

# U.S. - EGYPT JOINT BOARD ON Scientific and Technological Cooperation

Conditions for Undertaking and Financing Joint Science and Technology Activities

# **PROGRAM ANNOUNCEMENT**

FOR

JUNIOR SCIENTIST DEVELOPMENT

# VISIT GRANTS

Submission Start Date: November 2<sup>nd</sup>, 2022 Deadline for Submission: January 25<sup>th</sup>, 2023

U.S. - EGYPT JOINT BOARD • 2022

www.stdf.eg http://www.nationalacademies.org/egypt

# **GENERAL INFORMATION**

The U.S. - Egypt Science and Technology (S&T) Joint Fund was established under an Agreement between the Government of the United States of America and the Government of the Arab Republic of Egypt on Science and Technology Cooperation to strengthen scientific and technological capabilities between Egypt and the United States. The objectives of this cooperation are to help Egypt and the U.S. expand relations between the two scientific and technological communities, utilize science and apply technology by providing opportunities to exchange ideas, information, skills, and techniques, and to collaborate on scientific and technological endeavors of mutual interest to promote economic development.

The Joint Fund is governed by the U.S. - Egypt Joint Board, composed of six members each from the U.S. and Egypt, as detailed in the Agreement. It determines priorities among fields of cooperative activities based on mutual interests of both countries, recommends overall policies for the program, identifies areas and forms of cooperation, and approves the cooperative activities to receive funds. In so doing, the Joint Board shall consider the needs and capabilities of scientific and technological communities including the private sector in each country.

Joint Fund grants provide financial resources to support the add-on costs of bilateral cooperation. Applications submitted to the Joint Board should include strong elements of mutual interest and benefit, high scientific quality, and potential developmental impact on economy and society. Joint activities should be carried out in accordance with international obligations, national laws and regulations of the Arab Republic of Egypt and the United States of America.

## **COOPERATING ORGANIZATIONS**

The National Academies of Sciences, Engineering, and Medicine (NASEM) 500 Fifth St. NW Washington, D.C. 20001 Tel: +1-(202)-334-2626 Email: <u>usegyptjointfund@nas.edu</u> http://www.nationalacademies.org/egypt Science, Technology and Innovation Funding Authority (STDF) 101, Kasr El Aini St., 2nd floor,Cairo, Egypt Tel: +20 (2) 27925081 Email: <u>nariman.reda@stdf.eg</u> http://www.stdf.eg

# U.S. - EGYPT JOINT SCIENCE & TECHNOLOGY BOARD JUNIOR SCIENTIST DEVELOPMENT VISITS

### **GENERAL INFORMATION**

The Junior Scientist Development Visits program provides grants for short-term (up to 9 months) research training visits to U.S. institutions for Egyptian researchers.

## **Objectives**

To provide high quality training and research opportunities resulting in knowledge and skills that will:

- 1. Assist eligible Egyptian junior scientists in broadening their experience and training to advance their performance at their home institutions;
- 2. Strengthen and enhance mutually beneficial linkages between Egyptian and U.S. counterpart institutions, assisting in development of institutional capacity; and
- 3. Provide opportunities to access expertise and study areas normally unavailable to the Egyptian junior researchers.

#### **Research Areas**

Applications will be accepted for research in the four general areas of food security, green hydrogen, health, and water management, or for work at the nexus of two or more of the four general areas, especially as they relate to climate change.

- Food Security: Building a secure and sustainable long-term food system.
  - **Priority Topic**: Crop production and improving grazing, pollinator habitat and apiaries, solar greenhouses, and ecosystem services
  - **Priority Topic**: Animal health, including prevention, detection, and response to livestock diseases
  - **Priority Topic**: Food, energy, and water security in remote, off-grid areas
  - **Priority Topic**: Solar-agriculture colocation configurations
  - **Priority Topic**: Smart agriculture for arid environments
- **Green Hydrogen**: Overcoming technical barriers of hydrogen production, delivery, infrastructure, storage, fuel cells, and multiple end-uses across transportation, industrial, and stationary power applications.
  - **Priority Topic**: Hydrogen and fuel cell technologies to support large-scale commercial hydrogen deployment projects
  - **Priority Topic**: Desalination technology, including applications of renewable energy powered technologies
  - **Priority Topic**: Safety and standards for clean hydrogen engineers
  - **Priority Topic:** Hydrogen transportation and delivery: design of efficient transportation means for hydrogen gas, design of safe delivery stations for hydrogen gas for domestic and industrial supply chain

