Statement of

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Subcommittee on Border Security and Immigration
Committee on the Judiciary
United States Senate

Hearing on
Student Visa Integrity: Protecting Educational Opportunity and National Security

June 6, 2018
Chairman Cornyn, Ranking Member Durbin, and members of the Subcommittee, thank you for
the opportunity to appear before you this afternoon on behalf of NAFSA: Association of
International Educators.

As the largest association of international education professionals, NAFSA was founded 70 years
ago on the principle that global learning leads to a more engaged and welcoming United States, a
more responsive and participatory government, and a more secure and peaceful world. We are
proud to work with individuals within institutions of higher education to facilitate study abroad
by American students and to welcome international students and scholars to U.S. campuses and
communities. Our nearly 10,000 members, located at virtually every U.S. higher education
campus in all 50 states and the District of Columbia, engage in the daily work of supporting
international educational opportunities for students and scholars. In their work, they see firsthand
how international students and scholars create jobs, drive research and innovation, enrich our
classrooms, strengthen our national security, and serve as America’s best ambassadors and allies.

The Subcommittee’s efforts to ensure both an open and secure environment for internationally
collaborative study are appropriate and important. Universities and colleges take threats to U.S.
national security, as well as economic security and academic freedom, very seriously. NAFSA,
along with other higher education associations, stands ready to partner with you in this effort. It
is in our mutual interest to protect American universities and colleges and their knowledge
economies.
We are thankful that the Subcommittee is highlighting the existing national security infrastructure designed to catch bad actors as well as the measures taken by higher education institutions in order to comply with federal requirements. I would like to describe the types of precautions university and college officials are taking to protect national and institutional interests, but first, it is important to provide perspective on the scale of the problem and the potential unintended consequences associated with overly broad action.

There have been reports in the media about a small number of individuals who have taken advantage of their positions within U.S. institutions and taken knowledge offshore. Yet, we must be careful not to conflate the actions of those few individuals with the majority of international students and scholars studying in the United States. We commend the Federal Bureau of Investigation for consistently noting that while some individuals may pose risks, “Most foreign students, researchers, or professors studying or working at US universities are here for legitimate and proper reasons. Based on interviews, observations, defector information, and double-agent operations, the FBI concludes that only a small percentage of foreign students or visiting professors are actively working at the behest of their government or other organizations.”¹ Our nation hosts over a million international students a year who pose no threat and, in fact, are assets to our knowledge economy and individual communities all across the country.

Importance of Openness as Part of Security

As the Subcommittee further explores this issue, NAFSA encourages an approach that focuses on maintaining open educational environments that draw upon educational exchange as integral to our national and economic security. Over the past half-century, U.S. foreign policy leaders have consistently acknowledged that educational exchange is one of our nation’s most valuable foreign policy tools. Former Secretary of State Colin Powell has made the case clearly, stating: "I can think of no more valuable asset to our country than the friendship of future world leaders who have been educated here." Former Secretary of Defense Robert Gates said: “We cannot begin to understand other countries and deal with security challenges around the world if we don’t have leaders—not just in government but in other sectors as well—who understand those cultures and the history and something about those nations’ interests. And the best way that people can get a foundation for that is by having both direct experience and studying it in school. And I think it works both ways: we have had enormous success over the years with students coming to this country, including as adults to professional schools and professional military schools and learning about us. One extraordinary example is that of Anwar Sadat who had come to this country in the 1950s. He was so impressed that when he replaced Nasser as the president of Egypt, he began a historic turn away from the Soviet Union toward the United States. We’ve had that experience with Pakistani leaders; we’ve had it with a number of others such as Giscard d’Estaing, Helmut Kohl, and several others.”

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If students, particularly from strategic regions in the world, no longer come here, we will lose the ability for our country to build relationships with future leaders in other countries and strengthen our own national security. International students and scholars often become informal ambassadors when they return home, counteracting stereotypes about the United States and enhancing respect for cultural differences. In many cases, future U.S. and foreign leaders will have studied together, creating even more direct diplomatic ties.

