As America’s leading research universities, our members have enjoyed a productive partnership with the federal government since the middle of the 20th century. The students and research supported by this government-university partnership have produced many of the world’s greatest medical and technological advances – as well as untold millions of jobs and trillions of dollars in economic growth for the United States.

Unfortunately, our nation has lost crucial ground in recent years as many parts of this historic partnership have been neglected or harmed through federal de-prioritization of investments in research and higher education, federal inaction on important issues affecting immigration and infrastructure, and implementation of short-sighted federal policies that harm inclusion and international talent recruitment. Unless we improve access to higher education, cultivate more domestic talent, reform our immigration system to attract and retain top international talent, and invest in science and technology, we will not outcompete China and ensure that America’s global economic and scientific leadership continues.

The transition provides a unique opportunity to rebuild and reaffirm our historic partnership by expanding opportunities for Americans from all backgrounds to attend and complete college, enhancing immigration policies, safeguarding American research, and renewing investments in higher education and scientific research. The following recommendations are the most important ways we believe your administration can act during the transition to renew and strengthen the government-university partnership. These recommendations dovetail with the priorities your transition team has established regarding fighting COVID-19, promoting racial equity, fostering economic recovery, and addressing climate change.

Strengthening American Higher Education through Opportunity, Accountability, Equity and Inclusion, and Safety

The next four years afford an opportunity to reverse troublesome trends that have impeded access to, and successful completion of, higher education for all who seek it. The four Biden-Harris transition priorities depend in part on robust and accessible higher education pathways to the American dream and prosperity for all who choose that path.

RECOMMENDATION: Protect Deferred Action for Childhood Arrivals program recipients and Dreamers until Congress acts on permanent immigration reform. The administration should protect DACA recipients and other Dreamers from deportation while Congress passes legislation to normalize the status of these deserving young people.

• RATIONALE: While the Supreme Court has temporarily halted adverse actions against DACA recipients, they and other Dreamers remain in legal limbo. These hard-working young people deserve certainty about their long-term fates.
**RECOMMENDATION: Expand Pell Grants.** The Pell Grant program should be significantly expanded beginning in the administration’s FY22 budget by: tripling the maximum Pell Grant award by 2024 to $19,000; establishing a new eligibility maximum for family income of $125,000 and indexing the maximum to inflation thereafter; providing all first-time Pell recipients a $2,000 one-time grant for college transition needs (like orientation programs and technology acquisition); extending Pell eligibility to incarcerated students, Dreamers, and students with Temporary Protected Status; and enabling graduate students who were eligible for the Pell Grant as undergraduate students and who have annual incomes up to $75,000 to use any remaining Pell funds for up to three years to help finance graduate studies.

- **RATIONALE:** When Pell was first implemented in 1975, the maximum award covered 79 percent of the cost of in-state tuition and fees at public universities. Today, it covers only about 30 percent of in-state tuition. Restoring the purchasing power of the Pell Grant and expanding eligibility, award size, and benefits to aid in student success and completion are vital to renewing the promise of Pell – the program most responsible for increasing the number of first-generation and underrepresented minority students who attend and complete college.

**RECOMMENDATION: Expand the Federal Work-Study Program.** Beginning in the administration’s FY22 budget, double funding for Federal Work-Study (FWS) to $2.5 billion by 2024 and encourage the creation of a wide range of undergraduate research opportunities on and off campus.

- **RATIONALE:** By increasing the federal funding for FWS and broadening the scope of employment opportunities, more institutions can participate in the program; more students will be able to complete college with no debt or smaller debt; more funds matched by institutions will be leveraged to support students; and more students will gain additional skills and experience that bolster their future job prospects and contribute to our nation’s research ecosystem.

**RECOMMENDATION: Repeal the “scholarship tax” and establish a universal charitable giving deduction.** The excise tax on university endowments imposed by the 2017 Tax Cuts and Jobs Act should be repealed as quickly as possible and a universal charitable giving deduction for federal income tax purposes should be enacted.

- **RATIONALE:** Charitable giving provides resources vital to students and to advancing research. Repealing the excise tax on endowments and establishing a universal charitable giving deduction would increase funding for scholarships and crucial research at the vast majority of the nation’s colleges and universities. Endowments underwrite scholarships and other financial aid, subsidize vital scientific research, and enable universities to serve their communities. Itemized deductions for charitable contributions fell by $54 billion in May 2019 as compared to May 2018, the IRS reports. A universal deduction for charitable giving would allow non-itemizing taxpayers a deduction for their charitable gifts and increase charitable giving by an estimated $12.2 billion (4.3 percent). These gifts would also help underwrite student aid and medical and other important areas of research.

