East Asia and Pacific Summer Institutes for U.S. Graduate Students (EAPSI)

PROGRAM SOLICITATION
NSF 13-593

REPLACES DOCUMENT(S):
NSF 12-498

National Science Foundation

Office of International Science and Engineering

Full Proposal Deadline(s) (due by 5 p.m. proposer's local time):

November 25, 2013

November 13, 2014

Second Thursday in November, Annually Thereafter

IMPORTANT INFORMATION AND REVISION NOTES

Please be aware that significant changes have been made to the PAPPG to implement revised merit review criteria based on the National Science Board (NSB) report, National Science Foundation's Merit Review Criteria: Review and Revisions. While the two merit review criteria remain unchanged (Intellectual Merit and Broader Impacts), guidance has been provided to clarify and improve the function of the criteria. Changes will affect the project summary and project description sections of proposals. Annual and final reports also will be affected.

A by-chapter summary of this and other significant changes is provided at the beginning of both the *Grant Proposal Guide* and the *Award & Administration Guide*.

Please note that this program solicitation may contain supplemental proposal preparation guidance and/or guidance that deviates from the guidelines established in the Grant Proposal Guide.

Any proposal submitted in response to this solicitation should be submitted in accordance with the revised *NSF Proposal & Award Policies & Procedures Guide* (PAPPG) (NSF 16-1), which is effective for proposals submitted, or due, on or after January 25, 2016.

SUMMARY OF PROGRAM REQUIREMENTS

General Information

Program Title:

East Asia and Pacific Summer Institutes for U.S. Graduate Students (EAPSI)

Synopsis of Program:

NSF and selected foreign counterpart science and technology agencies sponsor international research institutes for U.S. graduate students in seven East Asia and Pacific locations at times set by the counterpart agencies between June and August each year. The Summer Institutes (EAPSI) operate similarly and the research visits to a particular location take place at the same time. Although applicants apply individually to participate in a Summer Institute, awardees become part of the cohort for each location. Applicants must propose a location, host scientist, and research project that is appropriate for the host site and duration of the international visit.

An EAPSI award provides U.S. graduate students in science, engineering, and education: 1) first-hand research experiences in Australia, China, Japan, Korea, New Zealand, Singapore, or Taiwan; 2) an introduction to the science, science policy, and scientific infrastructure of the respective location; and 3) an orientation to the society, culture, and language. It is expected that EAPSI awards will help students initiate professional relationships to enable future collaboration with foreign counterparts.

The NSF award includes participation in the Pre-Departure Orientation, summer stipend of $5,000, and roundtrip airplane ticket to the host location. EAPSI partner agencies pay in-country living expenses during the Summer Institutes.

Cognizant Program Officer(s):

Please note that the following information is current at the time of publishing. See program website for any updates to the points of

contact.

- Anne Emig, Program Officer, telephone: (703) 292-7241, email: eapsi@nsf.gov
- Elena Hillenburg, Program Specialist, telephone: (703) 292-2993, email: eapsi@nsf.gov

Applicable Catalog of Federal Domestic Assistance (CFDA) Number(s):

- 47.041 --- Engineering
- 47.049 --- Mathematical and Physical Sciences
- 47.050 --- Geosciences
- 47.070 --- Computer and Information Science and Engineering
- 47.074 --- Biological Sciences
- 47.075 --- Social Behavioral and Economic Sciences
- 47.076 --- Education and Human Resources
- 47.079 --- Office of International Science and Engineering
- 47.083 --- Office of Integrative Activities (OIA)

Award Information

Anticipated Type of Award: Fellowship

Estimated Number of Awards: 205

NSF nominates applicants to the foreign counterpart agency based on a previously negotiated limit for each EAPSI location: Australia - 20; China - 40; Japan - 65; Korea - 25; New Zealand - 15; Singapore - 15; Taiwan - 25. Success rates for the different locations vary within each fiscal year and from year to year. Tentative award offers from NSF are not finalized unless and until counterpart agencies concur in the selections.

Anticipated Funding Amount: $2,400,000 pending availability of funds.

Eligibility Information

Who May Submit Proposals:

Proposals may only be submitted by the following:

- Individual graduate students, not through the institutions at which they are enrolled. This requires that, during the application process, each student registers as an institution and serves as his or her own Authorized Organizational Representative (AOR). Similarly, awards are made to the individuals.

Who May Serve as PI:

Individual graduate students, not through the institutions at which they are enrolled. This requires that, during the application process, each student registers as an institution and serves as his or her own Authorized Organizational Representative (AOR). Similarly, awards are made to the individuals.

As of the deadline date for the application, applicants must

- be U.S. citizens or permanent residents;
- be enrolled in a research-oriented Master's or Ph.D. degree program, and, if enrolled in a joint Bachelor/Master's program, have graduated from the undergraduate degree portion of the program;
- be enrolled at a U.S. institution located in the United States; and
- propose a research project in a field of science, engineering, or science education supported by the National Science Foundation (see Section II below for fields of study eligible for NSF support).

Applications submitted by persons who do not meet **all** of the above criteria will not be entered into the competition and will be returned without review.

Applicants are encouraged to consult with and have the support of their academic advisors prior to applying.

Previous EAPSI awardees may apply, but only to a different host location from their previous award. Priority will be given to new applicants to the program.

If the student is enrolled at the time of application (i.e., in November) and subsequently graduates before the EAPSI Program starts (i.e., before June of the following year), he or she is still eligible to apply and receive the award.

Limit on Number of Proposals per Organization:

Not applicable

Limit on Number of Proposals per PI: 1

One application per student per year.

Proposal Preparation and Submission Instructions

A. Proposal Preparation Instructions

- **Letters of Intent:** Not required
- **Preliminary Proposal Submission:** Not required

- **Full Proposal Preparation Instructions:** This solicitation contains information that supplements the standard Grant Proposal Guide (GPG) proposal preparation guidelines. Please see the full text of this solicitation for further information

B. Budgetary Information

- **Cost Sharing Requirements:**

  Inclusion of voluntary committed cost sharing is prohibited.

- **Indirect Cost (F&A) Limitations:**

  There are no indirect costs allowed.

