UPDATE TO THE BOARD

in advance of the June 3, 2022
Board of Trustee Meeting

Key Updates

Major faculty honors and awards
Four faculty members (Wendy Griswold, C. Kirabo Jackson, James L. Mahoney, and Sara A. Solla) were elected to the American Academy of Arts and Sciences, three (Shana Kelley, Jeffrey Masten, and Kimberly Yuracko) named Guggenheim fellows, one (Amanda Logan) named a Carnegie fellow, and six (Piotr Dworczak, Wen-fai Fong, Yuchen Liu, Josiah Hester, Muzhou Wang, and Lucas Pinto) named Sloan Research fellows. Chad Mirkin received the UNESCO International Prize for Life Sciences. Details on these awards and other faculty honors are below in the Research Updates section.

Honorary degree for author and three Northwestern alumni
Four individuals will receive honorary degrees from Northwestern University.
• J. Landis (Lanny) Martin ’68, ’73 JD will receive a Doctor of Humane Letters. He leads a successful career in business and law and has served as a committed leader and philanthropist to cultural institutions across the nation. Martin has served as chair of the Northwestern University Board of Trustees since 2017.
• Isabel Wilkerson will receive a Doctor of Humane Letters at the June 13 commencement where she is acting as the 164th commencement speaker. She is a National Humanities Medal recipient and a former New York Times reporter. Wilkerson is the first Black woman to win a Pulitzer Prize and the first African American to win for individual reporting in the history of American journalism.
• Judith Olson ’65 will receive a Doctor of Science. For 30 years, she conducted research in the field of human-computer interaction. In 2015, Larry Page, co-founder of Google, was quoted in the book “Innovations” stating that the course that influenced him the most as an undergraduate was one taught by Olson on human-computer interaction.
• Eva Jefferson Paterson ’71 will receive a Doctor of Laws. She is co-founder and president of the Equal Justice Society which aims to transform the nation’s consciousness of race through law, social science and the arts. As an undergraduate at Northwestern, she was elected the first African American student body president and as a 20-year-old, debated then-Vice President Spiro Andrew on live television, fostering nonviolent protest.

Julie Payne-Kirchmeier to become vice president for student success for Indiana University system
Julie Payne-Kirchmeier was named the inaugural vice president for student success for the Indiana University system, effective August 1. Payne-Kirchmeier has served as vice president for Student Affairs since 2020, after service as interim vice president, and will conclude her time at Northwestern this summer. Payne-Kirchmeier has been a champion of the student experience during her 10 years at Northwestern. Under her
leadership, student spaces were constructed and renovated, including the ground floor of the Norris University Center, several buildings in campus housing, as well as cultural spaces, such as The Black House, the current Multicultural Center refresh and the forthcoming renovation of space for Student Enrichment Services. Payne-Kirchmeier has been one of the University’s leading voices in support of diversity, equity, and social justice. An announcement regarding the search for a new vice president, is forthcoming.

**Patricia M. Lampkin named interim vice president for Student Affairs**
Patricia Lampkin will become Northwestern University’s interim vice president for Student Affairs beginning August 1. She served as vice president and chief student affairs officer at the University of Virginia (UVA) until she retired in 2021. She spent four decades at UVA, the last 19 as vice president. Lamkin will work alongside Student Affairs professionals through the leadership transition period.

**Alicia Löffler to step down as Executive Director of the Innovation and New Ventures Office**
Alicia Löffler, the founding Executive Director of the Innovation and New Ventures Office (INVO), Associate Provost for Innovation and New Ventures, and Associate Vice President for Research, is slated to depart from the University at the end of the Fall Quarter. Löffler arrived at Northwestern in 1992, was appointed Associate Vice President for Research in 2010 and added the title of Associate Provost for Innovation and New Ventures in 2014. Löffler is responsible for all short-term and long-term strategies and operations for INVO, including all educational commercialization and new ventures. She was an important leader in the creation of a multimillion-dollar Querrey InQbation Lab technology accelerator, and she oversaw the inception of The Garage startup hub for student entrepreneurs and created entrepreneurial training programs past and present. The University will soon launch the search for the next leader of INVO.

**Xuemao Wang appointed Charles Deering McCormick University Librarian**
Provost Hagerty announced Xuemao Wang’s appointment as Charles Deering McCormick University Librarian and Dean of Libraries on May 10, 2022. He will begin in this role on September 1, 2022. Wang will join Northwestern from University of Cincinnati, where he has served as Dean of Libraries and Vice Provost of Digital Scholarship since 2012. He has also served in roles at Emory University, Johns Hopkins University, Sheridan Libraries, the Metropolitan New York Library Council, and Queens Borough Public Library in New York City. Wang succeeds Sarah Pritchard, who announced her pending retirement in October after 15 years in the role.

**Chicago Academy and Distinguished Secondary Teachers Award**
The Potocsnak family has made a new multimillion-dollar gift to Northwestern in honor of President Morton Schapiro. The gift will support programs created during Schapiro’s presidency that help prepare area students for college and celebrate the profound impact high school teachers have on readying students for Northwestern. Most of the gift will endow Northwestern Academy for Chicago Public Schools. The academy, established in 2013, is a free, multiyear college access and enrichment program for academically motivated high school students from diverse backgrounds. The remainder
of the gift will be used to endow the University’s Distinguished Secondary School Teacher Award program, launched in 2011. Each year at Commencement, Northwestern honors five high school teachers whose personal and professional commitment has touched the Northwestern community. “I’m proud of the way Northwestern faculty, staff and students launched and developed these two incredibly meaningful programs,” Schapiro said. “And I’m grateful beyond words for how the Potocsnak family has stepped forward to endow them both in perpetuity.”

Leadership Search Updates
School of Education and Social Policy Dean Search
Dan P. McAdams began serving as interim dean of SESP on May 15, following David Figlio’s departure to become Provost at the University of Rochester. The search committee, which is chaired by Emma K. Adam, Edwina S. Tarry Professor of Human Development and Social Policy, Faculty Fellow in the Institute of Policy Research, and Associate Vice President for Research in the Office of Research, includes School of Education and Social Policy (SESP) faculty, staff, students, and alumni. WittKieffer has been retained to assist the committee. The search committee is in the process of gathering input from the SESP community on the most important attributes and professional experiences for the next dean through a survey, listening sessions, and individual outreach. The committee also welcomes nominations of potential candidates.

The Garage Executive Director Search
The search for the next Executive Director of The Garage was announced on April 29, 2022. The individual chosen will succeed Founding Executive Director Melissa Kaufman, who left the university on May 15 after more than six years in the role. Associate Director Mike Raab will serve as interim director until a permanent executive director is appointed. The search committee, which is chaired by Roma Khanna, Associate Provost for Strategy and Policy, includes faculty, students, staff, and alumni. Korn Ferry has been engaged to support the search.

