The University of Rochester is among the nation’s leading research universities thanks to the path-breaking ideas of our faculty, the achievements of our graduates, the quality of our patient care, the creativity of our artists, the magnitude of our federally sponsored research, our history and ability to translate discoveries into new technologies and innovations that benefit society, and our commitment to the surrounding community.

Federal investments in scientific research and education have a direct impact on our ability to train the next generation of leaders, develop new treatments for disease, address our future energy needs, spark new business and economic growth, and enhance our security. Over the past five years, the University has received nearly $2 billion in research funding, the majority of which comes from federally sponsored research agencies, including the National Institutes of Health, National Science Foundation, Department of Energy, and Department of Defense, which has fostered pioneering work in optics, cardiac arrhythmias, medical imaging, LASIK surgery, and vaccine development. Since 1996, 56 startup companies have been created using University-licensed technology, of which 38 are still active, and 25 located in New York State.

Last fall, we announced our plan to create an Institute for Data Science, a $100 million initiative to establish us among the world leaders in this burgeoning discipline. The Institute builds upon our enormous strengths in data science, including the Health Science Center for Computational Innovation, research in fields such as machine learning, artificial intelligence, and biostatistics, and helps leverage existing industry collaborations with IBM and Xerox. Over the past five years, the University has been awarded a total of $307 million in research that relies, in part, upon high performance computation. The Institute is projected to create more than 380 jobs and attract about $530 million in research funding over ten years.

Our Laboratory for Laser Energetics recently completed its 25,000th high energy density physics experiment in support of the National Nuclear Security Administration’s Stockpile Stewardship Program, and continues to be a vital contributor to our national and global security, a critical component to the strategic work on an independent energy future, and an invaluable source of scientific leadership for our nation and economic vitality for this region.

At the same time we are experiencing such tremendous opportunity for advancement, an innovation deficit – the widening gap between needed and actual U.S. federal investments in research and higher education – is jeopardizing our nation’s scientific progress and global leadership. Sequestration threatens to undermine our progress and further damage the very investments that we need to continue to grow the economy. The Budget Control Act spending caps will force non-defense discretionary spending to its lowest level relative to GDP in a half century. A recent report by the National Science Board found that America’s share of annual global research spending between 2001 and 2011 declined significantly from 37% to 30%, while research done by Asian countries grew from 25% to 34%. The major Asian economies, taken together, now perform a larger share of global research and development (R&D) than the U.S. Countries with developing economies such as China, India, Taiwan, and Singapore are making significant investments in their research universities and expanding R&D expenditures to enhance their innovation capabilities, while spending in the U.S. on R&D and science, technology and engineering continues to decline. Closing the innovation deficit should be a national priority. We must address long-term fiscal and economic challenges through a responsible, strategic approach that prioritizes spending for investments in education and research in a manner that gives us the best chance for improving our future and retaining our role as the world’s innovation leader.

Our opportunity in the 21st century is to accelerate progress by building on our greatest strengths. We strive to be a University ever better in the quality of our teaching, research, scholarship, learning, clinical care, and creative arts; a fundamental part of our region’s revitalization; and a cornerstone of its economic health. Stable and sustained public-private investment and collaboration with the federal government will allow us to see this continued growth and success.
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WHAT IS NUCLEAR FUSION?
Nuclear fusion is the most basic form of energy in the universe, most commonly found in the thermonuclear reactions of the sun and the stars. Fusion energy can be used for electricity generation and national security-related applications, and does not produce nuclear waste or enhance nuclear proliferation. Since one of the main fuel source for fusion - deuterium – is found in ordinary water, demonstrating controlled nuclear fusion offers real potential to serve as an affordable, inexhaustible, and carbon-free energy source. Fusion research is also vital to maintaining the reliability and safety of the U.S. nuclear deterrent without the need for full-scale testing.

Scientists estimate a nuclear fusion power plant will be able to generate 1,000 megawatts of electricity, enough to power 1 million homes. While many challenges need to be overcome before fusion is an economically viable energy source, demonstrating the feasibility of inertial confinement fusion energy as an inexhaustible, safe, and efficient source of energy would ensure that our nation is able to reap the incredible benefits of this technology. A demonstration of thermonuclear ignition and moderate energy gain in the laboratory is a prerequisite to the commercial production of clean, plentiful electricity using thermonuclear fusion.

ABOUT THE LLE
The Laboratory for Laser Energetics (LLE) is a unique national resource not found at any other university in the country. It is a vital component of our nation’s scientific capital and leadership, and key to strategic work on an independent energy future. The LLE is home to the OMEGA laser, which is the second most powerful ultraviolet fusion laser in the world, and the OMEGA EP (Extended Performance) laser, a high-intensity, high-energy short-pulse laser, and serves as the principal laser research facility for two national laboratories (Los Alamos and Lawrence Livermore). As one of the preeminent research facilities for inertial confinement fusion and high-energy density physics research, the LLE serves a critical national security function and is at the forefront of efforts to demonstrate the viability of nuclear fusion as an inexhaustible, clean, and affordable source of energy. The LLE is the recognized leader of the direct-drive approach to demonstrate inertial fusion ignition at the National Ignition Facility. The LLE is also a magnet for scientific talent and one of the leading institutions training the next generation of leaders in the fields of physics, optics, and material science.

