UPDATE TO THE BOARD

in advance of the November 19, 2021
Board of Trustees Meeting

Key Updates

The Patrick and Shirley Ryan Family makes new $480 million gift, the largest gift in Northwestern’s history, providing capstone to $6 billion ‘We Will’ Campaign

The Patrick G. and Shirley W. Ryan Family has made the largest single gift in Northwestern University’s history, a $480 million gift that will accelerate breakthroughs in biomedical, economics and business research and enable the University to redevelop Ryan Field and construct a best-in-class venue for the Northwestern community. The transformative gift pushed We Will. The Campaign for Northwestern over the $6 billion mark, making it one of the most successful fundraising campaigns of all time. The “We Will” Campaign, which concluded June 30, 2021, raised $6.1 billion from 174,380 donors. The Ryan Family’s latest gift builds upon their unwavering commitment to furthering Northwestern’s rise as a top-tier academic institution. The Ryan Family was already the largest benefactor in Northwestern history before this new gift.

Rebecca M. Blank named next president of Northwestern

Rebecca M. Blank, chancellor of the University of Wisconsin-Madison, Wisconsin’s flagship campus, has been named the next president of Northwestern University, Northwestern’s Board of Trustees announced on October 11, 2021. Blank will succeed Morton Schapiro, who has served as president of Northwestern since 2009, one of the longest presidential tenures in the University’s history. She will become Northwestern’s 17th president, effective in the summer of 2022. A member of the American Academy of Arts and Sciences for almost two decades, Blank’s distinguished research and policy portfolio was most recently recognized with a lifetime achievement award as a 2021 Distinguished Fellow of the American Economic Association. As chancellor of an AAU research institution for the past eight years, Blank oversees a $1.5 billion research portfolio.

Rankings

For the third consecutive year, Northwestern maintained the 9th spot overall in this year’s 2022 U.S. News & World Report Best Colleges ranking of National Universities, tied with Johns Hopkins University, Duke, and Caltech. In the Wall Street Journal/Times Higher Education (WSJ/THE) 2022 College Rankings, Northwestern improved one spot to 9th from 10th last year and tied with Johns Hopkins. Northwestern’s rank in the four key global rankings that were released this year showed slight fluctuations from last year. Northwestern was again ranked 24th this year in the Times Higher Education World University Rankings. The QS World University Rankings placed Northwestern 30th in the world, a drop from last year’s 29th ranking. In the Shanghai-based Academic Ranking of World Universities, Northwestern’s rank dropped to 34th this year from 30th last year. The 2022 U.S. News & World Report Best Global Universities ranking placed Northwestern 24th for the fifth consecutive year.
The Black House reopens with reflections on the past and a look to the future

After a major renovation over the past two years, Northwestern’s historic Black House was rededicated on October 15, 2021, with a ribbon-cutting and grand reopening. The events were scheduled during Homecoming and Reunion Weekend so that the University community could come together in celebration of the past, present, and future of the Black House and its function as a critical space for Black connection on campus.

Former Dean of Feinberg School of Medicine Lewis Landsberg Passes

Lewis Landsberg, MD, former dean of Feinberg School of Medicine and chair of the Department of Medicine, whose thirty-year career at Northwestern transformed the medical school, passed away on September 23rd. In 1990, Landsberg joined Northwestern’s faculty as the Irving S. Cutter Professor and chairman of the Department of Medicine at the medical school and physician-in-chief at Northwestern Memorial Hospital. Nine years later, he was appointed vice president for medical affairs and dean of the medical school. His tenure was marked by academic excellence and a growing national reputation, as well as a significant expansion of the research enterprise: during his time as dean, research support increased, and so did space devoted to research. Landsberg’s influence touched every part of the medical school, and his leadership is seen throughout the organization: he appointed many new department chairs, as well as center and institute directors.

Three Northwestern faculty members elected to National Academy of Medicine

Elizabeth McNally, the Elizabeth J. Ward Professor of Genetic Medicine; Melissa Simon, the George H. Gardner, MD, Professor of Clinical Gynecology; and Guillermo Ameer, the Daniel Hale Williams Professor of Biomedical Engineering at the McCormick School of Engineering and professor of Surgery in the Division of Vascular Surgery, have been elected to the prestigious National Academy of Medicine (NAM). NAM is one of three academies that make up the National Academies of Sciences, Engineering, and Medicine, and strives to improve human health by advancing science, accelerating health equity, and providing trusted advice on a national and global scale. With the election of the new faculty, Northwestern’s now has a total of 14 members in this national academy that celebrates the accomplishments of physician-scientists. McNally’s clinical and research focus is the genetic mechanisms that cause inherited cardiovascular and neuromuscular disorders. Simon’s work aims to promote health equity and eliminate health disparities for underserved communities as well as improve access to preventive care and cancer treatment for low-income women. Ameer’s research is dedicated to the development of biomaterials and nanotechnology for regenerative engineering and medicine, specifically tissue engineering, medical devices, drug delivery and cell delivery applications.

