuclear receptors or proteins that turn genes on and off in the body and serve as sensors in protecting human cells against unusually high and possibly toxic levels of lipids, such as cholesterol and fatty acids.

Since 2002, Dr. Mangelsdorf has run a joint laboratory with longtime scientific collaborator Steven Kliewer, Ph.D. Work in the [Mangelsdorf/Kliewer Lab](#) has expanded the understanding of metabolic pathways, physiological regulators, and therapeutic interventions. Last year, in a paper published in [Cell Metabolism](#), they showed that a dose of the hormone FGF21 sobered up mice that had passed out from alcohol intoxication, allowing them to regain consciousness

and coordination much faster than those that did not receive this treatment. Their findings, which were featured during a January 2024 [President's Lecture Series](#) presentation, could lead to effective treatments for acute alcohol poisoning.

Dr. Mangelsdorf holds the Alfred G. Gilman Distinguished Chair in Pharmacology and the Raymond and Ellen Willie Distinguished Chair in Molecular Neuropharmacology in Honor of Harold B. Crasilneck, Ph.D. He is also a member of the Peter O'Donnell Jr. Brain Institute and the Simmons Cancer Center.

With [today's elections](#), UT Southwestern now has 24 members of the NAM – more than any other institution in Texas – along with 25 NAS members and 14 HHMI Investigators.

Please join us in congratulating Drs. Arteaga and Mangelsdorf on this special recognition of their outstanding contributions to medical science and public health.

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