ECONOMIC IMPACT
Since its inception, the LLE has attracted almost $2 billion to New York State to support cutting-edge research, and more than 1,000 individuals are currently involved in the program. Through its National Laser Users Facility, the University attracts as many as 500 additional scientists each year from national laboratories, universities, and companies. In addition to payroll and local purchases, the LLE provides a strong stimulus to the local economy through its advanced technology assets, which are the seeds that attract and develop new companies and investors to the high-technology sector. QED Technologies, Sydor Instruments LLC, and Lucid, Inc. are just a few of the local companies that were created — and continue to benefit us — as a result of the LLE’s technology and research. The LLE is also nationally recognized as the only facility that trains graduate students in inertial confinement fusion and thereby serves as a critical pipeline of future talent that is vitally important to our national and economic security.

REQUEST
We thank our Congressional delegation for securing $64 million for the LLE in FY14. In FY15, the LLE seeks $68,958,500 to support its research programs and to operate at sufficient capacity to support the Department of Energy’s Stockpile Stewardship Program’s Inertial Confinement Fusion (ICF) and High-Energy Density Physics (HEDP) programs. Continued federal investment in the LLE will advance the nation’s scientific leadership, strengthen our national security, support efforts to find an affordable, plentiful, and efficient source of energy for the future, and lead to the development of new technologies.
INVEST IN HIGH-QUALITY HEALTH CARE
Ensuring Access and Improving Quality

UR Medicine — which comprises Strong Memorial Hospital, Highland Hospital, Thompson Hospital, and our newest affiliate, Strong West, formerly Lakeside Hospital in Brockport — is the safety-net provider and the largest, most specialized academic health care system in western and upstate New York. The level of reimbursement UR Medicine receives from both Medicare and Medicaid, including critical adjustments for Graduate Medical Education (GME), Medicare bad debt payments, Medicaid provider assessments, and Disproportionate Share Hospital (DSH) payments affects our clinical margins, which not only sustain growth in our clinical and academic missions, but also impact our ability to train the next generation of physicians and provide high-quality care to the region.

UR Medicine helps anchor the region’s innovative, cooperative approach to health care financing and delivery that has resulted in costs that are 20% below the national average with excellent quality and access. A recently-issued Institute of Medicine report highlighted Rochester’s annual cost-per-Medicare beneficiary as the lowest in the country.

PROTECT FUNDING FOR MEDICARE AND MEDICAID
Reimbursement from both Medicare and Medicaid continues to fall short of what it actually costs to provide services to patients. Medicare pays only 90 cents on the dollar toward patient costs and reimburses only 70% of bad debt payments, while Medicaid pays only 89 cents on the dollar toward patient costs. As a result, America’s hospitals provided nearly $40 billion in uncompensated care in 2009. Last year, UR Medicine provided more than $70 million in uncompensated care alone. In addition, hospitals have experienced more than $110 billion in cuts since FY10. UR Medicine has recently undergone several rounds of funding cuts at the state and federal levels and we are preparing for more than $220 million in reductions from implementation of the Affordable Care Act (ACA). Reducing or eliminating funding for these vital programs will further limit access to care for Medicare and Medicaid beneficiaries and leave us less able to serve low-income patients who may not be able to afford cost-sharing requirements. As we implement the delivery system reform contained in the ACA, we urge Congress to provide relief from both Medicare DSH reductions and to oppose additional cuts, such as the recent extension of the Medicare sequestration cut until 2024, that will add $280 million in new Medicare cuts on top of the $2.6 billion in Medicare cuts already being implemented by New York hospitals. These cuts undermine our efforts to improve access, lower costs and enhance care. We also urge Congress to enact the Two-Midnight Delay Act of 2013 (H.R. 398) to delay enforcement of the controversial “two midnight” rule, which requires hospital stays shorter than “two midnights,” regardless of a patient’s severity of illness, to be categorized as outpatient.

PROTECT GRADUATE MEDICAL EDUCATION (GME) AND INCREASE MEDICARE RESIDENCY SLOTS
Funding through the GME program is essential for training new physicians and ensuring continued access to excellent, state-of-the-art patient care here and across the country. The U.S. Department of Health and Human Services estimates that our nation’s physician supply will increase by only 7% in the next 10 years while one-third of physicians will reach retirement age and the number of Americans over age 65 – the population most likely to have the greatest health needs – will increase a staggering 36%. Strong Memorial Hospital receives $55.6 million in Indirect Medical Education (IME) and $16.2 million in Direct Graduate Medical Education (DGME) funding, for a total of $72 million annually. Our School of Medicine and Dentistry is the largest source of new physicians in this region, with more than 593 medical residents, 157 fellow physicians in our graduate medical education program, more than 400 undergraduate medical education students, and 450 graduate students working toward doctoral degrees. Currently, the three Rochester-based providers train a total of 916 residents. On average, 42% of graduating residents and fellows who train here remain here for their first professional position, which has enabled Rochester to avoid the severe physician shortages experienced elsewhere; an equal number of doctors who graduate from the University’s School of Medicine and Dentistry affiliate with other local health systems. Any cuts to GME will limit our capacity to train new physicians and may intensify this growing shortage.