Physician-scientist named to National Cancer Advisory Board

Dr. Amy Heimberger was named by President Joseph Biden to the National Cancer Advisory Board, which plays an important role in guiding the director of the National Cancer Institute in setting the course for the national cancer research program. She is one of seven clinicians and researchers named to the prestigious board. Heimberger is
the Jean Malnati Miller Professor of Neurological Surgery and vice-chair for research in neurological surgery at Northwestern’s Feinberg School of Medicine. She also is scientific director of The Malnati Brain Tumor Institute at the Lurie Cancer Center. Her research focuses on immune therapeutic strategies for patients with central nervous system malignancies and studies tumor-mediated mechanisms of immune suppression.

**Dean of Libraries Sarah Pritchard plans to retire in 2022**

Sarah Pritchard, Northwestern University’s Dean of Libraries and Charles Deering McCormick University Librarian for the past 15 years, will retire on August 31, 2022 after a venerable 45-year career in research and academic libraries, Provost Hagerty announced on October 13, 2021. A search committee was named on November 4, 2021 to identify Pritchard’s successor.

**COVID-19 Updates**

The COVID-19 operations team has spent the last four months operationalizing the vaccination requirement. As of this time, over 98% of the Northwestern community is fully vaccinated. That percentage is consistent across students, faculty, and staff. Just over 600 individuals have received exceptions to the requirement, either permanently for medical or religious reasons, or temporarily for access-based reasons. The vaccination requirement continues to apply to any new students who enroll at Northwestern, or newly hired faculty or staff. At the beginning of the term, students who did not comply with the vaccination requirement were discontinued and had their status as active students terminated. There are no indications that a large number of prospective students unenrolled due to the requirement. Non-compliant faculty and staff have been escalated to unpaid leave of absence, and ultimately termination. So far, fewer than 20 employees have been terminated due to vaccination non-compliance.

The University testing centers at the Jacobs Center in Evanston and 345 Superior in Chicago have remained open with free, rapid testing available to all Northwestern community members. Any students, faculty, or staff with an approved vaccination exception are required to test twice per week, and otherwise are escalated for discipline following similar protocols as vaccination non-compliance. The University experienced low positivity (less than 0.4%) in the initial entry testing as students returned in September. Following Wildcat Welcome, there was an increase in positive cases within the undergraduate population. In response, an additional week of surveillance testing was added, and the numbers fell quickly and have remained low. There has been a relatively significant increase in cases in the Kellogg community over the last two weeks – 60 positive individuals and a 2.5% positivity over that period. Due to the frequent large social events in that community, the University is requiring regular surveillance testing for the next three weeks. If case volumes remain elevated, other mitigation strategies may be put into place. The numbers in the remainder of the Northwestern community remain stable – with 40 positive cases and a 0.5% positivity over the last two weeks. For the Fall Term, the seven-day moving-average of daily new cases has consistently remained between 0.5% and 0.7% positivity. Free at-home rapid tests continue to be distributed to the Northwestern community to encourage frequent testing.
**Financial Update**

Reporting and audit activities involved in measuring Fiscal Year 2021 financial performance are in process for the University’s finance teams. Unaudited financial results will be provided at the November Board meetings. External auditor KPMG has begun final fieldwork, and audited results will be presented to the Audit, Risk, and Compliance Committee on December 20th.

Operating performance continues to track close to projections for FY 2021. The fiscal year included many one-time impacts related to the COVID-19 pandemic, both positive and negative. Certain revenue sources were negatively impacted by the pandemic, especially in the Fall 2020 quarter, however these were largely offset by continued contraction in non-personnel spending and slowed hiring throughout the fiscal year.

Because the prior year impacts were one-time, an operating surplus in FY 2021 does not indicate the same outcome in FY 2022 as campus operations return to more normal levels. The FY 2022 budget approved in June was built to achieve balanced operations by moving past the one-time pandemic impacts, and incorporated plans for post-pandemic levels of activity and investment.

