This semi-annual report scans the initiatives of competitor peer institutions so Northwestern’s key leaders are better informed about developments in higher education among other elite institutions. More importantly, it provides a gauge of how well we are innovating and suggests directions to consider.

The report has been organized to track the major investments and innovations at peer institutions as well as Northwestern for July 2020 to December 2020. Data is collected primarily through institutions’ main news services with additional information incorporated from general news sources. This report, and those from previous years, are available online to the Northwestern community at http://www.adminplan.northwestern.edu/planning/special-reports/index.html.

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Overview

While COVID-19 has undoubtedly been the focus of the last year, Northwestern and its peer institutions were still able to make progress on various university initiatives, with a noticeable emphasis on expanding Diversity, Equity and Inclusion efforts. Areas of continued institutional investment at peer institutions also include AI and Big Data, Materials Science Research, Climate and Sustainability, Quantum Science, and Aging Research.

COVID-19 Pandemic Impact

For the last several months, higher education institutions have been consumed with planning and decision-making surrounding COVID-19. While various approaches to teaching and learning were deployed at Northwestern’s peer institutions, the majority of institutions conducted their fall semester/quarter in a virtual format. Campuses experienced varied levels of COVID-19 outbreaks in their student populations, with Notre Dame, University of Wisconsin – Madison, and University of North Carolina – Chapel Hill experiencing major outbreaks. Through its comprehensive planning, Northwestern has kept its positivity rate substantially below that of its surrounding communities.

For the latest news on COVID-19 in higher education, please refer to the Chronicle of Higher Education’s “Live Coronavirus Updates” tracker, linked here.

There were also several federal-level policy updates related to higher education and COVID-19. Northwestern was one of several universities that filed a lawsuit against the Trump administration regarding a rule that would have required international students to transfer or leave the country if their fall coursework would be held entirely online due to COVID-19. The rule was eventually rescinded by the administration due to widespread backlash.

In late December, Congress also passed a $20 billion relief bill that had implications for higher education. The combined FY21 funding bill and COVID-19 relief package [Public Law 116-260] provides a new Higher Education Emergency Relief Fund for all public and private non-profit institutions of higher education to grant emergency aid to students, with an institutional formula based on headcount and full-time equivalent enrollment. Institutions subject to the net investment income excise tax are only eligible for 50% of their allocation funds, which makes Northwestern eligible for approximately $6 million of the $12 million expected allocation.

Diversity, Equity and Inclusion

Northwestern made several public commitments to advancing racial and social justice in June and then provided an update on progress in September and again in December. Northwestern also announced the hiring of its new Chief Diversity Officer, Robin Means Coleman, in November, and its new Associate Vice President for Equity, TiShaunda R. McPherson, in August. Northwestern also announced it will contribute $1 million to the City of Evanston for a sixth year and will expand its commitment with the creation of a new $500,000 community engagement grant program aimed at working with Evanston and Chicago to advance racial equity and social justice.
REPORT THEMES

Similarly, peer institutions continue to create new programs and initiatives to support diversity and inclusion both on their campuses and in their surrounding communities. For example, Duke announced a $16 million grant from the Duke Endowment to amplify Duke’s efforts to recruit diverse faculty and to support programming to increase the university community’s understanding of historical and current racism. Additionally, the University of California Office of the President will fund two initiatives to advance faculty diversity at UC San Diego through a $700,000 grant. The first initiative will recruit 10-12 faculty whose research is focused on racial/ethnic disparities in STEM fields with a significant focus on the Black Diaspora and African American communities; the second initiative will seek to improve retention of underrepresented faculty through coaching for faculty mentors and coalition building.

Finally, two peer institutions received major gifts to support indigenous studies. Princeton received a $5 million gift to endow a new Professorship of Indigenous studies, and UCLA’s School of Law has received a $15 million donation from the Federated Indians of Graton Rancheria to advance the study and practice of Native American law.

Artificial Intelligence (AI)
Many institutions are embedding artificial intelligence and technology training into interdisciplinary degree programs or forging partnerships with organizations outside their universities to support learning in this area. For example, Carnegie Mellon announced a partnership with the U.S. Army to grow data science and AI expertise for top Army personnel. Other institutions are forming interdisciplinary teams to further AI research in new areas, such as the new NSF-sponsored research institute aimed at exploring the use of artificial intelligence in fundamental physics, led by researchers from Harvard, M.I.T, Northeastern University, and Tufts University. As an additional example, an interdisciplinary team of researchers led by Princeton University and University of Arizona (funded by a $1 million NSF grant) will use artificial intelligence to simulate the nation’s natural groundwater system in an effort to improve water management and help people better prepare for flooding and drought. At Northwestern, the Kellogg School of Management and the McCormick School of Engineering are launching an MBAi joint degree at the intersection of business and technology management. This accelerated five-quarter program responds to a growing and global need for leaders that can spearhead strategic, business-driving innovation while understanding the complexities and nuances of the technologies that enable it.