Nearly 10,000 residents, or 15% of the total resident physicians in the country, are being trained in New York State.

As we continue to implement health care reform, it is estimated an additional 32 million Americans will have health insurance and will be eligible for medical care, adding pressure to an already overburdened physician workforce. Thus, many medical schools are increasing class sizes to accommodate these changes in our nation’s healthcare needs, and these students must be placed in residency positions to complete their training, creating the need for more residency slots. The combined residency slots allowed for the University’s Strong Memorial and Highland Hospitals, as capped under the 1997 Balanced Budget Act, provides for 505 resident positions. In academic year 2012-2013, we trained 245 more
resident physicians than our cap allowed. While this is a positive step toward combating the nation’s looming physician shortage, we were not eligible to receive reimbursement from Medicare for training provided to those additional residents. The University of Rochester urges Congress to support the Resident Physician Shortage Reduction Act (S. 577 and H.R. 1180) to increase the number of Medicare-supported residency slots.

PROVIDE A LONG-TERM FIX FOR THE SUSTAINABLE GROWTH RATE (SGR)
The uncertainty of the Medicare physician reimbursement formula, or SGR, has a great effect on the ability of providers at UR Medicine to render quality care to some of our most vulnerable citizens. The Congressional Budget Office recently estimated the 10-year cost of eliminating the SGR is at an all-time low of $120 billion. In recent years, several proposals have been offered in Congress to offset the cost of the SGR “fix” with other cuts to providers, including reductions to hospital outpatient department reimbursement for evaluation and management (E/M) services, a cap on Medicare hospital outpatient department therapy, and changes to the 340B discount drug program. We strongly oppose additional provider cuts as an offset for repealing the SGR. We strongly urge Congress to pass a permanent solution to the Medicare physician fee schedule that provides full and fair reimbursement to physicians without further reductions in payments to hospitals for the vital services they provide.

PROTECT THE 340B DRUG DISCOUNT PROGRAM
The 340B Drug Pricing Program, administered by the Health Resources Services Administration’s (HRSA) Office of Pharmacy Affairs (OPA) requires drug manufacturers participating in Medicaid or Medicare Part B to provide covered outpatient drugs to designated safety-net providers at a reduced price. The 340B Program enables covered entities, including Strong Memorial Hospital, to stretch scarce federal resources, reach more eligible patients, and provide more comprehensive services. According to Safety-Net Hospitals for Pharmaceutical Access (SNHPA), the average safety-net hospital saved 27% on outpatient pharmaceutical costs in 2011 thanks to 340B. At Strong, the savings that result from participation in 340B helps fund a robust charity care program, several specialized patient pharmacies, and provides financial support to our transplant program. We applaud Congress for including $6 million in the FY14 Omnibus for program integrity efforts, and look forward to working with Congress and HRSA to preserve 340B and enhance program integrity by clarifying program requirements and the eligible patient definition.

SUPPORT HEALTH PROFESSIONS AND NURSING EDUCATION
HRSA’s health professions and nursing programs, authorized under Titles VII and Title VIII of the Public Health Service Act, provide educational and training opportunities to a wide variety of health professionals and students, both preparing them for career opportunities and bringing health care services to rural and underserved communities. With a focus on primary care and training in interdisciplinary, community-based settings, Title VII and VIII are the only federal programs focused on filling gaps in the supply of health professionals not met by traditional market forces, as well as producing a workforce prepared to care for the nation’s increasingly diverse population. In FY13, the University received nearly $1.9 million in support through Title VII for faculty development in primary care, geriatric education and training, graduate psychology education, postdoctoral dentistry training, and scholarships for disadvantaged students. Please provide at least $280 million for Title VII and $250 million for Title VIII in FY15.

INVEST IN HIGH-QUALITY HEALTH CARE
Ensuring Access and Improving Quality

In FY13, the University received more than $2 million in support through Title VII and Title VIII health professions and nursing programs to provide education and training opportunities in high-need disciplines to help meet the nation’s health care needs.
More than half of U.S. economic growth since World War II can be traced to science-driven technological innovation. The source of much of this innovation was scientific research supported by the federal government which has been translated into new commercial products, medical treatments, companies, and jobs that have ultimately improved lives and benefited our society in measurable ways. Innovations that flow from basic scientific research are the foundation for countless products and technologies that we take for granted today. Federal support for scientific research has strengthened the University’s pioneering work in vaccines – including the world’s first cancer vaccine – and has helped lead to the development of the MRI, modern communications devices, and the Internet.