- **Other Budgetary Limitations:**

  Not Applicable

C. Due Dates

- **Full Proposal Deadline(s)** (due by 5 p.m. proposer's local time):

  November 25, 2013

  November 13, 2014

  Second Thursday in November, Annually Thereafter

Proposal Review Information Criteria

Merit Review Criteria:

National Science Board approved criteria. Additional merit review considerations apply. Please see the full text of this solicitation for further information.

Award Administration Information

Award Conditions:

Additional award conditions apply. Please see the full text of this solicitation for further information.

Reporting Requirements:

Additional reporting requirements apply. Please see the full text of this solicitation for further information.

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I. INTRODUCTION

Support of international activities is an integral part of the NSF mission to sustain and strengthen the nation's science, mathematics, and engineering capabilities, and to promote the use of those capabilities in service to society. In particular, NSF recognizes the importance of enabling U.S. researchers and educators to advance their work through international collaborations, and of helping ensure that future generations of U.S. scientists and engineers gain professional experience beyond this nation's borders early in their careers.

II. PROGRAM DESCRIPTION

EAPSI awards are available in any area of science and engineering research or education supported by NSF. Applicants are reminded that NSF does not support research in the biological sciences with public health or disease-related goals, including the etiology, diagnosis, or treatment of physical or mental disease, abnormality or malfunction in humans or animals. Animal models of such conditions or the development or testing of drugs or other procedures for their treatment also are not eligible for support. Biomedical engineering and healthcare engineering are supported in selected areas; see the current descriptions on the Engineering website: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=501032&org=CBET&from=home.

EAPSI awards provide U.S. graduate students in science and engineering: 1) first-hand research experiences in partner locations, i.e., Australia, China, Japan, Korea, New Zealand, Singapore, or Taiwan; 2) an introduction to the science, science policy, and scientific infrastructure of the respective location; and 3) an orientation to the society, culture, and language of these locations. These goals are met through research visits that will help graduate students initiate scientific relationships to enable future collaboration with foreign counterparts. All institutes, except Japan, last approximately eight weeks from June to August. The institute in Japan lasts approximately ten weeks from June to August.

EAPSI aims to provide an international experience to graduate students, particularly those who have never had one previously. Previous awardees may apply to a new host location, but priority will be given to new applicants. As this program is open to all research fields and disciplines supported by NSF, at a wide range of suitable research institutions, NSF will ensure appropriate distribution of fellowships across disciplinary fields and research sites. Members of groups under-represented in U.S. science, engineering, and STEM education are especially encouraged to apply.

The East Asia and Pacific Summer Institutes are administered in the United States by the National Science Foundation. In East Asia and the Pacific, the Summer Institutes are co-sponsored by:

- Australian Academy of Science;
- Chinese Ministry of Science and Technology, Chinese Academy of Sciences, and National Natural Science Foundation of China;
- Japan Society for the Promotion of Science;
- National Research Foundation of Korea;
- Royal Society of New Zealand;
- National Research Foundation of Singapore; and
- National Science Council of Taiwan.

The first summer institute began in Japan in 1990, followed by Korea in 1995, Taiwan in 2000, China in 2003, Australia in 2004, New Zealand in 2007, and Singapore in 2008. The Summer Institute in Taiwan operates in accordance with the U.S.-Taiwan Relations Act (PL 96-8).

A. Key Elements

The EAPSI program is designed for U.S. graduate students wishing to conduct research in a foreign setting and to experience the culture of the host location.

Foreign language capability is not required for acceptance into the EAPSI program; however, basic language training prior to the travel may contribute to a successful EAPSI experience.

Before applying for the Summer Institutes, U.S. permanent residents should verify their ability to travel without difficulty outside of the United States and to Australia, China, Japan, Korea, New Zealand, Singapore, or Taiwan.

The application requires a letter of reference (recommendation) from the student's advisor at the U.S. university.

Applicants may indicate a second and third choice in the event their first choice is not possible. Only ONE potential host researcher may be identified per location in the application.

Applicants must obtain an invitation or acceptance from their first choice foreign host researcher to conduct summer research in the host laboratory prior to submitting an application. Information on host locations and lists of potential host institutions may be found at the end of respective Handbooks available at http://www.nsf.gov/eapsi.

Applicants are required to review information for their selected location in the respective Handbook on the EAPSI website http://www.nsf.gov/eapsi. Information in the Handbooks is updated each year for the following year's programs, or as details become available. Additional questions about specific locations can be addressed to the Office of International and Integrative Activities whose program managers have expertise and experience specific to these locations: http://www.nsf.gov/od/iia/ise/index.jsp.

Awardees must attend the Pre-Departure Orientation in the Washington, D.C. area, which is usually held in March or April. Expenses are paid by NSF.

Awardees are responsible for preparing for certain aspects of their own travel, including but not limited to obtaining passports, visas, travel insurance, and any other requirements for travel. Likewise, they are responsible for making their own arrangements for necessary medications, immunizations, and health insurance. Awardees with chronic health conditions should consult their health care provider regarding the advisability of participating in a program which introduces cross-cultural and other physical stresses.

At the conclusion of the Summer Institute, participants are encouraged to visit other research sites in their host location to learn about research being conducted in their field and to cultivate additional contacts for future collaborations. Such visits are scheduled in consultation with host researchers and foreign co-sponsoring organizations.

B. Program Conditions and Requirements

As a set of structured programs jointly funded and managed by NSF and foreign co-sponsoring organizations in the East Asia and Pacific region, all of the Summer Institutes operate in the same manner. All applications are submitted to NSF. Following merit review, NSF nominates its selected awardees to partner organizations and extends tentative offers to those selected applicants to verify that they will accept the fellowship if a final offer is made and that they agree to all conditions of the awards. NSF cannot make final award decisions unless and until the counterpart organizations and hosts concur in the nominations. Therefore, not all tentative offers are ultimately finalized.

Applicants selected by NSF must ACCEPT the following terms and conditions before NSF will forward their nominations to the counterpart organizations. Participants must commit to attend the Summer Institute:

1. in its entirety. Late arrivals and early departures are not allowed and participants must attend any opening and closing ceremonies. Tentative offers will include the dates of the select Summer Institute.

2. unaccompanied. Due to varying visa requirements and the nature of the program, it is not appropriate for awardees to be accompanied by family and/or friends during the Summer Institutes. NSF and host organizations provide support and resources for awardees only; they cannot provide any support, service, or accommodation to other individuals.

