

## EDUCATION

Ph.D. in Interdisciplinary Ecology with emphasis on Forest Resources and Conservation | **2012**  
University of Florida, Gainesville, Florida, USA

Master of Science in Interdisciplinary Ecology with emphasis on Tropical Conservation and Development | **2007**  
University of Florida, Gainesville, Florida, USA

Bachelor in Biology with Emphasis in Ecology and Sustainable Development | **2002**  
Universidad Latina de Costa Rica, San José, Costa Rica

Completed the first college year towards a degree in Environmental Studies | **September 1997 - May 1998**  
University of British Columbia, Vancouver, Canada

### **other professional training**

Participant in the Research Experiences for Undergraduates Program (REU) at La Selva Biological Station of the Organization for Tropical Studies (OTS)\* | **June 2003 - February 2004**

### **professional continuing education**

Participant in the workshop "Endangered tree species: Identification, management and conservation." Fundación Pro Zoológicos y Centro de Conservación Santa Ana. Santa Ana, Costa Rica | **2003**

Participant in the II Congress on Sustainable Development: "Costa Rica: Perspectives towards the 21st century." CONARE, San José, Costa Rica | **2000**

Participant in the course "Costa Rican Mammals" organized by the National Museum of Costa Rica. San José, Costa Rica | **1999**

Costa Rica Supreme Court. Participant in the Seminar on Environmental Law. San José, Costa Rica | **1998**

## TEACHING EXPERIENCE

### **JANUARY - APRIL 2013**

Biology Department,  
University of Florida, Gainesville, FL  
Lecturer for the course *Plant Ecology*

This course is an introduction to ecology as a scientific discipline with an emphasis on plants, covering ecological principles on how plant populations and communities interact with their environment at local, regional and global scale. The course is complemented with a laboratory which emphasizes the identification of common plants, vegetation types, and ecosystems of the region, and introduces students with hypothesis testing through field experiments.

### **AUGUST - DECEMBER 2012**

School of Natural Resources and Environment,  
University of Florida, Gainesville, FL  
Teaching Assistant for the course *Environmental Science*

> *Instructor:* Dr. Danny Coenen

The course was designed as an introduction to the field of environmental science in preparation for more advanced future coursework. Duties included grading quizzes, exams and term papers and help students with coursework during office hours.

### **AUGUST 2010 - DECEMBER 2012**

School of Forest Resources and Conservation,  
University of Florida. Gainesville, FL  
Guest lecturer during the Fall course *Dendrology and Forest Plants*

> *Instructor:* Dr. Michael Andreu

Lecture covered the tropical biome with an emphasis on tropical forests of Costa Rica.

### **MAY - AUGUST 2007**

Levine College of Law,  
University of Florida, Gainesville, FL  
Teaching assistant. Summer Study Abroad program (Costa Rica)

> *Instructors:* J.D. Thomas Ankersen, J.D. Joan Flocks, and Franklin Paniagua  
I was a student in the program and at the same time assisted with course logistics and helped students coordinate class projects.

### **AUGUST 2006 & AUGUST 2008**

School of Natural Resources and Environment,  
University of Florida. Gainesville, FL  
Teaching Assistant for the course *Forest Ecology*

> *Instructor:* Dr. Shibu Jose

Course covered ecological principles and their application to the management of forests. I supervised lab and field activities and helped students with lab/field related matters during office hours.

## TEACHING EXPERIENCE—CONTINUED

### AUGUST 2004 - MAY 2005

University of Florida, Gainesville, FL

Teaching Assistant for the course *Laboratory of Integrated Principles of Biology I*

Laboratory experiments designed to accompany theory course. I was in charge of lecturing, grading, and helping students during office hours.

### JULY - AUGUST 2004

Organization for Tropical Studies (OTS), Costa Rica

Teaching Assistant for the course *Plantains, Iguanas and Shamans: An Introduction to Field Ethnobiology*

> *Instructor:* Dr. Luis Diego Gómez

I was in charge of course logistics and statistics introductory lectures. I also helped students to develop their research assignments.

