**U.S. DEPARTMENT OF ENERGY**
**NATIONAL NUCLEAR SECURITY ADMINISTRATION**
**OFFICE OF NONPROLIFERATION AND INTERNATIONAL SECURITY'S**
**NEXT GENERATION SAFEGUARDS INITIATIVE**

# Nuclear Nonproliferation International Safeguards Graduate Fellowship Program

**Deadline for Applications for 2015-2016**
**February 2, 2015**

**Awards Announced April 2015**

**Administered by:**
**The Medical University of South Carolina (MUSC), Office of Special Programs through a Cooperative Agreement with the South Carolina Universities Research and Education Foundation (SCUREF)**

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## TABLE OF CONTENTS

## INTRODUCTION TO THE NUCLEAR NONPROLIFERATION INTERNATIONAL SAFEGUARDS GRADUATE FELLOWSHIP PROGRAM

This program is designed to meet the needs of the Department of Energy's (DOE) National Nuclear Security Administration (NNSA) for appropriately trained personnel in research and development in areas pertinent to Nuclear Nonproliferation and International Safeguards (NNIS). Increasing costs for graduate education and a high demand for nuclear-related scientists and engineers with a bachelor's degree have had a negative impact on the number of well-qualified students seeking advanced degrees in nuclear technologies and sciences. This problem has been particularly acute in programs in nuclear materials, engineering, nuclear science and engineering, radiochemistry and health physics, which has resulted in the closure of several programs and declining graduate school enrollments over the past two decades. This fellowship seeks to build collaboration between the leading nuclear technology programs and the schools studying the policy aspects of nuclear nonproliferation. The primary emphasis of this fellowship is to produce doctoral graduates who are familiar with both the technical and policy aspects of nonproliferation and international safeguards.

Two additional elements are having a negative impact on the United States' Nuclear Nonproliferation International Safeguards workforce pipeline. First, the demand for nuclear scientists and engineers (NSE) has increased dramatically over the past five years. The employment demands from the radiopharmaceutical, nuclear power, nuclear defense, and waste management industries have caused a dramatic increase in the demand for nuclear scientists and engineers, who would previously have worked in the Nonproliferation International Safeguards arena. Secondly, recent surveys have shown that the majority of NSE currently in the workforce are rapidly approaching retirement age. As a result, the demand for workers in this field will continue to increase in the near future.

The DOE/NNSA's Next Generation Safeguards Initiative (NGSI) is a comprehensive, multi-million dollar per year program dedicated to developing the policies, concepts, technologies, expertise, and infrastructure necessary to sustain the international safeguards system over the next 25 years. One of the key elements of the NGSI is the revitalization and expansion of the nuclear nonproliferation and international safeguards human capital base to meet the challenges outlined above through targeted investments in a new generation of international nuclear safeguards professionals.

The DOE/NNSA is the principal federal sponsor of long-term Nuclear Nonproliferation International Safeguards-related research and development. The investments made by DOE/NNSA focus on cutting edge, high-risk/high-payoff, basic and applied research, including testing and evaluation. This work has led to improvements in international safeguards systems and technologies. These efforts can only be enhanced through the appropriate development of a technical workforce to meet the challenges posed by making the world safe from nuclear threat.

This fellowship program is designed to provide incentives for universities to invest in and develop their NSE programs. Specifically, this program's goal is to encourage talented students to continue their education and seek a graduate education in research related to international safeguards and nuclear nonproliferation.

### TECHNICAL AREAS

The objective of the Nuclear Nonproliferation International Safeguards Graduate Fellowship program is to meet NNSA's need for highly trained scientists and engineers in the technical areas in which DOE/NNSA has ongoing research and development programs. At present, these areas include the following:

- Advancements in analytical techniques and instrumentation used in determining inventory and characterization of nuclear materials.
- Identifying ways to improve laboratory or in-field instrumentation and techniques for the physical, chemical, and radiological analysis of nuclear materials.
- Development of improved approaches to integrating international safeguards into the early design of nuclear facilities.
- Development of advanced safeguard approaches and techniques that can be applied to existing and future nuclear facilities, including, *inter alia*, uranium enrichment, reprocessing, and reactor facilities.

