

# UT Southwestern Medical Center

## End of Academic Year

June 13, 2021

To the UT Southwestern community:

Now that Memorial Day is behind us and the 2020-2021 academic year concluded, I write to thank each of you for your dedication and service to UT Southwestern and our mission to promote health and a healthy society. Despite the many challenges of this past academic year, we remain steadfast in our commitment to all those who depend on us. As I have done in the past, I want to highlight some of the major events and milestones from this year in order to acknowledge and celebrate our collective achievements.

### Leadership Transitions

To begin, we welcomed **Dr. Eric Peterson**, the inaugural Vice Provost and Senior Associate Dean for Clinical Research and Vice President for Health System Research, and **Dr. Nader Pouratian**, Chair of the Department of Neurological Surgery. Next month, I am pleased that **Dr. Joan W. Conaway** will begin as the new Vice Provost and Dean of Basic Research and Professor of Molecular Biology and will hold the Cecil H. Green Distinguished Chair in Cellular and Molecular Biology. In central administration, **Courtney Rottman** joined as my Chief of Staff, and **Russell Poole** was named as our new Chief Information Officer.

Several leaders announced their plans to retire after more than 100 years of collective service to UT Southwestern, including **Dr. David Russell**, Vice Provost and Dean of Research, **Dr. Kathleen Bell**, Professor and Chair of the Department of Physical Medicine & Rehabilitation, **Dr. James McCulley**, Professor and Chair of the Department of Ophthalmology, **Dr. Hak Choy**, Professor and Chair of the Department of Radiation Oncology, and **Leah Hurley**, Vice President of Legal Affairs. Finally, **Arnim Dontes**, Executive Vice President for Business Affairs, announced that he will be leaving UT Southwestern at the end of July to assume a new position at the Yale School of Medicine.

I know I speak on behalf of the entire institution when I say how grateful we are to each of these leaders for their contributions and dedication to UT Southwestern.

### Faculty Recognition

UT Southwestern proudly acknowledged the election of three faculty members to the National Academies. **Dr. Donald Hilgemann**, Professor of Physiology, and **Dr. Margaret Phillips**, Professor and Chair of the Department of Biochemistry, were elected to the National Academy of Sciences, and **Dr. Ralph DeBerardinis**, Professor of Pediatrics, Chief of the Division of Pediatric Genetics and Metabolism,

and in the Children's Medical Center Research Institute at UT Southwestern, was elected to the National Academy of Medicine.

The third annual **Leaders in Clinical Excellence Awards** was celebrated virtually last November to recognize the exceptional contributions of clinical faculty to the care of our patients, to the education of the next generation of health care professionals, and to UT Southwestern overall. The celebration included recognition of **Dr. Mark Drazner**, Professor of Internal Medicine and Clinical Chief of Cardiology, as recipient of the 2020 Patricia and William L. Watson Jr., M.D. Award for Excellence in Clinical Medicine, UT Southwestern's highest honor in clinical care. The complete list of all 2020 Leaders in Clinical Excellence Awards recipients can be found [here](#). Planning for the 2021 awards is already underway thanks to the leadership of Drs. Maeve Sheehan and John Mansour.

### **Education**

Last year, when UT Southwestern instituted remote learning and social distancing in response to COVID-19, our students and faculty showed impressive resilience and adaptability to remain on track in their studies in order to fulfill all graduation requirements. While our School of Health Professions participated in a virtual commencement ceremony last December, students from our Medical and Graduate Schools were able to hold in-person commencement ceremonies in May.

A **Master of Science in Health Informatics** program was established through the Graduate School of Biomedical Sciences to enhance learners' academic experiences and better prepare them for the technological shifts happening in health care. The program will welcome its first class of students this fall. A new **School of Public Health** was approved by the UT System Board of Regents. Plans are underway to welcome the first class of Master of Public Health students in the fall of 2023 and Ph.D. students in the fall of 2024.

### **Research**

The last 12 months have been a banner year for scientific discoveries on the UT Southwestern campus as illustrated by several examples:

Using **tissue engineering**, Dr. Jun Wu and colleagues in the Department of Molecular Biology developed new methods that ultimately will allow the regeneration of human organs and the growth of new ones for transplantation.

