

**U.S.-India STEM Education and Research Collaboration:  
STEM Faculty Training at Higher Education Institutions in India**

This AO is intended for OSU faculty in STEM disciplines as potential research advisors.

The Ohio State University has been awarded a highly competitive grant from the US-India Education Foundation (USIEF), under the Obama-Singh 21st Century Knowledge Initiative, for a pilot project to train STEM faculty in partnership with the Aligarh Muslim University in northern India (see attached flyer). The salient features of the USIEF program, involving OSU faculty and staff from the Colleges of Education, A&S, and Engineering, are as follows.

- The USIEF OSU-AMU program establishes a Center of Excellence for STEM Education and Research at AMU. The Center was inaugurated in November 2013 by a OSU delegation led by Vice-Provost for Global Affairs, Prof. William Brustein, Vice-Provost for Graduate Studies Prof. Patrick Osmer, and Dean of the College of Engineering Prof. David Williams.
- A two-year dual degree program devised by the College of Education has been approved by the OSU Council of Academic Affairs. It consists of a Doctorate degree from AMU and a Masters in Education with STEM specialization from OSU.
- Under the MEd-STEM (India) program, selected graduate students will undertake research and coursework at OSU during their first year, guided by OSU faculty advisors and mentors. During the second year, they will return to India to implement the STEM teaching methodologies, as well as continue their research.
- Four AMU students will be selected in SP14, and commence their MEd coursework in SU14. The selection is based on three criteria: (i) academic record, (ii) research project and progress, and (iii) match with OSU research advisors.
- The students will be fully funded. Tuition, fees, and stipend are supported as part of OSU-AMU cost share and the USIEF grant.
- This solicitation seeks potential OSU research advisors in STEM disciplines.

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# OBAMA-SINGH GRANT [oia.osu.edu](http://oia.osu.edu)

## Ohio State receives Obama-Singh award

The Ohio State University is one of four U.S. universities to receive the highly competitive Obama-Singh 21st Century Knowledge Initiative award for its project, "Training the Next Generation of STEM Faculty at Higher Education Institutions in India." Over a three-year period, Ohio State will receive approximately \$250,000 to launch a pilot program with Aligarh Muslim University in India. This program will aim to lay the groundwork for capacity building in STEM education and research at Indian universities in collaboration with universities in the United States. The Obama-Singh Initiative is the result of an agreement between the governments of India and the United States, who have committed a sum of \$5 million each to strengthen academic institutional partnerships between the two countries. This is the second year that funds have been awarded to partner institutions in the United States and India.

## OSU-AMU Center of Excellence for STEM Education and Research (STEM-ER)

Training the next generation of STEM faculty at high education institutions in India.

### Features of this pilot program:

- A concurrent two-year dual degree program - an advanced graduate degree from AMU and a newly designed master's degree with STEM-ER specialization at Ohio State
- STEM teaching and pedagogical methods in interdisciplinary education including digital e-learning
- Joint supervision by Ohio State and AMU faculty in science and engineering on advanced research topics

- Field experience in undergraduate STEM teaching at AMU and certification by Ohio State
- Extension to national level with support from governmental agencies, public and private colleges and universities

### Participate in this program through the following steps:

- Join the Indo-US Consortium of Higher Education Institutions for STEM-ER training
- Sponsor graduate students at the OSU-AMU STEM-ER Center as prospective faculty members at sponsoring institutions following the dual-degree program
- Establish national STEM-ER centers in collaboration with Ohio State and AMU
- Joint research projects and proposals

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