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**Guidance for Employing Foreign Citizen
Scientists and Engineers at Department
of Defense Science and Technology
Reinvention Laboratories**

Asha Balakrishnan
Susannah V. Howieson
Elizabeth C. Lee

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1899 Pennsylvania Ave., Suite 520
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Executive Summary

The United States depends on national security science, technology and engineering carried out at Department of Defense (DOD) laboratories, centers, and agencies to help respond to increasingly complex threats and support rapid technology developments. DOD laboratories employ scientists and engineers from a wide range of technical specialties, including engineering, computer science, as well as the physical and life sciences.

The National Security and International Affairs Division of the White House Office of Science and Technology Policy (OSTP) asked the IDA Science and Technology Policy Institute (STPI) to investigate and document the existing legal framework, immigration routes, and security clearance options for employing noncitizen scientists and engineers when qualified U.S. citizens cannot be found to fill science, technology, engineering, and mathematics (STEM) positions. Laboratory directors at the Department of Defense (DOD) Science and Technology Reinvention Laboratories (STRs)¹ may hire foreign nationals under special authorities. This document clarifies existing policies to serve as a reference for those organizations wishing to take advantage of this opportunity.

Background

Given technology globalization, many foreign citizens have enrolled in U.S. colleges and universities to pursue advanced STEM degrees. The U.S. Government funds graduate research of foreign students in areas of STEM of interest to the DOD. However, newly educated foreign STEM researchers are not easily able to work at DOD STRs after graduation. Foreign nationals must not only navigate the complex immigration process in order to work legally in the United States, they must also meet security requirements to work at national security organizations. DOD STRs are permitted to hire noncitizens in certain situations (as are all Federal organizations), but most national security positions require a security clearance, which is prohibited to noncitizens.

The current national science and engineering workforce is primarily made up of U.S. citizens; however, qualified foreign scientists and engineers can fill critical positions

¹ The National Defense Authorization Act of FY 1995 (Public Law 103-337) allowed the Secretary of Defense to carry out personnel demonstration projects at selected DOD laboratories, called the Science and Technology Reinvention Laboratories. The STRs include the Army Research Laboratory, Air Force Research Laboratory, and the Office of Naval Research, among many others.

at STRLs in cases where U.S. citizens with the requisite skills are unavailable. The lack of access to classified information limits the research depth and topics noncitizen STRL researchers can address, although such access may be obtained through a Limited Access Authorization (LAA) in “rare circumstances.”²

Working Group

On June 5, 2012, OSTP convened a workshop to discuss issues related to hiring noncitizen scientists and engineers. Attendees included over 25 representatives from DOD laboratories, the Office of the Under Secretary of Defense for Personnel and Readiness, the Office of the Assistant Secretary of Defense for Research and Engineering, the Department of Homeland Security’s Office of U.S. Citizenship and Immigration Services, and the Executive Office of the President’s Office of Management and Budget and Domestic Policy Council.

Subsequently, a working group was established to clarify the paths by which both foreign national students studying in the United States and exceptional foreign national scientists and engineers could apply for employment at a DOD STRL and potentially gain U.S. citizenship. Led by OSTP, the working group included volunteers from the organizations represented at the workshop. The group met over a 6-month period in 2012 to investigate and document available mechanisms by which DOD laboratories could access foreign national science and engineering talent.

Guidance Document

STPI researchers supported the working group by providing background materials on immigration pathways, investigating hiring authorities, and analyzing processes available to the STRLs to provide foreign citizens access to classified materials when needed. STPI conducted interviews and reviewed current legislation to help support the development of this guidance document. The document outlines existing laws and regulations and clarifies current processes and procedures for employment, immigration, and access to classified materials by foreign national scientists and engineers at STRLs when eligible and qualified U.S. citizens are not available.

Highlights of these processes and procedures follow:

- *Hiring foreign nationals.* Federal agencies have authority to hire foreign citizens as U.S. Government employees if the appointment is approved by the Director of the Office of Personnel Management. Laboratory directors at DOD STRLs may obtain local authority to hire foreign citizens if their laboratories adopt the

² See DOD 5200.2-R, “Personnel Security Program,” C3.4.3.1., January 1987, and Title 32 of the Code of Federal Regulation § 154.16(c), which describe the LAA process.

foreign citizen hiring flexibilities of the Naval Research Laboratory's Personnel Management Demonstration Project. Once local authority for noncitizen hiring has been adopted, STRL personnel can post a job announcement for a vacant science or engineering position on the USAJobs website, a portal managed by the U.S. Office of Personnel Management.

- *Navigating immigration.* STRLs can sponsor foreign workers under the several different nonimmigrant and immigrant visa classifications:
 - F-1: Academic Student with Optional Practical Training
 - H-1B: Temporary Worker
 - O-1: Individual of Extraordinary Ability
 - J-1: Exchange Visitor
 - EB-1: Individual of Extraordinary Ability
 - EB-2: Professional with Advanced Degree and Individual of Exceptional Ability
 - EB-3: Skilled Worker, Professional, and Other Worker

Employment requirements, minimum length of stay, and numbers of visas issued vary depending on visa classification. Depending on the path the foreign student or foreign worker takes, naturalized citizenship can take from 5 years to over 12 years. Wait times depend on a student's country of origin and the availability of a visa number in the preference category.

- *Gaining access to classified materials.* In rare circumstances, non-U.S. citizens can be granted access to classified information through a Limited Access Authorization. Immigrants who have obtained U.S. citizenship are eligible for applying for a security clearance, provided they are willing to renounce all other citizenships.

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1. Introduction

The United States depends on national security science, technology and innovative engineering carried out at Department of Defense (DOD) laboratories, centers, and agencies to help respond to increasingly complex threats and support rapid technology developments. DOD laboratories employ scientists and engineers from a wide range of technical specialties, including engineering, computer science, and the physical and life sciences.

The National Defense Authorization Act of FY 1995 (Public Law 103-337) allows the Secretary of Defense to carry out personnel demonstration projects at selected DOD laboratories, called the Science and Technology Reinvention Laboratories (STRs). These STRs include the Army Research Laboratory, the Air Force Research Laboratory, and the Office of Naval Research, among many others.

The National Security and International Affairs Division of the White House Office of Science and Technology Policy (OSTP) asked the IDA Science and Technology Policy Institute (STPI) to help investigate and document the existing legal framework, immigration routes, and security clearance options for hiring noncitizen scientists and engineers for positions at the DOD STRs. This document serves as a reference for those DOD organizations interested in hiring a noncitizen when qualified U.S. citizens cannot be found to fill science, technology, engineering, and mathematics (STEM) positions.

A. Background

The DOD science and technology and broader U.S. Government research programs have a mission to support and perform cutting-edge research and development activities requiring a highly trained and skilled workforce, particularly in STEM fields. The current Federal science and engineering (S&E) workforce is primarily made up of U.S. citizens. However, qualified foreign scientists and engineers can fill critical positions at STRs in cases where U.S. citizens with the requisite specialty skills are unavailable.

Given technology globalization, many foreign citizens have enrolled in U.S. colleges and universities for advanced STEM degrees. The U.S. Government funds the graduate work of many STEM foreign students in technical areas of interest to the DOD. In recent years, the DOD has supported close to two billion dollars of research annually

conducted at U.S. universities, colleges, and nonprofit institutions.¹ The National Science Foundation reported in 2012 that in most S&E occupations, the proportion of the workforce that is foreign born increased with higher degree levels and this relationship was strongest among computer and mathematical scientists and engineers.²

However, newly trained foreign STEM workers are not easily able to conduct research and engineering work at DOD organizations after graduation.³ Foreign nationals must not only navigate the complex immigration process in order to work legally in the United States, they must also meet security requirements to work at national security organizations. DOD STRLs are permitted to hire noncitizens in certain situations (as are all Federal organizations), but most national security positions require a security clearance, which is prohibited to noncitizens.

The inability of noncitizen scientists and engineers to access classified information limits the research depth and topics they can address. Although access to classified information for these individuals can be acquired through a Limited Access Authorization (LAA), as described in Title 32 of the Code of Federal Regulation (CFR) § 154.16(c), LAAs are approved only in “rare circumstances,” as described more fully in Chapter 4. The Naval Research Laboratory (NRL) has been hiring noncitizens for over a decade under its Laboratory Personnel Management Demonstration Project. Since none of the 17 noncitizens hired in the last 10 years has received an LAA, these foreign nationals were able only to assist the U.S. national security research mission in unclassified areas until they obtained citizenship.

B. Purpose

Over the last 3 years, staffs of the OSTP and the military departments have discussed establishing a pilot program under which the DOD STRLs could offer “expedited citizenship for service.” The pilot program would enable a small number of foreign scientists and engineers to obtain U.S. citizenship in return for employment as civil servants or for service as officers in the Reserves or active military. Foreign national scientists and engineers who obtained U.S. citizenship this way would become eligible to apply for a security clearance and, once authorized, could work on a full range of national security research efforts.

¹ National Science Foundation, *Survey of Federal Science and Engineering Support to Universities, Colleges, and Nonprofit Institutions*, WebCASPAR, <http://www.nsf.gov/statistics/srvyfedsupport/>.