- Development of additional technologies that can be used to detect, verify, and monitor nuclear materials as it relates to production and proliferation.
- Innovative ways to strengthen safeguards and security infrastructures, through training and other capacity building measures, in countries with credible plans to develop the peaceful uses of nuclear energy.
- Application or adaptation of technology advances in the information and communication technology sphere to make safeguards implementation more efficient and/or effective.
- Aiding the improvement and maintenance of U.S. infrastructure used to support safeguards equipment and methods development.

## APPLICATION PROCEDURES

### ELIGIBILITY

This fellowship is open to all individuals who will be starting graduate studies or graduate students who are currently enrolled in a qualified course of study (see technical areas) and have at least one full year of graduate work remaining at the beginning of September 2015. The award is limited to 24 months for master's candidates and 48 months for doctoral candidates. A fellowship appointment may not exceed 48 months and all appointments will be prorated for previous graduate work. The length of the fellowship appointment is based on the amount of graduate work completed before the initial fellowship appointment date. Awards may be limited to less time than the maximum in some situations.

Applicants must be U.S. citizens. It is the policy of DHS and its program administrators, the South Carolina Universities Research and Education Foundation (SCUREF) and the Medical University of South Carolina (MUSC), to recruit and nominate participants without regard to race, age, gender, religion, color, national origin, physical or mental disability, or special disabled or veteran status.

### APPLICATION DEADLINE

The current competition cycle for this program is from November 2014 – February 2015. **The MUSC Office of Special Programs must receive all parts of the application by February 2, 2015.** GRE scores are *required* for a complete application. Scores earned before November 2005 will not be accepted. MUSC will not process late and/or incomplete applications. Please include the fellowship program name on all correspondence.

A complete application includes the following components:

Application Form
Three (3) References
Official Transcripts (undergraduate and graduate transcripts must be sent directly from the university registrar)
GRE scores (GRE code 5949 – scores must be sent directly from ETS)

*Forms are located at www.scuref.org/forms under the NNIS tab. Applicants should submit all materials electronically through the SCUREF website. If you are unable to submit the application electronically, you may mail completed application materials to the following address:*

Medical University of South Carolina
Office of Special Programs, NNIS
19 Hagood Avenue, HOT 304-H4
MSC 851
Charleston, SC 29425-8510

For additional information or assistance, please contact the MUSC Office of Special Programs at (843) 792-0832 or nhuchet@scuref.org.

## FELLOWSHIP OBLIGATIONS

### ENROLLMENT

The initial fellowship appointment is for a 12-month period and renewable for up to a total of 48 months. Each appointment is prorated based on the amount of graduate work completed prior to the fellowship appointment date. Throughout the fellowship period, graduate students must be enrolled full time at an approved university and perform study and research within the objectives of the fellowship program. During the summer months, fellows are to continue working toward achieving a doctoral degree. Students may choose to conduct research relevant to their specialization, enroll in summer classes, complete a practicum assignment, or do a combination of the three. Please note a fellowship appointment is contingent upon certification of acceptance into the education program at the respective university.

### TERMS OF APPOINTMENT

Each fellow must agree to the conditions contained in the letter of appointment and terms of appointment. This includes agreement to perform a course of study and research in NNIS technically related areas and participate in at least one summer practicum at an NNIS-sponsored laboratory. Fellows agree to entertain employment offers by either DOE or one of its contractors. All fellows must notify MUSC if they hold dual citizenship.

### ANNUAL RENEWAL OF FELLOWSHIP

Each fellowship appointment is renewed annually through a renewal application process. The renewal is based upon the fellow's academic performance and course of study. An official Renewal Form along with official transcripts must be submitted to MUSC by February 1st of each year. Fellows must inform MUSC of their current addresses and must complete any evaluation/assessment questionnaires sent by MUSC for program information and/or evaluation during the fellowship and for 5 years after the fellowship ends.