**RECOMMENDATION: Rescind Executive Order 13950 on Combating Race and Sex Stereotyping.** The administration should promptly rescind [Executive Order 13950](https://www.whitehouse.gov/presidential-actions/executive-order/13950/) and, instead, promote and support workplace diversity training programs.

- **RATIONALE:** In addition to simply being the right thing to do, promoting and supporting diversity and inclusion are essential to the long-term strength, economic competitiveness, and security of our nation. But by tying federal contracts and grants to the prohibition of vague, ambiguous, and subjective “divisive concepts,”
Executive Order 13950 creates a chilling effect on the good faith and lawful efforts of universities to build and sustain non-discriminatory and non-hostile workplaces and learning communities.

**RECOMMENDATION:** Immediately task the National Science and Technology Council (NSTC) Committee on Science, Technology, Engineering and Math Education (CoSTEM) to review and modify the existing five-year national STEM education strategy plan to better account for educational challenges arising from the pandemic and to place a greater emphasis on scaling effective innovations, enhancing learning, and expanding participation at the undergraduate and graduate levels.

- **RATIONALE:** This will help ensure that the national strategy accounts for challenges and issues relating to the pandemic. It will also help ensure students from historically marginalized groups in STEM higher education (e.g., underrepresented minorities, first-generation college students, low-income students, and women) succeed by implementing promising, evidence-based STEM education practices across the country.

**RECOMMENDATION:** Strengthen accountability for federal higher education dollars. The administration should:
- restore the 85/15 Rule and count all federal educational funds as part of the federal share for that rule’s purposes, including active-duty military and veteran educational benefits;
- restore the Department of Education’s Gainful Employment Rule and withhold federal student aid from institutions with a record of graduating students with debt that outstrips their job opportunities;
- and create a secure federal student data system to provide policymakers and consumers with more accurate information about student outcomes.

- **RATIONALE:** Federal dollars aimed at supporting students’ education should not instead prop up low-quality schools more interested in making a dollar than educating students. The federal government should have more tools to hold accountable institutions that ensnare veterans and other Americans into unmanageable debt by making unrealistic promises about the value of their degrees. A federal student data system would better inform policymakers and accreditors as well as students and families about schools’ quality.

**RECOMMENDATION:** Revise the recently implemented Title IX sexual misconduct and assault regulations. The newly implemented Title IX rule should be revised to address deeply problematic aspects of the regulations that micromanage campus processes in an inflexible manner and undermine college and university efforts to effectively, fairly, and compassionately address the problem of campus sexual assault. A revised regulation should remove the requirement for a live hearing with cross-examination, broaden the definition of sexual misconduct, and allow campuses flexibility to choose between the “preponderance of evidence” standard and the “clear and convincing evidence” standard in Title IX grievance proceedings regardless of the standard used in other cases.

- **RATIONALE:** The new rule narrows the definition of sexual misconduct and imposes new guidelines for universities’ Title IX procedures. These guidelines are likely to deter reporting of sexual misconduct and assault.
Ensuring America’s Lead in Science, Medicine, and Innovation

The United States emerged from World War II as the world’s leader in scientific advancement and innovation in large part because of the government-university partnership, which educated and helped train the American workforce and increased and sustained federal investment in university-based research and research infrastructure. The administration has an opportunity in the next four years to renew our nation’s efforts to keep its competitive edge even as other nations on the world stage strive to overtake our lead.

RECOMMENDATION: Commit in the administration’s FY22 budget to sustaining real growth of at least 5 percent annually for scientific research and infrastructure supported by NSF, NIH, DOE, DOD, NASA, NIST, NOAA, USDA AFRI, the Department of Education’s IES, and other federal research agencies. At least 4 percent real growth should be devoted to long-term scientific research, and the remaining 1 percent real growth should be focused on scientific infrastructure and research in areas of critical national importance, such as: COVID-19, biotechnology, clean energy, environmental sustainability, artificial intelligence, quantum information science, and advanced manufacturing.