- **Priority Topic:** Economical production of hydrogen from sustainable resources: use of renewable sources of energy for hydrogen production, thermal production of hydrogen using highly energetic solar furnaces, biologically produced hydrogen using photosynthesis
- **Health**: Protecting citizens from the negative health impacts of climate change by exploring the link between climate change and disease incidence and prevalence, as well as ways to reduce risk.
  - **Priority Topic**: Infectious diseases related to the progression of climate change, particularly zoonotic and vector-borne diseases, with special interest in pandemic preparedness and response research, studies of anti-microbial resistant bacteria and fungal diseases, and basic immunology
  - **Priority Topic**: Cancer and metabolic changes that lead to cancer, in relation to increases of toxins and carcinogens exacerbated by climate change, with special interest in tools to enhance prevention, detection, or clinical care of cancer
- Water Management: Energy-water management and desalinization technologies for power generation and to mitigate the impacts of climate change.
  - **Priority Topic**: Smart agriculture and irrigation, including translational research into water issues related to smart agriculture, with special interest in agriculture technologies and water irrigation, reuse, and management
  - **Priority Topic**: Energy-water systems analysis to identify critical needs and optimize uses of desalinized water in agriculture, industry, and residential sectors
  - **Priority Topic**: Efficiency of water use in energy production, electricity generation, and end-use systems
  - Priority Topic: Renewable energy to power desalinization facilities

Proposals in priority topics and interdisciplinary research, at the nexus of two or more of the four general areas, will receive priority consideration during review. Applicants are urged to clarify the relevance of their proposals with respect to these general areas and the priority topics.

Proposals for translational research should include a plan for how the researchers will work with/engage potential users of their research/results as part of their research design. It is strongly preferred that the potential technology end users be located in Egypt or the United States.

# **CRITERIA FOR CONSIDERATION OF APPLICATION**

- □ The applicant must apply within 10 years after receiving his/her PhD.
- □ The applicant must be affiliated with an Egyptian scientific institute, university, research center, or governmental agency.
- The proposed visit is to last no longer than nine months.
- □ Working proficiency in English is required.
- A complete application package must include the following:
  - 1) Completed application form;

2) One signed and stamped letter of travel approval from the president of the applicant's home institution (no template provided);

- 3) Letter of Recommendation from Home Institution Supervisor (see Appendix I);
- 4) Signed Conditions of Visit form (see Appendix II);

- 5) Signed letter of agreement from the proposed U.S. host institution endorsing the applicant and the proposed visit plan. The letter should be written on the U.S. institution's letterhead and include the months/period of the planned visit, as well as the U.S. state of the institution;
- 6) Budget plan for the visit;
- 7) A copy of the PhD degree;
- 8) List of recent publications.
- □ The proposed budget should include travel and per diem costs. Applicants should check with their host institution about health insurance coverage and cost.
- □ The applicant must agree to and sign the Conditions of Visit form, which includes a statement of intent to return to their home institute following the completion of the visit.

# Applications must include a detailed description and approval of the proposed program for the visit.

Selection will be made on the basis of candidate qualifications, submitted recommendations, specific training and/or research needs, and how the knowledge gained from the visit will be used when the applicant returns to the home institute.

All costs for Egyptian researchers traveling to U.S. host institutions will be covered by grants issued by STDF. The grant's budget will be calculated as \$3,000 for airfare and \$2,500 per month for lodging and living expenses. For example, an applicant who will be traveling for only three months will receive \$3,000 for airfare and a total of \$7,500 for lodging and living expenses for the duration of the three months. Please note that lab fees for the U.S. institution are not eligible expenses.

A final report, including a summary stating the achievements of the visit, and how the visit may help improve future scientific cooperation between Egypt and the U.S. in the particular research area, should be submitted to the program administrators within 30 days of the return to the home institution.