However, over the past decade, federal investment in scientific research has been eroding. Sequestration and budget cuts have had a devastating impact on the U.S. research enterprise, resulted in eliminated jobs, closed labs and facilities, limited investments in the next generation of scientists, and postponed the development of new technologies, treatments, and cures. A recent survey by the American Society for Biochemistry and Molecular Biology found that, due to decreased federal investment in biomedical research, 18% of researchers are considering leaving the U.S. to continue their careers in another country.

**NATIONAL INSTITUTES OF HEALTH (NIH)**

Biomedical research funded by the NIH and performed at research universities saves lives. It also assures U.S. leadership in the life sciences revolution of the 21st century. Today’s investment in biomedical research funded by the NIH will enable research universities to pursue scientific opportunity, advance public health, and create jobs and economic growth.

The NIH has more scientific opportunity than it can support. A recent study in the *New England Journal of Medicine* showed that federally funded biomedical research discoveries substantially contributed to the development of new drugs and were more likely to lead to therapies benefiting large numbers of people. About 83% of NIH funding puts 350,000 scientists to work at research institutions across the country, and each grant supports six to eight jobs. NIH funding also leverages $58 billion in pharmaceutical and biotechnology industry investment, creating or sustaining an additional 580,000 private sector jobs. **Support at least $32 billion in funding for the NIH in FY15.**

**DOE AT WORK AT UR:** In 2011, University of Rochester chemists Ching Tang, Ph.D. and Lewis Rothberg, Ph.D., received $1.3 million in funding through the DOE to support research to increase the light output of organic light-emitting diodes (OLEDs), one of eight grants awarded nationally to help develop the next generation of high-efficiency, solid-state lighting technologies. OLEDs are expected to revolutionize the screens used on computers and televisions, and could one day replace fluorescent and incandescent bulbs.

As the “Innovation Agency,” the NSF also supports the development of the scientific tools and instruments needed to conduct large- and small-scale research. The NSF’s investment in basic scientific research and education, as well as in emerging fields, will ensure that the nation continues to develop new ways of thinking and can derive novel solutions to the challenges of the future. **Please provide at least $7.6 billion for the NSF.**

**DEPARTMENT OF ENERGY (DOE)**

The DOE’s Office of Science is a critical component in keeping the U.S. at the forefront of global research in the physical and biological sciences, computing, energy, and other important scientific fields. It will directly support approximately 27,000 researchers and enable some 26,000 scientific investigators from universities, national laboratories, and industry to use DOE scientific facilities. The Advanced Research Projects Agency-Energy (ARPA-E), meanwhile, plays a significant role in supporting high-risk, high-reward energy research that is unlikely to be supported by industry or other parts of DOE. Universities have received 40% of the total awards made by ARPA-E to date.

**DOE AT WORK AT UR:** In 2013, the University of Rochester was named a Center for AIDS Research (CFAR), a designation that infuses $7.5 million into HIV/AIDS work across the University and places it among the best places in the nation for research to improve the detection, prevention, and treatment of the disease.

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**NATIONAL SCIENCE FOUNDATION (NSF)**

The NSF and the programs it supports are critical to accelerating our nation’s science and innovation enterprise and fostering American competitiveness through growth in STEM education and advanced manufacturing. The NSF is committed to the fundamental interdisciplinary, high-risk, and transformative research and education that will help the U.S. remain competitive.

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SUPPORT FOR UNIVERSITY-BASED SCIENTIFIC RESEARCH
Harnessing Our Scientific and Technological Capital for the Future

Of particular importance is support for new and existing university-based energy research centers and training initiatives aimed at producing needed scientific and technical talent in key energy-related and physical science disciplines. Provide at least $4.99 billion for the Department of Energy’s Office of Science in FY15. In addition, please support $350 million in funding for the ARPA-E program and additional support for the Office of Fusion Energy Science, which funds the Fusion Science Center for Extreme States of Matter at the University’s LLE.

NSF AT WORK AT UR: Building on our strengths in optics, the NSF recently awarded the University of Rochester, University of North Carolina-Charlotte, and nine industry partners with funding to establish the collaborative Center for Freeform Optics for research of next generation optics in mobile displays, LED lighting, remote sensing devices, and astronomical instrumentation.

DEPARTMENT OF DEFENSE (DoD) BASIC RESEARCH
Defense 6.1 basic research programs support cutting-edge scientific and engineering research as well as undergraduate scholarships, graduate research assistantships, and fellowships that maintain our military superiority and strengthen our nation’s scientific and technical workforce. Emphasis must be placed on the Pentagon’s multi-year peer-reviewed basic research initiative, as it is in line with recommendations made by the National Academies’ report, Rising Above the Gathering Storm, which calls for an increase of $1 billion in Defense 6.1 basic research funding over five years. Support at least $2.12 billion in funding for Defense 6.1 basic research in FY15 and hold funding for Defense 6.2 research steady.