² National Science Foundation, National Science Board, *Science and Engineering Indicators 2012*, (NSB 12-01), <http://www.nsf.gov/statistics/seind12/pdf/seind12.pdf>.

³ National Academy of Engineering and National Research Council, *Assuring the U.S. Department of Defense a Strong Science, Technology, Engineering, and Mathematics (STEM) Workforce*. Washington, D.C.: The National Academies Press, 2012.

On June 5, 2012, OSTP convened a workshop to discuss issues related to hiring noncitizen scientists and engineers. Attendees included over 25 representatives from DOD laboratories, the Office of the Under Secretary of Defense for Personnel and Readiness (OUSDP&R), the Office of the Assistant Secretary of Defense for Research and Engineering (ASDR&E), the Department of Homeland Security's Office of U.S. Citizenship and Immigration Services (USCIS), and the Executive Office of the President's Office of Management and Budget (OMB) and Domestic Policy Council.

At the workshop, OSTP initially proposed establishing a pilot program to expand the DOD Military Accessions Vital to the National Interest (MAVNI) program⁴ to include foreign national scientists and engineers with STEM skills needed by the DOD. The National Defense Authorization Act for Fiscal Year 2012 (Public Law 112-81, § 905) mandated a study to explore the use of MAVNI or other mechanisms to employ non-U.S. citizens with specific critical scientific and technical skills within the DOD as uniformed personnel or as civilians or within the broader defense industrial base.

After discussing the MAVNI expansion option, most participants concluded that (1) foreign national scientists and engineers would not provide effective operational support for current military operations, and (2) there are no clear career ascension paths for scientists and engineers in the Reserves. The consensus was to establish a working group to clarify paths by which foreign national students studying in the United States and exceptional foreign national scientists and engineers could apply for employment at a DOD STRL and potentially gain U.S. citizenship via a nonmilitary immigration mechanism.

OSTP therefore established and led a working group whose membership included volunteers from the organizations represented at the workshop—OUSDP&R, ASD(R&E), USCIS, and OMB—as well as personnel, security, and hiring specialists from the STRLs. The working group's purpose was to investigate and document

⁴ Title 10 United States Code (U.S.C.) § 504(b)(2) gives authority to the secretaries of the military departments to recruit legal noncitizens (such as student and work visa holders, asylees, and refugees), if they are considered vital to the national interest. Title 8 U.S.C. § 1440 allows the naturalization of such individuals (non-green card holders) if they serve honorably on active-duty status during a period of time when the President, by Executive order, has designated that the nation is at war (or in an armed conflict with a hostile force). In November 2008, the Secretary of Defense authorized the military departments to use these authorities through the MAVNI program to attract health care professionals in specialties for which a department had a critical shortfall and persons with special language or cultural backgrounds necessary to current and future military operations. The MAVNI program is overseen by the Under Secretary of Defense for Personnel and Readiness, and the Army has the largest number of MAVNI allocations. The MAVNI program has been used to attract 789 soldiers with language skills and 143 health care professionals into Army service. The Army has worked with the Department of Homeland Security to reduce the time to process a citizenship to 8–10 weeks. Citizenship can be revoked if the enlistee fails to serve honorably for 5 years. MAVNI participants are required to enlist for set periods of active duty or reserve service, depending on their specialty and type of service.

currently available civilian mechanisms by which DOD laboratories could access foreign national S&E talent. This guide is the result of 6 months of discussions by the working group. It outlines existing laws and regulations and clarifies current processes and procedures for the DOD STRLs to hire, immigrate, and, as needed, gain limited access to classified information for foreign scientists and engineers. Appendix A provides a list of working group members and their affiliations.

STPI researchers supported the working group by providing background materials on immigration pathways, investigating hiring authorities available to STRLs, and analyzing processes available to the STRLs to provide foreign citizens access to classified materials when needed. STPI researchers also conducted interviews and reviewed current legislation to support the development of this guide.

C. Organization of the Document

The following chapters provide general guidance on the steps in the processes to hire foreign nationals into DOD STRLs (Chapter 2); navigate immigration of foreign nationals employed at DOD STRLs (Chapter 3); and gain limited access to classified materials, when needed, for foreign nationals employed at DOD STRLs (Chapter 4). Ancillary information is provided in the following appendixes:

- Appendix A provides a list of working group members and affiliations.
- Appendix B presents an example job announcement open to both U.S. and foreign nationals.
- Appendix C describes immigration pathways to employment in detail.
- Appendix D outlines the officials authorized to make decisions regarding the Limited Access Authorization.
- Appendix E provides a list of countries that are excluded from exports and imports of defense articles and defense services.
- Appendix F provides a list of relevant office contacts for questions regarding hiring, immigration, and security.

2. Hiring Processes

All Federal agencies have the authority to hire a foreign citizen as a U.S. Government employee where a qualified citizen is not available if the appointment is approved by the Director of the Office of Personnel Management. However, very few of these exceptions have been approved.⁷ An agency may only hire a qualified noncitizen in the excepted service or Senior Executive Service, and the noncitizen does not acquire competitive civil service status. The noncitizen may be hired only if permitted by the appropriations act and if he has valid immigration status (discussed further in Chapter 3). Congress prohibits the use of appropriated funds to employ noncitizens within the U.S., though certain agencies, including the DOD, are exempt from these restrictions.⁸

The Naval Research Laboratory (NRL) Personnel Management Demonstration Project dating from 1999 includes the local authority to hire foreign citizens.⁹ The other DOD STRL directors may also have local authority to hire foreign citizens if their laboratories adopt the foreign citizen hiring flexibilities of NRL's Personnel Management Demonstration Project. Legislative authority allows any of the STRLs to adopt this flexibility; however, to date only the Army Research Laboratory has requested to adopt the flexibility to hire foreign nationals.

Under NRL's Personnel Management Demonstration Project guidelines, laboratory directors can exercise local approval authority for hiring foreign citizens when a qualified U.S. citizen has not been found through standard recruiting methods and extensive paid advertisements in major national newspapers or scientific journals. In addition, the hiring organization for a noncitizen is required to comply with immigration law, appropriations act bans on paying certain noncitizens, and the Executive order restriction on appointing noncitizens into the competitive service. If STRLs that have adopted NRL's foreign citizen hiring flexibilities find no qualified U.S. citizens available to fill a competitive service position and meet the requirements of the appropriations ban and immigration rules, the STRLs may use their local authority to begin the process to hire a noncitizen under an excepted appointment. The sidebar below describes NRL's experience with foreign national hires in more detail.

⁷ The authority to approve exceptions may be delegated to the agency director of personnel management e.g. the Director, Office of Human Capital Management, USDA, see <http://www.afm.ars.usda.gov/hrd/jobs/VISA/Noncitizens-PermanentPositions.pdf>.

⁸ Federal Handbooks, 2011 Federal Personnel Handbook.

⁹ 64 FR 33970 (June 24, 1999), <http://www.gpo.gov/fdsys/pkg/FR-1999-06-24/pdf/99-15984.pdf>.

Once the local authority for noncitizen hiring has been adopted, STRL personnel can post a job announcement for the vacant science or engineering position on the USAJobs website, a portal managed by the U.S. Office of Personnel Management.¹⁰ If desired, the job announcement can explicitly state that applications will be accepted from U.S. citizens and noncitizens as allowed by appropriations and statute. Appendix B provides an example of an S&E job announcement. STRLs interested in hiring foreign nationals should contact their civilian personnel headquarters to ensure requirements are met prior to announcing open positions.

Naval Research Laboratory Experience Hiring Noncitizen Scientists and Engineers

NRL has used its local authority to hire 17 noncitizens times since 2003. For example, in the Space Science Division, a foreign national astrophysicist was hired for research into novel instruments for observing the sun from space. NRL was unable to find a U.S. citizen primarily because solar physics is not in the curriculum of many U.S. colleges and universities, but is in the European curriculum. Another astrophysicist working in the Remote Sensing Division was hired to conduct research in radio to optical range interferometry. Typically most interferometry researchers are either radio astronomers or optical astronomers, but not both. This particular foreign national has knowledge and experience in both, and NRL was unable to locate a U.S. citizen with this rare combination.

Another foreign national was hired as an oceanographer in the Oceanography Division. This individual has an extensive math background coupled with oceanography and came to NRL from a post-doctoral fellowship at Oregon State University where he was instrumental in developing ocean data simulation techniques and had specific expertise in variational ocean data simulation.

Future hires NRL are considering include two noncitizens. One has skills in analysis of data from space-borne solar spectroscopic and imaging instrumentation, along with understanding of the physics of the solar atmosphere and knowledge of the application of extreme-ultraviolet and X-ray spectroscopy to a variety of diverse solar physics problems. Another is experienced in the development of ensemble systems that support targeted observations using forecast uncertainties for prediction of ocean acoustic properties.

The major challenge NRL has had with hiring foreign national researchers has been prolonged security reviews which are required even if the individual will not have access to classified information. One has been ongoing since July 2010 and the other since March 2011. A previous security review took 5 years. NRL has not attempted to use the LAA process to have foreign scientists and engineers gain access to classified information. NRL is currently considering the feasibility and desirability of exploring the LAA process for an existing foreign national employee as a pilot case.

