

FLORIDA INTERNATIONAL UNIVERSITY: INTERNATIONAL EXPERTISE

*Be Worlds
Ahead*

FIU Facts and Figures

- **Opened in 1972, part of Florida State University System**
- **Miami's first and only four-year public research university**
- **Number of students – 44,010**
- **Gender of students: Female – 56%, Male – 44%**
- **Ethnicity:**
 - **Hispanic – 60%**
 - **White – 14%**
 - **African American – 13%**
 - **Asian – 3%**
 - **Other – 6%**
 - **Native Americans – 0%**

FIU Facts and Figures

- **Hispanic Serving Institution**
- **Ranked #1 in awarding Bachelor's and Master's degrees to Hispanic students**
- **Carnegie Foundation – Research University, High Research Activity**
- **\$100M in research, with funding from 41 federal agencies**
- **Carnegie Foundation – Community Engagement Classification**

FIU Facts and Figures

- **One of the 25 largest universities in the US:**
 - **44,010 students**
 - **870 full-time faculty**
 - **140,000 alumni**
- **Nearly 50% of students receive financial aid**
- **Ranked by Kiplinger's Personal Finance Magazine one of the best values in public education**

President's Vision

“A leading student-centered urban public research university that is locally and globally engaged.”



- President Mark Rosenberg

FIU International Expertise

- **Agroecology – Dr. Mahadev Bhat**
- **SEAS – Dr. Michael Heithaus**
- **Water for Sustainability – Dr. Michael McLain**
- **Climate Change Impact on Plants and Ecosystems – Dr. Steve Oberbauer**
- **Disaster Preparedness and Politics of Disaster – Dr. Richard Olson**
- **Rural Business Development/Export Market Development – Dr. Dileep Rao/Gabriel Pascual**
- **Water Treatment and Training of Environmental Engineers for Agriculture – Dr. Berrin Tansel**
- **Nutrition in Multicultural Populations – Dr. Fatma Huffman/Dr. Marianna Baum/Dr. Adriana Campa**

SEAS

- **School of Environment, Arts, and Society**
- **Assembles faculty from natural and social sciences for interdisciplinary research and education towards solution of pressing environmental issues**



Dr. Steve Oberbauer

- **Professor, Biology Department**
- **Research on plant response to stress and climate change, impact of climate change on phenology, and impact of vegetation responses on climate change**
- **Conducts work in Arctic, Tropics, and Everglades**
- **Capabilities:**
 - **Micrometeorological measurement of CO₂, CH₄, H₂O and energy exchange of forest wetlands → potential applicability to agriculture**
 - **Interested in measuring greenhouse gases in tree plantations, banana plantations, and pastures**



Dr. Steve Oberbauer

➤ **Federal Research Grants:**

- 1. “Complex Interactions Among Water Nutrients and Carbon Stocks and Fluxes Across A Natural Fertility Gradient in Tropical Rain Forest”**

Funded by NSF, \$1.6M

- 2. “ Collaborative Research : Arctic Observing Networks: Sustaining and Amplifying the ITEX AON Through Automation and Increased Interdisciplinarity of Observations:**