3. after attending the NSF orientation. Pre-Departure Orientation in Washington, DC is arranged for Fellows and expenses are paid by NSF.

4. at the location assigned by the partner organization. NSF and the relevant foreign co-sponsoring organizations make every effort to finalize host arrangements as proposed by applicants; but placement with the requested host researcher cannot be guaranteed. Students are expected to accept placement with alternative host researchers as suggested by NSF and/or the foreign co-sponsoring organization. Any changes in the research plan must be approved both by NSF and the counterpart agency in advance of the change.

5. with no overlap of Federal support. Participants may receive funding from only one federal source while participating in the EAPSI summer activity. If you currently receive salary or stipend from another federal source, including a fellowship or research and training grant, you must choose either the EAPSI stipend or the funding from the other federal source during the Summer Institute.

6. after providing NSF contact information of someone in the U.S. in case of emergency while outside the U.S.

Participants are representatives of NSF and the United States. Failure to adhere to any of the above terms and conditions or engagement in behavior that reflects negatively upon NSF or the United States may result in immediate dismissal from the program, immediate return home, and return of all award funds to NSF and the foreign co-sponsoring organization.

C. Approximate Timetable

November: Deadline, applications submitted.

December - January: NSF merit review of applications.

February: Tentative offers to selected applicants. Nominations sent to counterpart organizations.

March/April: Pre-Departure Orientation in Washington, D.C. area (2 days).

April: Final acceptance notices issued to confirmed students by NSF's foreign co-sponsoring organizations in Australia, China, Japan, Korea, New Zealand, Singapore, and Taiwan.

April - June: Potential awardees submit abstracts and prepare to travel; NSF Division of Grants and Agreements issues award notifications by email.

June - August: Summer Institutes.

December 1: NSF Final Report and Project Outcomes Report for the General Public are due via http://www.research.gov/. This is in addition to any reporting requirements established by foreign counterparts.

III. AWARD INFORMATION

The NSF portion of the EAPSI award consists of several parts: a stipend of $5,000, attendance at the Pre-Departure Orientation, and transportation from the Fellow's home to the host location in the form of a non-refundable airplane ticket on a U.S. flag carrier airline in accordance with GSA requirements and issued by the NSF travel contractor.

The foreign counterparts provide in-country living allowance.

IV. ELIGIBILITY INFORMATION

Who May Submit Proposals:

Proposals may only be submitted by the following:

- Individual graduate students, not through the institutions at which they are enrolled. This requires that, during the application process, each student registers as an institution and serves as his or her own Authorized Organizational Representative (AOR). Similarly, awards are made to the individuals.

Who May Serve as PI:

Individual graduate students, not through the institutions at which they are enrolled. This requires that, during the application process, each student registers as an institution and serves as his or her own Authorized Organizational Representative (AOR). Similarly, awards are made to the individuals.

As of the deadline date for the application, applicants must

- be U.S. citizens or permanent residents;
- be enrolled in a research-oriented Master's or Ph.D. degree program, and, if enrolled in a joint Bachelor/Master's program, have graduated from the undergraduate degree portion of the program;
- be enrolled at a U.S. institution located in the United States; and
- propose a research project in a field of science, engineering, or science education supported by the National Science Foundation (see Section II below for fields of study eligible for NSF support).

Applications submitted by persons who do not meet **all** of the above criteria will not be entered into the competition and will be returned without review.

Applicants are encouraged to consult with and have the support of their academic advisors prior to applying.

Previous EAPSI awardees may apply, but only to a different host location from their previous award. Priority will be given to new applicants to the program.

If the student is enrolled at the time of application (i.e., in November) and subsequently graduates before the EAPSI Program starts (i.e., before June of the following year), he or she is still eligible to apply and receive the award.

Limit on Number of Proposals per Organization:

Not applicable

Limit on Number of Proposals per PI: 1

One application per student per year.

V. PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS

A. Proposal Preparation Instructions

Full Proposal Instructions: Proposals submitted in response to this program solicitation should be prepared and submitted in accordance with the guidelines specified in the NSF Grant Proposal Guide (GPG). The complete text of the GPG is available electronically on the NSF website at: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=gpg. Paper copies of the GPG may be obtained from the NSF Publications Clearinghouse, telephone (703) 292-PUBS (7827) or by e-mail from nsfpubs@nsf.gov.

See Chapter II.C.2 of the GPG for guidance on the required sections of a full research proposal submitted to NSF. Please note that the proposal preparation instructions provided in this program solicitation may deviate from the GPG instructions.

In cases where requirements given in this program solicitation differ from those given in the Grant Proposal Guide, this program solicitation takes precedence.

All page limits indicated within this program solicitation include images, figures, graphics, tables, etc. Applicants must adhere to page limitations, NSF limits on font type and size, and margins (minimum of 1 inch on each side). Proposals that do not conform to the requirements will be returned without review.

IMPORTANT SUBMISSION NOTES: Unlike most proposals to NSF, EAPSI proposals are submitted directly to NSF **without going through the applicant's university**. EAPSI proposals must be submitted electronically on the NSF FastLane website. Refer to the How to Apply Guide available at https://nsf.gov/eapsi for detailed instructions.

1. Go to NSF FastLane system, choose Postdoctoral Fellowships and Other Programs tab, Individual Registration, and register as an individual researcher: https://www.fastlane.nsf.gov/n1/N1IndvReg.html?isScientist=GO In the FastLane application process for EAPSI, the applicant will be called a Principal Investigator (PI) or Proposer and **must register as an 'individual researcher'** acting as the Authorized Organizational Representative (AOR).

2. After registering as an individual researcher, applicants must log in to FastLane under Postdoctoral Fellowships and Other Programs tab; click on PI/Co-PI Login Page button: https://www.fastlane.nsf.gov/jsp/homepage/postdoc_fel.jsp

3. Edit the PI Information form regarding citizenship. Applicants must be U.S. citizens or permanent residents at the time of application and therefore are not permitted to select "do not wish to provide" in response to citizenship. Failure to provide citizenship information will result in the application being returned without review.