DOD AT WORK AT UR: Institute of Optics Professor Duncan Moore, Ph.D. has received more than $6 million in funding from the DoD’s Defense Advanced Research Projects Administration (DARPA) Manufacturable Gradient Index Optics (MGRIN) program to develop optical systems that achieve better, more efficient control of light. Gradient-index materials can bend light to provide additional degrees of freedom and better focus to improve optical systems such as telescopes and night vision goggles. Dr. Moore’s team is developing GRIN materials, the metrology instruments to characterize them, and the software tools to design optical systems.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA)
For the last 50 years, NASA has captivated the public with accomplishments that have revolutionized our understanding of earth and space science, the life sciences, and aeronautics, and have led to much technological advancement. NASA is the world’s preeminent space agency, and to remain as such, we must make a robust investment in NASA. In addition to the space program, research funded by NASA has led to the development of technologies that have been integrated into everyday items from lifesaving medical devices to protective eyewear, including cell phone cameras, solar panels, the MRI and CAT scans, the computer mouse, baby formula, UV sunglasses, and artificial limbs. Support robust funding for NASA and appropriate at least $4.9 billion for Science, $551 million for Aeronautics, and $699 million for Space Technology.

NASA AT WORK AT UR: With funding from NASA, University of Rochester scientists, in collaboration with the Jet Propulsion Laboratory and industry partners, have designed a sensor to increase the ability to detect hazardous asteroids near the earth and improve our understanding of threatening objects in the atmosphere. The sensor, which passed a critical design test in 2013, is the culmination of almost 10 years of scientific collaboration.
SUPPORT FOR STUDENT AID

Ensuring Access to Higher Education

In order for our nation to remain a global leader in technological and scientific innovation, we must ensure our students – from all socioeconomic backgrounds – have the opportunity to pursue high-quality higher education through access to student aid. Last year, with the assistance of Pell Grants, Federal Supplemental Educational Opportunity Grants, Federal Work-Study, and other forms of state and federal aid, more than one million American students earned degrees and are contributing to our economy.

SUPPORT FOR PELL GRANTS

The Federal Pell Grant Program provides critical need-based grants to low-income undergraduate students who might otherwise not have access to high-quality postsecondary education. At the University of Rochester, 1,035 students – more than 20% of our undergraduate population – are receiving assistance through the Pell Grant program for the 2013-2014 school year, with an average award of $4,150. Provide sufficient support to maintain the discretionary and mandatory funding streams that will allow for the scheduled increase in the maximum Pell Grant to $5,845. Please retain any surplus to help close the projected funding gap beginning in FY16.

SUPPORT FOR FEDERAL WORK-STUDY (FWS)

Federal Work-Study provides critical funds for part-time employment to help students finance the cost of college. For the 2013-2014 academic year, the University of Rochester received $865,000 in funding for FWS, which supports 1,800 work-study positions with wages paid to students totaling $1.2 million. Funds provided through FWS also help support our Career Services Job Location and Development Program, and UReading, a tutoring and mentoring program that pairs undergraduates with preschool and kindergarten students from the Rochester City School District. Provide sufficient funding for FWS to support the President’s proposal to double the number of work-study jobs over the next five years.

1,035 University of Rochester students are receiving Pell Grants in the 2013-2014 academic year with an average award of $4,150.

SUPPORT SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANTS (SEOG) AND GEAR UP

These federal programs provide grants to low- and middle-income students and fund programs that help at-risk students get into and stay in college, ultimately helping to increase the share of our nation’s workforce holding college or advanced degrees. For instance, in the 2013-2014 academic year, the University of Rochester received $546,000 in federal funding for SEOG. With the additional 25% in matching funds from the University, this program provided 975 students with an average award of $525. Support funding at the pre-sequester level for SEOG at $733 million and GEAR UP at $301 million in FY15.

85% of UR students receive institutional grants or scholarships toward the cost of college.

SUPPORT FUNDING FOR TRIO

Federal funding for Upward Bound, Upward Bound Math Science, McNair Post-Baccalaureate Achievement, and other TRIO programs provide vital outreach and student support services for low-income, minority, and potential first-generation college students. The University of Rochester’s highly successful Upward Bound programs provide a system of academic support for more than 100 students in the Rochester City School District through an array of college-preparation and academic activities. Support the pre-sequester funding level of $840 million for TRIO in FY15.

96% of UR’s Upward Bound students enroll in college.
**HIGHER EDUCATION, THE ARTS, AND THE HUMANITIES**

*Preparing our Future Workforce and Contributing to the Cultural Community*

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**SUPPORT A HIGHER EDUCATION ACT REAUTHORIZATION THAT IMPROVES ACCESS AND STREAMLINES REGULATION**

Since 1965, the Higher Education Act has been a critical vehicle for expanding access for low- and middle-income Americans to postsecondary education. As policymakers prepare to renew the Higher Education Act, we urge Congress to seek legislation that complements our efforts to promote student access to high-quality postsecondary education, provide students with a world-class academic experience, and educate future leaders. Reform should enhance college access; promote college completion; support an accreditation system that promotes effective assessment of student achievement and preserves the diversity and quality of U.S. higher education; support innovation in higher education; elevate graduate education; ensure appropriate accountability; and back consumer disclosure tools that will help students and their families understand their educational options and the value of a college degree. We also encourage Congress to support legislation that eliminates the excessive regulatory burden on colleges and universities. Congress should strengthen cost-benefit analysis requirements and efforts to streamline duplicative reporting requirements to reduce compliance costs.