## **APPLICATION SUBMISSION**

#### All proposals must be submitted to the application website found at:

https://sites.nationalacademies.org/pga/egypt/index.htm. A copy of the proposal submission packet must be uploaded to the STDF website at <u>http://www.stdf.eg/</u>. Please note that proposals submitted as hard copies or sent via email will not be considered.

#### The application deadline is 3:00 pm Cairo, Egypt time, January 25, 2023.

The final approval of candidates will be made by the Joint Board, on the basis of candidate qualifications, submitted recommendation letter, specific research and/or training needs, and how the knowledge gained during the visit will be used by the candidate upon his or her return to the home institution.

Award Announcement – It is expected that STDF will notify the funded applicants of final decisions, following Joint Board approval, by the summer of 2024.

# U.S. - EGYPT SCIENCE & TECHNOLOGY JOINT FUND PROGRAM JUNIOR SCIENTIST DEVELOPMENT VISITS

# 2022 APPLICATION FORM (NOTE: PLEASE TYPE) APPLICATION AND ATTACHMENTS MUST BE IN ENGLISH

# I. Personal Information

Name:	First		Middle			
Date of Birth:						
	ria	ce of Birth.				
Home Address:						
(Street)		(Home Telephone)				
		(Mobile Telephone)				
(Town or City/Country)		(Email Addr	(Email Address)			
II. Academic Education	and Training Experi	ence				
A) Academic						
NAME OF INSTITUTION	FIELD OF STUDY	DATES ATTENDED	DEGREE OBTAINED & DATE COMPLETED			
Field of Specialization:						
Title of Ph.D. Thesis:						
B) Training (list addition	onal training in home	country)				
Field of Study	Dates	Language/Pl	Language/Place of Instruction			

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# **C)** Additional Training in Other Countries Field of Study Language/Place of Instruction Dates Awards, Honors, Scholarships Received, Publications, Professional Memberships: **III.** Employment A) Current Employment FROM: / / TO: present (Title or Position) (Organization/Company) (# Street) (Employer's Email) (Town or City) (Employer's Telephone) Description of your place of employment and your duties and responsibilities. Use additional pages as necessary. B) Previous Employment (if at current position less than 2 years) FROM: / / TO: (Title or Position) (Organization/Company) (# Street) (Employer's Email) (Town or City) (Employer's Telephone)

Description of your place of employment and your duties and responsibilities (previous employment). Use additional pages as necessary.

# IV. Languages

Please indicate English capabilities in first line, additional languages on remaining lines.

Can Converse	Can Read	Can Write
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	Fluently	Passably	Fluently	Passably	Fluently	Passably
English						

#### V. Proposed Program

#### List proposal's eligible area(s) or priority area(s):

Applications will be accepted for research in the four general areas of food security, green hydrogen, health, and water management, or for work at the nexus of two or more of the four general areas, especially as they relate to climate change.

A. Title of Proposed Work:

B. Please describe your program of work for the proposed visit including proposed dates of visit:

C. Proposed Host Institution:

D. Contact Person at Host Institution:

#### VI. Benefits of Proposed Visit

How will experiences gained during your visit benefit you and your home institution when you return?

#### **VII.** Attachments

Please include with your application the following attachments as Appendices:

- Appendix ISupervisor's Recommendation for Applicant's Proposed VisitAppendix IISigned Conditions of Visit form
- Appendix III Appraisal from the Proposed Host Institution for the proposed visit

Appendix IVBudget Plan for Proposed VisitAppendix VCopy of Ph.D. DiplomaAppendix VIList of Recent Publications (max. 2 pages)

I certify that the information given in this application is complete and accurate to the best of my knowledge

Signature

# APPENDIX I Supervisor's Recommendation for Applicant's Proposed Visit

Name of Participant:

Applicants: Please have your supervisor complete the following questions.

A) What do you want the applicant to learn during the proposed visit?

B) How will the applicant's visit be useful for the organization when he/she returns?

C) Please comment on the applicant's suitability to carry out the proposed visit.