- RATIONALE: Federal investments in scientific research have consistently paid enormous dividends for our nation’s health, security, and economy. The computer industry, the internet, smartphones, the biomedical revolution with its continuing flow of vaccines and lifesaving drugs, and technologies that have made our military the world’s most effective force all had their start in federally funded scientific research conducted at universities. To stay ahead of our global competitors, including China, a recent report, “The Perils of Complacency: America at a Tipping Point in Science & Engineering,” calls again for establishing a sustainable real growth rate of at least 4 percent in federal basic research investments. This should be coupled with reinvigorating research infrastructure through investing in research facilities, equipment, instrumentation, and technology transfer programs at the NSF, NIH, Department of Energy, and other federal agencies.

RECOMMENDATION: Direct OSTP to work with federal research agencies to develop a comprehensive national plan and clear roadmap for rebuilding and reinvesting in America’s aging scientific infrastructure. Utilizing the coordinating authority granted under the NSTC, OSTP should engage other federal agencies to conduct a review of the current state of the national scientific research infrastructure at universities, national laboratories, and facilities otherwise supported or maintained by federal research agencies. Based on this assessment, the OSTP should develop a national strategy and priority list of key investments in scientific facilities and research infrastructure, and address how the federal government will support training programs to ensure the skilled labor force required to support the highly technical and specialized research infrastructure and facilities required to maintain America’s global scientific leadership.

- RATIONALE: Over the past seven years alone, we have witnessed an 80 percent drop in construction of higher education research facilities. During this same period, other countries – especially China – have been making significant new investments not only in the research infrastructure of their universities, but also in developing new large-scale national research facilities. The United States must have a clear roadmap for where we need to renew investments in research facilities and scientific infrastructure to ensure America’s future global scientific leadership, public health, economic competitiveness, and national security.
RECOMMENDATION: Create a new partnerships program to address structural and racial inequities in STEM research and related educational opportunities at higher education institutions. Develop and fund a new multiagency “Partnerships in Research and Education in STEM” program to enable, build, and grow new partnerships between Historically Black Colleges and Universities (HBCUs) and other minority-serving institutions (MSIs). This program should provide dedicated funds directly to HBCUs and other MSIs to help them build their research capacity; these grants would help MSIs develop innovative new partnerships that enable them to participate more actively in and benefit from existing federally supported multi-institutional center and other programs (e.g., NSF STCs or DOE EFRCs). A similar grants program should be created to help expand the ability of HBCUs and other MSIs to fully utilize and upgrade their existing research capacity. These new programs can build from exemplary federal programs at NIH, NSF, and other federal agencies.

• **RATIONALE:** Strategic partnerships between MSIs, and research universities can foster greater diversity in the scientific enterprise and leverage resources to address institutional STEM capacity and infrastructure needs necessary for research. New research partnership programs between MSIs and research universities can broaden participation in the scientific enterprise for the nation, increase the diversity of faculty pool in STEM disciplines, encourage more minority scholars and entrepreneurs to advance innovation and economic growth, and assist in the recruitment, retention, degree attainment, and ultimate success of historically marginalized groups in STEM fields.

RECOMMENDATION: Create a new university technology transfer regional consortium program and foster greater diversity and equity in American innovation through the patent ecosystem. Develop and fund a new regional technology transfer consortium program within NIST to encourage new partnerships between research universities and HBCUs as well as other MSIs, including Hispanic-serving institutions (HSIs) and tribal colleges, to help expand technology commercialization capacity across the U.S. higher education system and encourage more diverse entrepreneurs. To expand federal agencies’ ability to provide funding and capacity-building assistance to inventors from underrepresented groups, a federal interagency “Innovation through Diversity Initiative” – building on the bipartisan SUCCESS Act (Public Law 115-273) and the U.S. Patent and Trademark Office’s National Council for Expanding American Innovation – should also be created.

• **RATIONALE:** Technology transfer activity at research universities creates jobs, contributes to U.S. economic competitiveness and global technological leadership, improves public health, and strengthens national security. Many minority-serving and small research institutions often lack the resources and support infrastructure for robust technology transfer programs. In addition, [women and minorities](#) are notably underrepresented in the U.S. patent ecosystem, which means that the American innovation economy is deprived of the contributions of a substantial talent pool.