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**SUPPORT PROGRAMS TO ASSIST STUDENTS WITH DEVELOPMENTAL AND OTHER DISABILITIES**

The University Center of Excellence in Developmental Disabilities program (UCEDD), part of the Department of Health and Human Services (HHS) Administration on Intellectual and Developmental Disabilities, delivers high-quality collaborative, interdisciplinary education and training to address issues that affect people with disabilities across their lifespan. UR’s Strong Center for Developmental Disabilities (SCDD), a fully designated UCEDD, provides professional education, state-of-the-art service, community education, pioneering research, and advocacy in support of people with developmental disabilities and their families. The SCDD’s Institute for Innovative Transition, funded in part through the Department of Education’s Transition and Post-Secondary Programs for Students with Intellectual Disabilities (TPSID), supports 75 students with intellectual disabilities as they transition from school age to adulthood through access to higher education, vocational training, and competitive, integrated job placement. The University is also a long-time participant in the HHS Leadership in Education, Pioneering, Research, and Advocacy (LEPRA) program to fund scholarships and support at least $1 million through the GAANN program to fund scholarships and increase the number of nursing faculty with doctoral degrees.

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**SUPPORT FOR GRADUATE EDUCATION PROGRAMS**

Programs such as Graduate Assistance in Areas of National Need (GAANN) provide fellowships to help exceptional graduate students pursue the highest degree available in a field designated as an area of national need and ensure a pipeline of talented experts and educators to fuel our 21st century workforce. At the University of Rochester, the departments of chemistry, nursing, optics, and physics have been identified as high-needs disciplines. Support at least $30 million in funding for the GAANN in FY15.

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**SUPPORT THE DEPARTMENT OF EDUCATION INTERNATIONAL EDUCATION PROGRAMS**

The Department of Education’s International Education and Foreign Language programs play a critical role in supporting our nation’s long-term national security, global leadership, and economic competitiveness. Successful U.S. engagement in these areas, at home or abroad, relies on Americans with global competence. Returning these programs to pre-sequester funding levels would allow their activities to continue uninterrupted, helping to address the nation’s need for a steady supply of graduates with expertise in less commonly taught languages, world
areas, and transnational trends. Support at least $73 million for the Department of Education’s International Education and Foreign Language programs in FY15.

SUPPORT THE NATIONAL ENDOWMENT FOR THE ARTS (NEA)
The NEA is a critical source of federal support for arts organizations around the country, including the Memorial Art Gallery, which is held in trust by the University of Rochester. NEA grants have a powerful multiplying effect, with each grant dollar typically matched by nine dollars of additional investments in this country’s nonprofit arts organizations. NEA programs encourage creativity through support for performances, exhibitions, festivals, artist residencies, and other art projects throughout the country in a variety of disciplines that have a great impact on art education and local economies. Support at least $154 million in FY15 for the NEA to ensure sufficient support for the NEA’s grant-making programs.

In 2010 a $250,000 NEA grant supported the expansion of ARTWalk, an innovative urban trail that includes the Memorial Art Gallery’s recently completed Centennial Sculpture Park, and has helped transform and revitalize the City’s Neighborhood of the Arts.

SUPPORT THE NATIONAL ENDOWMENT FOR THE HUMANITIES (NEH)
The humanities programs funded by the NEH are vital to ensuring that America can compete successfully in a global economy and advance sound public policy to address the challenges of the 21st century. These programs stimulate the creativity and innovation that have brought world leaderships and underlie the cultural intelligence that buttresses successful diplomacy. Support at least $154 million for the NEH in FY15.
SUPPORT FOR COMPREHENSIVE IMMIGRATION REFORM

Enacting Smart Policies to Strengthen Our Economy and Remain Competitive in the Global Economy

A well functioning immigration system is critical to our nation’s ability to grow its economy, strengthen families and communities, and uphold American values. It is also key to the continued success and prominence of the U.S. higher education system. Institutions such as the University of Rochester play a significant role in the education and training of international students and the recruitment of top scientists and researchers who help fuel discovery and advance our scientific research enterprise.

