

medicine minute

October 21, 2025

announcements



Elena Hsieh Named Division Chief of Allergy and Immunology

Elena Hsieh, M.D., an Associate Professor of Immunology & Microbiology and Pediatrics at the University of Colorado Anschutz School of Medicine, has been named Division Chief of Allergy and Immunology, effective April 2026. Dr. Hsieh will join UT Southwestern as Associate Professor and will hold the William A. Sellars, M.D. and Joyce M. Sellars Distinguished Chair in Allergy and Immunology. She will also serve as Director of the Center for Inborn Errors of Immunity at Children's Health.

As a distinguished clinical immunologist, she directs the Jeffrey Modell Diagnostic and Research Center for Primary Immunodeficiencies and is Director of the Federation of Clinical Immunology Societies (FOCIS) Center of Excellence (FCE) at University of Colorado. As a physician-scientist whose career bridges rare and common immune disorders, she has led pioneering efforts to integrate cutting-edge immune-profiling technologies and genetic variant interpretation into clinical practice, particularly for patients with rare immune dysregulation syndromes and autoimmune diseases.

Her research program, continuously supported by the NIH, Lupus Research Alliance, Arthritis Foundation, and Boettcher Foundation, has advanced the mechanistic understanding of immune dysregulation in inborn errors of immunity, lupus, and other autoimmune diseases, bridging discovery science and patient care to propel precision medicine. Her contributions have been recognized with numerous honors, including the Boettcher Foundation Webb-Waring Award, the Women in STEM Leadership Award, and election to the Henry Kunkel Society. She is a Fellow of the Clinical Immunology Society.

As Chief, Dr. Hsieh will lead a division that spans both the of Pediatrics and Internal Medicine, with 11 full-time faculty in addition to 14 adjunct faculty and numerous clinical and research support staff. She will serve as a key advisor in support of the Department's strategic priorities. ■

kudos



Hill Recognized for Outstanding Contributions to Cardiovascular Research

Joseph Hill, M.D., Ph.D., a Professor in the Division of Cardiology and Director of the Harry S. Moss Heart Center, has received the Outstanding Contributions to Cardiovascular Research award from the Gill Heart and Vascular Institute. The award recognizes a lifetime of impactful research that has deepened our understanding of cardiovascular biology and disease and helped shape the standard of clinical care.

Dr. Hill's work has been instrumental in uncovering the molecular and cellular mechanisms that drive heart disease. His research centers on cardiac remodeling, with a particular focus on hypertrophy and heart failure. Using both genetic and surgical models, he explores how the heart adapts to stress, offering insights that continue to influence treatment strategies.

A prolific scholar, Dr. Hill has authored or co-authored nearly 280 scholarly articles, co-edited a foundational textbook on muscle biology, and served as Editor-in-Chief of *Circulation*, one of the most influential journals in cardiovascular medicine.

"This is a wonderful tribute to the work my team has accomplished to unveil mechanisms of pathological remodeling in the disease-stressed heart," Dr. Hill says. "It is my great honor to work with amazing early-career professionals, hoping to inspire them to discover and excel." ■

education and training



TRAINEE SCHOLARLY ACTIVITIES

Case Studies Illuminate Rare and Complex Cardiovascular Risks

Two case studies authored by **Julianna West, M.D.**, who recently completed internal medicine residency training, offer insight into rare cardiovascular and complicated health issues related to the heart and cholesterol.

In the [first study](#), “Complex Dyslipidemia Induced by Lorlatinib Therapy,” Dr. West detailed the case of a 59-year-old woman with lung cancer who developed very high cholesterol after starting the cancer drug lorlatinib, which was difficult to control despite strong cholesterol-lowering medicines. Doctors found that the problem wasn’t caused by lorlatinib-induced leakage of protein in the urine, which is often linked to high cholesterol. Instead, the drug may have caused the body to absorb more cholesterol from food. This shows how important it is to catch the changes in blood cholesterol early during lorlatinib therapy and adjust treatment to protect the heart.

In the [second case](#), “Multiple Coronary Artery Aneurysms in a Young Patient with Kawasaki Disease and Heterozygous Familial Hypercholesterolemia,” Dr. West described a 20-year-old man who had two rare conditions: Kawasaki disease (a childhood illness of unknown etiology that causes unusual dilations in coronary blood vessels called aneurysms) and a genetic form of high cholesterol. He had several heart attacks over 11 years, even though he was taking medicine to lower his cholesterol and prevent blood clots. He needed heart stents and coronary bypass surgery. This case shows how hard it can be to treat patients with more than one serious heart condition, especially at a young age.