All awards and renewals are subject to the continuing availability of funding.

### PRACTICUM

Fellows are required to participate in one practicum for at least three months at a designated DOE/NNSA facility to gain hands-on experience. Fellows typically complete their practicums during the summer and any practicum may be used to support the Fellow's thesis research. To initiate a practicum appointment, the fellow must first contact a laboratory coordinator to express an interest in participating at a sponsored facility and then fill out a Practicum Request Form on www.scuref.org/forms under the NNIS tab. Designated practicum locations and coordinators can be found on page eight of this booklet. *In certain cases, practicum assignments may be approved at European Union designated laboratories. Please contact Office of Special Programs at (843)792-0832 or nhuchet@scuref.org for additional information.*

Upon acceptance of a practicum appointment at a DOE/NNSA facility or an affiliated federal agency, fellows may be required to apply for a security clearance.

### PROGRAMS AT PARTICIPATING UNIVERSITIES

Fellowship awardees are required to attend a university designated as a DOE-approved institution of higher learning in the NNIS Fellowship program. To become a participating university, interested faculty members must submit an application, which can be found on www.scuref.org/forms under the NNIS tab. Universities selected to participate in the program will have demonstrated a commitment to advancing nuclear nonproliferation international safeguards education and creating a sustainable academic program. The list of participating universities and university fellowship coordinators is provided on page seven of this booklet. Interested fellowship applicants may contact any fellowship coordinator directly for detailed information related to the university's nuclear nonproliferation international safeguards program.

## EVALUATION OF APPLICATIONS

As the Program Administrator, MUSC ensures that each application package provides the requested information and materials. It is the applicant's responsibility to ensure that his or her application is complete. After the application deadline, MUSC will distribute the 2015-2016 NNIS applications to an independent panel for review. The review panel is composed of university, DOE/NNSA, and national laboratory personnel who are directly responsible for instruction and/or research in the international safeguards and nuclear nonproliferation fields. The panel reviews each application and recommends award recipients.. The DOE/NNSA program sponsor reviews the applications and the panel's recommendations and approves the final selection.

Applications are evaluated based on academic performance, relevant coursework, GRE scores, career and goals statements, and references. Other factors, including geographical criteria and professional personnel needs of the DOE/NNSA international safeguards nuclear non-proliferation research program, are also considered. The number of fellowships awarded annually is contingent on the number of fellows graduating from the program and the availability of funds.

After the DOE/NNSA approves the award recipients, MUSC notifies applicants of their award status. Notification usually occurs in April. MUSC is responsible for the daily administration of the NNIS on behalf of the program sponsor; as such, MUSC assists fellows and universities with questions regarding stipends, payment of tuition and fees, practicum assignments, travel, and related issues.

## PROGRAM BENEFITS

In most cases, the maximum value of any individual award, including stipend, tuition and fees, and summer practicum, is $50,000/yr.

### STIPEND

Fellows receive a monthly stipend in the amount of $2,200. Fellows will also receive a Dislocation Allowance of $500 (prorated) while on a practicum assignment. MUSC will either deposit stipends directly into the fellow's bank account or mail monthly stipends to the fellow.

The DOE/NNSA attempts to provide adequate funding to its fellowship participants for meeting the cost of graduate school but other awards, prizes, and similar payments (including veteran's benefits) that do not require a product or service may be accepted by the fellowship participant. If a fellow accepts another award such as a research assistantship or other responsibilities in which funds are provided and the fellow is required to spend time on the project, MUSC must be informed in advance and any resulting payments may be deducted from the fellow's stipend. In addition, MUSC reserves the right to withdraw the fellowship if the fellow receives compensation without notifying MUSC as to the nature and extent of any payment.