CASE FOR ACTION
As our foreign competitors build their knowledge base, it is important that we strengthen our commitment to international students and scholars who possess a tremendous desire to learn and to contribute to the diversity of ideas, perspectives, and innovative ways of thinking that will continue to drive our nation and help ensure the United States remains globally competitive. International students, scientists, and scholars encourage cultural exchange, contribute to the research enterprise, and add billions of dollars to the U.S. economy. For the 2013-2014 academic year, more than 2,000 international students from nearly 100 different countries of citizenship are enrolled at the University of Rochester in a variety of bachelor’s, master’s, and doctoral programs—approximately 20% of our student body population. These students go on to become leaders in business, academia, and government in their home countries, as well as in the U.S. According to a 2013 survey by the Association of International Educators (NAFSA), foreign students and their dependents contributed approximately $24 billion to the U.S. economy during the 2012-2013 academic year, including more than $2.8 billion in New York State alone, for living expenses, books and supplies, transportation, health insurance, and support for accompanying family members.

SUPPORT FOR COMPREHENSIVE IMMIGRATION REFORM
Comprehensive immigration reform is essential to realizing the full economic, scientific, and cultural contributions international students, scholars, and researchers bring to this country. We applaud the Senate for passing comprehensive reform legislation last year that established a clear path to green card status for advanced science, technology, engineering, and mathematics (STEM) degree graduates of U.S. colleges and universities, streamlined the H-1B temporary worker program, and removed barriers to higher education and provided a clear path to citizenship for undocumented students, along with fair and just border security practices. We urge the House of Representatives to pass comprehensive reform legislation, or pass these critical components of reform in piecemeal fashion so that our nation can attract and retain top talent from around the world.

STREAMLINE THE PATH TO GREEN CARD STATUS FOR U.S.-EDUCATED ADVANCED STEM GRADUATES
While the United States is the leading host for international students in STEM fields, the global competition for talent has intensified. We urge Congress to establish a clear and streamlined path to green card status for advanced degree graduates of U.S. colleges and universities that eases backlogs and allows the “best and brightest” to remain here to utilize their skills and contribute to our economy, rather than compete against us.

PREERVE THE HIGHER EDUCATION H-1B CAP EXEMPTION
The H-1B program is designed to allow U.S. employers to hire foreign nationals on a temporary basis to fill highly specialized positions within our workforce. In recent years, the number of H-1B petitions filed has reached the maximum of 65,000 within the first few weeks the program is opened. Applications for 2014 visas were exhausted just five days after the visas became available, and now employers must wait until next year to hire workers using an H-1B again. Please preserve the higher education H-1B cap exemption, and create an uncapped exemption for advanced degree holders from U.S. institutions of higher education and physicians in training to allow us the ability to continue to fill critical positions and alleviate temporary shortages in areas such as health care, teaching, and research.

URanks among the top U.S. institutions in international student enrollment with more than 2,000 international students in the 2013-2014 academic year.

SUPPORT THE DEVELOPMENT, RELIEF AND EDUCATION OF ALIEN MINORS (DREAM) ACT
Removing barriers to higher education would allow these undocumented students, who are here through no fault of their own, to achieve their full academic potential and become full participants in American society and the workforce. In the absence of federal legislation, the University of Rochester applauds the Administration’s implementation of the Deferred Action for Childhood Arrivals (DACA) program to temporarily eliminate the possibility of deportation for many youths who would qualify for relief under the DREAM Act, and ensure our nation’s enforcement resources are not expended on these low priority cases. We urge Congress to pass the DREAM Act.

SUPPORT SMART ENFORCEMENT POLICIES
Effective border security and interior enforcement are essential to a functioning immigration system and our national security, but must be done both smartly and effectively so as to ensure public safety in a fair and just manner. Effective border security must include sound and rational policies with clear metrics that will continue to facilitate legitimate travel and trade, and protect the rights of both our citizens and visitors along the northern and southern borders, including the Rochester region. Checks and detentions of our foreign students, researchers and faculty who are in the United States legally cause undue hardships and create an unfriendly environment that disrupts research and educational activities at the University. We urge continued cooperation and communication between the University’s International Services Office and the U.S. Border Patrol’s Rochester Station to mitigate any improper detentions of our students, faculty, and staff.
SUPPORT FOR ADVANCED MANUFACTURING
Accelerating Investment in Emerging Technologies to Revitalize American Manufacturing and Create Jobs

To ensure future economic growth and success in our region and across the nation, we must create a fertile environment for innovation that allows R&D and manufacturing to thrive. By expanding our capabilities and infrastructure, focusing our efforts to address cross-cutting challenges, training a 21st workforce with the skills necessary to succeed in a global economy, and catalyzing development of new technologies and manufacturing innovation to accelerate commercialization, we will create jobs and better compete. Bringing together federal research agencies, universities and industry to bolster relevant research agendas and technological opportunities will help revitalize U.S. leadership in advanced manufacturing.

The University is committed to helping rebuild the upstate New York economy and the optics, photonics and imaging manufacturing sector of the Rochester economy, as well as preserve and revitalize Eastman Business Park – one of the largest industrial parks in the nation. The Rochester region is home to the world’s greatest concentration of companies, university programs, and individual know-how in optics, photonics, and imaging that has been built up over the last 150 years.