Materials Science Research
Several peer institutions have made significant investments in their materials science programs and have received major grants to support research in materials. Most notably, The NSF awarded UC San Diego researchers a six-year $18 million grant to fund a new Materials Research Science and Engineering Center (MRSEC). Additionally, UCLA and UCSB will share a $23.7 million grant to study biologically based polymers. The initiative is part of the NSF Materials Innovation Platforms program, and its scientific methodology reflects the broad goals of the federal government’s Materials Genome Initiative, which aims to develop new materials “twice as fast at a fraction of the cost.” In addition, Notre Dame announced a new interdisciplinary doctoral program in materials science and engineering.
REPORT THEMES

Climate Change/Sustainability
Northwestern’s peer institutions continue to make progress towards ambitious climate change and sustainability efforts, both within their own institutions and in surrounding communities, by partnering with corporations and state/government entities to move these initiatives forward. As an example, a three-year “Climate Solutions Initiative” at Brown will study and seek to eliminate roadblocks to climate action through scholarship, learning, and research-informed infrastructure changes on campus. Universities also continue to develop new curriculum around climate change and sustainability. Columbia University’s new Climate School (Columbia’s first new school in a quarter century) recently announced its first academic program to reside in the school: the Master of Arts in Climate and Society.

Quantum Science
Higher education continues to make advances in research related to quantum science, with Northwestern and many peer institutions vying for funding and resources. Northwestern was recently announced as a major partner in the creation of five new national centers to bring about transformational advances in quantum information science (QIS) as a part of the U.S. National Quantum Initiative (NQI). The initiative provides the new Superconducting Quantum Materials and Systems Center (SQMS) with a planned $115 million from the Department of Energy over five years with the goal of building and deploying a beyond-state-of-the-art quantum computer based on superconducting technologies. The research will focus on breakthroughs important for medicine, life sciences, national security and more.

The NSF also announced a major five-year, $25 million award to create the ‘NSF Quantum Leap Challenge Institute for Present and Future Quantum Computation’. The institute will be headquartered at the University of Illinois and will work to overcome scientific challenges to achieving quantum computing and will design advanced, large-scale quantum computers that employ state-of-the-science algorithms developed by the researchers. Involved peer institutions include UC Berkeley, UCLA, University of Chicago, the University of Illinois at Urbana-Champaign, and the University of Wisconsin-Madison.

Stanford announced it will partner with the Department of Energy’s SLAC (Stanford Linear Accelerator Center) National Accelerator Laboratory and two Illinois universities (University of Illinois at Urbana-Champaign and University of Illinois – Chicago) to create the Center for Quantum Sensing and Quantum Materials, which aims to unravel mysteries associated with exotic superconductors, topological insulators and strange metals.

Alzheimer’s Research
Several institutions received major grants and announced new initiatives related to aging research, particularly Alzheimer’s research. As an example, a team of researchers from the University of Pennsylvania, the University of Southern California, the University of Pittsburgh, and Indiana University received a $17.8 million grant from the National Institute on Aging at the National Institutes of Health to collaborate with 11 research centers to determine more precise diagnostic biomarkers and drug targets for Alzheimer’s disease.
Additionally, Washington University in St. Louis’s School of Medicine received a $14.6 million grant to investigate whether early markers of Alzheimer’s that have shown promise for predicting the disease in white populations also predict the disease in African Americans. The researchers also will seek biological and social determinants of health that may explain the possible racial differences in these markers.

In addition to these themes, below is a list of key updates specific to Northwestern, as well as updates for peer institutions.
Northwestern University

