

10 Questions for Candidates

- Economic Competitiveness/America COMPETES.** The National Academies report, “Rising Above the Gathering Storm,” recommended several actions to ensure the future economic competitiveness of the U.S., including greater federal support for university-based scientific research. Many of the report’s recommendations have yet to be implemented and the America COMPETES Act, which Congress passed and the President signed to respond to this crisis, remains largely unfunded. What steps do you believe the federal government must take to ensure that America remains the world leader in innovation? Do you agree with the report on the need for greater support for scientific research? Will you support full funding of America COMPETES?
- Research.** There is great concern within the academic and business communities about stagnating federal support for basic research in both the physical and biomedical life sciences. What priority would you give to investment in basic research – across the sciences and the agencies supporting this research including NSF, DOE, NIH, NIST, DOD, NASA, and USDA – in upcoming budgets? How would you protect long-term investments in research against short-term spending constraints?
- Energy.** There is clear consensus among both Democrats and Republicans that our country needs new energy sources and there is support for applied research to bring known potential sources of energy to market. What priority would you give to funding basic research in this area, which can provide the foundation for important new discoveries, but may not lead to energy breakthroughs for a number of years?
- Climate Change.** Science and research are obviously critical to helping understand and address the effects of climate change. Do you believe the U.S. is adequately funding this research?
- NIH/Health Research.** Since 2003, funding for the National Institutes of Health, the government’s primary agency for funding medical research, has been outpaced by inflation, constricting important work supported by NIH. How would you prioritize NIH funding? And what role do you think NIH research can play in addressing issues related to the cost, quality and availability of health care?
- National Security.** Past federal investments in defense basic research have led to technologies with major payoffs for both national security and the economy. Radar, lasers, the Internet, stealth technology, fiber-optic-based communications, and satellite and GPS technology are all examples. While funding for defense research in recent years has been flat, funding for developing and testing new weapons systems has significantly increased. Do you believe the U.S. can and should invest more in defense basic research?
- Space.** The study of earth from space can yield important information about climate change; focus on the cosmos can advance our understanding of the universe; and human space travel can help us inspire new generations of youth to go into science. How would you prioritize funding for space and its various areas of research?
- Science and Engineering Workforce.** Leaders in the business and scientific communities, as well as the Defense Department and other national security agencies, are worried that America is not producing enough scientists, engineers and technicians to compete in the future innovation economy and help secure our nation. How would you inspire students and recruit them into these fields of study?
- Education.** Students in the U.S. are losing ground to their peers in other countries in the key areas of science and math. What is the role of the government in reversing this trend and supporting K-12 STEM (science, technology, engineering and math) education?
- Government-University Research Partnership.** Since World War II, there has been a unique partnership between the U.S. government and universities whereby U.S. universities conduct important scientific research on behalf of the American people. The research enterprise borne of this partnership has become the envy of the world, produced tremendous advances in health, technology, innovation and national security, and fueled economic growth while training new generations of scientists, engineers, teachers and leaders in government and industry. Today, however, this partnership suffers from decreased federal funding and because some have lost sight of its value and uniqueness in the world. What steps would you take to strengthen this uniquely American research partnership?