### JUNE 2002 - APRIL 2003

Universidad Latina de Costa Rica

Lecturer in *Biostatistics*

> Introductory course of statistics for biology majors. Also advised other students in the department of biology, who were working on their research assignments.

### JANUARY - DECEMBER 2001

Universidad Latina de Costa Rica

Teaching Assistant for the courses *Botany I* and *Botany II*

> *Instructor:* Gustavo Vargas

I was in charge of the respective laboratories and field trips.

### SEPTEMBER - DECEMBER 1999

Universidad Latina de Costa Rica,

Teaching Assistant for the course *Zoology I (Invertebrates)*

> *Instructor:* Orlando Muñoz

I was in charge of the laboratory.

## RESEARCH AND OTHER WORK EXPERIENCE

### AUGUST 2013 - JUNE 2015

Department of Biology,

University of Florida, Gainesville, FL

Postdoctoral Research Associate, with Dr. Edward (Ted) Schuur

> Data management for Ecosystem Dynamics Research Lab. Specifically conducted quality assurance and quality control (QA/QC) of data from Alaska LTER field station which focuses on responses of arctic ecosystems to climate change.

### JANUARY 2013 - AUGUST 2013

Department of Biology,

University of Florida, Gainesville, FL

Postdoctoral Research Associate, with Dr. John (Jack) Ewel

> Data analysis of manuscripts “*Eleven years of soil fertility changes in model tropical ecosystems: effects of stand longevity and plant diversity outweigh species identity*”.

### MAY 2011 - DECEMBER 2012

Department of Biology,

University of Florida, Gainesville, FL

Student Research Assistant with Dr. John (Jack) Ewel

> Data management and analysis for long term project that synthesizes information on relationships between biodiversity and ecosystem functioning in Costa Rica.

### AUGUST 2006 - MAY 2011

School of Natural Resources and Environment,

University of Florida, Gainesville, FL

Graduate Assistant

### MAY 2002 - JULY 2004

Fundación Pro Zoológicos,

Zoológico Nacional Simón Bolívar and Centro de Conservación Santa Ana

Educational guide

> Led site tours for groups from children to senior citizens.

### JUNE 2001 - JUNE 2002

San José, Costa Rica,

Consultant

> Flora and fauna inventories and river inventories of benthonic macroinvertebrates for environmental impact assessments.

### SEPTEMBER - NOVEMBER 2001

Secretaría Técnica Nacional Ambiental (SETENA), Costa Rica,

Volunteer for data entry into the database of the Department of Preliminary Evaluation

### MAY 2000 - MAY 2002

Departamento de Historia Natural, Programa de Investigación,

Museo Nacional de Costa Rica

Research Assistant ad honorem

> Worked for the project “Seed germination of two sympatric palm species: *Chamaedorea tepejilote* Liebm. and *Chamaedorea Costaricana* Oerst (Arecaceae) in natural conditions and in a nursery.”

## RESEARCH AND OTHER WORK EXPERIENCE—CONTINUED

### OCTOBER - DECEMBER 1999

Instituto Nacional de Biodiversidad (INBio), Santo Domingo de Heredia, Costa Rica,  
Consultant

- > Compiled, synthesized and put into HTML format information on Taxonomic Working Groups, in English and Spanish, for the website of the Costa Rica - Biodiversity Resources Development Project, funded by The World Bank. The final output of this work can be seen at: [http://www.inbio.ac.cr/papers/gt\\_Hongos/en/index.htm](http://www.inbio.ac.cr/papers/gt_Hongos/en/index.htm)

## LEADERSHIP POSITIONS

University of Florida,  
Mayor's Council, Student Government Funded Organization  
Elected mayor to represent students of Tanglewood Graduate Housing community | **2009 - 2012**

Universidad Latina de Costa Rica,  
Asociación de Estudiantes de Biología  
Elected Board Member | **2000 - 2001**

## EXTRACURRICULAR ACTIVITIES

Universidad de Costa Rica,  
Participant in the course *Introduction to first aid* | **2004**

Volunteer in the Education Committee of Cooperativa Tivives, Esparza, Costa Rica | **1998 - 2004**

- > Conducted nature tours along the forest and mangrove of Zona Protectora Tivives.

