# Florida Climate Institute

# Presentations held during the Annual Event November 14, 2011 at the University of Florida

#### 1:00-1:20pm PINEMAP - Mapping the Future of Southern Pine Management in a Changing World By Dr. Gary Peter, University of Florida

Gary Peter is a Professor at the School of Forest Resources and Conservation at the University of Florida.

Gary Peter uses a wide range of approaches to elucidate the genetic and molecular mechanisms that control stem growth, wood properties and to understand the ecological adaptations and the evolution of xylem structure and function in forest trees. In addition to this fundamental research, Gary Peter leads a commercial breeding program for southern pines with the Cooperative Forest Genetics Research Program. Gary Peter is a co-director of the Forest Biology Research Consortium whose objectives are to understand the mechanisms that control planted pine forest ecosystem productivity, health and sustainability.

#### 1:20-1:40pm Empirical Constraints on Future Sea Level Rise: Lessons from the Past By Dr. Andrea Dutton, University of Florida

Dr. Dutton is a carbonate geochemist and sedimentologist with a particular interest in paleoclimate and paleoceanography. Her current focus is to establish the behaviour of sea level and ice sheets during previous interglacials to better inform us about future sea level rise. She also has an ongoing interest in ancient greenhouse climates, and the response of the atmosphere, hydrosphere, biosphere, and lithosphere to climate change.

Dr. Dutton received her MS (2000) and PhD (2003) from the Department of Geological Sciences at University of Michigan in Ann Arbor, MI. She spent the following 7 years in Australia as a Postdoctoral Fellow and a Research Fellow at the Research School of Earth Sciences in The Australian National University, Canberra, Australia. She joined the faculty at the University of Florida in 2011.

#### 1:40-2:00pm Climate Without Borders: A Perspective on Florida's Climate by Dr. Vasubandhu Misra, Florida State University

Vasubandhu Misra is an Assistant Professor in the Department of Earth, Ocean and Atmospheric Science at the Florida State University. He is also affiliated with the Center for Ocean-Atmospheric Prediction Studies and the Florida Climate Institute. His primary research interest is in climate variability and







predictability. His ongoing research is dwelling on southeast US hydro-climate variability and change, oceanic variability in the Intra-Americas Seas, ENSO and monsoon variations.

#### 2:00-2:20pm Sea Level Changes in the Southeastern United States. Past, Present, and Future By Dr. Gary Mitchum, University of South Florida

Gary T. Mitchum is a Professor of Physical Oceanography in the College of Marine Science at the University of South Florida, where he has been since 1996. After receiving his PhD from the Department of Oceanography at the Florida State University in 1985, he spent 11 years in the Department of Oceanography at the University of Hawaii, first as a postdoctoral researcher and then as a member of the research faculty and as the Director of the University of Hawaii Sea Level Center. His research interests emphasize shortterm climate changes, ranging from interannual variations such as ENSO, to decadal processes, to the long-term sea level rise problem. He has also done work on continental shelf dynamics, mesoscale eddy interactions with mean flows, internal tide generation and propagation, and physical controls on fisheries variables. Although he has used many types of data in his research, he is especially interested in analyses of tide gauge and satellite altimetric data, and notably proposed and developed the presently accepted method of calibrating altimeters via comparisons with the global tide gauge network.

## 2:20-2:40pm Economic, Policy and Other Issues Related to Climate and SLR Research in Florida

#### By Dr. Julie Harrington, Florida State University

Dr. Harrington holds a doctorate in Economics and a MS in Fisheries from Auburn University, and a BS in Fish and Wildlife Management from Montana State University. She is currently the Director of the Center for Economic Forecasting and Analysis (CEFA) at the Florida State University. Her current research interests are directed towards the areas of energy, environment, advanced technologies, economic development, and education economics. She is a member of the Florida Climate Institute, and is also a member of the FSU Institute for Energy Systems, Economics and Sustainability (IESES) <u>http://www.ieses.fsu.edu</u> formed within the Florida Energy Systems Consortium (FESC) with primary focus on energy economy and policy. She has recently conducted economic research in the areas of climate, sea level rise, clean energy, carbon pricing and utility management in Florida. She recently served as a member on the "Governor's Action Team on Energy and Climate Change". Dr. Harrington also works with statistical and economic input-output modeling software.

### 2:40-3:00pm Facilitated Discussion: FCI Directors







#### 3:00-5:00pm Compass Training Workshop By Dr. Heater M. Galindo, University of Washington



With a background in biological oceanography (B.S., University of Washington) and English literature (B.A., University of Washington), Heather Galindo went on to get her Ph.D. in biological sciences at Stanford University's Hopkins Marine Station. Her research combined approaches from oceanographic modeling, field ecology, and population genetics to study how marine populations separate in space are connected by larval dispersal. Heather also researched how people develop mental models of this concept and worked at the intersection of science and policy in a state-level planning process. After completing a postdoctoral position in fisheries genetics at the University of Washington, Heather became the Assistant Director of Science at COMPASS where she has focused on advancing the science of the effects of climate change and ocean acidification on marine ecosystems.

The Communication Partnership for Science and the Sea (COMPASS) will introduce workshop participants to communication tools to help scientists distill facts and data into focused, relevant messages. Whether you are preparing to speak with a local newspaper reporter, a U.S. Senator, or a group of students, these tools can help you tailor your approach to fit your audience's needs, preconceptions, and level of familiarity with the subject matter. See the attached materials (pages 9 and 10).

- **6:15-6:30pm** Florida Climate Change Task Force Workshop Welcoming Remarks: Dr. James Jones - University of Florida, Dr. Leonard Berry - Florida Atlantic University, Dr. Eric Chassignet and Dr. Lynn Dudley - Florida State University
- 6:30-7:30pm Keynote Address: Steve Seibert, Founder, The Seibert Law Firm
- **7:30-8:30pm** Keynote Presentation: Virginia Burkett, Senior Science Advisor for Climate and Land Use Change, U.S. Geological Survey