Preliminary Undergraduate Admissions Numbers
Preliminary numbers for the Fall 2022 entering undergraduate class (Class of 2026) indicate a continued positive trajectory for Northwestern’s undergraduate admissions. Northwestern received 51,577 undergraduate first-year applications for Fall 2022 admission, an 8.3 percent increase over last year’s applicant pool and a 38.4 percent increase over 5 years ago. The number of early decision applicants increased 10.8 percent over last year and 31.5 percent increase over 5 years ago. The University enrolled 1,093 students in Early Decision from a very strong pool of 5,034 applicants. The average SAT of all deposits received is 1513. As of May 10, Northwestern has received deposits from 123 Chicago Public Schools students (up from 121 last year) and 21 Evanston Township High School students (up from 16 last year). Preliminary numbers indicate Pell recipients make up 21 percent of the incoming students (consistent with last year), African American students make up 13.5 percent (up from 12 percent last year) of incoming students, and Hispanic students account for 14.6 percent of incoming first-years (down from 17 percent last year).
WRITTEN UPDATE: COVID-19 HEALTH AND SAFETY
As the University progresses through the Spring Term, this update provides a snapshot of the current conditions on campus and planning assumptions for the upcoming months.

May Experience
Like the broader region, Northwestern’s campus has experienced a significant uptick in COVID cases over the month of May. Daily new cases have fluctuated between 30-60 on average, with positivity consistently elevated from the earlier weeks of the quarter. At this time, Northwestern continues to follow the messaging of public health agencies, focusing on low hospitalizations and continued protection from vaccination and boosters.

Spring Quarter
Given some concern related to heightened transmission during spring break, students were required to test upon their return to campus. However, unlike previous quarters, there was not a Wildcat Wellness period of remote activity. Spring quarter started as scheduled, fully in-person.

Vaccination and Booster Requirement
The vaccination and booster requirements continue to be enforced. 98% of the community is compliant with the initial vaccination requirement, and approximately 95% of the community is compliant with the booster requirement.

Individuals who are not fully vaccinated or boostered may request an exception for medical, religious, or certain other reasons. Currently, those individuals must continue testing twice weekly.

Onsite Testing Activity
The university required students to test following spring break, and since that time, testing has remained optional for all vaccinated/boostered members of the community. Case numbers and positivity are elevated when compared to the end of the Winter Quarter. However, fewer weekly tests weakens the comparison of positivity trends over time.

For the Spring Quarter to date, over 30,000 tests have been received. About 4,000 weekly tests are being completed, however, they are skewed heavily towards those who are not compliant with the booster requirement and who are required to test. The level of voluntary asymptomatic testing is much lower than the Winter. Testing positivity has generally remained consistent between 4-5%.

Quarantine and Isolation Housing
On-campus quarantine and isolation housing continue to be available at Hinman, with room for about 200 students. Currently, the daily census in Hinman is about 55 students. The University is currently following a modified protocol for isolation. Students are required to isolate for five days, and then may attempt to “test out” daily between days six and ten. This is aligned with the current CDC guidance.
Alternative Workplace Strategies Extension
The University previously released an Alternative Workplace Strategies (AWS) policy that provided guidance to the schools and units about in-person work expectations and remote flexibility. The AWS policy was extended through the end of FY22. Human Resources is currently leading an analysis of flexible work opportunities and considerations, with the plan to disseminate more permanent guidance to campus later this summer.

FINANCIAL UPDATE

At the April Executive Committee meeting, the FY 2022 Q2 forecast was presented, anticipating an operating surplus of $76.7M, an improvement of $55M from the Q1 forecast. The net positive operating performance is driven by increases in grants and contracts revenue incorporating the use of Higher Education Emergency Relief Funds, and continued expense savings related to staff vacancies and lower than forecasted levels of non-personnel spending.

The FY 2023 budget has been under development, informed by the University’s annual resource planning process with schools and units. Faculty and staff compensation pools have been prioritized for resource allocation, with additional focus on facilities and information technology infrastructure needs. The three-year financial plan that was developed in June 2021 has been updated to incorporate updated operating and capital assumptions.

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
The Long-Term Balanced Pool returned -2.8 percent for the quarter ended March 31, 2022. This preliminary return includes just 20 percent of the first quarter valuations for the illiquid portfolios. The market value of the Pool on March 31, 2022, was $15 billion, but it is expected to decrease as additional valuations are received. For the fiscal year period from September 1, 2021, through March 31, 2022, the Pool returned 2.0 percent.

For the fiscal year period through March 31st, distributions from illiquid investments have been strong and have outpaced calls by $661.9 million, which includes the proceeds from a secondary sale in the fourth quarter.

Alumni Relations and Development
As of April 30, 2022, Northwestern raised $867.8 million in new gifts and commitments towards the $475 million fiscal year goal, compared with $384.1 million last year at the same time. The net amount raised without giving to Northwestern Medicine’s related entities is $700.9 million, compared to $179 million for the same period last year.
Since the March Board meeting, President Schapiro traveled to Florida, Washington D.C., Los Angeles, San Francisco, Israel, Paris, and Zurich for “Celebrate Northwestern” events.

**RESEARCH UPDATES**

**Research Award Funding**
Northwestern’s fiscal year 2022 year-to-date research award funding, as of April 28, reached $349.5 million, a 3% increase ($10 million) from the same period last fiscal year. The number of awards totaled 1,464, representing a 5% decrease (70 awards) from the same period last year. The dollar volume of proposals submitted during this period was $2.0 billion, a 15% decrease from the prior year. The number of proposals submitted (2,018) decreased 9% over the same period last year. Typically, 15% of annual awards arrive in each of the first two quarters of a fiscal year, followed by 25% in the third quarter and the remaining 45% arriving in the final quarter of the fiscal year. Proposals tend to be distributed evenly across all four quarters of the fiscal year.

As of April 28, 2022, dollar volume of awards from the National Institutes of Health decreased less than 1% (to $168.8 million). The dollar volume of proposals submitted to the National Institutes of Health was down about 7% (to $1.5 billion), while that to industry sponsors was down 11% (to $72.3 million).

**Research News and Faculty Updates**

Northwestern named multimillion-dollar technology accelerator
Northwestern announced it will name its new multimillion-dollar technology accelerator the Querrey InQbation Lab in honor of Kimberly K. Querrey (’22, ’23 P), chair of the Innovation and Entrepreneurship Committee of Northwestern’s Board of Trustees.
Located at 1801 Maple Avenue in downtown Evanston, the Querrey InQbation Lab will provide a home for Northwestern’s highly entrepreneurial faculty to contribute to innovation through commercialization of sophisticated scientific discoveries as well as bring economic growth and opportunities to the Evanston and Chicago communities. Initial renovations have allowed six Northwestern startups to move into the space. Additional renovations to the fifth and sixth floors are expected to be completed by Nov. 2022 and Aug. 2023, respectively, allowing for additional laboratories and office spaces.

Deeply invested in Northwestern’s research efforts, Querrey made a $25 million gift to Northwestern to advance innovation and entrepreneurship. The Illinois Department of Commerce and Economic Opportunity provided a $3 million grant to support the first phase of renovations and the Illinois General Assembly appropriated $50 million for further expansion of the project as part of the state’s 2022 capital budget.