In contrast to the very small number of individuals who might be engaged in unethical or illegal activity, the overwhelming majority of international students and scholars are helping to drive innovation to the benefit of U.S. higher education institutions and businesses, as well as the American people. To better describe the types of international students and scholars who are pursuing their studies or research in the United States, we urge the Subcommittee to consider the following illustrative examples of typical Chinese students and scholars:

- Nanshu Lu, originally from China, earned a Master of Science and Ph.D. from Harvard University. She is currently teaching U.S. students as an Associate Professor of Biomedical Engineering at the University of Texas at Austin. She developed a first-of-its-kind malleable "electronic tattoo" that can measure health data to allow for more accurate monitoring by doctors. The hair-thin, skin-soft, noninvasive, and long-term wearable electronic tattoos are able to fully conform to soft and curvilinear human skin for mobile sensing, stimulation, and energy harvesting. Dr. Lu has been recognized by the MIT Technology Review as one of 35 innovators under 35, and she was awarded the National
Science Foundation CAREER Award as well as the Air Force Office of Science Research Young Investigator Award.

- After earning her Ph.D. in environmental engineering at the University of Illinois at Urbana-Champaign, Qilin Li joined the Rice University faculty in 2006, where she continued her research on using solar energy and nanotechnology to develop energy-efficient water filtration, wastewater reuse, and desalination technologies. Working in collaboration with colleagues across Rice University, Li’s aim is to find a solution for a sustainable water supply. Currently, Li serves on several environmental science boards and committees, including the National Science Foundation’s Nanosystems Engineering Research Center for Nanotechnology Enabled Water Treatment and the Environmental Protection Agency’s Science Advisory Board’s Environmental Engineering Committee.

- Yinyong Li earned his Ph.D. at the University of Massachusetts Amherst, researching nanotechnology and the fabrication of advanced surfaces. He developed a biodegradable, waterproof coating that reduces fogging on glass surfaces at 10 times the effect of its competitors. Recognizing the marketability of this technology, he teamed up with his Ph.D. adviser, Dr. Kenneth Carter, and an undergraduate researcher at UMass Amherst, Marc Gammell, to form Treaty LLC, with the aim of mass-producing the technology for consumer use. Treaty LLC received several innovation grants, including from the National Science Foundation, and launched their product “FogKicker” to great success. FogKicker is targeted toward the athletic wear field, focusing specifically on goggles for diving and other sports, and it is now available on Amazon and in sporting goods stores across the United States.
• Dr. Judy Wu received her Ph.D. in Physics from the University of Houston in 1993. She is now a University Distinguished Professor within the College of Liberal Arts and Sciences - Physics and Astronomy at the University of Kansas where she works on nanoscience and superconductivity. Through collaboration with the electrical engineering and computer science departments at the University of Kansas, Wu developed high-efficiency, low-cost solar energy technology by attaching thin films of nanoparticles to highly conductive material, graphene, with the aim of making solar power more feasibly commercialized. Put simply, her work has made solar energy less expensive. She’s also developing technology to make computers more high-powered and energy-efficient. Wu is passionate about educating the next generation of innovators and has advised and supervised more than 180 researchers at the postdoc, graduate, undergraduate, and K-12 levels, with about one third of them women or others from under-represented groups. These examples illustrate the types of contributions international students educated in the United States are making to benefit our knowledge economy. In addition, international students have saved lives by redesigning an exit ramp known to cause traffic fatalities, helped prevent spina bifida through the use of folic acid, conducted joint research on flu vaccines, run research labs that give American students and scholars hands-on learning experiences, coached community sports leagues, run charity events to sponsor local children living in poverty, created small businesses that employ Americans, and more. According to the National Foundation for American Policy, nearly one-quarter of the founders of the $1 billion U.S. startup companies first came to America as international students.4 In 2016 alone, all six American winners of the Nobel

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Prizes in economics and scientific fields were immigrants. Since the year 2000, immigrants have been awarded 40% of the Nobel Prizes won by Americans in chemistry, medicine, and physics.\(^5\)