STRLs must also take into account immigration status and classified information access, discussed further in Chapters 3 and 4.

¹⁰ See www.usajobs.gov for more information about the USAJobs website.

3. Immigration Pathways for Foreign Nationals to Work at DOD Laboratories

U.S. citizenship is required to be eligible for a U.S. security clearance. Addressing immigration pathways is an important step for a noncitizen scientist or engineer to obtain U.S. citizenship and be eligible for security clearance consideration. This section outlines typical immigration pathways for foreign S&E students and workers.

Foreign nationals who wish to work in the United States must do so legally via a nonimmigrant or an immigrant visa classification. STRLs can sponsor foreign workers for these visa classifications. This chapter describes these visa classifications and provides guidance on how an STRL would proceed with visa sponsorship.¹¹

A. Immigrant and Nonimmigrant Visa Classifications

Multiple visa classifications exist within the nonimmigrant and immigrant visa categories. These classifications have different application requirements and employment restrictions. For example, some classifications are granted only upon condition of employment by a sponsoring employer, while others require employers to attest that no U.S. citizens could be found for the available position. Table 1 lists the nonimmigrant and

Immigration Terminology Defined

Nonimmigrants are foreign nationals who have been granted temporary entry into the United States. Nonimmigrant temporary visits may be authorized primarily for the purposes of business or pleasure, academic or vocational study, temporary employment, and foreign government or international organization representation.

Immigrants are those individuals who are legal permanent residents (LPRs) or “green card” recipients. Legal permanent residents may live and work permanently anywhere in the United States, own property, and attend public schools, colleges, and universities. They may also join certain branches of the U.S. Armed Forces and apply to become U.S. citizens if they meet certain eligibility requirements.

Naturalization is the mechanism by which foreign citizens are granted U.S. citizenship after fulfilling the requirements established by the Immigration and Nationality Act. These requirements generally include 5 years of lawful permanent residency in the United States (3 years for those married to a U.S. citizen) and successful completion of English language, civics, and history tests.

Source: Randall Monger and James Yankay, “U.S. Legal Permanent Residents: 2011,” *Annual Flow Report*, April 2012, Office of Immigration Statistics, Policy Directorate, Department of Homeland Security, http://www.dhs.gov/xlibrary/assets/statistics/publications/lpr_fr_2011.pdf.

¹¹ See Appendix F for immigration office contact information and Appendix C for more details on immigration policy.

immigrant classifications that are pertinent to the employment of foreign STEM students and professionals by STRLs. While other nonimmigrant and immigrant classifications are available, the classifications listed in the table are the most germane to STEM professionals.

Table 1. Nonimmigrant and Immigrant Classifications for STEM Professionals

Nonimmigrant Visa Classification		Immigrant Visa Classification
Student	Worker	Lawful Permanent Resident
F-1: Academic student with optional practical training	H-1B: Temporary worker O-1: Individual of extraordinary ability J-1: Exchange visitor (professors and research scholars, specialists, and trainees)	EB-1*: Individual of extraordinary ability EB-2: Professional with advanced degree and individual of exceptional ability EB-3: Skilled worker, professional, and other worker

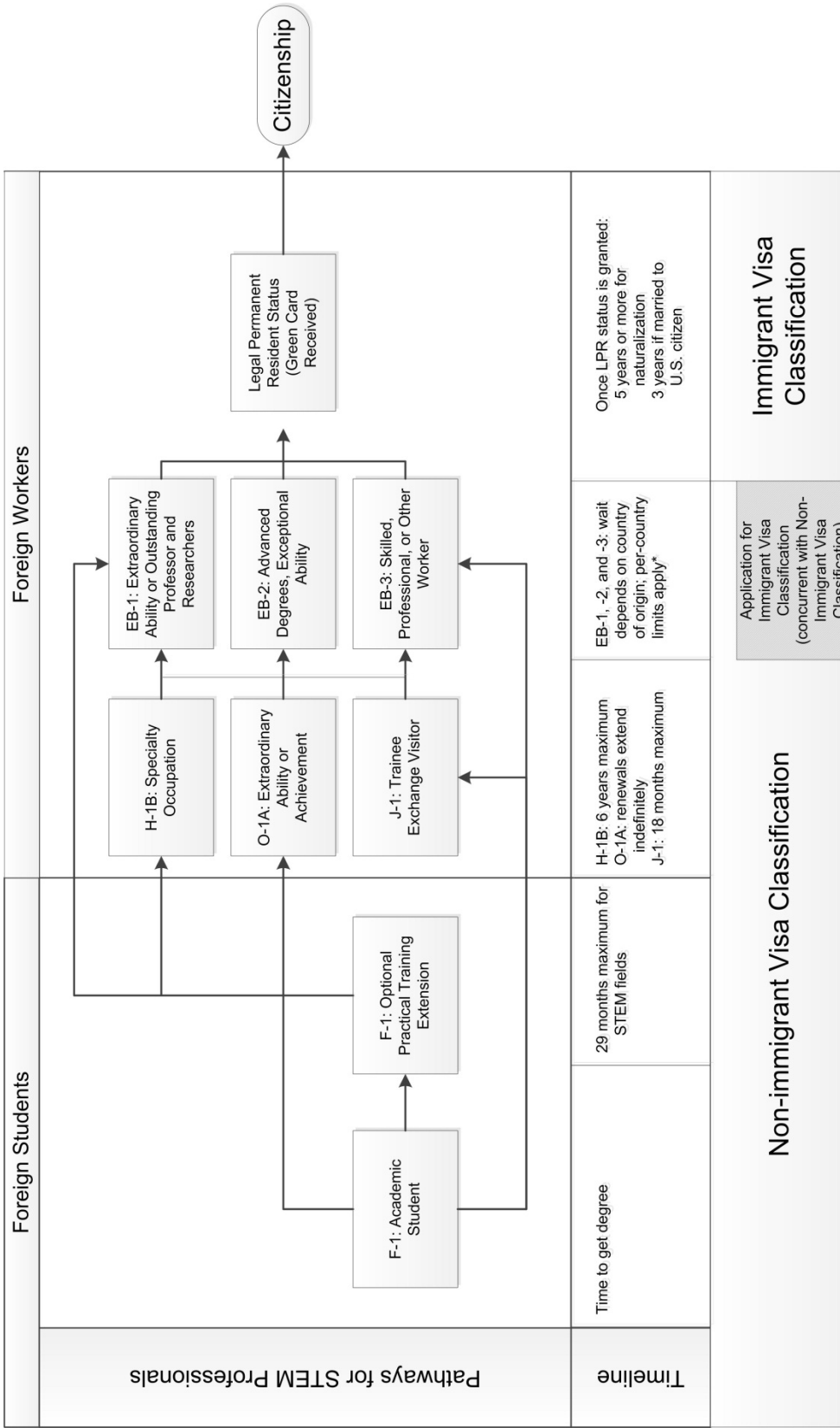
* The EB- visa classification is an application category for the immigrant visa classification. Applicants inside the United States applying for the EB- visa classification would concurrently be on a non-immigrant visa, while applicants outside the United States could apply directly for an EB- visa classification. Once granted, the applicant would be given legal permanent resident status.

Requirements for employment, minimum length of stay, and limits on the number of visas issued in a given classification all vary depending on visa classification. Details of the characteristics of each visa classification are provided in Appendix C. Immigration pathways for foreign students and foreign workers vary, depending on the visa classification pursued. If an S&E research position cannot be filled by a U.S. citizen at the STRL, the appropriate scientist or engineer may be a foreign student or a foreign worker. The pathways for foreign students or workers differ because the visa status and rules for student visas are different from foreign workers already working in the United States as well as foreign workers employed abroad.

Figure 1 describes the pathways and timeline for foreign students and foreign workers to immigrate and obtain citizenship. Depending on the path taken, naturalized citizenship can take anywhere between 5 years plus processing time to over 12 years waiting time for an immigrant visa, which are numerically limited by statute, to become “available” to the foreign student or worker.¹² Wait times depend on the country of origin and the availability of a visa number in the preference category.¹³

¹² The granting of LPR status is conditioned, in part, on an immigrant visa being available to the foreign national. Depending on the classification sought and the foreign national’s country of birth, the foreign national may be subject to lengthy delays in the employment-based immigration process due to lack of visa availability.

¹³ A recent report estimated the wait time for a high-skilled Indian national in the EB-3 preference category could be upwards of 70 years, and for a Chinese immigrant in the same category could be 24 years. Stuart Anderson. October 2011. *Waiting and More Waiting: America’s Family and Employment-Based Immigration System*. National Foundation for American Policy.



* As of September 2012, for EB-1 classifications, no wait times for any country; for EB-2, China and India have wait times; and for the EB-3, China, India, Mexico, and the Philippines have wait times.

Figure 1. Foreign Student Immigration Pathways

In the case of the EB-2 visa, wait times for foreign students from India and China can be 8 or more years, making the total time from degree to naturalization upwards of 20 years depending on the country of origin. For the EB-3 visa, wait times are even longer.¹⁴

The following sections outline the different pathways for each type of foreign S&E talent, depending on the situation.