“Together, these cases remind us that unusual health problems can happen, and doctors need to work together to find the best care for each patient,” says **Abhimanyu Garg, M.D.**, a Professor in the Division of Endocrinology and Director of the Nutrition and Metabolic Diseases Fellowship and senior author on both articles, which were recently published in the *Journal of Clinical Lipidology*.

Other UT Southwestern researchers who contributed to the second case study were **Amit Khera, M.D.**, a Professor in the Division of Cardiology, Chief of Cardiology Clinical Operations, and Director of Preventive Cardiology; and **Weiyi Tan, M.D., M.P.H.**, an Assistant Professor in the Division of Cardiology. ■

Dr. Garg holds the Distinguished Chair in Human Nutrition Research.

Dr. Khera holds the Dallas Heart Ball Chair in Hypertension and Heart Disease.

New Data Links Genetic Risk to Cardiomyopathy from Environmental Stressors

Genetic screening may help identify individuals at heightened risk for secondary cardiomyopathies triggered by environmental stressors, according to a new [study published in JAMA Cardiology](#). **Dimitri Maamari, M.D.**, a Chief Resident for the Internal Medicine Residency program, and colleagues found that a higher polygenic risk score for dilated cardiomyopathy was significantly associated with increased likelihood of developing cardiomyopathies related to pregnancy, alcohol use, and cancer therapy. The findings, drawn from four large biobank cohorts, support a “two-hit” hypothesis: a genetic predisposition combined with a physiological or environmental stressor can lead to overt disease. The study suggests that polygenic screening could enhance risk stratification and inform proactive monitoring during vulnerable periods such as pregnancy or chemotherapy.

In one of the study groups, researchers found that certain rare changes in a gene called *TTN* were strongly linked to heart problems caused by pregnancy, alcohol, or cancer treatment. People with these gene changes were much more likely to develop heart disease when exposed to these stressors. What’s more, many of the patients who developed heart problems didn’t have any other known risk factors, such as high blood pressure or diabetes. This suggests that genetic testing could help doctors identify people who are at risk, even if they seem healthy, so they can be monitored more closely during times when their heart might be under extra stress. ■

Machine Learning Predicts Leukemia Risk in Patients with Aplastic Anemia

A research team led by **Ahmet Toprak, B.S.**, a medical student in the Hematology Interest Group, has created two computer models that can help predict which patients with aplastic anemia (AA), a rare acquired bone disease, might later develop leukemia or similar blood cancers. These models used information from 275 patients treated over several decades to look for warning signs at two key times: when the disease is first diagnosed and six months after treatment began.

For the [study, published in *Blood Neoplasia*](#), the models were used to look at things like age, genetic mutations, and how well the patient responded to treatment. They were able to correctly identify high-risk patients with about 82% accuracy. People in the high-risk group were more likely to have shorter survival times.

“This research shows that artificial intelligence could help doctors make better decisions about treatments like stem cell transplants and how closely to monitor patients after therapy,” says senior author **Taha Bat, M.D.**, an Assistant Professor in the Division of Hematology and Oncology.

Other UT Southwestern researchers involved in the study included medical students **Zoe Bass, B.S.**, **Munevver Duran, B.S.**, **Leslie Guerrero, B.S.**, **Julia Shi, B.S.**, and **Zehra Tombul, B.S.**; Medical Scientist Training Program participant **Carlos Ivan Ayala Santos, B.S.**; and Associate Professor **Ibrahim Ibrahim, M.D.**, and **Julio Alvarenga Thiebaud, M.D.**, both in the Division of Hematology and Oncology. ■

research report



Munshi Lab Uncovers How Key Protein Helps Convert Fibroblasts into Pacemaker Cells

A research team led by **Nikhil Munshi, M.D., Ph.D.**, a Professor in the Division of Cardiology and Associate Director of the Harry S. Moss Heart Center, has discovered that a protein called HAND2 plays a surprising and essential role in turning ordinary cells into specialized heart pacemaker cells. While the nucleolus, a small structure inside the cell’s nucleus, is usually known for building ribosomes, [this study](#) revealed it also helps organize parts of the genome that are typically turned off. These regions, called Nucleolus-Associated Domains (NADs), contain genes that are crucial for defining what type of cell something becomes.

“Our team found that HAND2 doesn’t just float around the nucleus like other proteins but specifically travels into the nucleolus,” Dr. Munshi says. “Once inside, HAND2 binds as a dimer to special DNA sequences hidden within NADs. This action helps switch on genes that are vital for creating pacemaker cells, which control the heart’s rhythm.”

By using advanced techniques to track gene activity and protein behavior, the [Munshi Lab](#) showed that HAND2’s presence in the nucleolus is not merely coincidental but essential for successful reprogramming of cells into pacemaker cells. This discovery opens up new possibilities for understanding how cells change their identity and could lead to better strategies for repairing damaged hearts.