- Robin R. Means Coleman was named Northwestern’s Vice President and Associate Provost for Diversity and Inclusion and Chief Diversity Officer. Article.
- TiShaunda R. McPherson was named Northwestern’s new Associate Vice President for Equity. Article.
- James J. Phillips, Northwestern’s Combe Family Vice President for Athletics and Recreation, will become the next commissioner of the Atlantic Coast Conference (ACC). Article.
- Northwestern formed a search committee to identify its next Vice President and Chief Investment Officer, as the current leader, William McLean, stepped down as of October 16 to take a similar position at the University of Richmond. Article.
- Northwestern formed a search committee to identify the next Dean of the Northwestern Pritzker School of Law. The individual chosen will succeed Kimberly Yuracko, who stepped down from the role of dean on July 31. Article.
- Northwestern maintained its position at No. 9 in the U.S. News & World Report 2021 Best Colleges ranking. It is one of only four top 10 U.S. universities also ranked in the top 20 in each of the five graduate school rankings for business, education, law, medicine and engineering. Article.
- Northwestern researchers, led by Professor John A. Rogers, put their wearable COVID-19 monitoring device through a flurry of tests, updates, and improvements since unveiling it in early May. Now, Sibel Health — a Northwestern spinout commercializing the sensor — has received a highly competitive $2.4 million award from the U.S. Department of Defense to support the technology’s continued development and deployment. Article.
- Northwestern is joining three Illinois universities to create a regional research center to address key scientific and technological challenges with powerful ideas from mathematics and statistics. Led by the University of Chicago, the new Institute for Mathematical and Statistical Innovation (IMSI) is funded with a five-year, $15.5 million grant from the National Science Foundation (NSF). The University of Illinois at Chicago and University of Illinois at Urbana-Champaign also are members of the research center. Article.
- The U.S. Department of Energy’s (DOE) Fermi National Accelerator Laboratory has been selected to lead one of five national centers to bring about transformational advances in quantum information science (QIS) as a part of the U.S. National Quantum Initiative (NQI). Northwestern is a major partner in the new center. Article.
- The Kellogg School of Management and the McCormick School of Engineering are launching an MBAi joint degree at the intersection of business and technology management. The accelerated five-quarter program responds to a growing and global need for leaders that can spearhead strategic, business-driving innovation while understanding the complexities and nuances of the technologies that enable it. Article.
- Northwestern hosted the U7+ Presidential Summit this year in partnership with Columbia University, Georgetown University and the University of California, Berkeley. The summit brought together nearly 100 university leaders from six continents for a series of dialogues on intergenerational justice as students worldwide call on higher education institutions to play an active role in addressing the global challenges they will inherit. Article.
UPDATES BY INSTITUTION

Harvard University
- Harvard University and AbbVie announced a $30 million collaborative research alliance, launching a multi-pronged effort at Harvard Medical School (HMS) to study and develop novel therapies against emergent viral infections, with a focus on those caused by coronaviruses and by viruses that lead to hemorrhagic fever. Article.
- NSF has awarded a five-year, $20 million grant to a team of scientists, including eight from Harvard, to create a new research institute aimed at exploring the use of artificial intelligence in fundamental physics. Article.
- The White House Office of Science and Technology Policy and the U.S. DOE announced the creation of five new Quantum Information Science (QIS) Research Centers across the country. These centers will be part of the U.S. National Quantum Initiative. Harvard researchers will play a large role in three of the five centers. Article.
- Harvard Business School (HBS) and Harvard’s Department of Stem Cell and Regenerative Biology (HSCRB) have received a $25 million gift from The Chris and Carrie Shumway Foundation to fund programs promoting leadership in life sciences, including the M.S./M.B.A. Biotechnology: Life Sciences, a joint degree offered by HBS and the Graduate School of Arts and Sciences and Harvard Medical School through HSCRB. Article.
- The First Circuit Court of Appeals affirmed Harvard’s use of race as one factor among many in its application process. The decision, issued by a two-judge panel in Boston, upheld a district court finding last year that the College’s admission practices do not discriminate against Asian American applicants and comply with prior Supreme Court rulings. Article.
- Harvard President Larry Bacow launched a “Committee to Articulate Principles on Renaming” that will help guide consideration of questions about renaming campus buildings, spaces, programs, professorships, and other objects in view of their association with historical figures whose advocacy or support of activities would today be found “abhorrent” by members of the Harvard community. Article.

Stanford University
- Stanford announced it will partner with the Department of Energy’s SLAC (Stanford Linear Accelerator Center) National Accelerator Laboratory and two Illinois universities (University of Illinois at Urbana-Champaign and University of Illinois – Chicago) to create the Center for Quantum Sensing and Quantum Materials, which aims to unravel mysteries associated with exotic superconductors, topological insulators and strange metals. Article.
- Stanford professor and Nobel laureate Carl Wieman, an influential scholar whose work has shaped a new understanding of how to improve college science teaching and learning, was named a recipient of the 2020 Yidan Prize for education research, the world’s largest prize in education. Article.
- Stanford received a gift to create a permanent source of funding from alumnus Evan Spiegel (Founder of Snapchat), for the Black Community Services Center and Ujamaa House. Article.

Princeton University
- The Princeton Center for Complex Materials, a research center at Princeton dedicated to discovering the materials of the future and training a globally competitive and diverse
workforce, has been selected by the NSF to receive an $18 million grant to expand its groundbreaking interdisciplinary mission into two new areas: quantum technologies and biology-inspired materials. Article.