B. Foreign Students

Foreign nationals interested in studying in the United States typically enter the country on an F-1 visa. F-1 nonimmigrants cannot pursue permanent residency while in F-1 status.

The most straightforward immigration approach for a foreign student from a U.S. institution interested in employment at an STRL is as follows:

1. The STRL sponsors the foreign student for a nonimmigrant H-1B classification. Since the STRL is considered a government research organization, the H-1B is exempt from the statutory numerical cap of 65,000 H-1Bs per fiscal year.
2. Simultaneously or after some time, the STRL sponsors the student for an immigrant visa under the EB-2 preference category of professional with advanced degree. A request could also be made for a National Interest Waiver.¹⁵
3. Once a visa number is available (per country limits apply) under the EB-2 category and the adjustment of status application is processed and approved, the student will receive a green card and will be in legal permanent resident (LPR) status.¹⁶ Wait times vary depending on the country of origin.¹⁷
4. Once the green card is issued, the student will have to wait 5 years before applying for naturalization to become a U.S. citizen.

C. Foreign Workers

Foreign workers already in the United States and foreign workers employed abroad can apply for a nonimmigrant classification or an immigrant classification.

¹⁴ Stuart Anderson, “Waiting and More Waiting: America’s Family and Employment-Based Immigration System,” NFAP Policy Brief, October 2011, http://www.nfap.com/pdf/WAITING_NFAP_Policy_Brief_October_2011.pdf.

¹⁵ A foreign national may seek a National Interest Waiver in lieu of obtaining an employer sponsor. National Interest Waivers are granted to those who have exceptional ability and whose employment in the United States would greatly benefit the nation.

¹⁶ A Green Card holder is someone who has been granted authorization to legally live and work in the United States on a permanent basis.

¹⁷ See FN 10, *supra*.

Non-immigrant foreign persons already in the United States will already hold a non-immigrant visa. If this visa does not authorize him or her to work, they would need to adjust to a visa classification that does. For a non-immigrant foreign worker, the most straightforward immigration approach for employment at an STRL is:

1. The STRL sponsors the foreign worker for a non-immigrant H-1B classification. Since the STRL is considered a government research organization, the H-1B is exempt from the numerical cap of 65,000 H-1Bs per year.
2. Simultaneously, the foreign worker self-petitions for an EB-1 or an EB-2 under the National Interest Waiver, or the STRL sponsors the student for an EB-1, EB-2 or EB-3.¹⁸
3. Once a visa number is available in the applied for category (EB-1, -2, -3) (per country limits apply), and the adjustment of status application is processed and approved, the worker will receive a green card.¹⁹ Wait times vary depending on the country of origin.
4. Once the green card is issued, the worker will have to wait 5 years before applying for U.S. citizenship through naturalization.

Foreign workers employed abroad can apply directly for an immigrant classification or for a non-immigrant classification from outside the United States. Even if an employment-based immigrant application is approved, a visa number must be available for the application to move forward.

For foreign workers to directly apply for an immigrant classification, the most straightforward immigration approach for employment at an STRL is:

1. The foreign worker self-petitions for an EB-1 or an EB-2 under the National Interest Waiver or is sponsored by an employer for an EB-1, EB-2, or EB-3.²⁰
2. Once a visa number is available (per country limits apply), the foreign worker receives a green card.
3. Once the green card is issued, the foreign worker will have to wait 5 years before applying for naturalization.

¹⁸ Petitioner must use evidentiary criteria as described in Appendix C.

¹⁹ A Green Card holder is someone who has been granted authorization to legally live and work in the United States on a permanent basis.

²⁰ Petitioner must use evidentiary criteria as described in the Appendix C.

4. Security Procedures

U.S. citizenship is necessary to be eligible for a security clearance.²¹ Access to classified information, however, can be granted through a Limited Access Authorization (LAA) “in those rare circumstances where a non-U.S. citizen possesses a unique or unusual skill or expertise that is urgently needed in pursuit of a specific DOD requirement involving access to specified classified information for which a cleared or clearable U.S. citizen is not available.”²² LAAs are limited to “individuals who have a special skill or technical expertise essential to the fulfillment of a DOD requirement that cannot reasonably be filled by a U.S. citizen.”²³

The following sections describe the DOD-wide requirements for LAAs; component requirements may be more stringent, so adherence to local command procedures is advised. Regardless of the possession of an LAA, all foreign nationals are subject to heightened security requirements at the laboratory sites. Appendix D provides a list of officials authorized to grant, deny, or revoke LAAs. Appendix E provides a list of countries whose citizens should probably not be considered for a national security S&E position due to national security concerns. Appendix F provides a point of contact office for the LAA process.

1. Access to Classified Information by Noncitizens

Rather than constitute a security clearance, the LAA grants non-U.S. citizens access to limited classified information with restrictions including:

- LAAs are limited to information at the Secret and Confidential levels only. Interim access is not permitted pending approval of an LAA.
- The information must be approved for release to the person’s country of citizenship.
- Access to classified information is limited to information related to a specific program or project.

²¹ See Title 32 of the Code of Federal Regulations (CFR) § 154.16(c) and Executive Order No. 12968, Section 3.1(b) (1995).

²² See DOD 5200.2-R, “Personnel Security Program,” C3.4.3.1., January 1987.

²³ DOD 5200.2-R, C3.4.3.2.1.

- LAA personnel are not permitted uncontrolled access to areas with classified information or where classified information is discussed.
- LAA personnel cannot serve as couriers or escorts for classified information outside the location in which access is permitted.²⁴

All requests for initial LAAs must include the following:

- The location of the classified material in relation to the location of the noncitizen;
- The compelling reason for not employing a cleared or clearable U.S. citizen;
- A description of an annual continuing assessment program to evaluate continued trustworthiness and eligibility for access;
- A plan to control access to secure areas, classified information, and controlled unclassified information.²⁵

LAA determinations may be made by a limited list of officials (Appendix D). In order to issue an LAA, the LAA granting authority must make a written determination that access is essential for a critical mission and no U.S. citizen is available to perform the duties.²⁶ In addition to this justification, an initial LAA requires a favorably completed and adjudicated Single Scope Background Investigation (SSBI) within the last 5 years. If full investigative coverage is not provided by the SSBI, a polygraph examination must be completed to resolve any remaining security concerns.²⁷

The timing of obtaining an LAA varies, but in one instance, it took about 18 months—most likely due to the SSBI. Individuals awaiting LAA are only able to conduct unclassified research.

All LAAs must be reviewed annually by the issuing organization to determine if access to classified material continues to be required to accomplish the mission and to verify the LAA remains in compliance with current DOD and local policies.²⁸ If any subsequent background investigation results in discovery of unfavorable information, this should be taken into consideration during the annual review process. In addition, all LAA

²⁴ DOD Directive 5200.2-R, C3.4.3.2 and C3.4.3.3; 32 CFR § 154.16(c)(1)(i)-(vii) “Access to classified information by non-U.S. citizens.”

²⁵ DOD Directive 5200.2-R, C3.4.3.4.7.

²⁶ DOD Directive 5200.2-R, C3.4.3.4.1.

²⁷ DOD Directive 5200.2-R, C3.4.3.4.3.

²⁸ DOD Directive 5200.2-R, C3.4.3.7.

nominees are obligated to undergo a polygraph at any time during the LAA period (so long as there is no host-country legal prohibition).²⁹

All LAA determinations, favorable or unfavorable, are entered into the Defense Security Service (DSS) Defense Central Index of Investigations (DCII).³⁰ For each LAA in effect, the following information must be provided to the Deputy Under Secretary of Defense for Intelligence and Security within 60 days of the end of each fiscal year:³¹

- The identity of the individual granted the LAA, to include the full name, date and place of birth, current citizenship(s), Social Security Number, and any national identifying number issued by the individual's country or countries of citizenship;
- The individual's status as an immigrant alien or foreign national (and if an immigrant alien, the date and place such status was granted);
- The classification level of the LAA;
- Date and type of the most recent background investigation or periodic reinvestigation and the investigating agency;
- Whether a polygraph examination was conducted; if so, the date and administering agency for the most recent examination;
- The nature and identity of the classified program materials to which access is authorized and the precise duties performed; and
- The compelling reasons for granting access to the information.

2. Immigration and Security

Once an individual has successfully navigated the immigration processes described in Chapter 3 and obtained U.S. citizenship, he or she could be eligible for applying for a security clearance. Additionally, the applicant must be willing to renounce all other citizenships.

²⁹ DOD Directive 5200.2-R, C3.4.3.6.4.

³⁰ DOD Directive 5200.2-R, C3.4.3.5.4.

³¹ DOD Directive 5200.2-R, C3.4.3.7.

5. Conclusion

DOD laboratories help the U.S. respond to increasingly complex threats and support rapid technology developments. The large majority of laboratory employees are U.S. citizens hired using well-established employment practices. This document describes the applicable laws and regulations and outlines the hiring, immigration, and security mechanisms currently available to DOD STRLs for noncitizen S&E job applicants. It provides general guidance on the steps in the process to: (1) hire foreign nationals into DOD STRLs; (2) navigate the immigration process for foreign nationals employed at DOD STRLs; and (3) as needed, obtain access to classified materials for foreign nationals employed at DOD STRLs.