Other UT Southwestern researchers who contributed to this study were **Kartik Kulkarni, Ph.D.**; **Gabriella Quinn, B.S.**; **Jared Dela Rosa, M.D., Ph.D.**; **Sean Goetsch, M.S.**; **Vrushali Pandit, B.S.**, **Lin Wang, M.D., Ph.D.**, **Akane Sakaguchi, Ph.D.**, and **Sushama Sivakumar, Ph.D.** ■

News and Digital Media Featuring Internal Medicine Colleagues

- [Neuron in Brain's Timekeeper Might Control Nighttime Hunger](#) (via *UTSW Newsroom*, with Jeffrey Zigman, M.D., Ph.D.,
- [AI Can Identify Stroke Types Using Clinical Notes, Study Shows](#) (via *UTSW Newsroom*, with Ann Marie Navar, M.D., Ph.D., Dylan Owens, Ph.D., M.S., and Eric Peterson, M.D., M.P.H.)
- [Stressors Damage Kidneys by Mutating Mitochondrial DNA](#) (via *UTSW Newsroom*, with Samir Parikh, M.D., and Vamsidhara Vemireddy, M.D., M.H.A., M.B.A.)
- [Study Examines Biological Causes of Cancer Deaths](#) (via *UTSW Newsroom*, with Kelley Newcomer, M.D.)
- [Prostate Cancer Screening and Treatment: What You Need to Know](#) (via *MedBlog*, with Kevin Courtney, M.D., Ph.D.)

this week



Weissler to Discuss Pneumocystis Pneumonia on Oct. 24

Jonathan Weissler, M.D., a Professor in the Division of Pulmonary Critical Care Medicine and Vice Chair of Clinical Affairs for University Hospitals, will present the [Internal Medicine Grand Rounds](#) lecture on Friday, Oct. 24, at 8 a.m. in D1.502. His topic: "*Pneumocystis jirovecii* Pneumonia."

Pneumocystis jirovecii Pneumonia is a serious fungal lung infection that primarily affects people with weakened immune systems.

Dr. Weissler holds a bachelor's degree from the University of Michigan in Ann Arbor. He earned his medical degree from New York University School of Medicine and completed internal medicine residency training at UT Southwestern, where he served as Chief Resident. He then remained at UTSW to obtain advanced training through a fellowship program in pulmonary and critical care medicine.

Dr. Weissler's grant-funded research has centered on the immunological and molecular dynamics of the human lung. He investigated the function of natural killer cells and the regulation of lymphokine-activated killer cells by pulmonary macrophages, as well as the modulation of B cells within lung tissue. His studies also explored the genetic regulation of surfactant protein B, identifying co-factors and novel proteins, such as BR22, that interact with transcriptional regulators like TTF-1. Additionally, Dr. Weissler has examined the role of PLAGL2 in the development of emphysema, contributing to a deeper understanding of chronic pulmonary diseases. ■



Heyward to Present Insights on Hunger Regulation at Research Conference

Frankie Heyward, Ph.D., an Assistant Professor in the Center for Hypothalamic Research, will present the [Internal Medicine Research Conference](#) on Friday, Oct. 24, at noon in D1.502. His topic: "Employing Cell-Type Specific Neuroepigenomic Profiles to Identify Novel Transcriptional Pathways Regulating Hunger."

Dr. Heyward earned a bachelor's degree in biology and psychology from the University of Delaware. He received his doctorate in neurobiology from the University of Alabama at Birmingham and completed postdoctoral research training through joint fellowships at Harvard Medical School, Beth Israel Deaconess Medical Center, and the Broad Institute of MIT and Harvard.

Dr. Heyward joined the UT Southwestern faculty in 2023.

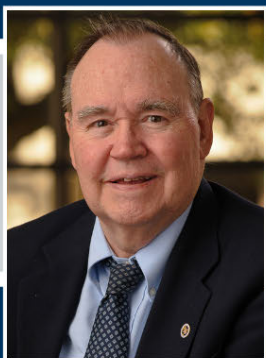
The [Heyward Lab](#) investigates the neuroepigenetic mechanisms regulating synaptic plasticity in the hypothalamus, their role in maintaining body weight set-point, and how their dysregulation contributes to diet-induced obesity, weight-regain, and aging-related impairments in appetite. ■