Chicago universities are part of $170 million NIH Nutrition for Precision Health study
Northwestern Medicine, the University of Chicago, Illinois Institute of Technology, University of Illinois, Chicago and Rush University are part of a new $170 million National Institutes of Health (NIH) program that is the first comprehensive study to investigate precision nutrition. The goal of “Nutrition for Precision Health,” powered by the All of Us Research Program, will be to develop algorithms to predict individual
Precision nutrition, also known as personalized nutrition, will evolve from the common “one-size-fits-all” dietary recommendations and create a customized diet plan for individuals based on personal differences, such as genetics and metabolism. Linda Van Horn, a professor of preventive medicine at Northwestern’s Feinberg School of Medicine, is one of the senior principal investigators along with Dr. Philip Greenland, the Harry W. Dingman Professor of Cardiology and a cardiologist and professor of preventive medicine at Northwestern. Joyce Ho, a research associate professor, is also an investigator.

New Northwestern collaboration with Army results in cross-disciplinary research center

Northwestern has established a new basic science research institute, the Cell-Free Biomanufacturing Institute, in partnership with the U.S. Army. Its goal is to accelerate the development of synthetic biology technologies for the creation of on-demand and point-of-need products useful to both society and the Army. With a focus on cell-free systems, the interdisciplinary institute builds off Northwestern’s multiple strengths at the intersection of knowledge domains and will develop a powerful infrastructure to design, create and manufacture molecules, materials, and sensors that are unattainable through traditional approaches. It also will train the next generation of scientists and engineers and act as an engine for entrepreneurial growth in Illinois in the area of synthetic biology, a relatively young discipline that uses tools and concepts from physics, engineering and computer science to build new biological systems. “There is an emerging and growing interest in being able to partner with biology to make what is needed, where and when it is needed, on a sustainable, renewable basis,” said Michael Jewett, a Northwestern expert in synthetic biology and director of the new University institute as well as the Center for Synthetic Biology. Jewett is the Walter P. Murphy Professor of Chemical and Biological Engineering in the McCormick School of Engineering.

Machine intelligence and safety converge in new Northwestern center and industry partnership

Faculty, students, and industry professionals came together on April 8 to celebrate the launch of Northwestern’s Center for Advancing Safety of Machine Intelligence (CASMI). In partnership with the Digital Intelligence Safety Research Institute (DISRI) at Underwriters Laboratories Inc., CASMI will lead a wide-ranging research network to evaluate the human impacts of intelligent technologies and develop best practices for the design, development, and evaluation of systems to help ensure they are safe, equitable and beneficial to all. Facial recognition, self-driving cars, smart homes and medical diagnostic systems are a few of the everyday innovations made possible through machine learning (ML). Yet despite the ubiquity of ML-driven applications, most people still do not fully understand the ramifications of this digital reality. “We are now in a world where the technologies of intelligence are having impact absolutely everywhere,” said Kristian Hammond, CASMI director and Bill and Cathy Osborn Professor of Computer Science at Northwestern’s McCormick School of Engineering. “If we don’t understand the science behind that impact, we will not be able to guide it and make sure that the technologies will be safe and beneficial.” Vice President for Research Milan Mrksich noted the new center’s potential to spur innovation through collaboration: “Research impact is achieved through translation and through affiliations with our
corporate partners, who provide us with knowledge, understanding and guidance about the most important problems that need to be solved with the best new ideas,” said Mrksich, the Henry Wade Rogers Professor of Biomedical Engineering and professor of chemistry and of cell and developmental biology. This center and partnership, he added, will develop those ideas and offer “tremendous societal benefit, drive a lot of science at Northwestern and recruit a great community to the University.”

Chad Mirkin wins UNESCO international prize for life sciences
The United Nations Educational, Scientific and Cultural Organization (UNESCO) has named Northwestern chemist Chad A. Mirkin as a winner of the 2022 UNESCO-Equatorial Guinea International Prize for Research in the Life Sciences. Mirkin, only the second American to win this international prize, was selected for his research on spherical nucleic acids, which the award committee cited for “revolutionary advances in diagnostics and precision medicine.” Spherical nucleic acids (SNAs) are nanoparticles that have been densely covered with DNA or RNA. The resulting three-dimensional structure gives SNAs chemical and physical properties that are radically different from linear nucleic acids, the primary structure found in nature, making it possible for them to cross biological barriers and enter human cells for the detection and treatment of disease.

In 2000, Mirkin discovered that strands of DNA attached to gold nanoparticles could be used to detect the genetic code of a disease or virus. The Verigene™ system that was built upon that discovery is used to diagnose illness and infections in many of the world’s top hospitals – quickly, easily, and at point-of-care. Mirkin’s laboratory has developed SNAs into a cornerstone of nanomedicine and changed how disease is studied, tracked, and treated. SNAs are the basis for more than 1,800 commercial products, ranging to the treatment of skin disorders to cancer. Mirkin is the George B. Rathmann Professor of Chemistry in Northwestern’s Weinberg College. He also is director of the University’s International Institute for Nanotechnology.

Four elected to the American Academy of Arts and Sciences
Four Northwestern faculty are among this year’s class of 261 artists, scholars, scientists and leaders in the public, nonprofit and private sectors.

- Wendy Griswold is the Bergen Evans Professor in the Humanities and professor of sociology in the Weinberg College of Arts and Sciences. Griswold is the author of several books and is currently writing a book on American cultural regionalism, the third volume of a trilogy on culture and place, with a focus on the Mississippi Delta. She is also working on a comparative study of the reading practices of educated youth in 12 countries; organizing a research symposium on “Global and Local Strategies of 21st-Century African Artists”; and studying the changing images of St. Jerome over a thousand years of European art.

- C. Kirabo Jackson is the Abraham Harris Professor of Education and Social Policy with the School of Education and Social Policy and faculty fellow with the Institute of Policy Research. He is a labor economist who studies education and social policy issues. Jackson has analyzed several important aspects of education policy such as the importance of public school funding on student outcomes through adulthood; the effects of college preparatory programs on students’ college and labor market
outcomes; the effects of educational tracking on students’ academic achievement; and the effects of single-sex education on students’ academic performance.

- **James L. Mahoney** is the Gordon Fulcher Professor in Decision-Making, professor of sociology and professor of political science in the Weinberg College of Arts and Sciences. Mahoney is a comparative-historical researcher with interests in political development, Latin America and methodology.

- **Sara A. Solla** is a professor in the department of physics and astronomy in the Weinberg College of Arts and Sciences and a professor of neuroscience in the Feinberg School of Medicine. Her research interests lie in the application of statistical mechanics to the analysis of complex systems. At Northwestern, Solla has concentrated on theoretical and computational neuroscience at the systems level. She studies the information processing capabilities of networks of neurons, their dynamics and their connection to behavior.