Signature

Title

#### APPENDIX II Conditions of Visit

Name of Participant:

If I am accepted to receive a grant for a scientific visit under the U.S – Egypt Science & Technology Joint Fund Program, I agree to adhere to my arranged program, to devote my time and attention to my research and/or practical training, and to conform to program regulations and procedures for the duration of the visit. I will not seek extension of the period of my visit but will return to my country without delay upon completion of my visit under this program. I also agree to conform to all rules and policies of the host institution and laws of the host country and agree at all times to conduct myself and my research in a professional and ethical manner.

Furthermore, I thoroughly understand the following policies of the Junior Scientist Development Visit Grants Program:

- I. Dependents: The Program strongly discourages family members from accompanying or joining a participant during the visit. The Program is not responsible in any way for family members.
- II. Attendance of Participants at Conferences and Meetings: While at the Host Institution, attendance of participants at national or international conferences, conventions or meetings of professional, trade, or other associations will not be supported by the program funds, unless such attendance is part of the approved program.
- III. Conditions for Termination of the Visit: The Joint Board reserves the right to terminate the visit of those participants who:
  - A. Change the program of the visit without authorization from the Joint Board or their representatives.
  - B. Fail to show sufficient interest in or to effectively pursue their program during the visit.
  - C. Conduct themselves in a manner prejudicial to the program or to the laws of the United States or Egypt.
  - D. Have in any way falsified information on the application and/or supporting documents.
  - E. The Host Institution determines that continuation of the visit is not in the interest of the Host Institution.
- IV. Financial Support: The applicant is aware that the financial support provided by the program covers fees, lodging and food only. The daily maintenance allowance is adequate for modest lodging and food. The Joint Board does not fund any expenses related to family members accompanying the participant.

- V. Health Insurance: Participants must have health insurance coverage during their exchange visit period. Egyptians traveling to the U.S. must have a minimum level of health insurance coverage. This can vary, depending on the type of visa the exchange visitor obtains, but as an example, for a J-1 visa to the U.S., the following is required:
  - Medical benefits of at least \$100,000 per accident or illness
  - Repatriation of remains in the amount of \$25,000
  - Expenses associated with the medical evacuation of the exchange visitor to his or her home country in the amount of \$50,000
  - A deductible not to exceed \$500 per accident or illness.

If the exchange visitor does not have health insurance coverage through their home institution, check with the host institution about short-term medical insurance coverage for foreign visitors. There are also private policies in the U.S. that meet the above requirements. Although information can be provided to assist the exchange visitor to choose health coverage, the Joint Board does not endorse any particular insurance company, nor will it be responsible for costs arising from illness or accident.

VI. Debts and Obligations: The participant will be responsible for all debts and financial obligations incurred while in the United States.

The Participant releases the host institution from any liabilities that may arise out of or in connection with Participant's visit.

Rights to Intellectual Property, Patents or Copyrights created during Participant's visit at Host Institution shall be determined in accordance with the policies of the host institution. Unless superseded by statute, treaty or prior agreement, the Host Institution shall have the right to take the entire right, title and interest in the United States of intellectual property developed by Participant during Participant's visit.

Signature below indicates agreement to and understanding of the above conditions.

Applicant's Signature

# APPENDIX III • Appraisal from the Proposed Host Institution

This appraisal must be filled out by the proposed U.S. host scientist.

1. Name of U.S. Host Scientist:

2. Name of Egyptian Junior Scientist:

3. Scientific Evaluation of the Egyptian Junior Scientist Proposal.

4. Additional Comments, if any.

Signature of the U.S. Host Scientist

## Appendix IV Budget Plan for Proposed Visit

Name of Participant:

Duration of Proposed Visit:

Note: List all amounts in U.S. dollar equivalents only.	<b>Total</b> U.S. \$ (up to \$25,500)
1. International Airfare	\$3,000
2. Lodging and Living Expenses (no of months × \$2,500)	
Total	

#### **Important Note:**

The budget will be calculated as \$3,000 for airfare and \$2,500 for lodging and living expenses. For example, an applicant who will be traveling for only 3 months will receive \$3,000 for airfare and a total of \$7,500 for lodging and living expenses for the duration of the 3 months-

# **APPENDIX V** Copy of Ph.D. Diploma

**APPENDIX VI** List of Recent Publications (Maximum 2 Pages)