



ASSOCIATION OF AMERICAN UNIVERSITIES

Key Policy Recommendations for the Next President

I. Name the Presidential Science Advisor early in the transition and raise the stature of the position and the Office of Science and Technology Policy in the new administration.

Because science will play a critical role in how the next administration addresses the nation's most pressing challenges, the Science Advisor should be designated as an Assistant to the President and assigned cabinet rank. The nomination for the next Science Advisor should be among the first cabinet-level nominations and senior White House staff appointments made by the President-elect, an action that will also help ensure the selection of highly qualified candidates for future appointments in critical S&T positions.

II. Reaffirm and strengthen the government-university partnership.

The next President and his administration should reinvigorate the government-university partnership by moving quickly to reaffirm and strengthen the core principles that underpin it:

- the federal investment in university-based research should continue to serve two vital national purposes: supporting critical research and educating the next generation of scientists, engineers, and scholars;*
- research projects should be selected based upon scientific merit as judged by leading scientists in a particular field, rather than based on political or geographical considerations;*
- universities must ensure that research is conducted responsibly and with integrity by those who receive government funding;*
- because the federal government invests in university-based research to benefit the public through the knowledge it yields and the students it educates, the federal government should provide its share of the costs of that research; this includes its portion not only of the direct costs of conducting the research but also of the necessary costs of research facilities, infrastructure, and regulatory compliance; and*
- federal regulations should be designed to foster effective compliance but should not be unnecessarily burdensome or extend beyond their appropriate purview into institutional governance, which should remain a core responsibility of the university's trustees, faculty, and administration.*

Brandeis University
Brown University
California Institute of Technology
Carnegie Mellon University
Case Western Reserve University
Columbia University
Cornell University
Duke University
Emory University
Harvard University
Indiana University
Iowa State University
The Johns Hopkins University
Massachusetts Institute of Technology
McGill University
Michigan State University
New York University
Northwestern University
The Ohio State University
The Pennsylvania State University
Princeton University
Purdue University
Rice University
Rutgers, The State University of New Jersey
Stanford University
Stony Brook University – State University of New York
Syracuse University
Texas A&M University
Tulane University
University at Buffalo – State University of New York
The University of Arizona
University of California, Berkeley
University of California, Davis
University of California, Irvine
University of California, Los Angeles
University of California, San Diego
University of California, Santa Barbara
University of Chicago
University of Colorado, Boulder
University of Florida
University of Illinois, Urbana-Champaign
University of Iowa
University of Kansas
University of Maryland, College Park
University of Michigan
University of Minnesota, Twin Cities
University of Missouri, Columbia
University of Nebraska - Lincoln
University of North Carolina at Chapel Hill
University of Oregon
University of Pennsylvania
University of Pittsburgh
University of Rochester
University of Southern California
University of Texas at Austin
University of Toronto
University of Virginia
University of Washington
University of Wisconsin - Madison
Vanderbilt University
Washington University in St. Louis
Yale University

III. Provide sustained and balanced growth for basic scientific research.

The next President should increase funding for basic scientific research. This investment, which was encouraged by the National Academies' report, Rising Above the Gathering Storm, enjoys significant support among the American people and within the federal government, industry, and academia. Specifically, the President should support:

- *increased investments in federally funded scientific research in both the physical and biomedical sciences that is systematic, reliable, and long-term, including full funding of the America COMPETES Act; and*
- *making the R&D tax credit permanent, with removal of the current penalty for supporting R&D outside of the company, including at universities.*

IV. Harness the federal government's innovation and scientific and engineering resources to address the major energy challenges facing our nation.

Because basic research is critical to both the development of alternative forms of energy and conservation of fossil fuels, the next President should:

- *support new funding for a government-wide, multiagency scientific initiative aimed at addressing our national energy production and self-sufficiency challenges in an environmentally sound manner;*
- *create, as part of that initiative, new programs to encourage high-risk, high-reward research in energy-related fields; and*
- *tap into the tremendous resources and talent at our universities, federal laboratories, federal agencies, think tanks, and corporations to develop solutions to our short- and long-term energy needs.*

V. Expand and nurture U.S. talent in science, mathematics, and engineering to create a workforce for the innovation challenges of the 21st century.

The next President should launch a major, inter-agency science, technology, engineering, and mathematics (STEM) education initiative for Americans from all backgrounds. This initiative should:

- *enhance K-12 STEM education, increase graduate fellowships and traineeships, expand the Defense Department's National Defense Education Program;*
- *aim to attract underrepresented minorities and women to studying and undertaking careers in STEM fields;*
- *create new sources of competitive federal research funding targeted to exceptional young scientists and engineers, such as the National Institutes of Health's Pioneer Awards; and*

- *improve the H-1B and employment-based visa programs to attract highly skilled talent to enhance competitiveness.*

VI. Strengthen the government's commitment to the humanities and social sciences to better prepare the nation and its citizens to understand and solve global issues.

The complexity of issues in our global society requires a multidimensional, interdisciplinary approach to problem solving. From military operations to finding a cure for cancer, the humanities and social sciences provide an additional and critical lens through which we view the root cause of an issue and develop appropriate resolutions. To broaden the nation's capacity for such judgments, the next President should:

- *strengthen the capacity of the National Endowment for the Humanities to support teaching and scholarship in these areas; and*
- *increase funding for social sciences research at the National Science Foundation and other appropriate agencies, including the Defense Department's Minerva initiative.*

VII. Expand access to higher education to provide opportunities for all students to acquire the knowledge and skills they will need to succeed in the competitive global environment of the 21st century.

To reduce financial barriers to higher education, the next President should:

- *increase funding of student aid programs newly reauthorized by the Higher Education Act;*
- *improve federal education tax credits and tuition tax deductions; and*
- *continue efforts to enhance student loan borrower benefits to help ensure that all students are able to pay for their college experience and manage their debts.*

VIII. Strengthen international education by encouraging U.S. students to study abroad and increasing enrollment of international students at U.S. colleges and universities.

The next President should:

- *ask Congress to create clear pathways to permanent residency and U.S. citizenship for talented international students who earn U.S. academic degrees;*
- *streamline the process for outstanding international scientists and engineers who are teaching and conducting research in the U.S to achieve similar status;*
- *support efforts to create incentives for U.S. students to study abroad in a wide array of nations and regions; and*
- *strengthen existing HEA-Title VI and Fulbright Hays international programs at the Department of Education to better prepare our citizens for a global workplace.*