Other Upcoming Lectures & Conferences of Note

- Tuesday, Oct. 21, Noon: [Psychiatry Sub-Specialty Presentation](#) with Dr. Deborah Freeland (Geriatric Medicine) – "Guardian of the Grandparents"
- Tuesday, Oct. 21, Noon: [Pathology Seminar](#) with Dr. Housheng Hansen He (University of Toronto) – "Transcriptional Regulation and Clinical Implication of Circular RNA in Cancer"
- Tuesday, Oct. 21, Noon: [Simmons Comprehensive Cancer Center Distinguished Lecture](#) with Dr. Alexander Kabanov (University of North Carolina - Chapel Hill) – "Polyoxazoline-Based Polymeric Micelles for Cancer Therapy"
- Wednesday, Oct. 22, 8 a.m.: [Geriatrics Grand Rounds](#) with Dr. Alayne Markland (University of Utah) – "Common but Not Normal: Lower Urinary Tract Symptoms and Bladder Health Across the Life-Course"
- Wednesday, Oct. 22, Noon: [AI in Medicine Seminar](#) with Dr. Mingrui Liu (George Mason University) – "Hierarchical Optimization in AI: Learning to Configure AI Systems"
- Thursday, Oct. 23, 8 a.m.: [Infectious Diseases Grand Rounds](#) with Dr. Grace Haser (University of California San Francisco) – "Updates in Viral Hepatitis in People with HIV"
- Thursday, Oct. 23, 9 a.m.: [Hamon Center for Therapeutic Oncology Research & Simmons Comprehensive Cancer Center Experimental Therapeutics Program Lecture](#) with Dr. David McFadden (Endocrinology) – "Screening for Small Molecular Modulators of EWSR1-FLI1 Function in Ewing Sarcoma"
- Thursday, Oct. 23, Noon: [STORIES \(Stories of Triumphs, Obstacles, Resilience, Innovation, Endurance, and Science\) Seminar](#) with Dr. Denise Marciano (Nephrology)
- Thursday, Oct. 23, Noon: [Radiology Clinical Grand Rounds](#) with Dr. Samantha Zuckerman (University of Pennsylvania) – "Breast AI: Past, Present, and Human Future"
- Thursday, Oct. 23, Noon: [Renal Grand Rounds](#) with Dr. Michael Dohopolski (Radiation Oncology) – "AI-Augmented, Human-in-the-Loop Trial Prescreening: Insights from Implementation across Multiple Trials"
- Friday, Oct. 24, 8 a.m.: [Program in Microbes, Immunity & Disease Symposium](#) with Dr. Eric Skaar (Vanderbilt University) – "Exploiting *Staphylococcus aureus* as a Biosensor to Identify Antibacterial Effectors of the Macrophage"
- Friday, Oct. 24, Noon: [Hematology & Oncology Grand Rounds](#) with Dr. Timothy Brown (Hematology & Oncology) – "Navigating the Shifting Therapeutic Landscape of Advanced Gastric Cancer"
- Friday, Oct. 24, 12:15 p.m.: [Endocrinology Grand Rounds](#) with Dr. Jeffrey Zigman (Endocrinology) – "Ghrelin at the Crossroads of Metabolism, Movement, and Time"

- Monday, Oct. 27, 12:15 p.m.: [General Internal Medicine Grand Rounds](#) with Dr. Jessica Campbell (General Internal Medicine) – “Primary Care Management of Patients with Parkinsons Disease”

reminders



Scott Grundy Symposium

Scott Grundy Symposium Honors Legacy of Nutrition Scientist's Groundbreaking Research

Internationally renowned researchers who were influenced by Scott Grundy M.D., Ph.D., will celebrate his enduring impact on science, medicine, and academia during the Scott Grundy Symposium on Thursday, Oct. 30, from 9 a.m. to 4:30 p.m. in NB2.EEF, hosted by the Center for Human Nutrition. Dr. Grundy, who died on Jan. 29, lived to the age of 91.

Lunch will be provided to those who pre-register. ■

[Register for the Grundy Symposim](#)

one last thing

Core Showcase Series to Begin on Oct. 27

Learn about the cutting-edge tools driving research across campus at the [Core Showcase Series](#), which begins on Monday, Oct. 27, from noon to 1 p.m. at the T. Boone Pickens Medical Education & Conference Center (NG3.112). Directors of the Quantitative Light Microscopy Core, Electron Microscopy Core Facility, and the Whole Brain Microscopy Facility will highlight the capabilities that support scientific discovery and include opportunities to ask questions and connect with colleagues across departments.

Light refreshments will be provided. ■



Jon Garinn
Medicine Minute Editor

Look for the next *Medicine Minute* on **Tuesday, Oct. 28, 2025.**

Want to access an item in a previous edition of the newsletter? [Check our *Medicine Minute* archive.](#)

Share feedback and news items with us at JMNews@UTSouthwestern.edu

Copyright 2025 UT Southwestern Medical Center. All rights reserved.

Medicine Minute is a publication of the Department of Internal Medicine at UT Southwestern Medical Center.