**Anthropology professor named Carnegie Fellow**
Northwestern University associate professor of anthropology Amanda Logan in the Weinberg College of Arts and Sciences was named to the 2022 Class of Andrew Carnegie Fellows. The 28 recipients of the so-called “Brainy Award” will receive a grant of up to $200,000, making it possible for them to devote significant time to research, writing and publishing in the humanities and social sciences. Selection criteria prioritize the originality and promise of the research, its potential impact on the field and the scholar’s plans for communicating the findings to a broad audience. Logan is a faculty affiliate of Weinberg’s African studies program and environmental policy and culture program, as well as the Buffett Institute for Global Studies at Northwestern. Her current research focuses on building an archaeology of food security that traces how, where and when chronic hunger emerged across Africa. She is the author of *The Scarcity Slot: Excavating Histories of Food Security in Ghana*, which was awarded the 2021 First Book Award from the Association for the Study of Food and Society. She has written numerous journal articles on African foodways and food security.

**Three professors named Guggenheim fellows**
Three Northwestern faculty members are among the 2022 Guggenheim Fellows recently named by the John Simon Guggenheim Memorial Foundation. This year, the Foundation awarded 180 artists, writers, scholars, and scientists from across the U.S. and Canada.

- **Shana Kelley** is the Neena B. Schwartz Professor of Chemistry and Biomedical Engineering, with appointments in the Weinberg College of Arts and Sciences and McCormick School of Engineering. Kelley develops innovative, translational methods for tracking molecular and cellular analytes with unprecedented sensitivity. With the Guggenheim Fellowship, Kelley intends to develop a new class of sensors to enable continuous monitoring of biochemical markers of health and disease.

- **Jeffrey Masten** is professor of English and Gender & Sexuality Studies at Weinberg College of Arts and Sciences. Masten’s work focuses on book history, sexuality, and early modern English literature. Masten’s 2016 book, *Queer Philologies: Sex, Language, and Affect in Shakespeare’s Time*, has been hailed as “a high-water mark in early modern sexuality studies” and won the Elizabeth Dietz Memorial Award.
Guggenheim award will support Masten’s research into early printed copies of literary texts and the changing histories of gender and sexuality registered by the readers who owned, marked up and read them across time.

- **Kimberly Yuracko** is the Judd and Mary Leighton Professor at the Pritzker School of Law. She also holds a courtesy appointment in Weinberg’s Department of Political Science. Yuracko is a nationally recognized expert in antidiscrimination law. Her work on Title IX explores how athletic opportunities should be allocated across sex-segregated sports teams. The Guggenheim Fellowship will support further work by examining athletic opportunities for transgender girls.

**Six Northwestern professors named Sloan Research Fellows**

Six of the University’s faculty members, representing three schools, have been awarded a prestigious 2022 Sloan Research Fellowship from the Alfred P. Sloan Foundation. They were selected for their creativity, innovation and research accomplishments that distinguish them as the next generation of leaders. The new Northwestern fellows are:

- **Piotr Dworczak**, an assistant professor of economics in the Weinberg College of Arts and Sciences. Dworczak researches mechanism and information design, attempting to combine research in pure theory with more applied interests in inequality-aware market design and financial over-the-counter markets.

- **Wen-fai Fong**, an assistant professor of physics and astronomy in Weinberg and a member of Northwestern’s Center for Interdisciplinary Exploration and Research in Astrophysics (CIERA). Fong’s research team investigates the enigmatic origins of the universe’s fastest explosions, known as transients, and their host galaxy environments.

- **Yuchen Liu**, an assistant professor of mathematics in Weinberg. Liu’s research focuses on algebraic geometry and its interactions with differential geometry and commutative algebra.

- **Josiah Hester**, the Breed Junior Professor of Design, an assistant professor of computer science and an assistant professor of electrical and computer engineering at the McCormick School of Engineering. With a goal of making computing and electronics more sustainable, Hester and his team design battery-free smart devices and intermittent computing systems that are resilient to frequent and unpredictable power failures.

- **Muzhou Wang**, an assistant professor of chemical and biological engineering at McCormick School of Engineering. Wang’s lab explores novel approaches to polymer fabrication and characterization, with particular interests in optical microscopy and high-throughput techniques.

- **Lucas Pinto**, an assistant professor of neuroscience at the Feinberg School of Medicine. He is a systems neuroscientist researching the neurobiological
mechanisms underlying cognition, at the local circuit level and in terms of large-scale interactions between different brain areas.

Wen-fai Fong receives Cottrell Scholar Award
Northwestern astrophysicist Wen-fai Fong has received a 2022 Cottrell Scholar Award from the Research Corporation for Science Advancement, the United States’ first foundation entirely dedicated to science. Fong is among a diverse group of 24 early career scholars in chemistry, physics, and astronomy recognized with the annual award. Each awardee receives $100,000. Fong is an assistant professor of physics and astronomy in the Weinberg College of Arts and Sciences and a member of the University Center for Interdisciplinary Exploration and Research in Astronomy (CIERA). She received the Cottrell Scholar Award for her proposal “Toward the Next Breakthroughs in Time-Domain Astronomy: The Origins of Fast Radio Bursts.” With the award, Fong will combine multi-wavelength observations with archival information to explore the origins of fast radio bursts, which remain a longstanding mystery. For the educational component of her project, Fong will develop and teach an innovative and sustainable undergraduate course centered on the contributions of women and astronomers of color to major astronomical discoveries throughout history.

Medical anthropologist Sera Young earns Kretchmer Award
Sera Young, associate professor of anthropology at Northwestern’s Weinberg College of Arts and Sciences, has received the Norman Kretchmer Memorial Award in Nutrition and Development from the American Society for Nutrition Foundation. The award is given to a young investigator for a substantial body of independent research in the field of nutrition and development with potential relevance to improving child health. “It’s thrilling to see our anthropological work being recognized with such a prestigious nutrition award,” said Young, a medical anthropologist and public health expert whose research has sought to understand how mothers, especially in low-resource settings, cope to preserve their health and their families’ health. She has significantly advanced science in the areas of infant feeding, micronutrient deficiencies, and food insecurity.

Harnessing positive emotions to prevent burnout among gun violence interrupters
Judith Moskowitz, a professor of medical social sciences at the Feinberg School of Medicine, and colleague Elizabeth Addington, an assistant professor of medical social sciences at Feinberg and a Northwestern Medicine clinical psychologist, are using their body of evidence-based skills to help support Chicago’s frontline violence-prevention workers by teaching them how to cope with the daily stresses of such a mentally and physically taxing job. The National Institutes of Health has awarded Moskowitz a $200,000 grant to develop and pilot the FOREST (Fostering Optimal Regulation of Emotion to prevent Secondary Trauma) program to help workers at READI Chicago, an innovative program designed to reduce gun violence. READI Chicago provides 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. The researchers employ a “toolbox” of various strategies from positive psychology to reduce stress and burnout.
Prof. Michael Kang appointed to Presidential Commission on the Supreme Court of the United States
The White House recently announced that Michael Kang, the William G. and Virginia K. Karnes Research Professor of Law at Northwestern’s Pritzker School of Law, served on the Presidential Commission on the Supreme Court of the United States, a team that in December submitted its report to President Joseph Biden detailing their findings on several key aspects of the high court. Following their appointment in April 2021, Kang and 33 other commission members began researching topics. Ultimately, the commission agreed that Congress does have the power to enlarge the court — though there was “profound disagreement” on whether it should do so — and that it found “considerable, bipartisan support” for implementing non-renewable 18-year term limits for justices.