**Liquidity and Debt Management**

Treasury, Investments, and Budget and Planning continue to collaborate closely with respect to liquidity monitoring, planning, and debt management in support of the University’s operating and capital needs.

**Investment Management**

As of August 31, 2021, the Long-Term Balanced Pool had an estimated value of $14.93 billion based on preliminary returns. For the fiscal year, which runs from September 1, 2020, through August 31, 2021, the preliminary return of the Pool was 37%. Cash flows from illiquid investments for this fiscal year period have been positive as distributions outpaced calls by $407 million.

**Alumni Relations and Development Update**

For the first month of FY 2022 through the end of September, Northwestern raised $440 million in new gifts and commitments (NGCs) towards the $475 million fiscal year goal, compared with $22.2 million last year at the same time. Much of the NGC fiscal year to date total is due to the timing for recording a portion of the historic Ryan Family gift. Over the same period, Northwestern has received $22.5 million in cash and gifts-in-kind toward our FY 2022 goal of $395 million, compared to $15.7 million received for the same period last year. No giving from Northwestern Medicine’s related entities was included for either NGCs or cash.
Research Update

Research Award Funding
Northwestern’s research award funding for FY 2021 reached $893.4 million, a 1% increase from FY 2020. The number of awards totaled 3,439, a 0.4% increase from last year’s total. The dollar volume of proposals submitted in FY 2021 was $3.9 billion, a 7% increase over the prior year. The number of proposals submitted (3,674) decreased 5% from FY 2020. At the end of FY 2021, the dollar volume of awards from the National Institutes of Health reflected a 1% increase (to $489 million) while that from industry sponsors was down 19% (to $121 million). The dollar volume of proposals submitted to the National Institutes of Health was up about 6% (to $2.6 billion), while that to industry sponsors was flat (at $131.5 million).

Research News and Faculty Updates
Economics professor named a researcher of ‘Nobel Class’
Joel Mokyr was named a 2021 Citation Laureate, for his studies of the history and culture of technological progress and its economic consequences. Mokyr is one of 16 researchers from around the globe whose work is deemed to be ‘of Nobel class,’ according to analysis by the Institute for Scientific Information (ISI)™. Mokyr is the Robert H. Strotz Professor in the Department of Economics at the Weinberg College of Arts and Sciences and co-director of Northwestern’s Center for Economic History. Mokyr’s research focuses on the economic history of Europe, with a specialization in the period of 1750–1914. His latest book, A Culture of Growth: Origins of the Modern Economy (2016), questions the factors that made the Industrial Revolution possible and how culture — the beliefs, values, preferences in society that are capable of changing behavior — played a deciding factor in societal transformations.

SQI director Samuel Stupp to receive prestigious chemistry award
Simpson Querrey Institute for BioNanotechnology (SQI) director Samuel Stupp will receive the 2022 American Chemical Society Ralph F. Hirschmann Award in Peptide Chemistry next March. Stupp was selected “for his fundamental and groundbreaking work on the supramolecular chemistry of peptide amphiphiles and on their remarkable functionality in biological regeneration.” Stupp’s work integrates chemistry with materials science, biology, and medicine. One of his landmark achievements has been the development of bioactive materials that can signal cells and be used in novel therapies for regenerative medicine. His work has led to the development of biomaterials that mimic the architecture of structures surrounding cells and activate the necessary signals to initiate regeneration of various tissues. Stupp is Board of Trustees Professor of Materials Science and Engineering, Chemistry, Medicine, and Biomedical Engineering at Northwestern, where he directs SQI and its affiliated research center, the Center for Regenerative Nanomedicine. He is a member of the National Academy of Sciences, the National Academy of Engineering, the American Academy of Arts and Sciences, the Spanish Royal Academy and the National Academy of Inventors, and a fellow of the American Physical Society, the Materials Research Society, and the Royal Society of Chemistry.
Neil Kelleher appointed director of Chemistry of Life Processes Institute
Renowned proteomics expert Neil L. Kelleher has been named director of the Chemistry of Life Processes Institute (CLP). Kelleher succeeds Thomas O’Halloran, who led CLP since it launched in 2005. CLP is a cross-campus driver of interdisciplinary collaboration and biomedical innovation that brings pioneering discoveries from the lab to society. With about 70 faculty affiliates from across multiple schools and some 20 departments, CLP catalyzes team science focused on human health to spur new treatments for a range of illnesses, including as Alzheimer’s disease, cancer, cardiovascular disease, and complications due to organ transplantation. Kelleher is the Walter and Mary Glass Professor of Molecular Biosciences and professor of chemistry in the Weinberg College of Arts and Sciences and a professor of medicine in Northwestern University Feinberg School of Medicine. Having served as CLP’s interim director since January 2021, Kelleher also is the faculty director of Northwestern Proteomics, a center of excellence within CLP that develops novel platforms for drug discovery and diagnostics.