Appendix F provides a list of offices and contact information for questions about foreign national hiring, immigration, and Limited Access Authorization.

Appendix A. Working Group Members

Name	Title	Agency, Department, Laboratory
John Brown	Consultant, Diligent Innovations, Supporting Defense Laboratories Enterprise, ASDR&E	Office of the Secretary of Defense
Cary Chabalowski	Acting Associate Director for Plans and Programs (Retired Oct 2012)	U.S. Army Research Laboratory
William T. Cole	Program Manager, Non-Traditional Personnel Programs, Defense Civilian Personnel Advisory Service	Office of the Secretary of Defense
Dana Crowe	Civilian Force Policy	U.S. Air Force
Kevin Cummings	Chief, Business & Foreign Workers Division, USCIS Office of Policy and Strategy	Department of Homeland Security
Chris Fall	Director, International Liaison Office	Office of Naval Research Global
Clarence Gooden	Deputy Chief, Engineering and Technical Management Division, SAF/AQRE	U.S. Air Force
William Hampton	A1 STEM Senior Representative and Mentor	U.S. Air Force
Gail Lovisone	Policy Analyst, Military Community & Family Policy, Office of the Undersecretary of Defense	U.S. Army
Kurt Masser	DPDC, Corporate Recruiting and Employee Development Branch	U.S. Air Force Research Laboratory
Cheryl Miglionico	Management Analyst	U.S. Air Force Research Laboratory
John Montgomery	Director of Research	U.S. Naval Research Laboratory
Adam Nave	Director, Research and Development, Deputy Assistant Secretary of Navy for Research, Development, Test & Evaluation	U.S. Navy
Abigail Norris	Program Examiner, National Security Division	Office of Management and Budget

Name	Title	Agency, Department, Laboratory
Ciro Parascandola	Adjudications Officer (Policy) Office of Policy and Strategy U.S. Citizenship and Immigration Services	Department of Homeland Security
Nora Pasion	Technical Assistant to the Associate Director	U.S. Army Research Laboratory
Mark Phillips	Chief, Residence and Naturalization Division, U.S. Citizenship and Immigration Services	Department of Homeland Security
Todd Rosenberger	Acting Associate Director for Plans and Programs (effective Oct 2012)	U.S. Army Research Laboratory
Mary Rotchford	Director of Staffing, Office of Civilian Human Resources	U.S. Navy
Carol Stahl	Assistant Secretary of the Army, Manpower & Reserve Affairs	U.S. Army
Bryan Stevens	DPDC, Corporate Recruiting and Employee Development Branch	U.S. Air Force Research Laboratory
John Thorne	Consultant, Diligent Innovations, Supporting Defense Laboratories Enterprise, ASDR&E	Office of the Secretary of Defense
Tammy VanKeuren	Civilian Force Policy	U.S. Air Force
Cathleen Watkins	Human Resource Specialist	U.S. Navy
Diana Williams	Civilian Force Policy (before Oct 2012)	U.S. Air Force
Michelle Williams	Lab Demo Project Manager	U.S. Air Force Laboratory
Allan Manuel	Senior Policy Analyst	Office of Science and Technology Policy
Doug Rand	Senior Advisor to the Deputy Director	Office of Science and Technology Policy
Reed Skaggs	Assistant Director for Defense Programs	Office of Science and Technology Policy
Susannah Howieson	Research Staff Member	IDA Science and Technology Policy Institute
Asha Balakrishnan	Research Staff Member	IDA Science and Technology Policy Institute

Appendix B.

Example Science and Engineering Job Announcement for U.S. Citizens and Noncitizens

USAJOBS - Search Jobs

Page 1 of 7

Job Title: Astrophysicist
Department: Department Of The Navy
Agency: Navy, Office of Naval Research
Sub Agency: Naval Research Lab
Job Announcement Number: NE0-1330-03NRL0991-DE

Salary Range: \$61,890.00 - \$115,961.00 /year
Salary will be determined based upon selectee's background, experience, and market consideration.

Series & Grade: NP-1330-03

Open Period: Wednesday, September 01, 2010 to Thursday, September 30, 2010

Position Information: Full-Time Permanent

Duty Locations: 1 vacancy - Washington DC

Who May Be Considered: Applications will be accepted from US Citizens and Non-Citizens as allowed by appropriations and statute.

Job Summary:

Do you have experience in the planning, execution, and reduction of data from optical and radio interferometry experiments relating to stellar astrophysics and interferometric imaging techniques and meet the below Selective Placement Factor (SPF)? Click - [YES](#) or [NO](#)

No Limits. No Bounds. Discover a civilian career with the U. S. Department of the Navy that is filled with possibilities and be a part of something that makes a difference for you, the country, and the world. We encourage you to apply online...It's easy, fast and convenient! Review the announcement carefully for detailed information and begin to manage your future today!

Key Requirements:

- Occasional travel is required
- Relocation expenses may be paid if authorized by Joint Travel Regulations
- This vacancy announcement may be used to fill additional vacancies.
- Other Selective Factors

Major Duties:

The selectee shall be a staff scientist in the Optical Remote Sensing Section, Radio/IR/Optical Sensors Branch of the Remote Sensing Division, and will also work closely with Radio Astrophysics and Sensing Section also in the Radio/IR/Optical Sensors Branch. The Optical Remote Sensing Section carries out basic astrophysical research using optical interferometry, and also carries out research and development in advanced interferometric technologies for use in remote sensing, Naval systems, and imaging. The Radio Astrophysics Section carries out research primarily on low-frequency (<100 MHz) radio astronomy, and associated instrumentation and interferometric imaging techniques. The selectee will work in the in the Optical Remote Sensing Section, but the primary purpose of this position is to bridge the optical and radio interferometric imaging fields, and to exploit the commonality and synergy between them to benefit both disciplines. As such, the selectee is expected to perform pioneering basic research on both radio and optical interferometric imaging systems, interferometric data reduction and analysis techniques, and exploitation of the data for astrometry and astrophysics. Specific duties and responsibilities include: The selectee shall participate in basic research programs designed to test novel interferometric methods, particularly in the areas of low signal-to-noise ratio data and multi-element optical and radio interferometry. In particular, the selectee will be responsible for applying exceedingly well developed radio interferometric

<http://jobview.usajobs.gov/GetJob.aspx?JobID=90008834&TabNum=6>

9/2/2010

Appendix C.

Immigration Pathways to Employing High-Skilled Immigrants in Defense Department Laboratories

Introduction to Immigration and Naturalization

U.S. immigration and naturalization is governed by the Immigration and Nationality Act of 1952,¹ which the Department of Homeland Security (DHS) implements and enforces through the U.S. Citizenship and Immigration Service (USCIS), Customs and Border Protection, and Immigration and Customs Enforcement, among other components.² The Department of State, through its embassies and consular offices, interprets visa laws and regulations, acts as a point of contact for visa applicants, and is responsible for processing and issuing visas for applicants, both within and outside the United States, once the USCIS has approved them. (A visa is a document showing that a person is authorized to enter the territory for which it was issued, subject to the permission of an immigration official at the time of actual entry.) The Department of Labor also plays a key role by issuing labor certifications.³

Foreign nationals who wish to enter the United States may do so legally via a nonimmigrant visa or an immigrant visa. Individuals who wish to become U.S. citizens do so through the naturalization process. This report does not cover undocumented immigrants, refugees/asylum seekers, or diplomatic or nongovernmental organization personnel.

Nonimmigrant Visas

Nonimmigrants are foreign nationals who have been granted temporary entry into the United States. Nonimmigrant temporary visits may be authorized primarily for the purposes of business or pleasure, academic or vocational study, temporary employment,

¹ See 8 U.S.C. §§1 *et seq.* for more information.

² Implementing regulations are located in title 8 of the Code of Federal Regulations.

³ Labor certifications verify there are insufficient qualified and willing U.S. workers to fill the position and that hiring a foreign worker will not adversely affect the wages and working conditions of similarly employed U.S. workers.

and foreign government or international organization representation. In 2011, 7.5 million nonimmigrant visas to enter the United States were issued to foreign nationals.⁴

The maximum duration of stay is determined by the class of admission. A person granted lawful permanent resident status (commonly referred to as a “legal permanent resident” or “green card” holder) is authorized to live, work, and study in the United States permanently. Conversely, a nonimmigrant is in a temporary status for a specific purpose and his or her activities, such as employment, travel, and accompaniment by dependents, are prescribed by his or her class of admission.