SESP professor named editor of leading economic journal
Northwestern professor Kirabo Jackson was appointed lead editor for the American Economic Journal: Economic Policy, one of the nation’s most respected scholarly economic journals. Jackson, a labor economist and the Abraham Harris Professor of Human Development and Social Policy at the School of Education and Social Policy, has served as a co-editor for the last three years. He begins his new role in January 2023. Jackson’s research examines how people are affected by education systems. In addition to public school funding, his work explores how college prep programs, ability tracking, single-sex education and other practices can benefit or hurt students long after they have left school.

Interdisciplinary research group developing roadmap to combat rise of antibiotic-resistant bacteria
Modern antibiotics have played a profound role in the ability to treat many bacterial infections once considered life threatening. Yet as global access to antibiotics has increased, so has their overuse, resulting in a rise in antibiotic-resistant bacteria. In response, an interdisciplinary research group funded by the Northwestern Buffett Institute for Global Affairs has been formed, drawing on the expertise of faculty members from the Feinberg School of Medicine, McCormick School of Engineering and Weinberg College of Arts & Sciences, and in collaboration with experts from Northwestern Memorial Hospital, Lurie Children’s Hospital, Argonne National Laboratory and Aga Khan University in Pakistan. The group, co-led by Erica Hartmann (assistant professor of civil and environmental engineering at McCormick) and Mehreen Arshad (assistant professor of pediatrics and infectious diseases at Feinberg) is developing a roadmap to coordinate responses to antimicrobial resistance across academic, political, pharmaceutical, and medical institutions. The group, in partnership with the Center for Pathogen Genomics and Microbial Evolution at Feinberg’s Institute for Global Health, recently received a grant from the Centers for Disease Control and Prevention to study antimicrobial resistance patterns and their associated clinical implications. The grant provides $500,000 annually for five years to support the research.
Research takes center stage at University’s annual alumni event
Northwestern alumni and friends who attended the annual “Day With Northwestern” program on April 23 enjoyed a compelling overview of the ways University research is improving the world. The daylong program began with a keynote panel discussion featuring Vice President for Research Milan Mrksich in conversation with three of Northwestern’s faculty thought leaders. They address pioneering discoveries in promising innovations—from black holes and gravitational waves to cellular “factories” in transformative public policy.

Research Highlights
Tumors dramatically shrink with new approach to cell therapy
Northwestern researchers have developed a tool to harness immune cells from tumors to fight cancer rapidly and effectively. Their findings, published Jan. 27 in Nature Biomedical Engineering, showed a dramatic shrinkage in tumors in mice compared to traditional cell therapy methods. With a novel microfluidic device that could be 3D printed, the team multiplied, sorted through, and harvested hundreds of millions of cells, recovering 400% more of the tumor-eating cells than current approaches did. Most cancer treatments involve toxic chemicals and foreign substances, which cause harmful side effects and weaken the body’s immune response. Using tissue from one’s own body can eliminate side effects and rejection risks, and many disease therapies in regenerative medicine and cancer treatment have gained traction in the clinic. Shana O. Kelley, a pioneer in translational biotechnology and corresponding author on the paper, is the Neena B. Shwartz Professor of Chemistry and Biomedical Engineering at Weinberg College of Arts and Sciences and McCormick School of Engineering, and a professor of biochemistry and molecular genetics at the Feinberg School of Medicine.

Researchers identify proteins that could predict liver transplant rejection
Northwestern scientists have discovered families of proteins that could potentially predict which patients may reject a new organ transplant, helping inform decisions about care. The advancement marks the beginning of a new era for more precise study of proteins in specific cells. Typically, scientists tend to look at shifting patterns of proteins as if through goggles underwater, taking in just a fraction of available information about their unique structures. But now Northwestern scientists took a magnifying glass to these same structures and created a clarified map of protein families. The result, the Blood Proteoform Atlas, outlines more than 56,000 exact protein molecules (called proteoforms) as they appear in 21 different cell types — almost 10 times more of these structures than appeared in similar previous studies. The study was published Jan. 28 in Science. Neil Kelleher, a leading expert in proteomics and the paper’s co-corresponding author, is the Walter and Mary Glass Professor of Molecular Biosciences and professor of chemistry in Weinberg College and a professor of medicine in the Feinberg School of Medicine. He also is the director of the Chemistry of Life Processes Institute (CLP), a cross-disciplinary hub attracting talent from across Northwestern, and faculty director of Northwestern Proteomics, a center of excellence within CLP that develops novel platforms for drug discovery and diagnostics.
Northwestern research finds five diseases that attack language centers in brain
An important new Northwestern Medicine study has shown there are five different
diseases that attack the language areas in the brain’s left hemisphere, slowly causing
progressive impairments of language known as primary progressive aphasia (PPA).
“We’ve discovered each of these diseases hits a different part of the language network,”
said lead author Dr. M. Marsel Mesulam, director of Northwestern’s Mesulam Center for
Cognitive Neurology and Alzheimer’s Disease at the Feinberg School of Medicine. “In
some cases, the disease hits the area responsible for grammar, in others the area
responsible for word comprehension. Each disease progresses at a different rate and has
different implications for intervention.” This study is based on the largest set of PPA
autopsies — 118 cases — ever assembled. It was published April 20 in the journal
Brain. Mesulam noted that the study is longitudinal, having followed the patients for
more than 25 years, resulting in the most extensive work of its kind to date. About one
in 100,000 people have PPA.

Close the blinds during sleep to protect your health
Exposure to even moderate ambient lighting during nighttime sleep, compared to
sleeping in a dimly lit room, harms cardiovascular function during sleep and increases
your insulin resistance the following morning, reports a new Northwestern Medicine
study. “The results from this study demonstrate that just a single night of exposure to
moderate room lighting during sleep can impair glucose and cardiovascular regulation,
which are risk factors for heart disease, diabetes and metabolic syndrome,” said senior
study author Dr. Phyllis Zee, chief of sleep medicine at the Feinberg School of Medicine
and a Northwestern Medicine physician. “It’s important for people to avoid or minimize
the amount of light exposure during sleep.” The study demonstrated that even low levels
of light increased heart rate and increased blood sugar the morning after people slept in
a lighted room. Exposure to artificial light at night during sleep is common, the
researcher note, either from indoor light emitting devices or from sources outside the
home, particularly in large urban areas. A significant proportion of individuals (up to
40%) sleep with a bedside lamp on or with a light on in the bedroom and/or keep the
television on. Zee is associate director of Northwestern’s interdisciplinary Center for
Sleep and Circadian Biology.