Northwestern receives $18 million to study heart failure
Northwestern’s Feinberg School of Medicine has been awarded two grants totaling $18.1 million to study the most common type of cardiac failure: heart failure with preserved ejection fraction (HFpEF), also referred to as diastolic heart failure. The grants are funded by the National Institutes of Health, which has recently created the HeartShare program to develop a new cohort of patients with the disease to better understand it. Northwestern Medicine and Feinberg cardiologist Sanjiv Shah — director of Northwestern’s Bluhm Cardiovascular Institute-Clinical Trials Unit as well as the Center for Deep Phenotyping and Precision Therapeutics in the Institute of Augmented Intelligence in Medicine — will receive $16.7 million to lead the HeartShare Data Translation Center. That center will coordinate data for all six sites in the program. Sadiya Khan, assistant professor of cardiology and epidemiology at Feinberg and a Northwestern Medicine physician, will receive $1.4 million over the next five years to lead one of six clinical centers in the HeartShare program.

Observational astronomer awarded prestigious Packard Fellowship
Northwestern observational astronomer Wen-fai Fong has received a 2021 Packard Fellowship in Science and Engineering from the David and Lucile Packard Foundation. The prestigious fellowship includes an unrestricted grant of $875,000 over five years to pursue experimental research. The foundation named Fong among the nation’s most innovative, early-career scientists and engineers. Fong is an assistant professor of physics and astronomy in the Weinberg College of Arts and Sciences and member of the Center for Interdisciplinary Education and Research in Astrophysics (CIERA). Fong and her research team investigate the enigmatic origins of the universe’s fastest explosions, known as transients. Fong uses observations across the electromagnetic spectrum to study fast radio bursts, gamma-ray bursts, electromagnetic counterparts to gravitational wave sources, and anything that collides or explodes.
Research Highlights
Winged microchip is smallest-ever human-made flying structure
Northwestern engineers have added a new capability to electronic microchips: flight. About the size of a sand grain, the new “microflier” is motorless. Instead, it flies on the wind — much like a maple tree’s propeller seed — and spins like a helicopter through the air. By studying various wind-dispersed seeds, the research team optimized the microflier’s aerodynamics to ensure that it falls at a slow velocity in a controlled manner. This behavior stabilizes its flight, ensures dispersal over a broad area, and increases the time it interacts with the air, making it ideal for monitoring air pollution and airborne disease. As the smallest-ever human-made flying structures, these microfliers can be packed with ultra-miniaturized technology, including sensors, power sources, antennas for wireless communication and embedded memory to store data. John Rogers, the Louis Simpson and Kimberly Querrey Professor of Materials Science and Engineering, Biomedical Engineering and Neurological Surgery, led the device’s development. The research was featured on the cover of Nature (September 23, 2021 edition).

New hope for an antibody to treat muscular dystrophy
Northwestern Medicine scientists have developed an antibody that can be used to treat muscular dystrophy. The antibody targets the TGF-beta pathway, one known to be important for regulating scarring (fibrosis). In muscular dystrophy, the muscles become scarred over time, and this antibody helps reduce scarring while also making muscles stronger. The study, published September 8, 2021 in Science Translational Medicine, was conducted in an animal model of muscular dystrophy. The scientists hope to develop the antibody to treat people, since the pathways are the same in the animal models as they are in people with muscular dystrophy. Dr. Elizabeth McNally is senior study author and director of the Center for Genetic Medicine at Northwestern’s Feinberg School of Medicine. Alexis Demonbreun, assistant professor of pharmacology at Feinberg, is the study’s lead author.