**International Students are Important to STEM Agenda**

The presence of international students and scholars at U.S. colleges and universities is critically important to the science, technology, engineering, and mathematics agenda of the United States. According to the Association of American Universities’ 2006 report, *National Defense Education and Innovation Initiative: Meeting America’s Economy and Security Challenges in the 21st Century*, we are encountering “growing competition from other nations – such as China and India – that are investing strategically in their manufacturing capabilities, expanding into service industries, and, most significantly, building state-of-the art research institutes and universities to foster innovation and compete directly for the world’s top students and researchers...The evidence of these problems is clear in both our own looming deficiencies and in the growing innovative capabilities of other nations. For example: Federal basic research funding in the physical sciences and engineering has been essentially flat, and has declined as a percentage of Gross Domestic Product over the past 30 years. The performance of American students in math and science declines as they reach higher grades and is significantly below that of many of our international competitors. Asia and Europe are expanding their capacity to educate and train scientists and engineers, thereby increasing competition for the best and brightest students. Both have surpassed the U.S. in the number of science and engineering (S & E) doctoral degrees awarded. U.S. students are far less likely to earn undergraduate science or

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engineering degrees than those in other countries. In a list compiled by the NSF, the U.S. ranked 16th out of 17 countries in the share of science and engineering degrees among all degrees awarded. (B)ecause an insufficient number of American students have chosen STEM-related careers, our nation has become overly dependent upon talent from abroad. Nevertheless, while developing U.S. talent will help restore a proper balance between U.S. and international talent – and is the primary focus of [the National Defense Education and Innovation] Initiative – it is essential that America continue to attract and retain the best and brightest from around the world.”

We urge Congress and U.S. higher education to heed the warnings and recommendations in this report.

**Contributions to U.S. Economy and Job Creation**

In addition to the innumerable academic, scientific, and foreign policy benefits, international student contributions to the U.S. economy are also vast, having contributed nearly $37 billion last year, according to the NAFSA’s latest analysis, which is also broken down by congressional district and state. According to these same data, international students studying at American colleges and universities also created or supported over 450,000 U.S. jobs. Chinese students alone contributed $12 billion, even though they comprise only 1.7% of total U.S. higher education enrollment. Importantly, international student and out-of-state tuition allows public universities and colleges to keep tuition lower for in-state students, particularly in states that

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have experienced severe state budget cuts. Simply stated, our academic institutions and our economy depend on the presence of international students and scholars to create jobs, drive innovation and research, and broaden the perspectives of American students.

**Competition from Other Nations**

In considering additional steps to deter bad actors, we urge the Subcommittee to ensure that these same steps do not unintentionally deter talented, legitimate international students from choosing U.S. institutions for their academic pursuits. There are very real consequences associated with slowing the pipeline of talent to the United States. The United States is already losing overall market share of internationally mobile students. Countries like Australia and Canada have worked to welcome international students, and their efforts have paid dividends. In its March 29, 2018, press release entitled Canada’s Brain Gain, Round 2, the Canadian government boasts of recruiting top-level researchers from Harvard University, Indiana University, Brown University, the University of California-Irvine, Johns Hopkins University, the University of California-Santa Barbara, Duke University, and the University of Michigan. “The results of this competition show that the most promising researchers and scholars, including Canadian expatriates, are choosing Canada as the best place to conduct ground-breaking research that will lead to new jobs, new skills and new ways of understanding the world around us…They see that Canadians respect the work of researchers who create new knowledge and help train the next generation of students. They understand that the Government of Canada has made science a priority following unprecedented investments in basic science through Budget 2018 that will further our capacity to
innovate and lead to the jobs of the future.”\textsuperscript{9} Canada’s approach to recruitment of top talent demonstrates how important it is for top U.S. policymakers to avoid rhetoric or policies that makes us appear unwelcoming, uninvested in science, or isolationist. As we compete globally for talent, we must avoid shooting ourselves in the foot. Treating students and scholars broadly as a threat and imposing more and more unnecessary requirements without any demonstrable national security benefit makes us weaker and less secure.

We urge the Subcommittee to avoid enacting policies that would lead to yet further decline in international student enrollments in U.S. institutions. America depends on a pipeline of talent from around the world, and yet, recent trends indicate that this valuable academic resource may be at risk. First-time international graduate student enrollment in the U.S. was down for fall 2017, the first such decline in over 10 years.\textsuperscript{10} First-time overall enrollments also dropped 3.3%, according to the Institute of International Education’s most recent \textit{Open Doors} report sponsored by the U.S. State Department, a trend that will likely have long-term consequences. Among the causes for the declines were visa issues and “feeling unwelcome in the United States.”\textsuperscript{11} Undoubtedly, further decline will have negative economic impacts on our country. Results from a survey of 1,815 students from 154 different countries conducted by StudyPortals in November 2017 indicate that international students find study abroad in the United States less attractive.