Rapid PCR test receives FDA emergency use authorization
A new highly sensitive, easy-to-use test for COVID-19 that requires a single swab and 15
minutes has received emergency use authorization status from the U.S. Food and Drug
Administration (FDA). Developed at Northwestern’s Center for Innovation in Global
Health Technologies (CIGHT), the point-of-care device is being commercialized by
Northwestern spinoff company Minute Molecular Diagnostics. Last year, Minute
Molecular received $21.3 million from the National Institutes of Health to manufacture
the technology. Called DASH (Diagnostic Analyzer for Specific Hybridization), the
device is about the size of a cereal box. The test uses a polymerase chain reaction (PCR)
technique that amplifies DNA, increasing very small virus samples to detectable levels.
To use the DASH test, a user simply performs a nasal swab, puts the swab into a
chamber within a small cartridge and then inserts the cartridge into the testing unit.
After 15 minutes, an easy-to-read positive or negative result appears on the unit’s
touchscreen. “DASH provides central laboratory-quality COVID-19 PCR results at the
point of care in approximately the same time as an antigen test,” said Northwestern clinical professor of biomedical engineering David Kelso, co-founder, president and CEO of Minute Molecular. “What distinguishes DASH from existing options are its simplicity, speed and PCR-level accuracy,” said Dr. Chad Achenbach, associate professor of medicine (infectious diseases) and preventive medicine at the Feinberg School of Medicine, who led DASH’s clinical evaluation. Sally McFall, director of research for CIGHT, is also a co-founder of Minute Molecular.

Decoy particles trick coronavirus as it evolves
As the SARS-CoV-2 virus begins to evade treatments, researchers are more interested in “decoy” nanoparticles that can thwart evasion. Mimicking regular cells, decoy nanoparticles soak up viruses like a sponge, inhibiting them from infecting the rest of the body. In a new study, Northwestern synthetic biologists set out to elucidate the design rules needed make decoy nanoparticles effective and resistant to viral escape. After designing and testing various iterations, the researchers identified a broad set of decoys that were incredibly effective against the original virus and mutant variants. In fact, decoy nanoparticles were up to 50 times more effective at inhibiting naturally occurring viral mutants, compared to traditional, protein-based inhibitor drugs. When tested against a viral mutant designed to resist such treatments, decoy nanoparticles were up to 1,500 times more effective at inhibiting infection. Although more research and evaluation is needed, the researchers believe decoy nanoparticle infusions someday could potentially be used to treat patients with severe or prolonged viral infections. The study was published April 7 in the journal Small. Joshua Leonard and Neha Kamat are the study’s co-senior authors. Leonard is associate professor of chemical and biological engineering in Northwestern’s McCormick School, where Kamat is assistant professor of biomedical engineering. Both are members of the University’s Center for Synthetic Biology.

Nanoparticle-based COVID-19 vaccine could target future infectious diseases
Just one dose of a new nanoparticle-based COVID-19 vaccine was enough to produce an immune response in animals, on track with vaccines currently in clinical use. With minor changes, Northwestern researchers hope the same vaccine platform could target other infectious diseases. In a new study published in the Proceedings of the National Academy of Sciences, 100% of mice who received the protein-based immunization survived when challenged with lethal doses of the SARS-CoV-2 virus, which causes COVID-19. None of the mice experienced lung damage due to SARS-CoV-2 exposure. All mice who did not receive this nanoparticle vaccine died in a 14-day trial. The results outline the structure-function relationships between the first spherical nucleic acid (SNA) vaccine developed to protect against viral infections. SNAs are nanoparticles that can house an immune target and enter and stimulate immune cells with extreme efficiency. SNAs have been tested in more than 60 cell types. Researchers experimentally determined the ideal ratio between the SNA’s shell and core density that produces the most potent response. SNA vaccines have been used to treat mice with triple negative breast cancer — and more vaccines for other cancers are in development. Chad A. Mirkin, the inventor of SNAs and the paper’s corresponding author, led the study. Dr. Michelle Teplensky, a post-doctorate fellow in Mirkin’s lab, is the paper’s co-first author. Mirkin is the George B. Rathmann Professor of Chemistry in Weinberg
College, director of the International Institute of Nanotechnology and a member of the Robert H. Lurie Comprehensive Cancer Center of Northwestern University.

Unprecedented videos show RNA switching ‘on’ and ‘off’
Similar to a light switch, RNA switches (called riboswitches) determine which genes turn “on” and “off.” Although this may seem like a simple process, the inner workings of these switches have confounded biologists for decades. Now researchers led by Northwestern and the University at Albany discovered that one part of RNA smoothly invades and displaces another part of the same RNA, enabling the structure to change shape rapidly and dramatically. Called “strand displacement,” this mechanism appears to switch genetic expression from “on” to “off.” Using a simulation they launched last year, the researchers made this discovery by analyzing a slow-motion simulation of a riboswitch. Called R2D2 (short for “reconstructing RNA dynamics from data”), the simulation models RNA in three dimensions as it binds to a compound, communicates along its length and folds to turn a gene “on” or “off.” The findings could have implications for engineering new RNA-based diagnostics and for designing successful drugs to target RNA to treat illness and disease. The research is described in a March 28 paper in *Nucleic Acids Research* (NAR), which has designated the study as a “Breakthrough Article.” NAR reserves “Breakthrough Article” status for the most high-impact studies answering long-standing questions in nucleic acids research. Julius B. Lucks, who co-led the study, is a professor of chemical and biological engineering in Northwestern’s McCormick School and a member of the University’s Center for Synthetic Biology and of the Chemistry of Life Processes Institute.

CRISPR and HIV: New technique in human blood unveils potential paths toward cure
Scientists at Northwestern Medicine are using new advances in CRISPR gene-editing technology to uncover new biology that could lead to longer-lasting treatments and new therapeutic strategies for Human Immunodeficiency Virus (HIV), a critical and ongoing threat to human health with an estimated 1.5 million new infections in the last year. Drug developers and research teams have been searching for cures and new treatment modalities for HIV for over 40 years but are limited by their understanding of how the virus establishes infection. How does this small virus with only 12 proteins — and a genome only a third of the size of SARS-CoV-2 — hijack the body’s cells to replicate and spread across systems? In a new study, a cross-disciplinary Northwestern team used a new CRISPR gene-editing approach to identify human genes that were important for HIV infection in the blood, finding 86 genes that may play a role in the way HIV replicates and causes disease, including over 40 that have never been looked at in the context of HIV infection. The study proposes a new map for understanding how HIV integrates into DNA and establishes chronic infection. The study was published April 1 in *Nature Communications*. Judd Hultquist, a co-corresponding author, is associate director of the Center for Pathogen Genomics and Microbial Evolution at the Feinberg School of Medicine and an assistant professor of medicine in infectious diseases at the school.
Psychological factors—more than demographics—drive vaccine behavior
A team of researchers from the Kellogg School of Management examined what factors predict whether someone will want to get vaccinated and whether they actually do so. With vaccine hesitancy contributing to infection rates, there is increased urgency for this information to assist policymakers and healthcare practitioners in understanding what predicts vaccine behavior. Most research and media coverage has focused on demographic factors that influence vaccine intent and uptake, such as race, education, and political affiliation. But Kellogg researchers Angela Lee and Ulf Bockenholt, both professors of marketing, along with Jiaqian Wang, a Kellogg doctoral student, took a different approach by focusing instead on psychological factors. Conducting surveys in 2020 and 2021, the research showed that “psychological factors are as much or more important than demographic variables related to vaccine intent and uptake.” For example, compliance with CDC recommendations, trust in information reported in the media and isolation anxiety were associated with higher vaccination intent. Conversely, those who chose not to be vaccinated, across segments, cited one main motivation above others for their inaction: concern about side effects.