Multiple atomic structures of proteins were determined in UT Southwestern's **cryo-electron microscopy facilities**, including a long-sought structure of an enzyme termed ACAT that stores cholesterol within cells, by Dr. Xiaochun Li and colleagues in the Department of Molecular Genetics; two neurotransmitter receptors that respond to acetylcholine and anesthetics by Dr. Ryan Hibbs in the Department of Neuroscience; and one receptor that responds to dopamine by Dr. Daniel Rosenbaum in the Department of Biophysics.

Inspired by the grim effects of the SARS-CoV-2 virus pandemic, and mindful of the future, UT Southwestern's **infectious disease experts** reported several discoveries. Dr. Vanessa Sperandio in the Department of Microbiology revealed how two molecules, endocannabinoid and serotonin, which regulate diverse physiological processes ranging from mood to pain sensation, also play crucial roles in combating the virulence of gut pathogens. Dr. John Schoggins, also in the Department of Microbiology,

identified a protein termed TRIM7 that combats infection by gut viruses such as polio, while colleagues Drs. Neal and Laura Alto showed that the pathogenic bacteria *shigella*, which causes gastrointestinal disease, does so by destroying a protein made by gut cells to fight the bug.

In a similar vein, researchers in Dr. Joshua Mendell's lab in the Department of Molecular Biology identified processes involving **protein degradation and phase separation** that are crucial to the regulation of small and large RNAs within the cell. Phase separation, in which a protein moves back and forth between liquid and gel states inside the cell, is a fundamental mechanism in cell biology and was discovered in part at UT Southwestern by Drs. Steven McKnight and Michael Rosen, in the Departments of Biochemistry and Biophysics, respectively.

Drs. David Mangelsdorf and Steven Kliewer in the Departments of Pharmacology and Molecular Biology, respectively, showed that a **common cause of acute pancreatitis is loss of the hormone fibroblast growth factor 21** and that replacement therapy with this hormone reverses the symptoms of the disease.

Dr. Hao Zhu and colleagues in the Children's Medical Center Research Institute at UT Southwestern and Department of Internal Medicine **identified the cell population in the liver responsible for the remarkable and unique ability of this organ to regenerate**. Their findings have implications for both liver transplantation and the treatment of hepatocellular carcinoma.

**Several advances were made in gene therapy.** Dr. Daniel Siegwart in the Department of Biochemistry, working with Dr. Eric Olson in the Department of Molecular Biology, developed a nanoparticle-based system that delivers gene editing proteins to select tissues. This method will facilitate ongoing research in the Olson lab directed toward correcting gene defects in muscular dystrophy. Similarly, Drs. Bhavya Shah and Rajiv Chopra in the Department of Radiology developed a high frequency ultrasound-based method that facilitates the entry of genes and drugs into the brain. Their approach transiently opens the blood-brain barrier, which normally prevents the delivery of therapeutics to the brain but is noninvasive, targetable, and reversible.

The **challenges posed by COVID-19 galvanized new studies and collaborations**, resulting in 270 different research projects and the publication of more than 340 articles in PubMed. A multidisciplinary group, drawing on capabilities in several of our departments, created a North Texas COVID-19 forecasting model that has proved remarkably accurate, guiding measures to confront the pandemic on our campus and serving as a valuable guide to policymakers, government officials, businesses, and schools.

### **Patient Care**

For the fourth year in a row, UT Southwestern's **William P. Clements Jr. University Hospital was designated by U.S. News & World Report as the No. 1 Best Hospital in Dallas-Fort Worth and the No. 2 Best Hospital in Texas**. In addition, we ranked among the top 50 hospitals nationally (from among nearly 5,000) in 10 specialties, and among the top 25 in six of the specialties. As one indication of the quality of care that led to these rankings, a **focus on improving mortality** has led to hundreds of lives being saved. UT Southwestern is now in the top decile of performance relative to *U.S. News & World Report* Honor Roll Hospitals.

We continue to make progress in our joint pediatric enterprise (JPE) with partner Children's Health and have initiated recruitment of a senior executive leader for the JPE. In anticipation of construction of the new pediatric hospital on the UTSW campus, plans for relocating from the Paul M. Bass Administrative and Clinical Center are also well underway.

Finally, Southwestern Health Resources (SWHR), the clinically integrated network formed by UT Southwestern and Texas Health Resources to provide coordinated care to the broad communities of North Texas, continues to distinguish itself in providing high value care. SWHR now coordinates care for nearly 100,000 Medicare beneficiaries in North Texas – more than any other Accountable Care Organization (ACO) in North Texas and the fourth largest in the nation. SWHR was also named as No. 1 ACO in the U.S. for Medicare savings for the third straight year, having saved more than \$52 million in 2019 (the most recent reporting year).