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given travel bans, restrictions on employment visas, stricter immigration policies, and the repeal of DACA.

Other nations are not only actively investing in their science and research education programs and recruiting talent from abroad, but they are also making it easier to retain top talent, causing the United States to risk losing our innovation edge. Following graduation, foreign students can work for a time period equal to the period they studied in Canada, up to a maximum of three years. Work experience considered “skilled” helps graduates qualify for legal residence in Canada. In Australia, students can work for up to 18 months after graduation. Graduates of certain high-need occupations are able to work longer, for up to four years. And in 2008, China set a target of bringing half a million foreign students to its shores by 2020; in 2015, enrollment was already just below 400,000. Foreign students graduating with a master’s degree or above in China are immediately eligible to apply for work visas within one year of graduation. The solution to protecting our economic edge is not to close our doors, but rather, to focus on policies that help U.S. institutions and businesses to attract and retain the best and brightest global talent.

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Why Does This Competition Matter? Why is it important to attract international students and scholars to the United States?

First, it promotes U.S. foreign policy and international leadership. The United States needs friends in the world—and educational exchange is a proven means of making friends. International students and scholars often return home with an appreciation for the United States and a network of personal connections to our country. Over the past half-century, U.S. foreign policy leaders have consistently acknowledged that educational exchange is one of our nation’s most valuable foreign policy tools.

Second, attracting international students and scholars is an important way that the United States grows its knowledge economy. In an era of competition for scarce global talent, the countries that draw the world’s best and brightest to their universities are the countries that will have the best talent pool from which to fill their cutting-edge jobs. The countries that create the most attractive environment for the world’s finest scientists will do the most to enhance their scientific leadership. Indeed, the very diversity that we gain through openness to international talent itself fuels innovation and creativity. Third, educational exchange benefits U.S. education. International students and scholars enrich their institutions and enable American students to have contact with other cultures and ways of thinking. Graduate students contribute to science instruction and research on their campuses. International scholars bring global expertise and the international dimensions and perspectives of their disciplines. Most important, in all of these ways, educational exchange enhances U.S. security. Immediately after 9/11, Americans feared that educational exchange threatened our national security. In fact, it is integral to our security; it is an investment we make to create a world in which we can be secure. We believe that U.S.
government and political leaders agree that attracting international students and scholars
provides these benefits. What is necessary is to translate their strong public statements to that
effect into concrete, strategic actions that will enhance the U.S. position in the crucial
competition for international students and scholars.

Institutions of Higher Education Comply with Existing Law and Regulations

As I mentioned earlier, we would like to provide more background on the topic of how seriously
university and college officials approach export and sensitive technology compliance issues.

Institutions of higher education comply with existing law and regulations, including those
implemented by the Department of State through its International Traffic in Arms Regulations
(ITAR), the Department of Commerce through its Export Administration Regulations (EAR),
and the Treasury Department through its Office of Foreign Assets Control (OFAC). As my
fellow witness will illustrate, most go above and beyond existing requirements to
ensure compliance. The specific processes followed will vary institution to institution, as each
institution will develop protocols that meet their particular needs. All will have dedicated staff,
such as an export control officer or a vice president for research, who oversee the institution's
policy on export controls. This is in addition to having dedicated staff (Designated School
Officers and Responsible Officers) to ensure compliance with federal immigration regulations.