New DNA computer assesses water quality
Northwestern synthetic biologists have developed a low-cost, easy-to-use, hand-held device that lets users know — within minutes — if their water is safe to drink. The new device uses powerful and programmable genetic networks, which mimic electronic circuits, to perform logic functions. Among the DNA-based circuits, for example, the researchers engineered cell-free molecules into an analog-to-digital converter (ADC), a circuit type found in nearly all electronic devices. In the water-quality device, the ADC circuit processes an analog input (contaminants) and generates a digital output (a visual signal to inform the user). The research was published Feb. 17 in Nature Chemical Biology. Equipped with a series of eight small test tubes, the device glows green when it detects a contaminant. The number of tubes that glow depend upon how much contamination is present. If only one tube glows, then the water sample has a trace level of contamination. But if all eight tubes glow, the water is severely contaminated. Julius B. Lucks, who led the research, is a professor of chemical and biological engineering in the McCormick School of Engineering and a member of the University’s Center for Synthetic Biology.

Kilonova afterglow potentially spotted for first time
For the first time, Northwestern-led astronomers may have detected an afterglow from a kilonova — the merger of two neutron stars that produces a blast 1,000 times brighter than a classical nova. In this case, a narrow, off-axis jet of high-energy particles accompanied the merger event, dubbed GW170817. Three-and-a-half years after the merger, the jet faded away, revealing a new source of mysterious X-rays. As the leading explanation for the new X-ray source, astrophysicists believe expanding debris from the merger generated a shock — one similar to the sonic boom from a supersonic plane. This shock then heated surrounding materials, which generated X-ray emissions, known as a kilonova afterglow. An alternative explanation for the X-rays involves materials falling toward a black hole — formed as a result of the neutron star merger. Either scenario would be a first for the field. The study was published Feb. 28 in The Astrophysical Journal Letters. Aprajita Hajela, who led the new study, is a graduate student at
Dying stars’ cocoons might explain fast blue optical transients

Since they were discovered in 2018, fast blue optical transients (FBOTs) have surprised and confounded observational and theoretical astrophysicists. So hot that they glow blue, these mysterious objects are the brightest known optical phenomenon in the universe. But with only a few discovered so far, FBOTs’ origins have remained elusive. Recently, a Northwestern astrophysics team presented a bold new explanation for these curious anomalies. Using a new model, the astrophysicists believe FBOTs could result from the actively cooling cocoons that surround jets launched by dying stars. It marks the first astrophysics model that is fully consistent with all observations related to FBOTs. The research was published April 11 in *Monthly Notices of the Royal Astronomical Society.* As a massive star collapses, it can launch outflows of debris at rates near the speed of light. These outflows, or jets, collide into collapsing layers of the dying star to form a “cocoon” around the jet. The new model shows that as the jet pushes the cocoon outward — away from the core of the collapsing star — it cools, releasing heat as an observed FBOT emission. Ore Gottlieb, who led the study, is a Rothschild Fellow in Northwestern’s Center for Interdisciplinary Exploration and Research in Astrophysics (CIERA). He coauthored the paper with CIERA member Sasha Tchekovskoy, an assistant professor of physics and astronomy in Weinberg College.

Methane-eating bacteria convert greenhouse gas to fuel

Methanotrophic bacteria consume 30 million metric tons of methane per year and have captivated researchers for their natural ability to convert the potent greenhouse gas into usable fuel. Yet humans know very little about how the complex reaction occurs, limiting the ability to use the double benefit to advantage. By studying the enzyme the bacteria use to catalyze the reaction, a Northwestern team has discovered key structures that may drive the process. Their findings, published March 18 in *Science,* could lead to the development of human-made biological catalysts that convert methane gas into methanol. Amy Rosenzweig, senior author of the paper, is the Weinberg Family Distinguished Professor of Life Sciences in Weinberg College, where she holds appointments in both molecular biosciences and chemistry.

Method efficiently breaks down plastic bottles into component parts

A Northwestern research team became the first to demonstrate that a material called a metal-organic framework (MOF) is a stable and selective catalyst for breaking down polyester-based plastic into its component parts. A class of nano-sized materials, MOFs have been widely investigated because of their highly ordered structures. With MOFs, only three things are needed: plastic, hydrogen and the catalyst. The pioneering researchers used an easy-to-make, scalable and inexpensive zirconium-based MOF called UiO-66 to break down the plastic that was most handy: discarded plastic water bottles. Yufang Wu, the study’s first author and a visiting graduate student, chopped up the bottles, heated the plastic and then applied the catalyst. An important additional benefit of this process is that one of the component parts into which the plastic is broken down is terephthalic acid, a chemical used to produce plastic. With this Northwestern
method, expensive and energy-intensive production and separation of xylenes is avoided. The work was published recently in Angewandte Chemie. Omar Farha, a professor of chemistry in Weinberg College, is the corresponding author of the study. Wu worked in Farha’s group. Farha has studied MOFs for more than a decade and previously showed they can be used to destroy toxic nerve agents.

Cleaning up lakes and oceans
Northwestern researchers have developed a sponge that looks like one found in a kitchen but can effectively clean up oil, microplastics and phosphate pollution — so-called “silent pollution” that is not always immediately obvious. This sponge could help clean up oil spills without harming marine life and prevent algae blooms from forming when phosphate builds up to dangerous levels. To recover and reuse dwindling natural resources, like oil and phosphate, the sponge can simply be wrung out. Northwestern engineer Vinayak Dravid, who developed the new tool, said the novel technology can accommodate multiple functions. The sponge absorbs 99% of phosphate ions it encounters and 30 times its weight in oil. Dravid is the Abraham Harris Professor of Materials Science and Engineering at Northwestern’s McCormick School and the founding director of the Northwestern University Atomic and Nanoscale Characterization Experimental Center (NUANCE). Vikas Nandwana, a research assistant professor of materials science and engineering at McCormick, is co-founder of MFNS Tech, a startup in the process of commercializing oil-absorbing sponges.

ACADEMIC AFFAIRS UPDATES

The Graduate School
Fall 2022 PhD Admissions
As of April 18, 2022, TGS anticipates welcoming 626 new PhD students in the Fall 2022 Quarter, compared to 539 last year. Forty-two percent of admitted PhD students have accepted their positions, an identical yield as that for our 2021 student cohort. We anticipate enrolling approximately 41% international students and 59% domestic students. The percentage of incoming international students rose by six percentage points from last year. Enrollees who identify as women make up 44% of the group, 52% identify as men, 2% identify as non-binary, and 2% are unknown. This is a decline in women by seven percentage points and an increase in men by five percentage points from last year. The percentage of non-binary enrollees stayed the same while the percentage of unknown gender rose by one percentage point. Underrepresented minorities (URM) comprise 30% of our domestic incoming PhDs, which is an all-time high for PhD programs at Northwestern University. (Last year’s total was 29% URM of domestic students.) Of the anticipated new PhD enrollees, over 22% identify as being part of the LGBTQ+ community, and 22% identify as First-Generation.