One of the largest-ever early-brain development studies has just launched
In the largest, most diverse, and comprehensive study of its kind, Northwestern University, along with 24 other research sites across the United States and in collaboration with the Ann & Robert H. Lurie Children’s Hospital of Chicago, has embarked on a longitudinal study to assess how exposures to substances and environments before and after birth may alter early brain development. Funded by the National Institutes of Health, the HEALthy Brain and Child Development (HBCD) Study will establish a large, diverse cohort of more than 7,500 pregnant women in their second trimester across a variety of regions and socioeconomic contexts and follow them and their children for up to a decade. The scientists will collect a large, well characterized dataset that captures biologic, brain, behavior and social information about the children and their families that will enable comparisons of brain development and behavioral outcomes of young children from a variety of environments. It is co-directed by two scientists: Elizabeth Norton, a developmental cognitive neuroscientist in the School of Communication, and Lauren Wakschlag, a developmental/clinical psychologist in Northwestern’s Feinberg School of Medicine.
New simulation shows how galaxies feed their supermassive black holes
Northwestern researchers have developed a new high-powered simulation that shows how gas flows across the universe all the way down to the center of a supermassive black hole. While other simulations have modeled black hole growth, this is the first single computer simulation powerful enough to comprehensively account for the numerous forces and factors that play into the evolution of supermassive black holes — cosmic phenomena equivalent to the mass of millions or even billions of suns. The details about how gas flows across the universe to feed supermassive black holes have remained a long-standing question. The simulation also gives rare insight into the mysterious nature of quasars, which are incredibly luminous, fast-growing black holes that often outshine entire galaxies. The research was published Aug. 17 in the Astrophysical Journal. Claude-André Faucher-Giguère, one of the study’s senior authors, is an associate professor of physics and astronomy in the Weinberg College of Arts and Sciences and a member of the Center for Interdisciplinary Exploration and Research in Astrophysics (CIERA).

Machine-learning model can detect rare cardiomyopathy
A machine-learning model can identify patients at risk of a rare cardiomyopathy, according to a recent Northwestern study published in Nature Communications. Transthyretin amyloid cardiomyopathy (ATTR-CM) can cause heart failure and should be treated differently than other causes of heart failure, so diagnosis is key, according to Sanjiv Shah, the Neil J. Stone, MD, Professor, director of the Center for Deep Phenotyping and Precision Therapeutics at Northwestern’s Institute for Augmented Intelligence in Medicine, and senior author of the study.

Northwestern ‘SuperAger’ study expands nationally with $20 million grant
Northwestern Medicine’s SuperAger research on adults over 80 years old with superior memory capacity will expand beyond its Chicago roots to include sites across the United States and one in Canada. The study was awarded a $20 million grant from the National Institute on Aging (NIA) to establish an international multi-center SuperAging consortium coordinated through Northwestern University. This award builds upon the pioneering work of Emily Rogalski, associate director of the Mesulam Center for Cognitive Neurology and Alzheimer’s Disease at Northwestern’s Feinberg School of Medicine, and Changiz Geula, research professor at the Mesulam Center. Dr. Marsel Mesulam, director of the Mesulam Center, said he expected the expanded project “to generate exciting discoveries on factors that enhance the brain's resistance to Alzheimer's disease and to the wear and tear of aging.” Since 2008, Northwestern scientists have studied SuperAging, coining the term, “SuperAger,” as someone who is over age 80 and has the memory capacity of an individual who is at least 20 to 30 years younger.

COVID-19 antibody study shows downside of not receiving second shot
A new Northwestern study showed that two months after the second Pfizer/Moderna vaccination, antibody response decreases 20% in adults with prior cases of COVID-19. The study also tested how well current vaccines resist emerging variants. The research underscores the importance of receiving a second dose of vaccine, not only because vaccine-conferred immunity wanes over time, but also because of the risk posed by emerging coronavirus variants, including the highly contagious delta variant. The study
also showed that prior exposure to SARS-CoV-2, the virus that causes COVID-19, does not guarantee a high level of antibodies, nor does it guarantee a robust antibody response to the first vaccine dose. This finding directly contradicts the assumption that contracting COVID will naturally make a person immune to re-infection. The findings further support vaccination even for people who have contracted the virus previously. The study was published August 30, 2021 in the journal Scientific Reports. Thomas McDade, the study’s lead author, is a professor of anthropology in the Weinberg College of Arts and Sciences and a faculty fellow with the University’s Institute for Policy Research. Alexis Demonbreun, the study’s co-author, is an assistant professor of pharmacology at Northwestern’s Feinberg School of Medicine.