4. The applicant must list the name of the Letter of Reference Writer (applicant's advisor at the U.S. university) within the "Add/Delete Letter of Reference Writers" section in FastLane Proposal Preparation. This must be done **BEFORE** the applicant's advisor can upload his or her letter into the FastLane system. The advisor must log in as Letter of Reference Writer under NSF Postdoctoral Fellowships and Other Programs tab of FastLane https://www.fastlane.nsf.gov/jsp/homepage/postdoc_fel.jsp to submit the recommendation letter.

5. **All** proposal materials must be submitted via FastLane by the deadline. Materials sent via other means to NSF or received after the deadline will not be reviewed, considered, or accepted.

6. EAPSI applications will be shared with foreign partner science agencies, and subsequently, with potential host researchers. Therefore, do not include any information in your application to which you would not want your host researcher or the foreign co-sponsoring organization to have access.

7. Before selecting a host institution, applicants are advised to review lists of prospective hosts available at the end of the Handbooks on the EAPSI website http://www.nsf.gov/eapsi. Applicants initiate contact with potential host researchers, establish communication, and if mutual commitment is established, obtain letter of invitation or acceptance from the host. Applicants to Japan should seek formal acceptance from a senior-level representative at the host institution (e.g., Professor, Director), even if the applicant's mentor may be a junior-level (e.g., Assistant Professor) researcher at that institution.

8. Students are strongly encouraged to seek information about potential foreign host researchers and institutions from their academic advisors, appropriate U.S. or foreign faculty members, or by contacting primary points of contact at foreign co-sponsoring organizations listed in the respective Handbooks. Students may also seek out host researchers by conducting literature searches and/or from host universities directly. Contact EAPSI Program Office http://www.nsf.gov/eapsi if you wish to be hosted by an institution not listed in the respective Handbook.

9. While preparing the application, applicants should keep in mind that the key to a successful EAPSI application and experience is developing clear, mutually agreed upon expectations about the proposed research project and sharing them with the host and the graduate advisor.

10. If applicants have any questions about registering as an individual researcher or need assistance with submitting materials in FastLane, contact the FastLane Helpdesk at fastlane@nsf.gov or 1-800-673-6188.

PROPOSAL COMPONENTS: Only complete and timely applications will be accepted. All materials listed below must be submitted by the deadline**.** Applications that include any extraneous information not requested in the program solicitation will be returned without review.

1. Cover Sheet: Applicants must first complete the requested fields on the cover sheet to gain access to the application process. Check that name and address are correct. Select the EAPSI program solicitation from the list shown. When you click on "remainder of the cover sheet," you will notice that the cover sheet autofills and is saved.

2. Application Form:

- You must complete and save the Application Form. Please enter all information COMPLETELY and CORRECTLY.
- In item 2, you may list up to three locations in order of preference from the following list: Australia, China, Japan, Korea, New Zealand, Singapore, or Taiwan. Identify one potential host researcher at each location.
- In item 3, identify the NSF program area or research directorate most closely related to your research (see NSF organizational list http://www.nsf.gov/staff/orglist.jsp). For interdisciplinary and multidisciplinary projects, list the major field(s) of science/engineering/education. This field is limited to 30 characters.
- In item 4, provide a succinct and clear **title** of the research project you are proposing in terms understandable to any scientist, mathematician, or engineer. Do not use abbreviations or acronyms. This field is limited to 180 characters.
- If item 6 reads "do not wish to provide," go back and edit the PI Personal Information in FastLane. If you are a U.S. permanent resident, you must supply registration number and country of citizenship.
- In item 12, provide the information about your primary proposed host researcher, including email address.
- Applicants must obtain and include an invitation or acceptance from their first choice host researcher. Email is acceptable. A summary of the email or other correspondence between you and the proposed host that lead to the research plan is required and must be uploaded in the "Supplementary Documents" section of the application.

3. Project Summary (not to exceed one (1) page): Each proposal must contain a summary of the proposed project not more than one page in length. The Project Summary consists of an Overview, a statement on the Intellectual Merit of the proposed activity, and a statement on the Broader Impacts of the proposed activity.

The Overview includes a description of the activity that would result if the proposal were funded and a statement of objectives and methods to be employed. The statement on Intellectual Merit should describe the potential of the proposed activity to advance knowledge. The statement on Broader Impacts should describe the potential of the proposed activity to benefit society and contribute to the achievement of specific, desired societal outcomes. Although the international component of EAPSI is itself a broader impact, it may be appropriate to include community engagement, outreach efforts, and educational activities.

The Project Summary should be written in the third person, informative to other persons working in the same or related fields, and, insofar as possible, understandable to a scientifically or technically literate lay reader. It should not be an abstract of the proposal.

Proposals that do not contain the Project Summary, including an Overview and separate statements on Intellectual Merit and Broader Impacts will not be accepted by FastLane or will be returned without review.

4. **Project Description** (**not to exceed five (5) single spaced pages** with one-inch margins using an NSF-allowed font): Project Description is the section of the application where you present your research plan for the summer, the specific justification for the selection of your host and host location, and how the EAPSI fellowship fits with your thesis project and/or career goals.

- Begin the project description with a project synopsis and timeline.
- Present a research plan including a short introduction and background section. Provide a clear description of what research you plan to conduct and why traveling to the host location is justified for the project's successful completion. If asking hypothesis-driven research question(s), give research objectives and methodologies. The description should be detailed and specific enough to be evaluated by both disciplinary experts and general enough for an interdisciplinary panel. If specific hypotheses are not presented, give sufficient detail to explain what research is being conducted, how, and why. Explain how the research fits into your thesis/dissertation research and/or career goals. Explain to what extent proposed activities suggest and explore creative, original, or potentially transformative concepts.
- The proposed research should be achievable within 6-7 weeks (8-9 weeks for Japan). Your plan for carrying out the proposed activities should be well-reasoned, well-organized, and based on a sound rationale. It should incorporate a mechanism to assess success.
- Describe previous collaboration with the host and/or proposed future collaboration as a result of an EAPSI project, if any.
- Identify any special clearances or reviews required, e.g., human subjects, vertebrate animals, collection/import/export/field work permits and how these requirements will be met prior to accepting an EAPSI fellowship.
- Give a brief scientific biography of your primary proposed host, including a few select publications or activities that directly relate to your project, if any.
- Explain how the specific expertise of your proposed host researcher and capability of the host institution (e.g., facilities, data, equipment access) benefits your proposed project, i.e., describe what benefits derive from working with your host on the proposed research topic/project. Make sure adequate resources are available to carry out the proposed activities. You should provide a strong justification for the host location.
- Describe the expected value of gaining both cultural and scientific experience in Australia, China, Japan, Korea, New

Zealand, Singapore, or Taiwan to your future career goals.
- Describe any unique qualifications you possess to conduct research in an international setting.
- List the person who will be writing your Letter of Reference; include his or her institution, position, and relationship to you and identify any potential conflicts-of-interest, *e.g.,* personal or family relationships, etc.

