CIARA Receives $5.4M Grant from the National Science Foundation

January 28, 2011 Miami, FL. – Florida International University has been awarded $5.4 million from the National Science Foundation (NSF) to lead the project to enhance network infrastructure for science research and education between the U.S. and Latin America. The Center for Internet Research and Assessment (CIARA), part of FIU’s Division of Information Technology, will manage the project on behalf of FIU. The project, Americas Lightpaths, named AmLight, builds upon the achievements of FIU’s previous NSF awards in international research network connections.

With the support of the NSF and the contributions of national and international partnerships, the AmLight project establishes lightpaths between the U.S. and Latin America from four geographical locations: Miami-São Paulo, Santiago-São Paulo, San Diego-Tijuana, and San Antonio-Mexico City. “Lightpaths” refers to physical network connections between two or more networks based upon photonic technologies.

“Lightpaths are essential, because they provide the technological capacity needed to support the high-bandwidth requirements of science applications. The U.S. research and education community will be connected to 18 countries and an estimated 100 million students, faculty, and researchers through these lightpaths”, says Julio Ibarra, Assistant VP and Principal Investigator of AmLight.

The AmLight award will have an immediate impact on several FIU research projects of international scope. One of these projects is PrimoGENI which implements a real-time network simulation for the NSF Global Environment for Network Innovations (GENI).

“PrimoGENI coupled with AmLight network resources extends the GENI infrastructure to partnership programs in Brazil to prototype future Internet network architectures”, says Jason Liu, Assistant Professor and Principal Investigator of PrimoGENI.

The Cyberinfrastructure - Partnerships for International Research and Education (CI-PIRE) project creates a hub of international collaboration to enable research discoveries by supporting science and engineering applications with Cyberinfrastructure.

“CI-PIRE relies upon the AmLight network resources to provide researchers and fellows unconstrained access to CI resources in the U.S. and Latin America”, said Masoud Sadjadi, Associate Professor and Principal Investigator of CI-PIRE.

FIU’s faculty and students are also able to connect to off-site locations and conduct research observations by leveraging the infrastructure FIU has established between the U.S. and Latin America via AmLight. For example, as a member of the Southern Association for Research in Astronomy (SARA) Observatory, FIU is able to remotely operate a telescope located in northern Chile using the AmLight infrastructure.

“Although I’ve never even been to Chile, I can still use the SARA telescope located there to do research from campus.” says Dr. James Webb, professor of physics at FIU.

CIARA, in close cooperation with its national and international partners, will lead the AmLight initiative to connect research and education communities in the U.S. with their counterparts in Latin America.

“Experience in the implementation and operation of large-scale international network infrastructure by CIARA was a key reason why FIU was awarded to lead this project on behalf of the NSF”, said Dr. Min Yao, FIU Vice President and CIO.