Immigrant Visas

As stated in the DHS’s annual report on legal permanent residents:

A legal permanent resident (LPR) or “green card” recipient is defined by immigration law as a person who has been granted lawful permanent residence in the United States. Permanent resident status confers certain rights and responsibilities. For example, LPRs may live and work permanently anywhere in the United States, own property, and attend public schools, colleges, and universities. They may also join certain branches of the Armed Force and apply to become U.S. citizens if they meet certain eligibility requirements.⁵

In 2011, a total of 1,062,040 individuals received green cards in United States.⁶ The term *preference* is used to designate priority categories for LPR status. For family-sponsored preference, employment-based preference, and diversity immigrants the law prescribes an annual limit of between 416,000 and 675,000. The employment-based (EB) preference limit is equal to 140,000 plus any unused visas in the family-sponsored preferences from the previous year. The EB immigrant visa has five preference categories: EB-1 for individuals of extraordinary ability, outstanding professors and researchers, and multinational managers or executives; EB-2 for professionals with advanced degrees and individuals of exceptional ability; EB-3 for skilled workers, professionals (without advanced degrees), and other workers; EB-4 certain special immigrants (e.g., ministers, religious workers, and employees of the U.S. Government abroad); and EB-5 employment creation immigrants or “investors.” Preference categories EB-1 through EB-3 are each allocated 28.6% of annual visas (equivalent to 40,040 visas), while categories EB-4 and EB-5 each receive 7.1 percent (equivalent to 9,940 visas).

⁴ Visa Statistics, State Department, http://travel.state.gov/visa/statistics/statistics_1476.html.

⁵ Randall Monger and James Yankay, “U.S. Legal Permanent Residents: 2011” *Annual Flow Report*, April 2012, p. 1, http://www.dhs.gov/xlibrary/assets/statistics/publications/lpr_fr_2011.pdf.

⁶ Legal Permanent Residents: 2011 Report, DHS, Office of Immigration Statistics, http://www.dhs.gov/xlibrary/assets/statistics/publications/lpr_fr_2011.pdf.

EB visas are also subject to per-country and dependent limits defined as the maximum number of family-sponsored and employment-based preference visas that can be issued to citizens of any country in a fiscal year. Per-country and dependent limits are equal to 7% and 2%, respectively, of the total number of family-sponsored and employment preferences. In 2011, the per-country limit was 25,620 and the dependent area limit was 7,320 for each preference.⁷

Naturalization

Naturalization is the mechanism established by the Immigration and Nationality Act to grant U.S. citizenship to foreign citizens who fulfill certain requirements. Most legal permanent residents who are at least 18 years of age are eligible to apply for naturalized citizenship after meeting certain requirements. These requirements generally include 5 years of lawful permanent residency in the United States (3 years for those married to a U.S. citizen) and successful completion of English language, civics, and history tests. In 2011, the total number of individuals naturalizing was 694,193.

Nonimmigrant and Immigrant Visa Classifications

Multiple visa classifications exist within the nonimmigrant and immigrant visa categories described in the previous sections. These classifications have different application requirements and employment restrictions. For example, some classifications are granted only upon condition of employment by a sponsoring employer, while others require employers to attest that no U.S. citizens could be found for the available position.

Table C-1 lists the nonimmigrant and immigrant classifications that are pertinent to the employment of foreign STEM students and professionals by DOD laboratories in the United States. While other nonimmigrant and immigrant classifications are available, the classifications listed in the table are the most germane to STEM professionals.

Table C-1. Nonimmigrant and Immigrant Classifications for STEM Professionals

Nonimmigrant Visa Classification		Immigrant Visa Classification
Student	Worker	Lawful Permanent Resident
F-1: Academic student with optional practical training	H-1B: Temporary worker O-1: Individual of extraordinary ability J-1: Exchange visitor (professors and research scholars, specialists, and trainees)	EB-1: Individual of extraordinary ability EB-2: Professional with advanced degree and individual of exceptional ability EB-3: Skilled worker, professional, and other worker

⁷ Legal Permanent Residents: 2011 Report, DHS, Office of Immigration Statistics, http://www.dhs.gov/xlibrary/assets/statistics/publications/lpr_fr_2011.pdf.

Requirements for employment, minimum length of stay, and limits on the number of visas issued in a given classification vary depending on visa classification. Table C-2 offers more details on the characteristics of nonimmigrant and immigrant visas.

Pertinent Nonimmigrant Classifications for STEM Students

The F-1 visa classification is for individuals enrolled as full-time students at a DHS-approved academic institution or language training program with the intention of obtaining a degree, diploma, or certificate.⁸ These students must maintain a residence abroad and may not pursue permanent residency status while maintaining their F-1 visas. There are no caps on the number of F-1 admissions each year.

The DOD laboratories have the opportunity to hire graduating F-1 foreign students using Optional Practical Training (OPT).⁹

F-1 Optional Practical Training

OPT may be granted to F-1 students for temporary employment that qualifies as practical training in a field directly related to a foreign student's major area of study. F-1 students may be authorized to receive 12 months of practical training. In addition, F-1 students who complete degrees in STEM fields have the option to apply for a 17-month extension of their F-1 OPT after their original 12 months of training.¹⁰

All individuals who apply for OPT must complete Form I-765 (Application for Employment Authorization), which authorizes certain classifications of foreign students and nonimmigrants to work in the United States. F-1 students authorized for OPT may switch employers under certain restrictions. If they are unemployed for more than 90 days under the initial OPT authorization or more than 120 days during the 17-month extension, they are considered "out of immigration status" and are no longer legally entitled to remain in the United States.¹¹

⁸ Read more about student visas:
<http://www.USCIS.gov/portal/site/USCIS/menuitem.eb1d4c2a3e5b9ac89243c6a7543f6d1a/?vgnextoid=e34c83453d4a3210VgnVCM100000b92ca60aRCRD&vgnnextchannel=e34c83453d4a3210VgnVCM100000b92ca60aRCRD>.

⁹ OPT may be granted to F-1 visa holders prior to or after completion of their degree. We discuss only post-completion OPT extensions because these are most pertinent to employment at DOD laboratories.

¹⁰ See 8 CFR §214.2(f)(10)(ii)(C) for more information.

¹¹ See 8 CFR §214.2(f)(10)(ii)(E) for more information.

Table C-2. Characteristics of Nonimmigrant and Immigrant Visa Classifications

	Nonimmigrant Classifications				Immigrant Classifications		
	Students	Workers		Lawful Permanent Residents (LPRs)			
	F-1	H-1B	O-1	J-1	EB-1	EB-2	EB-3
Visa Classification	Full-time student earning certificate, degree or diploma	Worker in specialty occupation	Individuals with Extraordinary Ability or Achievement	Exchange Visitor (Trainees, Professors and Researchers, Scholars, Specialists)	Extraordinary Ability	Advanced Degree or Exceptional Ability	Skilled Workers, Professionals, Unskilled Workers
Duration	F-1 visa for as long as enrolled in degree program; F-1 Optional Practical Training (OPT) extension authorizes 12–29 months depending on degree field	3 years, with possibility to renew for additional 3 years* yearly	3 years initially, with ability to extend yearly	Trainees: 18 months Scholars: 5 years Specialists: 1 year	Indefinite, but once granted, 5 years until eligible for naturalized citizenship	Indefinite, but once granted, 5 years until eligible for naturalized citizenship	Indefinite, but once granted, 5 years until eligible for naturalized citizenship
Can foreign nationals on this visa hold employment?	Yes, under F-1 Optional Practical Training (OPT) extension allowing work in a related degree field	Yes (must be employed by definition)	Yes (must be employed by definition)	Yes, under exchange visitor program sponsorship	Yes, once LPR status is granted, the individual is authorized to work in the United States.	Yes, once LPR status is granted, the individual is authorized to work in the United States.	Yes, once LPR status is granted, the individual is authorized to work in the United States.
Labor-related assurances	Employment Authorization Document evidencing the right to work. Employers must be enrolled in E-verify	Labor Condition Application	None	None	None	Labor certification, except for those filing a National Interest Waiver	Labor certification
Can foreign nationals on this visa switch employers?	F1-OPT individual can change employers if working in related degree field	Yes, but new employer must petition on behalf of worker	Yes, but new employer must petition on behalf of worker	No	Yes, LPRs may work for any employer in the United States	Yes, LPRs may work for any employer in the United States	Yes, LPRs may work for any employer in the United States
Can foreign nationals on this visa apply for permanent residency?	No	Yes	Yes	No	N/A	N/A	N/A

	Nonimmigrant Classifications				Immigrant Classifications		
	Students	Workers			Lawful Permanent Residents (LPRs)		
	F-1	H-1B	O-1	J-1	EB-1	EB-2	EB-3
Are there limits on the number of visas available in this classification?	No	Yes, cap of 65,000 for new H-1Bs. First 20,000 approved applications from U.S. master's degree or above holders and all approved H-1Bs sponsored by government research organizations are exempt from the cap	No	No	Yes, approximately 40,040 available each year. 7% per country limit	Yes, approximately 40,040 available each year. 7% per country limit	Yes, approximately 40,040 available each year. 7% per country limit
Number issued in 2011	447,410	129,134	8,828	324,294	Approximately 40,040 total green cards	Approximately 40,040 total green cards	Approximately 40,040 total green cards

*H-1B status may be granted beyond 6 years provided certain steps have been taken on the individual's behalf for obtaining lawful permanent residence.