5. References Cited (Bibliography): References (literature) cited in the Project Description are not counted against the 5-page limit on the project description but must be listed separately and uploaded into the References section.

6. Biographical Sketch (Curriculum Vitae):

- Provide a 2-page CV that includes your academic background, previous appointments, past research experience, previous international experience, a list of publications, and/or other pertinent information (e.g., awards, skills, and abilities) you consider relevant to determining your overall suitability for receiving an EAPSI fellowship. Your CV needs to explain clearly what graduate program you are enrolled in, what degree you seek, projected graduation date, and where you are in the process of earning the degree.
- List any Responsible Conduct of Research training you have had.
- **If you are a prior EAPSI Fellow, indicate the year and location of Fellowship experience and provide a short paragraph on results of your past EAPSI support.**
- The biographical sketch should include only your professional information; do not include personal information, such as birthdate, marital status, etc.
- You may use the format described in the Grant Proposal Guide at http://www.nsf.gov/publications/pub_summ.jsp?ods_key=gpg or a format of your choosing as long as it does not exceed the 2-page limit.

7. A Letter of Reference: You must have one letter of reference (recommendation) from your current graduate/thesis advisor.

- If you are not assigned to one advisor, you may substitute your academic advisor or Department Chair.
- The reference writer must identify any potential conflicts-of-interest, e.g. personal and/or family relationship with the applicant.
- Do not use your proposed foreign host as the writer of a letter of reference.
- Your reference-letter writer must submit the letter using FastLane (See "Add/Delete Letter of Reference Writers" section in your FastLane application).
- You must list the person's name in FastLane before your reference can submit a letter.
- You are responsible for assuring that your reference uses FastLane to submit the letter by the application deadline.
- If the letter is not received in FastLane by the deadline, the application **will be returned without review**.

8. Supplementary Documents: ONLY the following supplementary documents are to be submitted electronically via FastLane as part of the application. Please submit them in the following order:

- Proof of Current Enrollment: A statement from your advisor, the registrar's office, Dean, or Department Chair attesting to your current enrollment in the graduate program. Email statements with their original headings including sender's email address and date are acceptable.
- Graduate Transcripts (graduate transcripts are required; undergraduate transcripts are optional). Unofficial transcripts are permitted.
- Letter of invitation or acceptance (email is sufficient) from the potential host researcher. The host letter must indicate that the host has read your proposal and agrees to host you for the proposed project, what facilities and resources will be made available to you for the summer, and mutual benefits of collaboration.
- Include a description of how you made contact with the proposed host and established mutual commitment to the project. Keep this section brief (one paragraph).
- IRB Approval (if applicable): If your proposal involves human subjects, include Institutional Review Board (IRB) Approval or Exemption information from your home or host institution. Otherwise, address how you will obtain approval in the project description.
- Vertebrate Animals Statement (if applicable): Upload Institutional Animal Care and Use Committee (IACUC) approval for your research from your graduate institution or similar approval from the host institution, if available. Otherwise, address how you will obtain the approval in the project description.
- Responsible Conduct of Research training certificates (if available).
- Data Management Plan, or assertion of the absence of the need for such a plan, per guidance in the GPG. Data Management Plan may include a paragraph addressing the types of data, samples, physical collections, software, curriculum materials, and other materials to be produced in the course of the project; the standards to be used for data and metadata format and content; policies for access and sharing including provisions for appropriate protection of privacy, confidentiality, security, intellectual property, or other rights or requirements; policies and provisions for re-use, re-distribution, and the production of derivatives; and plans for archiving data, samples, and other research products, and for preservation of access to them.

SPECIFIC NOTES REGARDING THE EAPSI SELECTION PROCESS:

1. Following merit review, NSF nominates its selected awardees to partner organizations for matching/confirming with host researcher(s) listed in the application. Final award decisions are contingent on (1) recommendation by NSF, (2) acceptance by NSF's foreign co-sponsoring organization, and (3) confirmed placement at the foreign host institution.
2. NSF may suggest alternative placement at other locations in rare cases where applicants are not able to be matched with a host or are declined by the foreign co-sponsoring organization.

Proposers are reminded to identify the NSF publication number (located on the first page of this document) in the program solicitation block on the NSF Cover Sheet For Proposal to the National Science Foundation. Compliance with this requirement is critical to determining the relevant proposal processing guidelines. Failure to submit this information may delay processing.

B. Budgetary Information

Cost Sharing:

Inclusion of voluntary committed cost sharing is prohibited.

Indirect Cost (F&A) Limitations:

There are no indirect costs allowed.

Budget Preparation Instructions:

The proposal budget form is filled in automatically to reflect the amount of the stipend and allowances. Do not alter this form in any way.

C. Due Dates

- **Full Proposal Deadline(s)** (due by 5 p.m. proposer's local time):

  November 25, 2013

  November 13, 2014

  Second Thursday in November, Annually Thereafter

D. FastLane Requirements

Proposers are required to prepare and submit all proposals for this program solicitation through use of the NSF FastLane system. Detailed instructions regarding the technical aspects of proposal preparation and submission via FastLane are available at: http://www.fastlane.nsf.gov/a1/newstan.htm. For FastLane user support, call the FastLane Help Desk at 1-800-673-6188 or e-mail fastlane@nsf.gov. The FastLane Help Desk answers general technical questions related to the use of the FastLane system. Specific questions related to this program solicitation should be referred to the NSF program staff contact(s) listed in Section VIII of this funding opportunity.

Submission of Electronically Signed Cover Sheets. The Authorized Organizational Representative (AOR) must electronically sign the proposal Cover Sheet to submit the required proposal certifications (see Chapter II, Section C of the Grant Proposal Guide for a listing of the certifications). The AOR must provide the required electronic certifications within five working days following the electronic submission of the proposal. Further instructions regarding this process are available on the FastLane Website at: https://www.fastlane.nsf.gov/fastlane.jsp.