New COVID-19 antigen testing method offers highly accurate results in minutes
A Northwestern laboratory has developed a novel antigen-based COVID-19 detection method that demonstrates 100% accuracy in a blind test in five or fewer minutes from swab to signal. The rapid swab test uses a nanomechanical platform to detect multiple surface proteins on the COVID-19 virus and shows potential to differentiate among different variants and viruses. The high-sensitivity test is also being developed as a rapid exhaled breath COVID-19 detection method, similar to a breathalyzer test. The study was published Oct. 1 in the journal Biosensors and Bioelectronics. Corresponding author Vinayak P. Dravid is the Abraham Harris Professor of Materials Science and Engineering at the McCormick School of Engineering.

A rare feat: Material protects against both biological and chemical threats
A Northwestern research team has developed a versatile composite fabric that can deactivate biological threats, such as the novel coronavirus that causes COVID-19, and chemical threats, such as those used in chemical warfare. A material that is effective against both classes of threats is rare. The Northwestern material also is reusable: The fabric can be restored to its original state by a simple bleach treatment. The promising material could be used in face masks and other protective clothing. The composite fiber, made of a metal-organic framework (MOF), builds on an earlier study by Northwestern chemist Omar Farha and his team in which they created a nanomaterial that deactivates toxic nerve agents. With some small manipulations, the researchers were able to also incorporate antiviral and antibacterial agents into the material. This latest study was published September 30, 2021 in the Journal of the American Chemical Society. Farha, a co-corresponding author on the study, is professor of chemistry in the Weinberg College of Arts and Sciences.

Engineers create double layer of borophene for first time
For the first time, Northwestern engineers have created a double layer of atomically flat borophene, a feat that defies the natural tendency of boron to form non-planar clusters beyond the single-atomic-layer limit. Although known for its promising electronic properties, borophene — a single-atom-layer-thick sheet of boron — is challenging to synthesize. Stronger, lighter, and more flexible than graphene, borophene has the potential to revolutionize batteries, electronics, sensors, solar cells, and quantum computing. The research was published August 26, 2021 in Nature Materials. Mark Hersam, the Walter P. Murphy Professor of Engineering at the McCormick School of Engineering, is the study’s co-senior author.
A biomarker in the brain predicts future cognitive decline in patients with the language form of Alzheimer’s disease (AD), reports a new Northwestern study. Northwestern Medicine scientists discovered that the buildup of tau protein in the brain predicts the amount of future cognitive decline over one year in individuals with AD. The study used a newer type of positron emission tomography imaging that shows the location of toxic tau protein in the brain. The higher the level of the bad form of tau in the brain, the worse a person’s cognitive performance, the study showed. The study was published September 8 in *Alzheimer’s and Dementia: The Journal of the Alzheimer’s Association*. Lead author Adam Martersteck conducted the research as a neuroscience graduate student at Northwestern’s Feinberg School of Medicine and now is a postdoctoral fellow at the University of California at Berkeley. Senior study author Emily Rogalski is associate director of Northwestern’s Mesulam Center for Cognitive Neurology and Alzheimer’s Disease.

Northwestern-invented biomaterial technology moves from lab to orthopaedic market
Northwestern biomedical engineer Guillermo A. Ameer has developed a medical product based on novel biomaterials that will benefit patients following musculoskeletal surgeries. The biomaterial technology, called CITREGEN™, developed by the start-up company Acuitive Technologies, Inc., is a thermoset biodegradable synthetic polymer with unique chemical and mechanical properties for orthopaedic surgical applications that help grafted tissue heal. CITREGEN™ is the first polymer of its kind to be used in implantable medical devices. The material will be used in Stryker Corporation’s CITRELOCK™ Tendon Fixation Device System, a device that is used to attach soft tissue grafts to bone in reconstruction surgeries. CITRELOCK™ has a compressive strength comparable to cortical bone and maintains structural integrity during healing while allowing the implant to be remodeled by host tissue over time. The implantable device received clearance from the Food and Drug Administration last year. Ameer is a faculty member in the McCormick School of Engineering and the Feinberg School of Medicine.

A new, race-free approach to diagnosing kidney diseases
The two largest national kidney associations — the National Kidney Foundation and the American Society of Nephrology (ASN) — have outlined a new race-free approach to diagnosing kidney disease and functionality. This move helps ensure that “racial bias does not affect the diagnosis and subsequent treatment of kidney diseases,” said ASN president Dr. Susan E. Quaggin, chief of nephrology and hypertension at Northwestern’s Feinberg School of Medicine and a Northwestern Medicine nephrologist.