### TUITION AND FEES

The fellows required tuition and fees are paid by MUSC directly to the participating university upon receipt of invoice. Optional, refundable, and penalty fees (such as late registration and duplication fees) are not payable by MUSC. Health insurance fees will be paid by MUSC only if they are certified to be required for all graduate students. All tuition and fee charges must be certified consistent with those made to regular graduate students and necessary for enrollment into the graduate program. The tuition is limited to $23,600/year. Any charge above that will not be assumed by the fellowship. In August of each year, MUSC sends a notification letter to the university's bursar describing the procedures for invoicing tuition and fees on behalf of the fellow.

### TRAVEL

Travel expenses are approved by MUSC and DOE/NNSA prior to actual travel and are based on U.S. General Services Administration accepted rates. In general, travel reimbursements are considered for seminars, conferences, and workshops associated with this program or any meeting for which the sponsor requests

attendance. Conference travel requires approval by MUSC at least one month before the anticipated travel dates. It is the fellow's responsibility to find the least expensive reasonable mode of travel before submitting this information on a travel request form. All travel is subject to the availability of funding.

Travel in excess of 50 miles to and from the approved practicum location will be reimbursed, in addition to the Dislocation Allowance provided during the practicum assignment. No expenses are paid for food or lodging at the practicum site. Travel expenses are also allowable on occasions requiring the fellow to consult with the university graduate committee and/or deliver a presentation of thesis/dissertation research.

**THESIS RESEARCH AT PARTICIPATING DOE/NNSA DESIGNATED CENTERS**

A fellow may request to spend all or part of the time working on thesis/dissertation research at one of the participating DOE/NNSA-approved facilities (page eight of this booklet). Off-campus research requires that the fellow complete a request form (available from MUSC) and have it endorsed by the faculty advisor, facility coordinator, and facility advisor. Throughout the research assignment, the faculty advisor must agree to supervise the fellow's progress and coordinate activities with facility personnel, and the advisor may also take a trip to the facility to review the fellow's research. In addition, the facility advisor will mentor the fellow and serve on the fellow's graduate thesis research committee, if approved by the university. Travel expenses are reimbursable in accordance with MUSC's Travel Policy.

**PUBLICATION ACKNOWLEDGMENT**

DOE/NNSA and MUSC encourage fellows to publish reports and articles in scientific and engineering journals and present posters or papers at conferences. The fellow must submit any articles, reports, posters, papers, theses, etc. to MUSC at least three weeks before submission for publication, presentation, etc. These works should show the joint affiliation of the fellow with the university and, if appropriate, with the laboratory in which the research was conducted, and should acknowledge fellowship support.

Fellowship support should be acknowledged in the following manner:

> *"This research was performed under appointment to the Nuclear Nonproliferation International Safeguards Graduate Fellowship Program sponsored by the National Nuclear Security Administration's Next Generation Safeguards Initiative (NGSI)."*