Funded by NSF, \$1.2M



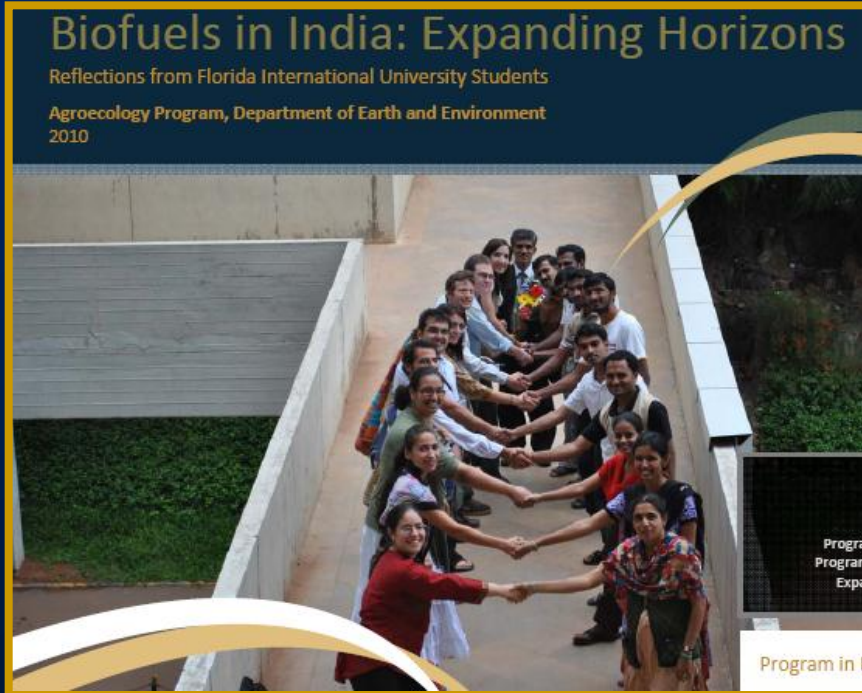
Agroecology Program

- **USDA – NIFA funded capacity building program for students and faculty in sustainable, local, and small-scale agriculture production**
- **B.S. Environmental Studies with Agroecology Certificate**
- **Agroecology Internships and Multicultural Scholars Program**
- **International Science and Education Program**





- **MOU signing with the University of Agricultural Sciences, Bangalore, India, for long-term research collaboration**
- **USDA funded International Science and Education Program**



MOU students and faculty researching production, markets, and policies of bioenergy crops in India



**Hosting students of National Agricultural
University, Honduras, at FIU, 2010**

FIU students and faculty training, and researching at small farms of El Salvador, Kenya, and Indonesia



El Salvador



Indonesia



Kenya

Global Water For Sustainability (GLOWS)

Dr. Michael McLain and team

1. Transboundary Water for Biodiversity and Human Health in the Mara River Basin, Kenya, and Tanzania (TWB-MRB)

- **Funded by USAID \$3.8M**
- **Implement a coordinated program to facilitate improved river basin management and ensure water flows to sustain human population**
- **Promote biodiversity conservation in Mara-Serengeti Ecoregion**
- **Support native communities to construct new water systems and improve sanitation services**



GLOWS Program

2. Integrated Water Resources Management in the Pastaza River Basin, Ecuador, and Peru

- **Funded by USAID**
- **To protect aquatic biodiversity and the well-being of human communities and assist native people to manage natural resources**
- **To reduce water contamination in the Pastaza River Basin**
- **To facilitate communication and sharing of lessons learned among native communities: Achuar, Kandozi, and Quechua**



GLOWS Program

3. Integrated Water Resources Management in Wakal River Basin, India

- **Funded by USAID**
- **To achieve sustainable integrated water resources management in the Wakal River Basin**
- **To examine effectiveness of different rainwater harvesting structures and locations**
- **Collaboration with universities in Udaipur, Rajasthan; Action for Food Production (AFPRO) and Foundation for Ecological Security**



GLOWS Program

4. Integrated Natural Resources Management in Watersheds of Georgia

- **Funded by USAID**
- **To reduce threats to natural resource sustainability by introducing innovative approaches and practical models of participatory natural resources management (water, soil, vegetation)**
- **To empower local communities and authorities by promoting local governance that enable rural people to advocate for change to better their lives**



Dr. Richard Olson

- **Professor and Department Chair, Politics and International Relations**
- **Expertise in the politics of disasters**
- **Author of “The Politics of Earthquake Prediction” (1989) and “Some Buildings Just Can’t Dance: Oakland, California After The Loma Prieta Earthquake” (1999)**



Federal Grants

**“Risk Management in LAC Region Higher Education:
The Paul C. Bell, Jr. Risk Management Program”**

➤ **USAID/DCHA, \$1.6M**

**“Disaster Risk Reduction (DRR) in the Americas:
Conceptualizing, Identifying, Analyzing, Stimulating,
and Strengthening Transferable DRR Models”**