VI. NSF PROPOSAL PROCESSING AND REVIEW PROCEDURES

Proposals received by NSF are assigned to the appropriate NSF program for acknowledgement and, if they meet NSF requirements, for review. All proposals are carefully reviewed by a scientist, engineer, or educator serving as an NSF Program Officer, and usually by three to ten other persons outside NSF either as *ad hoc* reviewers, panelists, or both, who are experts in the particular fields represented by the proposal. These reviewers are selected by Program Officers charged with oversight of the review process. Proposers are invited to suggest names of persons they believe are especially well qualified to review the proposal and/or persons they would prefer not review the proposal. These suggestions may serve as one source in the reviewer selection process at the Program Officer's discretion. Submission of such names, however, is optional. Care is taken to ensure that reviewers have no conflicts of interest with the proposal. In addition, Program Officers may obtain comments from site visits before recommending final action on proposals. Senior NSF staff further review recommendations for awards. A flowchart that depicts the entire NSF proposal and award process (and associated timeline) is included in the GPG as Exhibit III-1.

A comprehensive description of the Foundation's merit review process is available on the NSF website at: http://www.nsf.gov/bfa/dias/policy/merit_review/.

Proposers should also be aware of core strategies that are essential to the fulfillment of NSF's mission, as articulated in *Investing in Science, Engineering, and Education for the Nation's Future: NSF Strategic Plan for 2014-2018*. These strategies are integrated in the program planning and implementation process, of which proposal review is one part. NSF's mission is particularly well-implemented through the integration of research and education and broadening participation in NSF programs, projects, and activities.

One of the strategic objectives in support of NSF's mission is to foster integration of research and education through the programs, projects, and activities it supports at academic and research institutions. These institutions must recruit, train, and prepare a diverse STEM workforce to advance the frontiers of science and participate in the U.S. technology-based economy. NSF's contribution to the national innovation ecosystem is to provide cutting-edge research under the guidance of the Nation's most creative scientists and engineers. NSF also supports development of a strong science, technology, engineering, and mathematics (STEM) workforce by investing in building the knowledge that informs improvements in STEM teaching and learning.

NSF's mission calls for the broadening of opportunities and expanding participation of groups, institutions, and geographic regions that are underrepresented in STEM disciplines, which is essential to the health and vitality of science and engineering. NSF is committed to this principle of diversity and deems it central to the programs, projects, and activities it considers and supports.

A. Merit Review Principles and Criteria

The National Science Foundation strives to invest in a robust and diverse portfolio of projects that creates new knowledge and enables breakthroughs in understanding across all areas of science and engineering research and education. To identify which projects to support, NSF relies on a merit review process that incorporates consideration of both the technical aspects of a proposed project and its potential to contribute more broadly to advancing NSF's mission "to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense; and for other purposes." NSF makes every effort to conduct a fair, competitive, transparent merit review process for the selection of projects.

1. Merit Review Principles

These principles are to be given due diligence by PIs and organizations when preparing proposals and managing projects, by reviewers when reading and evaluating proposals, and by NSF program staff when determining whether or not to recommend

proposals for funding and while overseeing awards. Given that NSF is the primary federal agency charged with nurturing and supporting excellence in basic research and education, the following three principles apply:

- All NSF projects should be of the highest quality and have the potential to advance, if not transform, the frontiers of knowledge.
- NSF projects, in the aggregate, should contribute more broadly to achieving societal goals. These "Broader Impacts" may be accomplished through the research itself, through activities that are directly related to specific research projects, or through activities that are supported by, but are complementary to, the project. The project activities may be based on previously established and/or innovative methods and approaches, but in either case must be well justified.
- Meaningful assessment and evaluation of NSF funded projects should be based on appropriate metrics, keeping in mind the likely correlation between the effect of broader impacts and the resources provided to implement projects. If the size of the activity is limited, evaluation of that activity in isolation is not likely to be meaningful. Thus, assessing the effectiveness of these activities may best be done at a higher, more aggregated, level than the individual project.

With respect to the third principle, even if assessment of Broader Impacts outcomes for particular projects is done at an aggregated level, PIs are expected to be accountable for carrying out the activities described in the funded project. Thus, individual projects should include clearly stated goals, specific descriptions of the activities that the PI intends to do, and a plan in place to document the outputs of those activities.

These three merit review principles provide the basis for the merit review criteria, as well as a context within which the users of the criteria can better understand their intent.

2. Merit Review Criteria

All NSF proposals are evaluated through use of the two National Science Board approved merit review criteria. In some instances, however, NSF will employ additional criteria as required to highlight the specific objectives of certain programs and activities.

The two merit review criteria are listed below. **Both** criteria are to be given **full consideration** during the review and decision-making processes; each criterion is necessary but neither, by itself, is sufficient. Therefore, proposers must fully address both criteria. (GPG Chapter II.C.2.d.i. contains additional information for use by proposers in development of the Project Description section of the proposal.) Reviewers are strongly encouraged to review the criteria, including GPG Chapter II.C.2.d.i., prior to the review of a proposal.

When evaluating NSF proposals, reviewers will be asked to consider what the proposers want to do, why they want to do it, how they plan to do it, how they will know if they succeed, and what benefits could accrue if the project is successful. These issues apply both to the technical aspects of the proposal and the way in which the project may make broader contributions. To that end, reviewers will be asked to evaluate all proposals against two criteria:

- **Intellectual Merit:** The Intellectual Merit criterion encompasses the potential to advance knowledge; and
- **Broader Impacts:** The Broader Impacts criterion encompasses the potential to benefit society and contribute to the achievement of specific, desired societal outcomes.

The following elements should be considered in the review for both criteria:

1. What is the potential for the proposed activity to
    a. Advance knowledge and understanding within its own field or across different fields (Intellectual Merit); and
    b. Benefit society or advance desired societal outcomes (Broader Impacts)?
2. To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?
3. Is the plan for carrying out the proposed activities well-reasoned, well-organized, and based on a sound rationale? Does the plan incorporate a mechanism to assess success?
4. How well qualified is the individual, team, or organization to conduct the proposed activities?
5. Are there adequate resources available to the PI (either at the home organization or through collaborations) to carry out the proposed activities?