NUCLEAR NONPROLIFERATION INTERNATIONAL SAFEGUARDS FELLOWSHIP PROGRAM
*PARTICIPATING UNIVERSITIES*

| | |
|---|---|
| **CLEMSON UNIVERSITY**<br>Timothy DeVol, Ph.D.<br>Environmental Engineering and Earth Sciences<br>342 Computer Court<br>Anderson, SC 29625-6510<br>864-656-1014<br>Devol@clemson.edu | **UNIVERSITY OF CALIFORNIA, BERKELEY**<br>Eric Norman, Ph.D.<br>Department of Nuclear Engineering<br>4109 Etcheverry Hall, MC 1730<br>Berkeley, CA 94720-1730<br>510-643-9984<br>ebnorman@lbl.gov |
| **GEORGIA INSTITUTE OF TECHNOLOGY**<br>Farzad Rahnema, Ph.D.<br>Boggs Building<br>770 State Street<br>Room 3-39S<br>Atlanta, GA 30332<br>404-894-3731<br>Farzad@gatech.edu | **UNIVERSITY OF ILLINOIS, CHAMPAIGN**<br>James F. Stubbins, Ph.D.<br>Dept of Nuclear, Plasma and Radiological Engineering<br>216 Talbot Laboratory, MC-234<br>104 S. Wright St.<br>Urbana, IL 61801<br>217-333-6474<br>jstubbin@illinois.edu |
| **MASSACHUSETTS INSTITUTE OF TECHNOLOGY**<br>Richard Lanza, Ph.D.<br>Department of Nuclear Science and Engineering<br>Kennedy School<br>77 Massachusetts Avenue, Room NW14-2222<br>Cambridge, MA 02319<br>617-253-2399<br>lanza@mit.edu | **UNIVERSITY OF MICHIGAN**<br>Sara Pozzi, Ph.D.<br>Department of Nuclear Engineering and Radiological Sciences<br>2355 Bonisteel Boulevard<br>1902 Cooley Building<br>Ann Arbor, MI 48109-2104<br>734-615-4970<br>pozzisa@umich.edu |
| **MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY**<br>Carlos H. Castano, Ph.D.<br>Nuclear Engineering Program<br>1870 Miner Circle<br>Rolla, MO 65409<br>573-341-6766<br>castanoc@mst.edu | **UNIVERSITY OF MISSOURI, COLUMBIA**<br>J. David Robertson, Ph.D.<br>Department of Chemistry<br>125 Chemistry Building<br>Columbia, MO 65211<br>573-882-2240<br>RobertsonJo@missouri.edu |
| **UNIVERSITY OF NEVADA, LAS VEGAS**<br>Ralf Sudowe, Ph.D.<br>Dept of Health Physics and Diagnostic Sciences<br>4505 S. Maryland Parkway<br>Box 4543037<br>Las Vegas, Nevada 89154-3037<br>702-895-5964<br>ralf.sudowe@unlv.edu | **NORTH CAROLINA STATE UNIVERSITY**<br>John Mattingly, Ph.D.<br>Department of Nuclear Engineering<br>2148 Burlington Nuclear Laboratory<br>2500 Stinson Drive<br>Raleigh, North Carolina 27695-7909<br>919-515-0224<br>john_mattingly@ncsu.edu |
| **OREGON STATE UNIVERSITY**<br>Kathryn A. Higley, Ph.D.<br>Department of Nuclear Engineering & Radiation Health Physics<br>100 Radiation Center<br>Corvallis, OR 97331-5902<br>541-737-0675<br>kathryn.higley@oregonstate.edu | **PENNSYLVANIA STATE UNIVERSITY**<br>Kenan Unlu, Ph.D.<br>Radiation Science and Engineering Center<br>101 Breazeale Nuclear Reactor<br>University Park, PA 16802<br>814-865-6351<br>k-unlu@psu.edu |

| | |
|---|---|
| **TEXAS A&M UNIVERSITY**<br>William S. Charlton, Ph.D.<br>Nuclear Engineering Department<br>3473 TAMU<br>College Station, TX 77843-3473<br>979-845-7092<br>wcharlton@tamu.edu | **UNIVERSITY OF TENNESSEE**<br>Howard Hall, Ph.D.<br>Department of Nuclear Engineering<br>215 Pasqua Engineering Building<br>Knoxville, TN 37996-2366<br>865-974-2525<br>Howard.hall@utk.edu |
| **UNIVERSITY OF TEXAS**<br>Sheldon Landsberger, Ph.D.<br>Nuclear and Radiation Engineering Program<br>Nuclear Engineering Teaching Lab<br>Pickle Research Campus, R-9000<br>Austin, Texas 78712<br>512-232-2467<br>s.landsberger@mail.utexas.edu | **UNIVERSITY OF UTAH**<br>Luther McDonald, Ph.D.<br>50 South Central Campus Drive<br>MEB1490A<br>Salt Lake City, UT 84112<br>801-581-7768<br>luther.mcdonald@utah.edu |