U.S. Universities and the "Fundamental Research" exception

As expressed earlier, open collaboration and the free exchange of ideas are fundamental to the
culture of America’s research universities. It is through this culture of openness that the United
States has thrived, serving as fertile ground where innovative and groundbreaking ideas are brought to life. For this reason, current export control regulations allow for exceptions involving “fundamental research.” This is an important exception for U.S. colleges and universities and for the science and innovation agenda of the United States. Fundamental research is considered to be any university-based research conducted by scientists, engineers, or students at any accredited U.S. institution of higher education where the resulting information is ordinarily published and shared broadly with the scientific community. This exception derives from the National Security Decision Directive 189, National Policy on the Transfer of Scientific, Technical, and Engineering Information, which states: "fundamental research means basic and applied research in science and engineering, the results of which ordinarily are published within the scientific community, as distinguished from proprietary research and from industrial development, design, production, and product utilization, the results of which ordinarily are restricted for proprietary or national security reason." Issued in 1985 by the Reagan Administration and reaffirmed in November 2001 by then-National Security Advisor Condoleezza Rice, the policy established classification as the appropriate means of protecting national security while encouraging necessary research.

Not all university research falls within this definition, but it covers a majority of activities on a U.S. campus. Research performed on U.S. university premises normally will be considered as fundamental research unless the university or its researchers accept sponsor restrictions on publication of scientific and technical information resulting from the project or activity. As a

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result, most U.S. universities will avoid engaging in classified or restricted research, as the close coupling of research and education at universities and the need to freely exchange the new ideas that flow from scholarly discourse require that access to laboratories and classrooms be unimpeded.

U.S. institutions of higher education often make strategic decisions regarding the extent and scope of required export control reviews on campus. Some institutions require that all foreign nationals undergo a review, regardless of nationality; others will be more focused, requiring review only of those who will be involved either in federally funded research or exposed to certain types of technology or technical data that require the individual be licensed. For example:

- At a public university located in the U.S. south, all prospective H-1B, J-1 scholars, and B-1 visitors, regardless of citizenship, undergo a review by the University's export control officer to make sure that the prospective scholar or visitor or the field of research is not on any list, such as the U.S. Munitions List, Commerce Control List, the Denied Persons List, the Entity List, Unverified Parties List, the List of Specially Designated Nationals List, and the State Department’s list of debarred parties. Department sponsors are required to review a training module and the university's export control website before preparing the visa petition.

- At a major U.S. research institution located in the Midwest, all H-1B faculty and J-1 research scholar applicants are required to be reviewed for need for export control licenses. This policy has been in place since 2011, when DHS added an export control attestation question to the visa application form for H-1Bs; the institution took the
step to include J-1s to be further vigilant. Export control reviews are handled by the university's export control officer.

• At another major midwestern U.S. public university, there are several protocols in place. Due to heightened awareness and strong interest in protecting intellectual property, the university, using the *Visual Compliance* online database (www.visualcompliance.com), runs visual compliance checks prior to engaging any new partner university (in China or elsewhere). They also run separate visual compliance screenings for all signatories for agreements, as well as for incoming participants in delegations from China, or people university officials plan to meet in China. When the university plans trips, they vet the itinerary in advance to ensure awareness of any IP issues or export control violations, ITAR issues, etc. Whenever there is a “hit” in the database, the General Counsel’s office is consulted for expertise and connections to the security industry to ensure the right path. The university does the same prior to issuing visiting scholar immigration documents to scholars from China (or elsewhere), as well as for all international research or faculty hires at the institution (in addition to export control screening more broadly). These efforts are combined with the U.S. State Department’s enhanced vetting and screening procedures at the U.S. consular offices abroad.

**Additional Screening Procedures**

The immigration system itself also has security redundancies built in to the process. The U.S. Department of State has the authority and discretion to issue visas; however, the issuance of a visa is no guarantee of entry to the country. Whether to admit an international student, or other visitor, is the sole decision of the Customs and Border Protection (CBP) official of the
International students are the most vigorously vetted because, unlike all other immigrants or nonimmigrants, they are tracked from the moment they are admitted to U.S. higher education institutions until they complete their studies. This tracking is conducted by Immigration and Customs Enforcement (ICE) within DHS through the Student and Exchange Visitor Program (SEVP) and the Student and Exchange Visitor System (SEVIS).

Prospective international students may only apply for admission to higher education institutions that are approved by ICE to admit international students. After admission, the SEVIS-approved school must issue a Form I-20, “Certificate of Eligibility for Nonimmigrant Student Status,” to the prospective student. International students are required to apply for visas, so the ICE-issued form is a key piece of evidence needed for the DOS visa interview.