Broader impacts may be accomplished through the research itself, through the activities that are directly related to specific research projects, or through activities that are supported by, but are complementary to, the project. NSF values the advancement of scientific knowledge and activities that contribute to achievement of societally relevant outcomes. Such outcomes include, but are not limited to: full participation of women, persons with disabilities, and underrepresented minorities in science, technology, engineering, and mathematics (STEM); improved STEM education and educator development at any level; increased public scientific literacy and public engagement with science and technology; improved well-being of individuals in society; development of a diverse, globally competitive STEM workforce; increased partnerships between academia, industry, and others; improved national security; increased economic competitiveness of the United States; and enhanced infrastructure for research and education.

Proposers are reminded that reviewers will also be asked to review the Data Management Plan and the Postdoctoral Researcher Mentoring Plan, as appropriate.

Additional Solicitation Specific Review Criteria

The review criteria above are for standard NSF proposals. The EAPSI program will also consider the following additional criteria:

- Qualifications of applicant, including potential for continued growth and the probable effect of participation in the Summer Institute on the applicant's graduate training and career goals;
- Justification provided in the application for the selection of the host, including resources and capabilities of the proposed host institution(s) and researcher(s);
- NSF program priorities and efforts to broaden participation; and
- Merit, complementarities, and expected mutual benefits of the proposed international collaboration.

B. Review and Selection Process

Proposals submitted in response to this program solicitation will be reviewed by Panel Review and/or Internal NSF Review.

Applications will be screened for compliance with the requirements in this program solicitation; non-compliant applications will be returned without review.

EAPSI is funded and managed in partnership with counterpart agencies in other countries; therefore, final selection of participants is dependent on mutual agreement between NSF and the counterparts. Thus, it is possible that an applicant who has been tentatively

selected based on merit review may ultimately be declined.

Reviewers will be asked to evaluate proposals using two National Science Board approved merit review criteria and, if applicable, additional program specific criteria. A summary rating and accompanying narrative will generally be completed and submitted by each reviewer and/or panel. The Program Officer assigned to manage the proposal's review will consider the advice of reviewers and will formulate a recommendation.

After scientific, technical and programmatic review and consideration of appropriate factors, the NSF Program Officer recommends to the cognizant Division Director whether the proposal should be declined or recommended for award. NSF strives to be able to tell applicants whether their proposals have been declined or recommended for funding within six months. Large or particularly complex proposals or proposals from new awardees may require additional review and processing time. The time interval begins on the deadline or target date, or receipt date, whichever is later. The interval ends when the Division Director acts upon the Program Officer's recommendation.

After programmatic approval has been obtained, the proposals recommended for funding will be forwarded to the Division of Grants and Agreements for review of business, financial, and policy implications. After an administrative review has occurred, Grants and Agreements Officers perform the processing and issuance of a grant or other agreement. Proposers are cautioned that only a Grants and Agreements Officer may make commitments, obligations or awards on behalf of NSF or authorize the expenditure of funds. No commitment on the part of NSF should be inferred from technical or budgetary discussions with a NSF Program Officer. A Principal Investigator or organization that makes financial or personnel commitments in the absence of a grant or cooperative agreement signed by the NSF Grants and Agreements Officer does so at their own risk.

Once an award or declination decision has been made, Principal Investigators are provided feedback about their proposals. In all cases, reviews are treated as confidential documents. Verbatim copies of reviews, excluding the names of the reviewers or any reviewer-identifying information, are sent to the Principal Investigator/Project Director by the Program Officer. In addition, the proposer will receive an explanation of the decision to award or decline funding.

VII. AWARD ADMINISTRATION INFORMATION

A. Notification of the Award

Notification of the award is made to *the submitting organization* by a Grants Officer in the Division of Grants and Agreements. Organizations whose proposals are declined will be advised as promptly as possible by the cognizant NSF Program administering the program. Verbatim copies of reviews, not including the identity of the reviewer, will be provided automatically to the Principal Investigator. (See Section VI.B. for additional information on the review process.)

B. Award Conditions

An NSF award consists of: (1) the award notice, which includes any special provisions applicable to the award and any numbered amendments thereto; (2) the budget, which indicates the amounts, by categories of expense, on which NSF has based its support (or otherwise communicates any specific approvals or disapprovals of proposed expenditures); (3) the proposal referenced in the award notice; (4) the applicable award conditions, such as Grant General Conditions (GC-1)*; or Research Terms and Conditions* and (5) any announcement or other NSF issuance that may be incorporated by reference in the award notice. Cooperative agreements also are administered in accordance with NSF Cooperative Agreement Financial and Administrative Terms and Conditions (CA-FATC) and the applicable Programmatic Terms and Conditions. NSF awards are electronically signed by an NSF Grants and Agreements Officer and transmitted electronically to the organization via e-mail.

*These documents may be accessed electronically on NSF's Website at http://www.nsf.gov/awards/managing/award_conditions.jsp?org=NSF. Paper copies may be obtained from the NSF Publications Clearinghouse, telephone (703) 292-7827 or by e-mail from nsfpubs@nsf.gov.

More comprehensive information on NSF Award Conditions and other important information on the administration of NSF awards is contained in the NSF *Award & Administration Guide* (AAG) Chapter II, available electronically on the NSF Website at http://www.nsf.gov/publications/pub_summ.jsp?ods_key=aag.

Special Award Conditions:

The National Science Foundation claims no rights to any inventions or writings that might result from its fellowship or traineeship grants. However, fellows and trainees should be aware that the NSF, another Federal agency, or some private party may acquire such rights through other support for particular research. Also, fellows and trainees should note their obligation to include an Acknowledgment and Disclaimer in any publication.

C. Reporting Requirements

For all EAPSI awards, participants are required to submit a final project report to the EAPSI Program Office by December 1 of the year in which they participated in the EAPSI program. This reporting requirement is in addition to any established by the participant's foreign co-sponsoring organization.

Failure to provide the required final project report, or project outcomes report, to NSF will impact any future requests for funding as well as any pending proposals for that PI. PIs should examine the formats of the required reports in advance to assure availability of required data.