Northwestern scientists explore impacts of genomic variation in disease in NIH project
Northwestern Medicine is part of the research team on a $185 million National Institutes of Health (NIH) project that will explore the millions of genetic variants that cause disease. The project is called the Impact of Genomic Variation on Function Consortium. Northwestern and Washington University will receive a $7 million NIH grant to co-lead the consortium’s Data and Administrative Coordinating Center (DACC). The NIH project will address the challenge of determining which human genomic variants, out the millions that scientists have identified, are relevant for health and disease. The project will fund 25 awards across 30 U.S. research sites. Feng Yue, the Duane and Susan Burnham Professor of Molecular Medicine and associate professor of
biochemistry and molecular genetics at Northwestern’s Feinberg School of Medicine, will lead the Northwestern DACC team. The team includes Barbara Stranger, associate professor of pharmacology, and associate vice president for research Rex Chisholm, who is also vice dean for scientific affairs and graduate education and the Adam and Richard T. Lind Professor of Medical Genetics at Feinberg.

New research will work to prevent gun violence
On October 1, 2021, U.S. Sen. Dick Durbin (D-IL) announced new grants from the National Institutes of Health (NIH) to Northwestern University for gun violence-prevention research, part of $25 million Durbin worked to include in the Fiscal Year 2020 appropriations bill to support gun violence research at NIH and the U.S. Centers for Disease Control and Prevention. Judith Moskowitz, a professor of medical social sciences at Northwestern’s Feinberg School of Medicine, will receive $406,967 to develop and test pilot the FOREST (Fostering Optimal Regulation of Emotion to prevent Secondary Trauma) program to help READI Chicago front-line staff maintain well-being and reduce burnout. READI Chicago is an innovative program designed to reduce gun violence by providing community-based outreach, psychosocial support, and job-skills training to adults living in Chicago neighborhoods with some of the highest rates of unemployment, poverty, and firearm injury and mortality. Andrew Papachristos, professor of sociology in the Weinberg College of Arts and Sciences and faculty director of the Northwestern Neighborhood and Network Initiative (N3), also is a part of the grant.

Did a black hole eating a star generate a neutrino? Unlikely, new study shows
In a study published October 4, 2021 in the Astrophysical Journal, researchers at Northwestern University and the Center for Astrophysics | Harvard & Smithsonian refute earlier claims that a high-energy neutrino that slammed into Antarctica in October 2019 came from a supermassive black hole. Researchers originally traced the neutrino back to the black hole, which had just ripped apart and swallowed a star some 750 million light years from Earth. Known as a tidal disruption event (TDE), AT2019dsg had occurred months earlier in April 2019 and in the same region of the sky where the neutrino had come from. Astronomers at the time concluded the monstrously violent event must have been the source of the powerful particle. But new radio observations and data on AT2019dsg enabled the team to calculate the energy emitted by the event. The findings show AT2019dsg generated nowhere near the energy needed for the neutrino; in fact, what it spewed out was quite “ordinary,” the team concluded. Yvette Cendes, a postdoctoral fellow at the Center for Astrophysics, led the study. Kate Alexander, the study’s co-author, is a NASA Einstein fellow at Northwestern’s Center for Interdisciplinary Exploration and Research in Astrophysics (CIERA).
**Academic Affairs Updates**

**Northwestern Qatar (NU-Q)**
NU-Q welcomes its newest class
NU-Q welcomed its largest and most diverse class, representing nearly 60 nationalities. Among the more than 130 students making up the class, many from nations and cultural backgrounds represented for the first time at NU-Q, are students with a wide array of unique talents and interests.

**LaMay named director of Journalism Program**
Craig LaMay has been named director of the Journalism Program at NU-Q. LaMay is a professor at Northwestern’s Medill School and a professor in residence at NU-Q. He has been actively involved with NU-Q's campus since its founding, both as a professor and the school’s acting dean in 2020. He has also served as associate dean at Medill.

**Professor’s film premieres in Europe and U.S.**
*The Translator*, a feature film by NU-Q Professor Rana Kazkaz, premiered at the Institut du Monde Arabe in Paris. The has also been released in Switzerland and will be released in other parts of the world, including the United States, in early 2022. Kazkaz is an award-winning filmmaker and an assistant professor in residence at NU-Q. This semester, she is the Roberta Buffett Visiting Professor of International Studies in the Program of Middle Eastern and North African Studies at the home campus in Evanston.