When an international student or exchange visitor is issued a visa by DOS and admitted by DHS at the port of entry, SEVIS tracking begins for each individual student. The SEVIS system automatically alerts the school to expect the student on campus. Students are required to check in, and the school is required to register them in SEVIS upon arrival on campus. If the student does not arrive, ICE is made aware of this through SEVIS. Ongoing enrollment must be reported in SEVIS each term or semester. The students’ level of education and areas of study are recorded in SEVIS. International students must comply with the requirements of their immigration status,
which includes maintaining a full-course of study. Failure to do so is recorded in SEVIS. Further, if students avail themselves of optional practical training, that information is recorded in SEVIS.

To ensure compliance in an ever-changing regulatory environment and to provide accurate advice to students and scholars, NAFSA’s members engage in an unending effort to educate themselves, their campuses, and their students about the intricate and overlapping policies and requirements for maintaining SEVIS and immigration status. NAFSA members take their responsibility seriously—to their students, their institutions, and their country.

Export control requirements are on top of the existing SEVIS reporting, resulting in a thorough vetting and tracking system.

**Conclusion**

At NAFSA, we share your commitment to protecting the security of citizens while promoting an open educational system that has served as the backbone for economic growth for centuries. As you consider additional measures, we urge the committee to strive for an outcome that facilitates even more robust exchange opportunities while simultaneously ensuring the oversight of strong security measures. Policy changes made today should be carefully considered as they will affect our nation’s competitiveness for years to come. Thank you for the opportunity to appear before you today. I look forward to answering any questions you may have.
Addendum:

A range of press articles have focused on the ways in which the United States is at risk of losing foreign talent to other nations:

Cheng, Yangyang. “Don’t close the door on Chinese scientists like me.” Foreign Policy, June 4, 2018.


Thompson, Bennie G. “Trump’s racially charged, xenophobic words hurt our economy. Will that make him stop?” USA Today, March 2, 2018.


Kaufman, Ted. “Immigration crackdown will have unintended consequences.” *Delaware Online*, February 9, 2018.


America Needs International Students and Scholars

The United States is in a competition for global talent with other countries. We are losing our market share of international students and scholars, while many other countries are proactively introducing national policies and marketing strategies in order to attract these talented individuals.

What Congress Can Do to Help Our Universities Compete

America needs *welcoming and commonsense* immigration policies; uncertainty hinders our competitive edge.

Congress should **exercise oversight** over the Department of Homeland Security, the Department of Justice, and the State Department to ensure these agencies:
- Allow students to gain experiential learning opportunities
- Ensure timely and predictable visa processing
- Strategically use resources to focus on those who pose a threat and not on vetted students who enhance our security and economy

Congress should support bills that **make us a more welcoming nation**

We urge Congress to **protect practical training and make more green cards available** for students who graduate from our universities.

**SOURCES**
1 tinyurl.com/AU-PostStudyWorkArrangements | 2 tinyurl.com/CA-StayPostGraduation | 3 tinyurl.com/CN-PostStudyWorkGraduates
International Students Contribute to Our Economy and American Innovation

International Students Grow the U.S. Economy

While international students make up only 5% of overall U.S. college enrollments, they make significant contributions to our communities.

International students contributed nearly $37 billion to the U.S. economy last year.

International students created or supported over 450,000 U.S. jobs. That’s three jobs for every seven international students.

Nearly one-quarter of the founders of the $1 billion U.S. startup companies first came to America as international students.

International Students Help America Lead in Innovation

For America to remain the leader in scientific discovery, we must continue to attract the best and brightest from around the world.

U.S. productivity is generated largely by advances in technological improvements. Technological improvements are largely driven by the rate of innovation.

In 2016, all six American winners of the Nobel Prizes in economics and scientific fields were immigrants.

Immigrants have been awarded 40% of the Nobel Prizes won by Americans in chemistry, medicine, and physics since 2000.

Sources:
1. tinyurl.com/BrainsWithoutBorders | 2,3. tinyurl.com/NAFSAEconomicValueTool | 4. tinyurl.com/ImmigrantBillionDollarStartups | 5,6. tinyurl.com/IntlStudentContributions | 7,8. tinyurl.com/ImmigrantsNobelPrizes