- Researchers from Princeton will help lead a $1 million project funded by the NSF that will use AI to simulate the nation’s natural groundwater system to improve water management and help people better prepare for flooding and drought. Article.
- Princeton has received a $5 million gift to endow a new Professorship of Indigenous studies. Article.
- Princeton’s Board of Trustees concluded that Woodrow Wilson’s racist views and policies made him an inappropriate namesake for the School of Public and International Affairs and residential college and will remove his name from the School and College. Article.

University of Pennsylvania

- The Center for Hybrid Approaches in Solar Energy to Liquid Fuels has been awarded a DOE grant focused on the production of fuels from sunlight. The $40 million grant, over five years, will accelerate fundamental research on solar technology to meet the increasing needs for clean and renewable energy sources. Article.
- With a $17.8 million grant from the National Institute on Aging at the National Institutes of Health, researchers in the Perelman School of Medicine will collaborate with 11 research centers to determine more precise diagnostic biomarkers and drug targets for Alzheimer’s disease. Article.
- The NSF, through a 5-year, $26 million grant, has established the NSF Engineering Research Center for the Internet of Things for Precision Agriculture (IoT4Ag), headquartered at the University of Pennsylvania’s School of Engineering and Applied Science. The IoT4Ag Center aims to address food, energy and water security through advanced agricultural technologies. Article.
- Penn Engineering, Penn Arts & Sciences and the Wharton School will partner with an interdisciplinary team led by researchers at Johns Hopkins in a project known as Transferable, Hierarchical, Expressive, Optimal, Robust, and Interpretable NETworks (THEORINET). The researchers will build mathematical and statistical theories to explain the success of existing deep learning architectures, and they expect that their work will lead to novel machine learning techniques. The collaboration will receive $10 million over five years. Article.

Duke University

- Daniel Ennis, the chief financial and operating officer at Johns Hopkins, was named the executive vice president at Duke. Article.
- The Duke University Center for Water, Sanitation, Hygiene and Infectious Disease (WaSH-AID) received a $4.5 million grant from the Bill & Melinda Gates Foundation to support the management of field testing of “reinvented toilets” and other hygienic technologies in India. Article.
- Duke’s new Engineering Building, The Wilkinson Building, will open for classes in 2021. In addition to state-of-the-art design labs and active-learning classrooms, the building features a Center for Engineering Entrepreneurship, a Center for Innovation, a Learning Commons and a 200-seat auditorium, expanding Duke Engineering’s current student education and
Updates by Institution

Programming space by 50%. Article.

- As part of its Diversity, Inclusion, and Anti-racism Initiative, Duke announced a $16 million grant from the Duke Endowment to amplify Duke’s efforts to recruit diverse faculty. The grant allocates $10.5 million toward recruiting and retaining diverse faculty and $5.5 million to support programming to increase the university community’s understanding of historical and current racism. Article.

Columbia University

- Columbia’s new Climate School (Columbia’s first new school in a quarter century) announced its first academic program to reside in the school: the Master of Arts in Climate and Society. The program formerly resided in Columbia’s Graduate School of Arts and Sciences. Article.

- A coalition of student organizations led by Columbia-Barnard Young Democratic Socialists (YDSA) of America has come together to call for a tuition strike against Columbia. The strike, which amassed 3,200 signatures over two months, aims to hold the University accountable to students, staff, and community members for how it handles its wealth. YSDA is calling for the University to institute a 10% decrease in the cost of attendance and a 10% increase in financial aid, defund Public Safety, halt its expansion into West Harlem, fully divest from fossil fuels, and grant union recognition for master’s and undergraduate student-workers. Article.

Cornell University

- The NSF has awarded the Cornell High Energy Synchrotron Source (CHESS) $32.6 million to build a High Magnetic Field (HMF) beamline, which will allow researchers to conduct precision X-ray studies of materials in persistent magnetic fields that exceed those available at any other synchrotron. Article.

- The Cornell Alliance for Science is expanding its mission of science communication and advocacy and broadening its commitment to diversity and inclusion, thanks to $10 million in new funding from the Bill & Melinda Gates Foundation. Article.


- Cornell received a $3.3 million grant to fund the creation of an Office of Diversity and Inclusion in the Faculty of Computing and Information Science (CIS), in addition to new graduate student fellowships and increased support for existing programs that foster diversity in computing. Article.

- The Defense Advanced Research Projects Agency, the research and development arm of the U.S. Department of Defense, has awarded a three-year, $30 million grant to a team including Cornell researchers to build a fully programmable computer network in order to bolster internet security and help fuel innovation. Article.

