Pusan National University and IPRC Partner on Monsoon Studies

January 11, 2012

Atmospheric scientists at Pusan National University (PNU) and climate modelers at the International Pacific Research Center are joining forces to study one of the most challenging issues facing today's scientists: predicting climate change, with an emphasis on the East Asian and Global Monsoon.

This new project was begun under the sponsorship of the Global



Unveiling the Project Plaque: IPRC Director Kevin Hamilton, Professor Kyung-Ja Ha, and Professor Bin Wang.

Research Laboratory (GRL) program of Korea's Ministry of Education, Science and Technology. The GRL funds joint projects between Korean and foreign universities, with 1/3 of the funding coming as a grant to the foreign partner. The program is extremely competitive with the PNU–IPRC project being one of 5 selected from over 100 applications and the only one funded in environmental sciences. Project funding will be for 6 years.

To inaugurate this exciting project, a two-day workshop was held at the IPRC on January 9 and 10, 2012. Participants came not only from PNU and the IPRC, but also from Seoul National University, the Korea Ocean Research and Development Institute, the First Institute of Oceanography in Qingdao in China, and McGill University in Canada.

The Korean principal investigator of the project is Kyung-Ja Ha, Professor of the Department of Atmospheric Sciences at Pusan National University. Joining her are 15 scientists who range in experience from graduate student to professor in meteorology. The IPRC principal investigator is Bin Wang, Professor and Chair of the Meteorology Department, University of Hawaii at Manoa. The IPRC team will initially include also 5 senior researchers and graduate students.



By combining the strengths in observational, numerical modeling, and theoretical methodologies of these two leading teams in monsoon research, the group hopes to make breakthroughs in the concepts and theory of global monsoon prediction.

The scientists will work to determine whether the variations in the global and East Asian monsoon are predictable, especially given the atmospheric changes expected under global warming. On the basis of their findings, they plan to improve predictions of such related climate aspects of the monsoon as extreme rainfall and extreme droughts. Finally they intend to use their findings to develop strategies to mitigate and adapt to the possible consequences of changes in the East Asian and the Global Monsoon.

A significant part of the project is also the education of young climate scientists, including Ph.D. students and undergraduates and even high school students. A joint workshop will be held every year, alternatively in Korea and Hawaii.