### **Campus Facilities**

I am pleased to report that thanks to the continued leadership of Juan Guerra, Vice President of Facilities Management, all capital projects remained on schedule and budget in FY21, despite disruptions caused by the pandemic.

Late last fall, we completed and opened a new **Vivarium** on South Campus, and in December we completed the **third tower expansion of William P. Clements Jr. University Hospital (CUH)**, which added more than 290 beds and became the clinical home for the **Peter O'Donnell Jr. Brain Institute** inpatient neuroscience programs. Our **Radiation Oncology building expansion** on East Campus was completed and we welcomed our first patients last month.

Work continues on the combined **O'Donnell Brain Institute/Harold C. Simmons Comprehensive Cancer Center buildings** as part of our Phase VI North Campus expansion. The two towers are scheduled to open next summer. Construction began last fall on our new **outpatient medical center at the Red Bird Mall in the southern sector of Oak Cliff**. In May, we received final approval from the Board of Regents to begin construction on a **Biomedical Engineering & Sciences building** on East Campus as a joint initiative between UTSW and UT Dallas.

### **COVID-19 Response**

Beginning with the vaccination of our own health care professionals in December, the Health System and Occupational Health teams established and led multiple vaccination sites as a state-designated vaccination hub. With more than 317,000 vaccine doses administered and more than 161,000 persons fully vaccinated to date (through June 11, 2021), I am extremely proud of our efforts and the positive impact we have made in North Texas.

We also owe a special debt of gratitude to our colleagues who have been serving for over a year as members of the Emergency Response Operations Committee (EROC), led by **Dr. William Daniel**, Vice President and Chief Quality Officer, and **Dr. Bruce Brown**, Associate Vice President for Safety and Business Continuity, advising the Executive Vice Presidents and me on all institutional issues related to COVID-19.

### **Legislative Session**

An important priority this year was the State of Texas 87<sup>th</sup> Legislative Session that began in January and ran through May. During this biennial session, we advanced three priorities on behalf of the patients and

communities we serve. The research operation's performance-based funding pilot was made permanent, ensuring adequate, predictable support for UT Southwestern's cutting-edge biomedical research enterprise. In addition, the Legislature endorsed our new School of Public Health and provided \$10 million in seed funding. We also secured funding to purchase land and begin planning for a state psychiatric hospital in Dallas. My sincere thanks and appreciation go to **Angelica Marin Hill**, Vice President for Government Affairs and Policy, and her entire team for their tireless dedication and efforts that helped to enable a productive legislative session.

### **Additional Highlights**

This past year, we also completed the rolling [Six Year Institutional Strategic Planning Process](#) to help prioritize our institution's needs and suggest where we should best utilize our resources. Recommended strategic priorities include advancing the implementation of the clinical strategic plan, planning for a new pediatric hospital, and launching initiatives aimed at enhancing our diversity and inclusion efforts.

### **Diversity & Inclusion**

This year, several new diversity and inclusion initiatives were identified as priorities for the institution, including increased scholarship funding for students interested in health equity and renewed commitments to increase the number of underrepresented minority students in our Medical School. In support of our employees, unconscious bias, and inclusive team building, management and search committee trainings were provided to more than 2,000 faculty and staff. We also launched a new Women & Allies Business Resource Group, joining the African-American, Asian-Pacific Islander, Hispanic-Latino, LGBT & Allies, and Veterans BRGs that boast thousands of active members who are committed to fostering a culture of belonging at UT Southwestern. To enable our continued diversity and inclusion efforts in Academic Affairs, we recruited Dr. Quinn Capers IV, Associate Dean for Faculty Diversity, and Dr. Arnaldo Díaz Vázquez, Assistant Dean for Diversity and Inclusion in the Graduate School.

### **Concluding Comments**

I thank every member of the UT Southwestern community for all that you have done this past year. As this summary makes clear, as an institution we have not only coped with an unprecedented challenge, but together have truly advanced our mission. I am confident that, because of the talents and dedication of our faculty and staff, we will carry the momentum into the start of the 2021-2022 academic year. I look forward to writing to you again in September and setting forth our priorities for the new year.

Daniel K. Podolsky, M.D.  
President, UT Southwestern