- Cornell is partnering with Walmart to reduce 1 gigaton of greenhouse gas emissions in their supply chain by 2020. Article.
UPDATES BY INSTITUTION

University of Chicago
- Established with a $25 million, five-year NSF award, the new Quantum Leap Challenge Institute for Hybrid Quantum Architectures and Networks (HQAN) includes the University of Chicago, the University of Illinois at Urbana-Champaign and the University of Wisconsin-Madison. The institute, which will be headquartered at the University of Illinois’ Quantum Information Science and Technology Center, will create new undergraduate and graduate training opportunities, as well as partnerships with industry and government labs. It is one of only three Quantum Leap Challenge Institutes in the country. Article.
- NSF has awarded a $15.5 million grant to the University of Chicago to launch a new mathematical institute. The team comprises a collaborative group of mathematicians and statisticians from U Chicago, Northwestern, the University of Illinois at Chicago, and the University of Illinois at Urbana-Champaign who seek to bring powerful mathematical ideas to bear on key contemporary scientific and technological challenges. Article.

Washington University in St. Louis
- A $14.6 million grant to Washington University in St. Louis School of Medicine will support studies to investigate whether early markers of Alzheimer’s that have shown promise for predicting the disease in white populations also predict the disease in African Americans. The researchers also will seek biological and social determinants of health that may explain the possible racial differences in these markers. Article.

Vanderbilt University
- Vanderbilt University launched “Destination Vanderbilt”, a $100 million university excellence initiative to recruit new faculty. Over the next two to four years, the university will leverage the investment to recruit approximately 60 faculty who are leaders and rising stars in their fields. Article.
- Vanderbilt University Medical Center has been awarded a one-year, $34 million grant by the National Center for Advancing Translational Sciences, part of the National Institutes of Health, to conduct a nationwide study of “convalescent plasma” as a treatment for COVID-19. Article.
- A Vanderbilt Medical school professor has been awarded a $3.7 million, three-year grant from the National Institute on Aging (NIA) to support establishment of a prospective NIA-funded Alzheimer’s Disease Research Center (ADRC) at Vanderbilt University Medical Center. Article.
- The NSF expands a School of Engineering-led project for creating novel AI technology and tools and platforms that train and support individuals with Autism Spectrum Disorder in the workplace. Article.
- Vanderbilt received $8.4 million from the Tennessee Department of Transportation (TDOT) to help realize the university’s sustainability and mobility plan. The funds are a continuation of partnership between the university and the state to reduce air emissions from cars, trucks and buses. Article.
- Vanderbilt received an $8.7 million DARPA (Defense Advanced Research Projects Agency) grant for machine learning algorithms and artificial intelligence processors. Article.
- Vanderbilt received substantial press when Vanderbilt Senior Sarah Fuller became the first woman to play in a SEC football game. Article.
Updates by Institution

Updates by Institution

Massachusetts Institute of Technology (MIT)

- MIT announced a strategic plan to connect six strategic areas identified for shared faculty hiring in computing. Article.
- The NSF AI Institute for Artificial Intelligence and Fundamental Interactions (IAIFI), will be led by MIT’s Laboratory for Nuclear Science (LNS) and become the intellectual home of more than 25 physics and AI senior researchers at MIT and Harvard, Northeastern, and Tufts Universities. Article.
- With a founding $25 million gift from King Philanthropies, MIT’s Abdul Latif Jameel Poverty Action Lab (J-PAL) is launching a new initiative to solve problems at the nexus of climate change and global poverty. Article.

California Institute of Technology (Caltech)

- The Department of Energy (DOE) announced that it would provide $100 million in funding for two artificial photosynthesis research projects, one of which is a Caltech-led partnership with Lawrence Berkeley National Laboratory (LBNL), SLAC (Stanford Linear Accelerator Center) National Accelerator Laboratory, and the National Renewable Energy Laboratory. Article.
- Preparations are under way for the new Amazon Web Services Center for Quantum Computing at Caltech, scheduled to open in spring 2021. Article.

University of California, Berkeley

- Michael Drake was announced as President of the University of California (UC) system; he is the first Black president of the UC system. Article.
- As part of the federal government’s effort to speed the development of quantum computers, the National Science Foundation (NSF) has awarded the University of California, Berkeley, $25 million over five years to establish a multi-university institute focused on advancing quantum science and engineering and training a future workforce to build and use quantum computers. Article.
- Berkeley’s Simons Institute for the Theory of Computing has received a new $35.5 million grant from the Simons Foundation in support of the Institute’s mission to advance knowledge of the mathematical foundations of computing, as well as machine learning, data privacy, quantum computing, and neuroscience. Article.
- Berkeley received a $24 million gift to provide full financial support to underrepresented students at UC Berkeley. The investment includes $10 million in matching funds for the Haas Family Fiat Lux Scholarship that is one of the single largest scholarship gifts in Berkeley’s history. The matching gift is meant to challenge other Berkeley alumni and donors to contribute individual scholarships which the Haas family will match. Article.
- Two new grants totaling nearly $14 million over three years will jump-start research at UC Berkeley into the molecular and genetic causes of Parkinson’s disease. Article.
- The California Bureau of Cannabis Control (BCC), the lead state agency that regulates commercial licenses for both medical and adult-use cannabis, announced a wave of research grant funding at public universities. Researchers affiliated with the Berkeley Cannabis Research Center received $4.6 million in grants of the $30 million total that was awarded across the state. Article.
Updates by Institution