NUCLEAR NONPROLIFERATION INTERNATIONAL SAFEGUARDS FELLOWSHIP PROGRAM

*PARTICIPATING PRACTICUM CENTERS AND COORDINATORS*

| | |
|---|---|
| **ARGONNE NATIONAL LABORATORY**<br>J'Tia Taylor<br>Argonne National Laboratory<br>9700 S. Cass Avenue, Building<br>Argonne, IL 60439<br>630-252-1446<br>jptaylor@anl.gov<br>www.anl.gov | **BROOKHAVEN NATIONAL LABORATORY**<br>Susan Pepper<br>Brookhaven National Laboratory<br>MS 197c<br>Upton, NY 11973-5000<br>631-344-5979<br>pepper@bnl.gov<br>www.bnl.gov |
| **IDAHO NATIONAL LABORATORY**<br>Sean Morrell<br>Idaho National Laboratory<br>PO Box 1625<br>Idaho Falls, ID 83415-3740<br>208-526-2431<br>sean.morrell@inl.gov<br>www.inl.gov | **LOS ALAMOS NATIONAL LABORATORY**<br>Brian Boyer<br>Los Alamos National Laboratory<br>PO Box 1663, Mail Stop C921<br>TA-16, Building 200, Room 217<br>Los Alamos, NM 87545<br>505-606-2368<br>bboyer@lanl.gov<br>www.lanl.gov |
| **LAWRENCE LIVERMORE NATIONAL LABORATORY**<br>George Anzelon<br>Lawrence Livermore National Laboratory<br>P.O. Box 808<br>Mail Stop L-090<br>Livermore, California 94551<br>925-422-5038<br>anzelon1@llnl.gov | **OAK RIDGE NATIONAL LABORATORY**<br>Kimberly Gilligan<br>Oak Ridge National Laboratory<br>PO Box 2008<br>MS 6315<br>Oak Ridge, TN 37831-6315<br>865-241-9287<br>gilligankl@ornl.gov<br>www.ornl.gov |
| **PACIFIC NORTHWEST NATIONAL LABORATORY**<br>Roberta Burbank<br>Pacific Northwest National Laboratory<br>902 Battelle Boulevard<br>PO Box 999, MSIN K8-50<br>Richland, WA 99352<br>509-372-4002<br>Roberta.Burbank@pnnl.gov<br>www.pnnl.gov | **SANDIA NATIONAL LABORATORIES**<br>Dianna Blair<br>Sandia National Laboratories<br>PO Box 5800<br>Albuquerque, NM 87185-1371<br>505-845-8800<br>DSBlair@sandia.gov<br>www.sandia.gov |
| **SAVANNAH RIVER NATIONAL LABORATORY**<br>Rick Poland<br>Savannah River National Laboratory<br>Building 773-A<br>Aiken, SC 29808<br>803-725-1998<br>richard.poland@srnl.doe.gov<br>www.srnl.doe.gov | |

NUCLEAR NONPROLIFERATION INTERNATIONAL SAFEGUARDS FELLOWSHIP PROGRAM
*PARTICIPATING PRACTICUM CENTERS AND COORDINATORS*

**JOINT RESEARCH CENTER, GERMANY**

Klaus Luetzenkirchen, Head of Nuclear Safeguards and Forensics Unit
European Commission, Joint Research Centre
Institute for Transuranium Elements
PO Box 2340
76125 Karlsruhe, Germany
Phone: +49-7247-95-1424
Email: klaus-richard.luetzenkirchen@ec.europa.eu
http://itu.jrc.ec.europa.eu

**JOINT RESEARCH CENTER, ITALY**

Willem Janssens , Head of Unit Nuclear Security
European Commission Joint Research Centre
Institute for Transuranium Elements
Via E. Fermi, 2749
TP 210 I – 21027, Ispra (VA), Italy
Phone: +39-0332-78-9939, Mobile: +39-349-761-7411
Email: willem.janssens@ec.europa.eu
http://npns.jrc.ec.europa.eu