PIs are required to use NSF's electronic project-reporting system, available through Research.gov, for preparation and submission of the NSF report. The report will provide information on accomplishments, project participants (individual and organizational) publications, and other specific products and impacts of the project. Submission of the report via Research.gov constitutes certification by the PI that the contents of the report are accurate and complete. The project outcomes report also must be prepared

and submitted using Research.gov. This report serves as a brief summary, prepared specifically for the public, of the nature and outcomes of the project. This report will be posted on the NSF website exactly as it is submitted by the PI.

The co-sponsoring organizations in Australia, China, Japan, Korea, New Zealand, Singapore and Taiwan have independent reporting requirements and deadlines. EAPSI participants are expected to comply with the guidelines of foreign co-sponsoring organizations, in addition to those of NSF.

EAPSI program staff may request at a future date that EAPSI participants provide evaluations of their experience.

VIII. AGENCY CONTACTS

Please note that the program contact information is current at the time of publishing. See program website for any updates to the points of contact.

General inquiries regarding this program should be made to:

- Anne Emig, Program Officer, telephone: (703) 292-7241, email: eapsi@nsf.gov
- Elena Hillenburg, Program Specialist, telephone: (703) 292-2993, email: eapsi@nsf.gov

For questions related to the use of FastLane, contact:

- FastLane Help Desk, telephone: 1-800-673-6188; e-mail: fastlane@nsf.gov.

IX. OTHER INFORMATION

The NSF website provides the most comprehensive source of information on NSF Directorates (including contact information), programs and funding opportunities. Use of this website by potential proposers is strongly encouraged. In addition, "NSF Update" is an information-delivery system designed to keep potential proposers and other interested parties apprised of new NSF funding opportunities and publications, important changes in proposal and award policies and procedures, and upcoming NSF Grants Conferences. Subscribers are informed through e-mail or the user's Web browser each time new publications are issued that match their identified interests. "NSF Update" also is available on NSF's website.

Grants.gov provides an additional electronic capability to search for Federal government-wide grant opportunities. NSF funding opportunities may be accessed via this mechanism. Further information on Grants.gov may be obtained at http://www.grants.gov.

ABOUT THE NATIONAL SCIENCE FOUNDATION

The National Science Foundation (NSF) is an independent Federal agency created by the National Science Foundation Act of 1950, as amended (42 USC 1861-75). The Act states the purpose of the NSF is "to promote the progress of science; [and] to advance the national health, prosperity, and welfare by supporting research and education in all fields of science and engineering."

NSF funds research and education in most fields of science and engineering. It does this through grants and cooperative agreements to more than 2,000 colleges, universities, K-12 school systems, businesses, informal science organizations and other research organizations throughout the US. The Foundation accounts for about one-fourth of Federal support to academic institutions for basic research.

NSF receives approximately 55,000 proposals each year for research, education and training projects, of which approximately 11,000 are funded. In addition, the Foundation receives several thousand applications for graduate and postdoctoral fellowships. The agency operates no laboratories itself but does support National Research Centers, user facilities, certain oceanographic vessels and Arctic and Antarctic research stations. The Foundation also supports cooperative research between universities and industry, US participation in international scientific and engineering efforts, and educational activities at every academic level.

Facilitation Awards for Scientists and Engineers with Disabilities provide funding for special assistance or equipment to enable persons with disabilities to work on NSF-supported projects. See Grant Proposal Guide Chapter II, Section D.2 for instructions regarding preparation of these types of proposals.

The National Science Foundation has Telephonic Device for the Deaf (TDD) and Federal Information Relay Service (FIRS) capabilities that enable individuals with hearing impairments to communicate with the Foundation about NSF programs, employment or general information. TDD may be accessed at (703) 292-5090 and (800) 281-8749, FIRS at (800) 877-8339.

The National Science Foundation Information Center may be reached at (703) 292-5111.

The National Science Foundation promotes and advances scientific progress in the United States by competitively awarding grants and cooperative agreements for research and education in the sciences, mathematics, and engineering.

To get the latest information about program deadlines, to download copies of NSF publications, and to access abstracts of awards, visit the NSF Website at http://www.nsf.gov

- **Location:** 4201 Wilson Blvd. Arlington, VA 22230
- **For General Information** (NSF Information Center)**:** (703) 292-5111

- **TDD (for the hearing-impaired):** (703) 292-5090
- **To Order Publications or Forms:**

  Send an e-mail to: nsfpubs@nsf.gov

  or telephone: (703) 292-7827
- **To Locate NSF Employees:** (703) 292-5111

PRIVACY ACT AND PUBLIC BURDEN STATEMENTS

The information requested on proposal forms and project reports is solicited under the authority of the National Science Foundation Act of 1950, as amended. The information on proposal forms will be used in connection with the selection of qualified proposals; and project reports submitted by awardees will be used for program evaluation and reporting within the Executive Branch and to Congress. The information requested may be disclosed to qualified reviewers and staff assistants as part of the proposal review process; to proposer institutions/grantees to provide or obtain data regarding the proposal review process, award decisions, or the administration of awards; to government contractors, experts, volunteers and researchers and educators as necessary to complete assigned work; to other government agencies or other entities needing information regarding applicants or nominees as part of a joint application review process, or in order to coordinate programs or policy; and to another Federal agency, court, or party in a court or Federal administrative proceeding if the government is a party. Information about Principal Investigators may be added to the Reviewer file and used to select potential candidates to serve as peer reviewers or advisory committee members. See Systems of Records, NSF-50, "Principal Investigator/Proposal File and Associated Records," 69 Federal Register 26410 (May 12, 2004), and NSF-51, "Reviewer/Proposal File and Associated Records," 69 Federal Register 26410 (May 12, 2004). Submission of the information is voluntary. Failure to provide full and complete information, however, may reduce the possibility of receiving an award.

An agency may not conduct or sponsor, and a person is not required to respond to, an information collection unless it displays a valid Office of Management and Budget (OMB) control number. The OMB control number for this collection is 3145-0023. Public reporting burden for this collection of information is estimated to average 12 hours per response, including the time for reviewing instructions. Send comments regarding the burden estimate and any other aspect of this collection of information, including suggestions for reducing this burden, to:

Suzanne H. Plimpton
Reports Clearance Officer
Office of the General Counsel
National Science Foundation
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