➤ **USAID/DCHA, \$4.5M**

DRR and Bell Program Activity Sites and Linkages



Dr. Dileep Rao

- **Clinical Professor of Entrepreneurship, College of Business**
- **National expert on rural business development and job creation**
- **Worked with USDA, SBA, EDA, HHS, and others**
- **Taught in Executive MBA programs in Warsaw, Vienna, Paris, South Korea, Rumania, and in Latin American countries**
- **Author of “Business Financing: 25 Keys to Raising Money”**



Dr. Jerry Haar

- **Professor and Associate Dean, College of Business**
- **Director, Pino Global Entrepreneurship Center**
- **Director of Washington Programs for the Council of the Americas, a business association of over 200 U.S. corporations investing in Latin America**
- **Author of “Winning Strategies for New Latin Markets: Can Latin America Compete”**
- **Fulbright Scholar, Fundação Getúlio Vargas, Brazil**



Gabriel Pascual

- **Adjunct Faculty, College of Business**
- **Founding Director of Agency for Development of Export Markets (ADEM)**
- **Has implemented programs for USFDA, USAID, USDA, and IDB in Latin American, Eastern Europe, Middle Asia, and Southern Asia**
- **Designed largest dairy production and dairy processing facility in Sri Lanka**
- **Capabilities in compliance and food processing safety standards, export market development, and trade mission development**



Applied Research Center

- **Dr. John Proni, Executive Director**
- **Dr. Proni was former Director of Ocean Chemistry at AOML, NOAA**
- **ARC's core research includes:**
 - **Environment – Innovative solutions in remediation and restoration of contaminated sites**
 - **Waste Management – Risk assessment, waste characterization, transport, treatment, and disposal**
 - **Energy – Biofuels and bioenergy technology, biomass conversion to energy, fuels, chemicals**
 - **Defense – Experience in sensors, remote imaging**
 - **Water – Treatment, remediation, desalination, restoration**



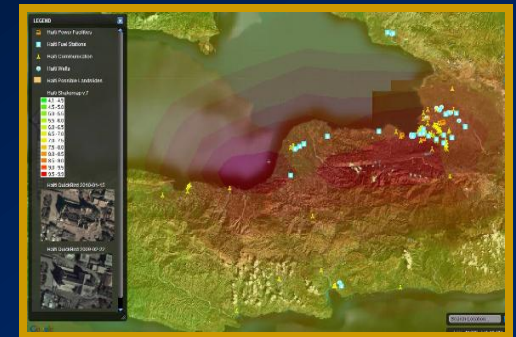
Environmental Security in Latin America

Objective:

- Evaluate and recommend a technology roadmap to address environmental security
- Coordinate, oversee, and provide support for technology demonstrations related to environmental security (i.e. disaster response)
- Set-up, maintain and test the use of Web 2.0 platforms and the development of social communities of interest to network experts in non-traditional security (i.e. food security)

Partners/ Stakeholders:

- United States Southern Command (USSOUTHCOM)



Dr. Berrin Tansel

- **Associate Professor, Civil and Environmental Engineering**
- **Past USDA Fellow**
- **Areas of expertise: water treatment and waste management**
- **Former project manager at Massachusetts Water Resources Authority**
- **Potential for curriculum development and training of environmental engineers with understanding of agricultural issues**



Dr. Marianna Baum

- **Professor, Dietetics and Nutrition**
- **Pioneered concept of relationship between plasma nutrients, disease progression and HIV mortality**
- **Federal Research Grants:**
 1. **“HIV Disease, Drug Abuse, and Nutrient Therapy in Botswana”**
NIH, \$3.6M
 2. **“HIV/HCV Infection, Disease Progression, Oxidative Stress, and Antioxidants”**
NIH, \$1.5M



Dr. Fatma Huffman

- **Professor and Department Chair, Dietetics and Nutrition**
- **Bachelor's and post-graduate degrees in Agricultural Engineering**
- **Expertise in dietary glycemic index in relation to cardiovascular disease and Type II diabetes in multicultural populations**
- **Current NIH grant:
“CVD Risk in Minority Populations with and without Type II Diabetes – Haitian and Black”**