Updates by Institution

• Berkeley has renamed several buildings on campus, as part of their Building Name Review Committee. [Article]

University of California, Los Angeles (UCLA)
• The NSF announced a five-year, $25 million award to UC Berkeley, UCLA and other universities to create the NSF Quantum Leap Challenge Institute for Present and Future Quantum Computation. The institute will work to overcome scientific challenges to achieving quantum computing and will design advanced, large-scale quantum computers that employ state-of-the-science algorithms developed by the researchers. [Article]
• UCLA and UCSB will share a $23.7 million grant to study biologically based polymers. The initiative is part of the NSF Materials Innovation Platforms program, and its scientific methodology reflects the broad goals of the federal government’s Materials Genome Initiative, which aims to develop new materials “twice as fast at a fraction of the cost.” [Article]
• UCLA School of Law has received a $15 million donation from the Federated Indians of Graton Rancheria to advance the study and practice of Native American law. [Article]
• UCLA has received seven grants totaling $6.4 million from the California Bureau of Cannabis Control. The awards will fund studies on topics ranging from the toxicity of inhaled and second-hand cannabis smoke to employment conditions in California’s cannabis industry. [Article]

University of Southern California (USC)
• USC’s medical school was awarded $17.8 million to lead a new artificial intelligence study of Alzheimer’s. [Article]
• An HIV research program led by scientists at USC and the Fred Hutchinson Cancer Research Center in Seattle has received a five-year, $14.6 million grant from the National Institutes of Health. [Article]
• USC and UCLA’s Center of Biodemography and Population Health have received a $4.4 million renewal from the National Institute on Aging. [Article]
• USC Alzheimer’s disease researchers have joined with experts across the country to launch a unique and comprehensive course to educate and diversify the next generation of scientists and research teams who lead clinical trials for Alzheimer’s disease and Alzheimer’s-related dementias. [Article]

University of California, San Francisco (UCSF)
• UCSF has selected an architect and moved forward with plans for its proposed new hospital at the UCSF Helen Diller Medical Center at Parnassus Heights. Expected to open in 2030, the hospital will enable UCSF Health, one of the premier health systems in the nation, to serve the growing health care needs of patients in the San Francisco Bay Area and beyond for decades to come. [Article]
University of California, San Diego (UCSD)

- The NSF awarded UC San Diego researchers a six-year $18 million grant to fund a new Materials Research Science and Engineering Center (MRSEC). Article.
- The NSF approved a $53 million grant to a consortium of the country’s top ocean-research institutions to build a global network of chemical and biological sensors that will monitor ocean health. Scientists at the Monterey Bay Aquarium Research Institute (MBARI), Scripps Institution of Oceanography at UC San Diego, University of Washington, Woods Hole Oceanographic Institution, and Princeton University will use this grant to build and deploy 500 robotic ocean-monitoring floats around the globe. Article.
- The NSF has awarded $39 million to a team of engineers and computer scientists at UC San Diego to build a first-of-its-kind testbed to better understand how to integrate distributed energy sources such as solar panels, wind turbines, smart buildings and electric vehicle batteries into the power grid. The goal is to make the testbed available to outside research teams and industry by 2025. Article.
- The UC San Diego Collaborative Clinical Trials Unit (CTU) has been selected by the National Institutes of Health (NIH) to lead and administer an international seven-year, $28-million grant for science-driven clinical trials that deliver innovative, efficient results needed to turn the corner on the HIV/AIDS pandemic. Article.
- UC San Diego will collaborate with the University of Wisconsin – Madison, the University of Southern California, Indiana University, the University of Chicago, and the University of Nebraska on a $22.5 million NSF grant to advance open science via the practice of distributed High Throughput Computing (dHTC). The project seeks to harness the computing capacity of thousands of computers assembled in a network of campus clusters to cut time to science results that might take years, to be done in days, especially for applications that are parallel by design. Article.
- The NSF has awarded the San Diego Supercomputer Center (SDSC) at UC San Diego a $5 million grant to develop a high-performance resource for conducting artificial intelligence research across a wide swath of science and engineering domains. Article.
- UC San Diego researchers received a $7.2 million grant from the Aligning Science Across Parkinson’s (ASAP) initiative to further support research on Parkinson’s Disease. Article.
- Scientists at UC San Diego received seven Defense University Research Instrumentation Program (DURIP) awards from the Department of Defense (DOD), totaling $7 million. Article.
- The UC San Diego’s Center for Energy Research has been awarded two grants totaling $5 million from the Department of Energy (DOE) for research focused on developing environment-friendly and cost-competitive energy sources and systems. Article.
- The University of California Office of the President will fund two initiatives to advance faculty diversity at UC San Diego through a $700,000 grant. The first initiative will recruit 10-12 faculty whose research is focused on racial/ethnic disparities in STEM fields with a significant focus on the Black Diaspora and African American communities; the second initiative will seek to improve retention of underrepresented faculty through coaching for faculty mentors and coalition building. Article.
- UC San Diego was the first university in California to connect its almost 40,000 student health records to the electronic health record platform of its top-ranked academic medical center, UC San Diego Health. The experience has created a model for other colleges and is
Updates by Institution