**Trustee News and Honors**

**Trustee Ginni Rometty to Serve as MIT Visiting Innovation Fellow**
Trustee Ginni Rometty, a business leader and champion of diversity in the workplace, will serve as the next MIT Visiting Innovation Fellow for the coming academic year. During her MIT appointment, Rometty will focus on advancing women in STEM and in entrepreneurship, as well as on bolstering ethics and responsibility in a digital age. The MIT Visiting Innovation Fellows are part of MIT's Innovation Initiative, which collaborates with all five of MIT's schools and the MIT Schwarzman College of Computing.

**Administrative Update**

**Government Relations**
On August 31, 2021, U.S. Representative Jan Schakowsky toured the Walter Athletics Center and met with President Schapiro and Derrick Gragg, Combe Family Vice President for Athletics and Recreation, to discuss federal issues in student athletics. Athletics and Recreation staff briefed the Congresswoman on how the University supports the health and well-being of student-athletes through their college years and beyond and gave an update on compliance with the recently enacted Illinois law on Name-Image-Likeness (NIL) ahead of the September 30 hearing of the House Energy and Commerce Committee on federal NIL legislation. Northwestern has advocated for federal NIL legislation to ensure an even-playing field across all states.
Community Relations
Northwestern Racial Equity Fund (Guaranteed Basic Income Pilot Program)
As part of the University’s social justice commitment, Northwestern - with additional funds from the City of Evanston - has committed to pilot a Guaranteed Basic Income program in Evanston to distribute funds ($500 per month for one year) to 150 individuals across three identified groups: disengaged youth (ages 18-24), senior citizens (ages 62+), and undocumented residents. An interdisciplinary research team at Northwestern will evaluate the impact of guaranteed income on the three subpopulations and perform a mixed-methods study combining quantitative analyses of a randomized controlled trial (RCT) with qualitative analyses of a series of longitudinal interviews. The target launch date for the program is January 2022.

Northwestern and the Robert Crown Community Center Partnership
NCR worked with the City of Evanston to design a partnership agreement that allows all Northwestern students, faculty, and staff to have free access to the ice rinks at Robert Crown as part of a $1 million programmatic investment by the University to support the Robert Crown Center's long-term viability.

Global Marketing and Communication
Public Service Announcements
PSAs during Northwestern athletic events have the largest media audience of any University communications. This year, OGMC focused on highlighting academic Northwestern stories from our Magazine, featuring Northwestern’s Prison Education Program, the engineering innovations of Prof. John Rogers and his team, and Northwestern researchers who are aiding the mission to Mars. These spots were launched on several networks and were supported by a multi-channel social effort. The TV spots alone reached millions. On social, total reach for these spots was 658,400 and resulted in 3,600 engagements.

Athletics Update
Wildcats, Wolverines Introduce George Jewett Trophy
In October, Northwestern and Michigan met in Ann Arbor in the first matchup vying for the new George Jewett Trophy. Jewett, was the first African-American football player at both schools in the late 1890’s, coming to Northwestern to enroll in medical school. The new rivalry trophy is the first in college football in honor of a black student-athlete and its introduction was celebrated on the field by both school’s athletic directors and members of the family.

Ryan Field Redevelopment
In September, Patrick G. Ryan ’59, ’09 H and Shirley W. Ryan ’61, ’19 H (’97, ’00 P), committed the largest philanthropic gift in Northwestern history to accelerate breakthroughs in biomedical, economic, and business research, and begin the process to rethink and rebuild Ryan Field. The multi-year project will create a state-of-the-art venue that Wildcats football, and the Northwestern community will call home for generations. More information is available at RebuildRyanField.com.
**Byington Breaks Barriers**
The Milwaukee Bucks named two-sport (basketball, soccer) Northwestern alumnus Lisa Byington as the team’s television play-by-play announcer for games on Bally Sports Wisconsin. In joining the Bucks, Byington became the first female full-time TV play-by-play announcer for a major men’s professional sports team.

**Northwestern Represented in Ryder Cup**
Wildcats were well represented on Team Europe at the 2021 Ryder Cup, hosted at Whistling Straits in eastern Wisconsin. Matt Fitzpatrick was in the lineup for the visitors, while former Big Ten and NCAA champion Luke Donald was a vice-captain for the squad.