RECOMMENDATION: Preserve and reaffirm the Bayh-Dole Act and do not allow changes to the existing government interpretation of the law pertaining to the application of government march-in rights. The National Institutes of Health’s response to previous Bayh-Dole Act “march-in” petitions is the correct understanding of the scope and appropriate uses of march-in rights.

• **RATIONALE:** Much innovation in biomedical research – including virtually all vaccines introduced in since the 1990s – has occurred because of the Bayh-Dole Act of 1980, which incentivized the transfer of federally funded university-based research to advance the public good. But recent efforts to use Bayh-Dole Act march-in rights to
control drug prices now threaten the law. This approach is ineffective for its stated purpose and would have a chilling impact on the creation of new drugs.

**RECOMMENDATION: Immediately stand up the Research Policy Board (RPB).** The Office of Management and Budget (OMB) Director should constitute the RPB, as directed by Section 2034 of the 21st Century Cures Act (Public Law 114-255). This board is charged with coordinating and improving regulations and policies, identifying policy and regulatory gaps and challenges, and conducting ongoing assessment of regulatory burdens to enhance efficiencies and optimize the federal investment in research.

- **RATIONALE:** Research universities often face duplicative and inefficient regulations that are not sensible or scaled to risk. While many of these regulations and reporting requirements are well intentioned, the cumulative burden imposed by the many layers of regulations has become unbearable. Such regulations also reduce faculty productivity by diverting time from research and teaching.

**RECOMMENDATION: Appoint a presidential science advisor and director of OSTP along with other major cabinet level appointments.** The appointed individual should be given the title of special assistant to the president.

- **RATIONALE:** President-elect Biden has said that he will listen to science and seek advice from the nation’s top scientists. To do this, it is critical that the role of the OSTP director be elevated and that this individual be designed as a special assistant to the president. Appointing the science advisor early will send an important signal about the importance that science will play in helping the administration develop and implement evidence-based policies to address the COVID-19 pandemic and climate change, and foster racial equity and economic prosperity.

**RECOMMENDATION: Propose in the administration’s FY22 budget a new early-stage proof-of-concept research program to accelerate moving discoveries to the marketplace.** This program would be aimed at filling funding gaps required for university faculty to commercialize their research more effectively.

- **RATIONALE:** The existing Small Business Innovation Research and Small Business Technology Transfer programs presume there is already evidence that specific research or technology has enough commercial value to attract further investment. In many cases, there is still a gap in the funding needed to push technologies across the chasm between obvious commercial value and successful commercialization. This discourages would-be investors from funding studies into the commercial viability of such university-based research advances, preventing universities and faculty entrepreneurs from moving new discoveries and technologies into the marketplace.

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**Securing American Research, Intellectual Capital, and Talent**

America has been an intellectual and innovation powerhouse for more than a century – but increasingly sophisticated espionage by other global powers threatens our ability to protect the integrity of the research we conduct and related intellectual property. Meanwhile, misguided immigration policies have made the U.S. less inviting to many of the world’s greatest scholars. Several executive and legislative actions could be taken to increase both our ability to safeguard
scientific research and our intellectual capital from foreign threats without unnecessarily stifling the free flow of scientific information and international talent that are crucial to scientific advancement and innovations that benefit the nation.

**RECOMMENDATION:** Rescind Executive Orders and Presidential Proclamations that impede international students, scholars, and researchers from studying, teaching, and conducting research in America.

- **RATIONALE:** Executive Orders 13769, 13780, and 13815 and Presidential Proclamations 9983, 10014, 10043, and 10052 have harmed on our nation’s ability to attract international students and scholars to come study and work in America and contribute to our economy. The impacts of these policies are seen in the recent declines in enrollment of international students. The [2020 Open Doors Report](https://www.iie.org/International-Education-Data/Open-Doors-Report) indicates the U.S. welcomed 32,000 fewer new international students in the 2019-2020 academic year compared to the 2015-2016 academic year.

**RECOMMENDATION:** Rescind and revise harmful immigration regulations promulgated in the Fall of 2020, including the NPRM on [Duration of Status](https://www.iie.org/International-Education-Data/Open-Doors-Report), the DHS Interim Final Rule on the [H-1B Nonimmigrant Visa Classification Program](https://www.iie.org/International-Education-Data/Open-Doors-Report), and the DOL Interim Final Rule on [Strengthening H-1B Wage Protections](https://www.iie.org/International-Education-Data/Open-Doors-Report).

