“You Choose” Award Application for the Sciences and Engineering

Geophysics Distinguished Lectureship

Guoqing Lin
Assistant Professor

Division of Marine Geology and Geophysics
Rosenstiel School of Marine and Atmospheric Science
University of Miami

Phone: (305) 421-4150

mlin@rsmas.miami.edu
Abstract

In 2010, the University of Miami (UM) was ranked 13th in the world for geosciences according to the data provided by Thomson Reuters from its Essential Science Indicators (January 1999–June 2009). Geophysics, an important and essential sub-discipline of Earth Sciences, is one of the core educational and research strengths at the Division of Marine Geology and Geophysics (MGG), Rosenstiel School of Marine and Atmospheric Science (RSMAS). I propose to host a series of “Geophysics Distinguished Lectures” by inviting two world-leading geophysicists to UM in 2014. The visits and lectures of these scientists will arouse students’ interest in Earth Science from different disciplines and promote the society’s appreciation to geophysics and Earth Science in general. The proposal will help to build collaborative relationships with other research institutions. It will also foster the career of a female junior faculty member.

Activity goals

Geophysics is a diverse science with its subject as the Earth, the planet we live in. How does the Earth work? Why do earthquakes occur? Where? And when? Fifty years ago people did not know the answers to these questions. Today we have a general knowledge of the workings of the planet, although there is still much to be discovered. The recent disastrous earthquakes in Haiti and Japan have drawn great attention of the public community to the seismic hazards and were timely reminders that geophysicists play a critical role in the society.

Here I propose to develop a “Geophysics Distinguished Lectureship” at RSMAS, starting by inviting two distinguished geophysicists to UM to give lectures. The plan is that each invited speaker will stay for three nights and give two lectures, one aimed at general public audiences and the other more research-oriented. The speakers will be chosen for their interesting subject matter as well as their ability to convey scientific ideas to general public audiences. They will be selected among the top scientists in the fields of seismology, geodesy, geodynamics, geomagnetism and other geophysical sub-disciplines, by consultation among the MGG faculty members.

The MGG Geophysics group, currently consisting of two tenured/tenure-track faculty members and one research professor, and ~15 graduate students and postdocs, is one of the core strengths of MGG, focused on seismology and geodesy. Faulty and students work divergently on scientific problems related with earthquakes and volcanic activities. However, in order to pursue more comprehensive research and fully understand earthquake/volcanic mechanisms, other geophysical and geological data and studies are essential. The proposed activities will allow more productive communication and research idea exchanges with leading geophysicists.
The proposed lectureship can also arouse students’ interest in Earth Science from different disciplines and promote the society’s appreciation to geophysics and Earth Science in general.

**Personal goals**

Since arrival at RSMAS in 2009, I have been trying to broaden the educational and research scope at MGG, by developing more courses in geophysics, pursuing seismological research, and supervising graduate students. This proposal will represent another step forward in these efforts. In addition to drawing more attention to geophysics from the society and scientific community, another important goal of this proposal is to help me and other MGG faculty members build a collaborative relationship with leading geophysicists and enhance the connections with other research institutions. The proposed activities are also aimed to write collaborative proposals with these scientists and publish in prestigious peer-reviewed journals, which will foster my career more productively.

**Budget Justification**

Funds are requested to support the visit of two outside speakers to the University of Miami.

Per invited speaker:
Airline Tickets and transportation: $500
Hotel in Miami (3 nights): $500
Meals and refreshments: $250

Total for 2 speakers: $2,500
BIOGRAPHICAL SKETCH

GUOQING LIN

Professional Preparation

Peking University, China, Geophysics, B.S., 2002.

Appointments

01/2009 – present  Assistant Professor, University of Miami
07/2007 – 12/2008  Postdoctoral Research Associate, University of Wisconsin-Madison

Five Significant Publications


Five Related Products

Lin, G., P. Shearer, and E. Hauksson (2007), Applying a three-dimensional velocity model,


**Synergistic Activities**

Associate Editor: Bulletin of the Seismological Society of America, 2010 - present


Chair, 2011 Bi-Lateral Workshop Under The Sino-Us Earthquake Studies Protocol Judge, Outstanding Student Paper Award, 2010 AGU Fall Meeting
Session Convener and Chair in Seismology, 2010 AGU Fall Meeting
Conference Chair, Oral Session, 2006 AGU Fall Meeting
Conference Chair, Poster Session, 2006 AGU Fall Meeting

**Collaborators & Other Affiliations**

Collaborators
F. Amelung, Univ. of Miami; M. R. Brudzinski, Miami Univ.; T. Dixon, Univ. of Miami; V. Huerfano, Univ. of Puerto Rico; P. Swart, Univ. of Miami; C. Thurber, UW-Madison; H. Zhang, UW- Madison/MIT; P. Shearer, U.C. San Diego; C. Wolfe, Univ. of Hawaii; P. Okubo, HVO; E. M. Syracuse, UW-Madison; T. Taira, U.C. Berkeley.

Graduate Advisors and Postdoctoral Sponsors
Peter M. Shearer, Ph.D. Advisor, Scripps Institution of Oceanography
Clifford H. Thurber, Postdoctoral Supervisor, University of Wisconsin-Madison

Graduate Students Supervised
Qiong Zhang (UM, 2009-present)
Peng Li (UM, 2010-present)