Enhanced Funding for Underrepresented PhD Students
TGS offered enhanced funding to 70 admitted underrepresented PhD students through stipend supplements, relocation cost coverage, and/or research funds. These additional funds are used to compete with peer institutions to actively recruit exceptionally strong underrepresented candidates. Thirty-eight of the 70 students offered a funding
enhancement accepted our offer of admission, and TGS has committed over $127,000 in FY23 for this recruitment initiative.

Presidential Fellowship
The Presidential Fellows recently hosted a conversation with poet and writer Natasha Trethewey that was open to the public. Professor Trethewey served two terms as poet laureate of the United States and is currently the Board of Trustees Professor of English at Northwestern. At the end of May, TGS will host an induction ceremony to welcome the newest cohort of Presidential Fellows and hear research presented by a current Presidential Fellow. The Presidential Fellowship is the most prestigious fellowship awarded to graduate students by Northwestern University. A recent survey of Presidential Fellows from 2012 – 2021 revealed that two-thirds are now in academic positions, including faculty positions at Harvard, Yale, Princeton, and Johns Hopkins, supporting the impact these fellows have within the academy.

Northwestern University – Qatar
Northwestern Qatar hosted graduation ceremonies for the first time since the start of the pandemic
A graduation ceremony for Northwestern Qatar’s Class of 2022 was held on the school’s campus. The first in-person ceremony since 2019, it also marked the 10th anniversary of the graduation of NU-Q’s first class. Fatma Hassan Alremaihi, CEO of the Doha Film Institute, was the graduation speaker and Nur Munawarah, the student speaker. The school also hosted an in-person ceremony for the Classes of 2019 and 2021 after previously having virtual ceremonies due to the global pandemic. Students from both classes returned for a formal celebration of their graduation.

Wright named associate dean
Zachary Wright, a member of the NU-Q faculty since 2010 was named associate dean for faculty affairs. Wright received his PhD in history, with a focus on Africa, Middle East and Islamic Studies from Northwestern University. He also holds an MA in Arabic studies/Middle East history from the American University of Cairo and a BA in history (Africa emphasis) from Stanford University.

Professor Wright’s research concerns Islamic intellectual history in West and North Africa, broadly from the fifteenth century to the present, with a focus on Sufism and global networks of Islamic revival in North Africa (18th-19th centuries), Muslim scholars as social and political intermediaries in medieval West Africa (16th-17th centuries), and Islamic learning practices in the context of colonialism and decolonization in West Africa (19th-century to the present).

Hiwar Speaker addresses democracy failures in the Arab World
Amaney A. Jamal, dean of the Princeton School of Public and International Affairs and Edwards S. Sanford professor of politics at Princeton University and scholar of Arab politics for more than two decades, examined U.S. hegemony and its influence on the prospects of democratization in the Middle East at Northwestern Qatar’s most recent Hiwar Speaker event.
In a conversation moderated by Professor Sami Hermez, Jamal shared insights from her book Of Empires and Citizens: Pro-American Democracy or No Democracy at All? to explain how U.S. interest-driven policy in the Middle East, compounded with the failure of post-Arab Spring democratic initiatives to deliver economic benefits, has contributed to the stalling of the democratization process in the region.

**ADMINISTRATIVE UPDATES**

**Government Relations**
In March, President Schapiro traveled to the State Capitol to meet with legislative leaders and discuss Northwestern priorities. He advocated for increased Monetary Award Program (MAP) funding and Northwestern priorities, including the release of $50 million in State funds for the Kimberly Querrey InQbation Lab, and $5 million in scientific equipment for the SQBRC. The State reappropriated these important funds, but still needs to sell bonds to release the funding.

While President Schapiro was in Springfield, Governor Pritzker honored him at a dinner at the Governor's mansion. President Schapiro also met with Senate President Don Harmon, who invited several Northwestern alums to his leadership office to celebrate and thank him for his years of service. Northwestern Alum and Illinois House Speaker Emanuel “Chris” Welch introduced a congratulatory House resolution honoring President Schapiro's years of dedicated Northwestern leadership, with State Rep. Robyn Gabel and Minority Leader Jim Durkin offering laudatory remarks on the House floor. In early March, Congress completed its work on Fiscal Year 2022 appropriations. The legislation included robust increases to student financial aid programs and federal research agencies. Northwestern also secured $10 million in Department of Defense funds to support research at the Center for Synthetic Biology. This is the second year of such funding and will allow Northwestern and the University’s Center for Synthetic Biology to continue to grow as one of the nation’s leaders in the field.

In Springfield, the General Assembly (GA) session concluded on April 8 with the passage of a budget that included a $122 million increase for MAP. Northwestern also worked with State Rep. Kambium Buckner and other Illinois universities to amend the State’s Name-Image-Likeness law to permit flexibility for institutional involvement in NIL contracts for student athletes.

**Global Marketing and Communications**
**Top Media Stories**
The University and its faculty continue to garner national and global media coverage. Since February, top stories include commentary by several faculty on the causes and consequences of Russia's invasion of Ukraine (period reach: 44.9 million); Dr. Bill Muller's research finding that Moderna’s vaccine is effective in children under age six (period reach: 44.4 million); Harry Kraemer, Nour Kteily and Nick Diakopoulos discuss Elon Musk's purchase of Twitter (period reach: 23.3 million); and Phyllis Zee finds that even a moderate amount of light during sleep can increase problems including high blood sugar and risk for cardiovascular disease (period reach: 19 million).
Top Northwestern Social Media Coverage
Northwestern’s top-level social media presence (Instagram, LinkedIn, Twitter, Facebook) continues to grow at-the University. In March, the main Northwestern LinkedIn page crossed a major milestone, eclipsing 300,000 followers—it is the most-followed social media page at the University.

Branding and communication for the introduction of the Querrey InQbation Lab
OGMC worked with INVO and Kimberly Querrey to develop a positioning platform and new name for the space. Our digital team will also be developing a website for this high-profile long-term initiative. Northwestern announced the naming of the Querrey InQbation Lab in March.

Athletics
National Champion
Wrestler Ryan Deakin won Northwestern’s second national title of 2021-22, capturing the crown at 157lbs in front of nearly 20,000 fans in Detroit’s Little Caesar’s Arena. The four-time All-American and three-time Big Ten champion was celebrated back home with the opportunity to Shoot The Puck between periods of a Chicago Blackhawks game and throw out the first pitch before a Chicago White Sox game.

Diamond Dominance
Northwestern softball captured its first Big Ten regular-season championship since 2008 this spring and will host NCAA Regional play after earning the #9 national seed. The 'Cats also swept the major Conference awards this season, with Rachel Lewis (who broke the program’s home run record) earning Player of the Year honors, Danielle Williams being named Pitcher of the Year, and Kate Drohan winning her fourth Big Ten Coach of the Year Award.

Next Level
Women’s basketball captain Veronica Burton was selected in the first round of the 2022 WNBA Draft by the Dallas Wings. The three-time Big Ten Defensive Player of the Year capped her 'Cats career with Associated Press All-America honors, the first student-athlete in program history named to one of the three AP All-American teams.