**JÜLICH LABORATORY**

Dr. Irmgard Niemeyer, Head of Nuclear Safeguards
Institute of Energy and Climate Research
IEK-6: Nuclear Waste Management and Reactor Safety
Forschungszentrum Jülich GmbH
in der Helmholtz-Gemeinschaft ,52425 Jülich, Germany
Tel.: +49-2461-61-1762
Fax: +49-2461-61-2450
Email: i.niemeyer@fz-juelich.de
www.fz-juelich.de/iek/iek-6/
www.treatymonitoring.de

U.S. DEPARTMENT OF ENERGY
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NUCLEAR NONPROLIFERATION INTERNATIONAL SAFEGUARDS
GRADUATE FELLOWSHIP PROGRAM
2015-2016

**A complete application includes:**

1. Application Form (Hand written applications will **not** be accepted)

2. Current Official Transcript of Grades (all undergraduate and graduate transcripts are required and should be sent directly to the Office of Special Programs from the Registrar)

3. Three (3) Reference Forms (enclosed)

4. GRE Scores (Must be sent directly from ETS. Our GRE reporting code is 5949)

Please ensure you have completed all parts of the application and obtained the proper signatures for each section. Please include the fellowship program name on all correspondence. Keep a copy of this application and supporting materials for your files.

All applicants must submit the required information to the MUSC Office by February 2, 2015. It is the applicant's responsibility to ensure the application is complete. MUSC will not process late and/or incomplete applications.

*Forms are located at www.scuref.org/forms under the NNIS tab. Applicants should submit all materials electronically through the SCUREF website. If you are unable to submit the application electronically, you may mail completed application materials to the following address:*

Medical University of South Carolina
Office of Special Programs, NNIS
19 Hagood Avenue, HOT 304-H4
MSC 851
Charleston, SC 29425-8510

For additional information or assistance, please contact the MUSC Office of Special Programs at (843) 792-0832 or nhuchet@scuref.org.

Application information will be used solely for the purpose of selecting participants and administering the program. Disclosure of this information is subject to Public Law 93-579 (the Privacy Act of 1974).

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NEXT GENERATION SAFEGUARDS INITIATIVE

# NUCLEAR NONPROLIFERATION INTERNATIONAL SAFEGUARDS GRADUATE FELLOWSHIP PROGRAM 2015-2016 APPLICATION FORM

## DATA

1. Name:_____
   *(First)* *(Middle)* *(Last)*

2. Academic Status: *Please indicate your anticipated academic status as of September 1, 2015*.
   ( ) Entering Graduate Student
   ( ) First Year Graduate Student (Enrolled prior to the fall term 2015)
   ( ) Returning Graduate Student (Enrolled more than 2 semesters prior to the fall term 2015)
   Expected Graduation Dates (mm/yy):_____(Master's)
   _____(Ph.D.)
   If you are currently enrolled as a graduate student, please list the university and department:
   _____

3. If *entering* as a graduate student, please indicate your preference in universities:

   1. _____
      (Name of University) (Major Area of Study)
   2. _____
      (Name of University) (Major Area of Study)
   3. _____
      (Name of University) (Major Area of Study)

## EDUCATION INFORMATION

List all previous universities or colleges attended (graduate and undergraduate).
Official transcripts must be sent directly from the registrar to complete the application.

4. University Degree Major Award Date

   _____
   _____
   _____
   _____

5. Undergraduate: GPA_____ (based on 4 pt. scale)

6. Graduate: GPA_____(based on 4 pt. scale)

7. GRE Scores: Verbal_____ Quantitative_____ Writing_____

BACKGROUND INFORMATION

8. Address: ( ) Home ( ) School (check one)

   Street or Box Number:_____

   City:_____State:_____Zip:_____

   Phone Number:_____E-Mail:_____

9. Are you a U.S. Citizen? Yes ( ) No ( )

10. Are you a dual citizen? Yes ( ) No ( )

    If you are a dual citizen, in which other country do you hold citizenship? _____

11. How did you hear about this fellowship ?

    _____

PREVIOUS NGSI EXPERIENCE

12. If applicable, list any previous participation in NGSI-funded opportunities (i.e. NGSI National Laboratory safeguards internships, NGSI safeguards short courses, or NGSI-sponsored university courses). Include year.