Updates by Institution described in the November issue of Journal of American College Health. Article.

- Former University of California President and UC San Diego Chancellor Richard C. Atkinson and his wife, Rita, have contributed $150,000 to the UC San Diego Black Alumni Scholarship Fund at The San Diego Foundation. This external fund independently supports the academic success of Black students at UC San Diego. The donation sets into motion the public launch of an initiative aiming to raise $9.5 million for the Black Alumni Scholarship Fund Endowment. Article.

Brown University

- Brown received the largest single NSF grant in Brown’s history, $23.7 million, to fund the Institute for Computational and Experimental Research in Mathematics (ICERM), Brown’s national mathematics institute, for the next five years. Article.
- Brown researchers have received a $10 million federal grant to expand research to protect against concussions. Article.
- Brown launched a new Center for Computational Brain Science, which will harness the University’s expertise in computation, cognition and systems neuroscience toward new brain health solutions. Article.
- As part of a pledge made after its groundbreaking 2006 report on the University’s historic ties to slavery, Brown has fully funded a commitment to establish $10 million in endowed funds to support current and future generations of pre-K-12 students in Providence. The Fund will advance initiatives to improve teaching and learning in Pre-K-12 classrooms, ensure access to high-quality education for city students and support the Providence Public School District’s Turnaround Action Plan. Article.
- A three-year “Climate Solutions Initiative” at Brown will study and seek to eliminate roadblocks to climate action through scholarship, learning, and research-informed infrastructure changes on campus. Article.
- Brown has received a $20 million gift to provide crucial support for Brown’s plan to double the number of student veterans enrolled as undergraduates by 2024. Article.

University of Notre Dame

- The U.S. Agency for International Development (USAID) has awarded an $8 million grant to Notre Dame to expand its early-grade literacy and social-emotional learning programs and improve early childhood development. Article.
- Notre Dame announced a new interdisciplinary doctoral program in materials science and engineering. Article.
- Notre Dame is now offering 24/7 telehealth services to all enrolled students. Article.

Carnegie Mellon University

- Carnegie Mellon and the U.S. Army Combat Capabilities Development Command’s Army Research Laboratory (ARL) have entered into a $3.5 million cooperative agreement that supports machine learning-enabled additive manufacturing to enhance the expeditionary manufacturing capability of the Army. Article.
- Carnegie Mellon received a $500,000 planning grant from the NSF to work toward creating a National Artificial Intelligence Research Institute in Physics. Article.
UPDATES BY INSTITUTION

- Carnegie Mellon announced a partnership with the U.S. Army to grow data science and AI expertise for top Army personnel. Article.

Emory University
- Gregory L. Fenves stepped into his role as President of Emory on August 1. Article.

University of Washington
- The University of Washington and The Nippon Foundation announced the launch of the ‘Nippon Foundation Ocean Nexus Center’, an interdisciplinary research group at the UW that studies changes, responses and solutions to societal issues that emerge in relationship with the oceans. The Center will bring uncompromised, critical voices to policy and public conversations to enable research and studies equaling $32.5 million spread over 10 years. Article.
- The NSF has awarded $3 million to establish an NSF Research Traineeship at the University of Washington for graduate students in quantum information science and technology, or QIST. Article.
- The University of Washington announced that it will partner with The University of Wisconsin – Madison, UC – Santa Cruz, and the University of Chicago to create an Institute for the Foundations of Data Science. Article.
- The University of Washington received $23.5 million from the NSF to build and deploy 500 robotic ocean-monitoring floats to monitor the chemistry and biology of the world’s oceans. Article.