- **RATIONALE:** These new regulations, which are in effect now or could soon be in effect, further harm international student enrollments and universities’ ability to employ experts who teach, innovate, and serve patients. The duration-of-status NPRM would accelerate the steep decline of international student enrollment by establishing an uncertain process for degree completion. The interim final rules promulgated by DHS and DOL on H-1B visas significantly narrow the qualifications for an H-1B visa and drastically raise wages for foreign workers.

**RECOMMENDATION:** Expand “dual intent” visa eligibility to international students. Eliminate the requirement that student visa applicants show evidence they intend to leave America upon completion of their studies and/or Optional Practical Training experiences.

- **RATIONALE:** This is a requirement unique to student visa applicants. Extending dual intent to these individuals will allow the U.S. to keep the best and brightest international students.

**RECOMMENDATION:** Create a new green card pathway for international STEM students. The administration should work to create a new green card category that would allow international students completing Ph.D. STEM, M.D., and advanced degrees in other designated areas of critical national need at American universities to self-petition.

- **RATIONALE:** One of the great strengths of American colleges and universities is the presence of the best and brightest international students, scientists, and scholars. To compete with the talent recruitment programs of other nations, the nation’s immigration system needs to be modernized to encourage foreign talent not only to come and study in the United States, but to stay after they graduate to work and help grow the nation’s economy.

**RECOMMENDATION:** Reaffirm National Security Decision Directive 189 (NSDD 189). First issued by President Ronald Regan in 1985 and reaffirmed by Secretary of State Condoleezza Rice in 2001, NSDD 189 asserted that “to the maximum extent possible, the products of fundamental research [defined as basic and applied research] remain unrestricted,” and
declared that classification should be the primary mechanism for control of sensitive scientific and technological information.

- **RATIONALE:** Research universities share the federal government’s interest in ensuring intellectual property, proprietary information, sensitive data, and other classified and/or otherwise controlled government information developed or housed by universities is not vulnerable to exfiltration or espionage. The administration must restore proper balance between the need for securing federally funded research and the need to make new scientific knowledge publicly accessible to ensure continued scientific progress. NSDD 189 has enabled the government to strongly protect a narrow set of key technologies when imposing information security controls, while still ensuring the widespread, public, and open dissemination of research results. This clear policy avoids ambiguous measures that make it difficult for American universities to comply with federal security controls.

**RECOMMENDATION:** Establish and maintain an interagency working group under the Office of Science and Technology Policy (OSTP) to ensure coordination and consistency of federal agencies relating to research security policies and support other key mechanisms through which stakeholder inputs can be sought and incorporated. Section 1746 of the FY20 National Defense Authorization Act (Public Law 116–92) requires OSTP, through the National Science and Technology Council (NSTC), to create an interagency working group to coordinate research security across federal science, intelligence, and security agencies. This interagency group should be quickly stood up within 90 days of the new administration taking office. It should review, as deemed appropriate, issue-specific multi-agency recommendations for research security based on work already done by the existing NSTC JCORE research security subcommittee. Additionally, OSTP, the Department of Defense, and other key federal science, intelligence, and security agencies should actively participate in and support the statutorily required National Academies of Science, Engineering, and Medicine Science, Technology and Security Roundtable, which engages the university and scientific community to help coordinate action with federal intelligence and science agencies.

- **RATIONALE:** Uncoordinated actions, disparate policies, and conflicting information and communications by federal science and security agencies create confusion for universities and fail to improve the security of research conducted on behalf of American taxpayers. Therefore, engagement and coordination between research institutions and federal intelligence and science agencies is vital to our collective interest.

**RECOMMENDATION:** Reconstitute the Homeland Security Academic Advisory Council (HSAAC) to expand the Department’s outreach to higher education institutions. The Council connects the DHS Secretary and senior DHS leadership to higher education representatives who can provide advice and recommendations on international students; protecting academic research; campus and community resiliency; security and preparedness; and cybersecurity.

- **RATIONALE:** Since its establishment in 2012, HSAAC proved to be a valuable asset to the Department, delivering more than 120 recommendations across a broad range of topics at the intersection of academia and homeland security. On June 14, 2019, the Council was terminated by Executive Order 13875 on Evaluating and Improving the Utility of Federal Advisory Committees.