_____

_____

_____

_____

_____

_____

QUALIFICATIONS

13. Extracurricular Activities

List all technical societies and service organizations. Include offices held. Attach additional page if necessary.

_____

_____

_____

_____

_____

_____

14. Practical Experience

List significant work experience gained from time in a laboratory setting or federal agency.

15. Academic Awards and Honors

List significant pre-college, undergraduate, and/or graduate honors and awards and give a brief description of each.

16. Employment Records

Please attach resume.

17. References

You must include references from three people familiar with your academic preparation and technical capabilities. At least two references should be from faculty members who are familiar with your current academic work. Please have these individuals send official reference forms directly to MUSC. These forms are located at www.scuref.org/forms under the NNIS tab.

COURSEWORK

18. Previous Courses

List all science, engineering, and mathematics courses that you have completed at all undergraduate and graduate institutions listed in this application. Provide course title and number, hours attempted, and letter grade.

| Course Title and Number | Hours | Grade |
|---|---|---|
| *Example: Nuc 400: Advanced Nuclear and Radiochemistry* | *4* | *A* |

*If grades listed above are numeric, please indicate on which scale they are based, e.g., 4 pt. or 5 pt.

19. Current Courses

| Course Title and Number | Hours |
|---|---|
| *Example: Engineering 101* | *4* |

20. Planned Courses

List all courses you plan to take prior to September 2015.

| Course Title and Number | Hours |
|---|---|
| *Example: Engineering 101* | *4* |

21. Statement on Career Goals and Objectives

In no more than 500 words, provide information on your education plans and career aspirations. Please relate your statement to one or more of the Technical Areas listed on pages two and three of this booklet. This statement is critical to the overall evaluation of your application.

Signature:_____ Date:_____

(In providing this signature, the applicant recognizes that SCUREF, MUSC, and the program sponsor, the U.S. Department of Homeland Security, have the right to verify all information contained in this application. Any false or misleading statements made by the applicant may result in either the removal of the application or termination of a fellowship appointment.)

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NUCLEAR NONPROLIFERATION INTERNATIONAL SAFEGUARDS
GRADUATE FELLOWSHIP PROGRAM
2015-2016

# REFERENCE FORM

Applicant's First Name Middle Name Last Name

How long and in what association have you known the applicant?

| PERSONAL CHARACTERISTICS | Highest 10 % | Highest 20% | Mid Level | Lowest 20% | Lowest 10% | Inadequate Observation |
|---|---|---|---|---|---|---|
| Imagination and Originality of Thought | | | | | | |
| Ability to Work with Others | | | | | | |
| Leadership Potential | | | | | | |
| Independence and Self-reliance | | | | | | |
| Growth During Total Period Observed | | | | | | |
| Motivation Toward a Productive Career | | | | | | |
| Technical Expertise | | | | | | |
| Ability to Communicate (Written/Oral) | | | | | | |

Add any descriptive comments that will assist in providing a complete picture of the applicant's character, attitude, abilities, and potential for success to perform on a high level at a college or university. Please comment on the applicant's weak and strong points.

| | |
|---|---|
| Comments: | |
| Signature: | Date: |
| Typed/Printed Name: | Title: |
| Address: | |

*Reference forms, which should be submitted electronically, are located at www.scuref.org/forms under the NNIS tab. If you are unable to submit this form electronically, you may mail this form to the following address:*

*Medical University of South Carolina*
*Office of Special Programs, NNIS*
*19 Hagood Avenue, HOT 304-H4*
*MSC 851*
*Charleston, SC 29425-8510*

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GRADUATE FELLOWSHIP PROGRAM
2015-2016

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