UNIVERSITY OF ROCHESTER AND ADVANCED MANUFACTURING IN THE FINGER LAKES REGION

Last year, the National Research Council issued a landmark report, Optics & Photonics, Essential Technologies for Our Nation, on the importance of optics and photonics to our nation’s future. This 200-page report outlines the many ways that optics and photonics technologies are used in a wide range of industrial sectors, and the significant impact optics and photonics have on the national economy will remain critical to ensuring a U.S. leadership position in these fields.

The Rochester-Finger Lakes region is an internationally recognized center for optics, photonics, and imaging innovation, and has the ability to lend its strengths to lead our nation in areas such as national defense, healthcare, high speed data communication, precision metrology, and energy. The optics and photonics cluster in Rochester is one of the oldest, largest industrial clusters in the nation. Today, there are over 60 companies including companies like Kodak, Xerox, B&L, ITT Exelis, and Carestream, employing 24,000 people covering everything from basic optics and photonics to imaging and display applications. Over 50 of these companies are small- and medium-sized companies that produce very important parts in the supply chain in support of large industrial manufacturing. In 2010, the cluster manufactured over $5 billion in goods, making up over 50% of the region’s total manufacturing output and nearly 10% of all of New York State’s output.

Industry support and growth is fueled, in part, by strong academic support by significant leading research programs at the Institute of Optics, the nation’s premier optics school which is a part of the University of Rochester’s Hajim School of Engineering and Applied Sciences. The Institute of Optics has as strong record of entrepreneurship and technology commercialization. A recently conducted survey revealed that 129 alums, staff and faculty have started 193 companies - one third, of which, are in Rochester.

The United States has been the world leader in developing photonics technology for the past century. Fiber optics, photovoltaics, lasers, digital imaging, flat panel displays, and many other photonic technologies were all invented in the United States. However, the U.S. share of photonics manufacturing has dropped significantly. Today the U.S. manufactures only 10% of all photonics components in the world. U.S. market share in PV dropped from 30% in 2000 to less than 5% today, and there is no flat panel display manufacturing left in this country. Nowhere has the movement of photonics manufacturing offshore been more pronounced than in New York State, and the Rochester region in particular. New York State, led by Kodak, Xerox, Bausch + Lomb, and IBM, has been the center of the photonics industry in the U.S. for over 100 years. Recent downsizing by some of the large companies, due in part to the rapid evolution of photonics, has cost tens of thousands of jobs and has idled a vast amount of photonics manufacturing infrastructure. Reversing this trend requires that the U.S. develop advanced optics, photonics, imaging and display manufacturing technologies.

The University has begun to leverage federal funding to support advanced manufacturing jobs and innovation in the Finger Lakes region. In 2012, a University-led consortium was selected for one of 10 grants awarded under...
SUPPORT FOR ADVANCED MANUFACTURING

Accelerating Investment in Emerging Technologies to Revitalize American Manufacturing and Create Jobs

the Advanced Manufacturing Jobs and Innovation Accelerator Challenge sponsored by five different federal agencies (EDA, NIST, DOE, ETA, and SBA). This three-year, $2.6 million program, entitled the Rochester Regional Photonics Accelerator, strengthens the Rochester photonics cluster with a focus on the region’s small optics manufacturers. The Rochester Regional Photonics Accelerator leverages regional strengths in education, workforce training, technology development, and incubation to accelerate the growth of the optics, photonics, and imaging companies and stop the net loss of jobs stemming from the downsizing of some larger companies in the area.

The University, in partnership with several other colleges and universities, NY Photonics – a consortium of more than 100 optics companies, Eastman Kodak, the City of Rochester, and others— has also taken the lead in helping to rebuild the region’s manufacturing sector by applying for funding under the NIST Advanced Manufacturing Technology Consortium program and the EDA Investing in Manufacturing Community Partnership planning program. We thank our Congressional delegation for their consistent support for our efforts to help revitalize the optic, photonics, imaging, and display manufacturing sector in New York State.

SUPPORT THE CREATION OF NATIONAL NETWORK OF MANUFACTURING INNOVATION HUBS

We applaud the President’s recent announcement to create four additional high-tech manufacturing hubs in the U.S. to help spur domestic job growth. These centers would bring together the best talents from a wide variety of partners from manufacturers, higher education, government, economic development organizations, and other stakeholders to develop sustainable manufacturing innovation hubs to create, showcase, and deploy new capabilities, products, and processes to improve commercial production. In 2012, the University, in partnership with public and private partners, responded to the federal government’s initial request for information, proposing an Institute for Manufacturing Innovation in Optics, Photonics, and Imaging to develop scalable manufacturing technologies for optics, photonics, imaging, and display industries that would drive innovation and have critical applications in the defense, energy, healthcare, and information technology sectors. We continue to urge the Administration to designate a high-tech hub in optics, photonics, imaging, and displays, and ask Congress to pass the Revitalize American Manufacturing and Innovation Act of 2013 (H.R. 2996 and S. 1468) to create a National Network of Manufacturing Innovation Program, to launch even more hubs in the future.