Pertinent Nonimmigrant Classifications for STEM Workers

In addition to employing foreign scientists in F-1 status who are authorized for OPT, DOD laboratories can hire foreign STEM workers that work abroad or already have temporary visas that authorize them to work for their current employers. The pertinent nonimmigrant classifications are H-1B, O-1, or J-1 Trainee visas.¹

H-1B Specialty Occupations Visas

The H-1B nonimmigrant classification is primarily for individuals who perform services in specialty occupations.² These individuals must have at least a bachelor's or equivalent degree and be sponsored by an employer for a job with complex and specialized needs that only an individual with a degree in a related field can fulfill. There is an annual fiscal year cap of 65,000 H-1B visas, but there are several statutory exemptions from this cap.³ For example, the first 20,000 petitions approved each fiscal year for individuals with U.S. master's degrees or above are exempt from the cap. In addition, all H-1B petitions for employment at institutions of higher education (and related or affiliated nonprofit entities), nonprofit research organizations, and government research organizations are exempt from the 65,000 annual cap.

The employer petitioning for an H-1B worker must submit a Department of Labor-approved form, ETA Form 9035, Labor Condition Application for Nonimmigrant Workers, to U.S. Citizenship and Immigration Services. The form certifies that the employer will comply with certain wage and working condition requirements and that the employment of the H-1B nonimmigrant will not adversely affect the wages of similarly employed workers. A person in H-1B status may simultaneously maintain H-1B nonimmigrant status and pursue LPR status, which is called "dual-intent."⁴ Individuals may typically extend their H-1B status for a total of 6 years, but further extensions are possible for individuals who are

¹ In the U.S. immigration system, post-doctoral researchers are treated as workers; they typically work in the United States under H-1B and J-1 Trainee visas.

² Read more about H-1B eligibility criteria at <http://www.USCIS.gov/portal/site/USCIS/menuitem.eb1d4c2a3e5b9ac89243c6a7543f6d1a/?vgnextoid=73566811264a3210VgnVCM100000b92ca60aRCRD&vgnnextchannel=73566811264a3210VgnVCM10000b92ca60aRCRD>.

³ Read more about the H-1B annual cap at <http://www.USCIS.gov/portal/site/USCIS/menuitem.5af9bb95919f35e66f614176543f6d1a/?vgnextoid=4b7cdd1d5fd37210VgnVCM100000082ca60aRCRD&vgnnextchannel=73566811264a3210VgnVCM10000b92ca60aRCRD>.

⁴ Read more about dual intent and H-1 nonimmigrant status at <http://www.USCIS.gov/ilink/docView/FR/HTML/FR/0-0-0-1/0-0-0-54070/0-0-0-57543/0-0-0-57820.html>.

waiting for a permanent immigrant visa number to become available or if they are subject to lengthy adjudication delays in the green card process.

H-1B approvals are granted on the condition of employment with a specific employer. If the lab files a new petition on behalf of an individual, a DOD lab may hire current H-1B nonimmigrants, foreign citizens who are in the United States on another nonimmigrant classification, or foreign citizens who are not yet living in the United States.

O-1 Individuals with Extraordinary Ability or Achievement Visas

The O-1 nonimmigrant classification is for individuals with extraordinary ability in sciences, arts, education, business, or athletics and extraordinary achievement in motion picture or TV production to perform specific events or activities in the United States. The O-1A nonimmigrant classification, which includes individuals with extraordinary ability in the sciences, is the category most relevant to STEM workers.⁵ These individuals must have demonstrated sustained national or international acclaim and risen to the top of their fields. Employers must sponsor individuals for an O-1 visa classification, but the application does not require an ETA Form 9035. O-1 nonimmigrants can enter the United States for up to 3 years initially, with indefinite extensions available to complete the initial event or activity in increments of up to 1 year.

For an O-1A nonimmigrant classification, applicants must provide evidence that they have received a major, internationally recognized award (such as a Nobel Prize). Alternatively, they must provide evidence of at least three of the following:⁶

- Receipt of nationally or internationally recognized prizes or awards for excellence in the field of endeavor;
- Membership in associations that require outstanding achievements, as judged by recognized national or international experts, in the field for which classification is sought;
- Published material in professional or major trade publications, newspapers, or other major media about the applicant and the applicant's work in the field for which classification is sought;

⁵ Read more about O-1 visas at <http://www.USCIS.gov/portal/site/USCIS/menuitem.eb1d4c2a3e5b9ac89243c6a7543f6d1a/?vgnextoid=b9930b89284a3210VgnVCM100000b92ca60aRCRD&vgnnextchannel=b9930b89284a3210VgnVCM10000b92ca60aRCRD>.

⁶ Adapted from USCIS description of O-1A at <http://www.USCIS.gov/portal/site/USCIS/menuitem.eb1d4c2a3e5b9ac89243c6a7543f6d1a/?vgnextoid=b9930b89284a3210VgnVCM100000b92ca60aRCRD&vgnnextchannel=b9930b89284a3210VgnVCM10000b92ca60aRCRD>.

- Original scientific, scholarly, or business-related contributions of major significance in the field;
- Authorship of scholarly articles in professional journals or other major media in the field for which classification is sought;
- A high salary or other remuneration for services in the field for which classification is sought as evidenced by contracts or other reliable evidence;
- Participation on a panel, or individually, as a judge of the work of others in the field for which classification is sought or in a field of specialization allied to that field; and
- Employment in a critical or essential capacity for organizations and establishments that have a distinguished reputation.

If these standards do not readily apply to the applicant's occupation, the petitioner may submit comparable evidence in order to establish eligibility. An adjudicator then determines whether evidence, taken as a whole, establishes (by a preponderance of the evidence) that the individual has sustained international or national acclaim and is at the top of the field.

J-1 Exchange Visitor (Trainees, Professors and Research Scholars, Specialists) Visas

The J-1 Exchange Visitor Program is a nonimmigrant visa classification overseen by the Department of State.⁷ The purpose of the program is to foster global understanding through educational and cultural exchanges. The Department of State has a designated list of employers that are certified to participate in the J-1 program, and exchange visitors may engage only in the activities stated on their Form DS-2019, Certificate of Eligibility for Exchange Visitor (J-1) Status. DOD laboratories interested in working with foreign scientists and engineers as exchange visitors may work towards certification to participate in the J-1 exchange program. While there are several types of programs under the J-1 classification, DOD laboratories can engage with STEM professionals only under the Professor and Research Scholar, Specialist, and Trainee programs.

Professor and Research Scholar Program. The J-1 Professor and Research Scholar classification provides foreign professors and research scholars the opportunity to engage in research, teaching, and lecturing with their American colleagues at research institutions, corporate research facilities, museums, libraries, post-secondary accredited educational institutions, or similar types of institutions.⁸ In general, J-1 Professors and

⁷ Read more about the J-1 Exchange Visitor Program at <http://j1visa.state.gov/>.

⁸ See 22 CFR §62.20(b) and 22 CFR §62.20(c) for more information.

Research Scholars may stay in the United States for a maximum of 5 years. This stay may be extended to a maximum of 5 additional years for individuals engaged in research under the direct sponsorship of a federally funded research and development center or U.S. Federal laboratory, which includes DOD laboratories.⁹

Specialist Program. The J-1 Specialist classification is for experts in fields of specialized knowledge or skill who seek to observe, consult, or demonstrate their skills in the goal of promoting the interchange of knowledge and skills with their American specialist peers.¹⁰ J-1 Specialists may participate in the exchange program for a maximum of 1 year.¹¹

Trainee Program. The J-1 Trainee classification is for individuals with degrees or professional certificates from a foreign post-secondary institution and 1 year of work experience abroad in their occupational fields or for individuals with 5 years of work experience abroad in their fields.¹² J-1 Trainees must participate in a sponsor-guided work-based program in their academic or occupational fields. Depending on the nature of the training, J-1 Trainees may stay for a maximum of 18 months.¹³

Pertinent Immigrant Visa Classifications for STEM Workers

DOD laboratories may sponsor foreign scientists and engineers for LPR status if these individuals want to work permanently in the United States. Generally, attainment of LPR status is necessary for all foreign individuals who eventually want to apply for U.S. citizenship.

The three major categories for obtaining LPR status are family-sponsored preference, employment-based preference, and other (including refugee or asylee and other special adjustment programs).

Family-sponsored immigration comprises the majority of the approximately one million green cards granted each year (65 percent in 2011).¹⁴ By statute, employment-based immigration comprises about 14 percent of all immigration, and cannot exceed 140,000 visas per year.¹⁵ Family-sponsored and employment-based green cards are subject to a 7

⁹ See 22 CFR §62.20(i) for more information.

¹⁰ 22 CFR §62.26(d) for more information.

¹¹ See 22 C.F.R. §62.26(i) for more information.

¹² See 22 CFR §62.22(d)(2) for more information.

¹³ See 22 CFR §62.22(k) for more information.

¹⁴ Legal Permanent Residents: 2011 Report, DHS, Office of Immigration Statistics, http://www.dhs.gov/xlibrary/assets/statistics/publications/lpr_fr_2011.pdf.

¹⁵ See Immigration and Naturalization Act §201; 8 U.S.C. § 1151(d) for more information.

percent per-country limit.¹⁶ That is, each fiscal year, no more than 7 percent of these visa numbers may be issued to individuals born in any one country in a given category.

Of the five employment-based (EB) immigrant preferences, EB-1 through EB-3 are most pertinent to the employment of foreign STEM students and professionals by DOD laboratories in the United States.