University of Wisconsin—Madison
- Former Governor Tommy G. Thompson was named the University of Wisconsin System Interim President effective July 1, 2020. Article.
- UW–Madison is co-leading a cohort of institutions to study the theoretical underpinnings of the rapidly growing field of data science. The Institute for the Foundations of Data Science — with partners at the University of Washington, the University of California, Santa Cruz, and the University of Chicago — is being funded by a $12.5 million Phase II grant from NSF’s Transdisciplinary Research in Principles of Data Science (TRIPODS) program. $4.6 million is slated for UW–Madison. Article.
- The UW–Madison School of Social Work received a $5 million naming gift and is now the Sandra Rosenbaum School of Social Work. It is the largest gift the School has ever received. Article.
- As joint members of a Midwest quantum science collaboration, the UW–Madison, the University of Illinois at Urbana–Champaign and the University of Chicago were named partners in a National Science Foundation Quantum Leap Challenge Institute, a five-year, $25 million challenge. Article.
- A group of universities, including UW–Madison, were named the newest “Physics Frontier Center” by the NSF. The center expands the reach and depth of existing capabilities in modeling some of the most violent astrophysics events known in the universe: the mergers of neutron stars and their explosive aftermath. Article.
- Chancellor Rebecca M. Blank was been appointed to a four-year term on the NCAA Board of
Governors, representing the Big Ten athletic conference. Article.

- UW-Madison announced a new online M.S. in Education Psychology Learning Analytics program. The program aims to harness “big data” to tackle a range of challenges. Article.

University of Illinois at Urbana-Champaign (UIUC)

- UIUC’s Grainger College of Engineering’s Illinois Quantum Information Science and Technology Center (IQUIST) will launch a National Science Foundation Quantum Leap Challenge Institute for Hybrid Quantum Architectures and Networks (HQAN). Funded by a $25 million NSF grant, the collaborative institute includes The University of Illinois, University of Chicago, and the University of Wisconsin. Article.

- The NSF and the U.S. Department of Agriculture’s National Institute of Food and Agriculture announced an investment of more than $140 million to establish seven artificial intelligence institutes in the U.S. Two of the seven will be led by teams at UIUC. Article.

- UIUC received widespread media recognition for the administration of its saliva-based COVID-19 testing plan, administering its millionth test in December. A number of other institutions are in the process of implementing the Illinois system, which the university validated by successfully comparing its performance to a test with Food and Drug Administration emergency use authorization. Article.

- UIUC’s Chancellor released a plan to address issues related to Native American imagery on campus. The Commission on Native Imagery was formed in fall 2018 to help the university explore institutional strategies to begin the process of moving the university community forward after the retirement of Chief Illiniwek, the school’s former mascot. Article.

University of North Carolina at Chapel Hill (UNC)

- The U.S. Department of Energy (DOE) will provide a $40 million award to the North Carolina-based Center for Hybrid Approaches in Solar Energy to Liquid Fuels (CHASE) to accelerate fundamental research of the production of fuels from sunlight. UNC-Chapel Hill leads the CHASE partnership. Article.

University of Virginia (UVA)

- UVA President Jim Ryan announced more than $30 million in new investments supporting both UVA’s research enterprise and its Carter G. Woodson Institute for African American and African Studies. Article.

- UVA announced a new academic program geared towards working adults called ”UVA Edge,” a yearlong, six-course, online program, aims to give workers who might only have a few college courses under their belts – or none at all – a way to develop digital and human skills that can be useful in their careers and a new path to a degree. Article.

- UVA’s Weldon Cooper Center for Public Service’s Energy Transition Initiative announced a new partnership with the Virginia Solar Initiative to further support solar and clean energy initiatives. Article.

- UVA’s approved the building design for a new School of Data Science. Article.

- UVA Researchers had a research breakthrough that deploys a new approach to “efficient oxygen evolution reaction catalysts,” which could support scaled use of renewable solar energy. Article.
COMPETITOR PEER INSTITUTIONS TRACKED

- Harvard University
- Stanford University
- Yale University
- Princeton University
- University of Pennsylvania
- Duke University
- Columbia University
- Cornell University
- University of Chicago
- Washington University in St. Louis
- Vanderbilt University
- Massachusetts Institute of Technology
- Caltech
- Brown University
- Carnegie Mellon University
- New York University
- Emory University
- Dartmouth College
- University of Southern California
- University of Notre Dame
- University of California, Berkeley
- University of California, Los Angeles
- University of California, San Francisco
- University of California, San Diego
- University of Michigan
- University of Washington
- University of Wisconsin—Madison
- University of Illinois at Urbana-Champaign
- University of North Carolina at Chapel Hill
- University of Virginia