EB-1 Preference Category

The three subcategories under the EB-1 preference are extraordinary ability, outstanding professors and researchers, and multinational manager or executive.¹⁷ Under current policy, highly skilled STEM immigrants can be hired by DOD laboratories only under the extraordinary ability category. Individuals with extraordinary ability must meet criteria similar to that of the O-1A visa. The EB-1 category does not require a labor certification from the Department of Labor.

For an EB-1 immigrant application, the applicant must submit evidence that they have received a major, internationally recognized award (such as a Nobel Prize) or alternatively, evidence of at least three of the following to prove extraordinary ability in the field:¹⁸

- Receipt of lesser nationally or internationally recognized prizes or awards for excellence;
- Evidence of membership in associations in the field which demand outstanding achievement of their members;
- Evidence of published material about the foreign national in professional or major trade publications or other major media;
- Evidence that the foreign national has been asked to judge the work of others, either individually or on a panel;
- Evidence of original scientific, scholarly, artistic, athletic, or business-related contributions of major significance to the field;

¹⁶ See Immigration and Naturalization Act §202(a)(2); 8 U.S.C. §1152 for more information.

¹⁷ Read more about the first preference EB-1 category:
<http://www.USCIS.gov/portal/site/USCIS/menuitem.eb1d4c2a3e5b9ac89243c6a7543f6d1a/?vgnextoid=17b983453d4a3210VgnVCM100000b92ca60aRCRD&vgnnextchannel=17b983453d4a3210VgnVCM100000b92ca60aRCRD>.

¹⁸ Adapted from the USCIS description of the EB-1 at
<http://www.USCIS.gov/portal/site/USCIS/menuitem.eb1d4c2a3e5b9ac89243c6a7543f6d1a/?vgnextoid=17b983453d4a3210VgnVCM100000b92ca60aRCRD&vgnnextchannel=17b983453d4a3210VgnVCM100000b92ca60aRCRD>.

- Evidence of authorship of scholarly articles in professional or major trade publications or other major media;
- Evidence of the foreign national's performance of a leading or critical role in distinguished organizations;
- Evidence that command a high salary or other significantly high remuneration in relation to others in the field; and

If at least three criteria are met, an adjudicator must then determine whether the evidence, taken as a whole, establishes (by a preponderance of the evidence) that the individual has sustained international or national acclaim and is at the top of his or her field.

EB-2 Preference Category

The two subcategories under the EB-2 preference are advanced degree and exceptional ability.¹⁹ Highly skilled immigrants in STEM fields may be hired by DOD laboratories under both categories. Those in the advanced degree category must have an advanced degree or a bachelor's or equivalent degree and at least 5 years of progressive work experience in his or her area of study. Individuals in the exceptional ability category must show exceptional ability, a degree of expertise significantly above that ordinarily encountered in the field.

For an EB-2 immigrant application, applicants must submit evidence of at least three of the following to demonstrate that the individual has exceptional ability:

- Official academic record showing receipt of a degree, diploma, certificate, or similar award from a college, university, school, or other institution of learning relating to the area of exceptional ability;
- Letters documenting at least 10 years of full-time experience in the occupation;
- License to practice or certification for the profession or occupation;
- Evidence that the foreign national has commanded a salary or other remuneration for services that demonstrates your exceptional ability;
- Membership in a professional association(s);
- Recognition for achievements and significant contributions to industry or field by peers, government entities, or professional or business organizations; and
- Other comparable evidence of eligibility is also acceptable.

¹⁹ Read more about the second preference EB-2 category:
<http://www.USCIS.gov/portal/site/USCIS/menuitem.eb1d4c2a3e5b9ac89243c6a7543f6d1a/?vgnnextoid=816a83453d4a3210VgnVCM100000b92ca60aRCRD&vgnnextchannel=816a83453d4a3210VgnVCM100000b92ca60aRCRD>.

If threshold criteria is established, a final merits determination made by the adjudicator to determine if the individual has a degree of expertise significantly above that ordinarily encountered in the field.

EB-2 petitions must be accompanied by an approved individual labor certification from the Department of Labor on ETA Form 9089. This certification verifies there are insufficient qualified and willing U.S. workers to fill the position and that hiring a foreign worker will not adversely affect the wages and working conditions of similarly employed U.S. workers. Some EB-2 individuals may qualify for the National Interest Waiver, which waives the requirements of an employer sponsor and approved labor certification. National Interest Waiver jobs are not defined by statute. They are granted to individuals who not only qualify for EB-2 classification but further demonstrate that a waiver of the job offer requirement is in the “national interest.”

EB-3 Preference Category

The three subcategories in this immigrant visa preference category are skilled worker, professional, and other worker. Hiring under the professional category of the EB-3 is the likely path for the DOD laboratories. “Professionals” are individuals whose jobs require at least a U.S. baccalaureate degree or a foreign equivalent and who are members of the professions. A labor certification and a permanent, full-time job offer are required as part of the EB-3 application.

Appendix D.

Officials Authorized to Grant, Deny, or Revoke Limited Access Authorization

Individuals with the authority to grant, deny, or revoke Limited Access Authorization (LAA) include:¹

- Secretary of Defense or single designee;
- Secretary of the Army or single designee;
- Secretary of the Navy or single designee;
- Secretary of the Air Force or single designee;
- Chairman of the Joint Chiefs of Staff or single designee;
- Director, Washington Headquarters Services, or single designee;
- Director, National Security Agency, or single designee;
- Director, Defense Intelligence Agency, or single designee;
- Deputy General Counsel, Legal Counsel, Office of General Council, or single designee (may grant LAAs for contractors under the Defense Industrial Security Program [DISP]);
- Director, Defense Security Service, or single designee (may grant LAAs for contractors under DISP); and
- Commanders of the Combatant Commands, or single designees, which must be a general officer, flag rank, or civilian equivalent.

¹ DOD Directive 5200.2-R, AP5.2.

Appendix E.

List of Excluded Countries

It is the policy of the United States to deny licenses and other approvals for exports and imports of defense articles and defense services destined for or originating in certain countries. This policy applies to the following countries:¹

Afghanistan	Kyrgyzstan
Belarus	Lebanon
Burma	Liberia
People's Republic of China	Libya
Côte d'Ivoire	North Korea
Cuba	Pakistan
Cyprus	Somalia
Democratic Republic of the Congo	Sri Lank
Eritrea	Sudan
Fiji	Syria
Republic of Guinea	Venezuela
Haiti	Vietnam
Iran	Zimbabwe
Iraq	

Whenever possible, Department of Defense Science Technology Reinvention Laboratories should exclude from consideration employee candidates from these same countries.

¹ This list was adapted from Country Policies and Embargoes, U.S. Department of State, Directorate of Defense Trade Controls, http://www.pmdt.c.state.gov/embargoed_countries/index.html.

Appendix F. List of Office Contacts

Science and Technology Reinvention Laboratories Hiring

Defense Civilian Personnel Advisory Service
Program Manager, Non-Traditional Personnel Programs
571-372-1551

Immigration

U.S. Citizenship and Immigration Services
Office of Policy and Strategy
Business and Foreign Workers Division
202-272-8412

Limited Access Authorization

Office of the Deputy Under Secretary of the Navy (ODUSN) for
Plans, Policy, Oversight and Integration (PPOI)
Directorate of Security Branch Chief
Information and Personnel Security
ODUSN PPOI Security Directorate
703-601-0558

Abbreviations

ASD(R&E)	Assistant Secretary of Defense for Research and Engineering
CFR	Code of Federal Regulation
DISP	Defense Industrial Security Program
DCII	Defense Central Index of Investigations
DHS	Department of Homeland Security
DOD	Science and Technology Policy Institute
DSS	Defense Security Service
IDA	Institute for Defense Analyses
LAA	Limited Access Authorization
LPR	Lawful Permanent Resident
NRL	Naval Research Laboratory
MAVNII	Military Accessions Vital to the National Interest
OMB	Office of Management and Budget
OSTP	Office of Science and Technology Policy
OUSD(P&R)	Office of the Under Secretary of Defense for Personnel and Readiness
STEM	science, technology, engineering, and mathematics
U.S.C.	United States Code
USCIS	U.S. Citizenship and Immigration Services
S&E	science and engineering
SSBI	Single Scope Background Investigation
STPI	Science and Technology Policy Institute
STRL	Science and Technology Reinvention Laboratory

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14. ABSTRACT Department of Defense (DOD) research and development activities at the Science and Technology Reinvention Laboratories (STRLs) require a highly trained and skilled workforce, particularly in science, technology, engineering, and mathematics (STEM) fields. This document reflects the legal framework, immigration pathways, and security clearance options for hiring non-citizen scientists and engineers at the DOD STRLs when qualified U.S. citizens are not available to fill these positions. The document is the result of 6 months of discussions with a working group led by the Office of Science and Technology Policy, consisting of stakeholders from the Office of the Under Secretary of Defense for Personnel and Readiness, Director of Defense Research and Engineering Laboratory offices, U.S. Citizenship and Immigration Services, and Office of Management and Budget as well as representatives from personnel, security, and hiring at the STRLs. The purpose of the document is to provide guidance to those interested in hiring foreign scientists and engineers at STRLs about current hiring processes, immigration pathways, and security procedures for these individuals.					
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