## AWARDS AND GRANTS

University of Florida,  
Department of Housing and Residence Education,  
Annual Multicultural Student Award | **June 2011**

International Honorary Grant for Leaders in University Apartment Communities,  
Recognition for leadership and distinguished service | **May 2010**

Florida Exotic Pest Plant Council (FLEPPC),  
Julia Morton Invasive Plant Research Program Grant. Funded dissertation research. (\$1,500) | **April 2010**

University of Florida,  
Natural Area Teaching Laboratory (NATL),  
Mini grant for research (\$500) | **May 2009**

School of Natural Resources and Environment (SNRE) - UF Travel grant (\$250) | **August 2007**

Institute of Food and Agriculture Science (IFAS) - UF Travel grant (\$200) | **August 2007**

PSTC-Compton International Fellowship Research Grant. Funded Master's research (\$8,000) | **February 2004**

Florida-Costa Rica Linkage Institute (FLORICA),  
Awarded 9 credits of out-of-state tuition exemption | **August 2004**

Organization for Tropical Studies (OTS),  
Scholarship awarded to participate in the program *Research Experiences for Undergraduates (REU)* at La Selva Biological Station | **June 2003**

## AFFILIATIONS

Ecological Society of America (ESA)

Society for Ecological Restoration (SER)

Association for Tropical Biology and Conservation (ATBC)

## PUBLICATIONS

Deane-Coe, K.K., M. Mauritz, **G. Celis**, V. Salmon, K.G. Crummer, S.M. Natali, E.A.G. Schuur. 2015. *Experimental warming alters productivity and isotopic signatures of tundra mosses*. *Ecosystems*, doi:10.1007/s10021-015-9884-7

Ewel, J.J., **G. Celis**, and L. Schreeg. 2015. *Steeply increasing complementarity among tropical trees*. *BIOTROPICA*, 47(2): 162-171.

Natali, S., E.A.G. Schuur, J. Schade, **G. Celis**, K. G. Crummer, C. Johnston, J. Krapek, E. Pegoraro, V. G. Salmon, and E.E. Webb. 2015. *Permafrost thaw and soil moisture drive CO<sub>2</sub> and CH<sub>4</sub> release from upland tundra*. *Journal of Geophysical Research: Biogeosciences* 120, doi:10.1002/2014JG002872.

Baber, O., M. Slot, **G. Celis**, K. Kitajima. 2014. *Diel patterns of leaf carbohydrate concentrations differ between seedlings and mature trees of two sympatric oak species*. *Botany* 92(7): 535-540.

Ewel, J.J., M.J. Mazzarino, and **G. Celis**. 2014. *Eleven years of soil fertility changes in model tropical ecosystems: effects of stand longevity and plant diversity outweigh species identity*. *Ecosystems* DOI: 10.1007/s10021-014-9753-9.

## PUBLICATIONS—CONTINUED

**Celis, G** and G. Ávalos. 2013. *Acclimation of seedlings of Gnetum leyboldii Tul. (Gnetaceae) to light changes in a tropical rain forest.* Revista de Biología Tropical 61(4): 1859-1868.

**Celis, G** and S. Jose. 2011. *Restoring abandoned pasture land with native tree species in Costa Rica: effects of exotic grass competition and light.* Forest Ecology and Management 261(10): 1598-1604.

Shields, J., S. Jose, J. Freeman, M. Bunyan, **G. Celis**, D. Hagan, M. Morgan, E. Pieterston, and J. Zack. 2011. *Short-term impacts of Laurel Wilt on Redbay (Persea borbonia [L.] Spreng.) in a mixed ever-green-deciduous forest in northern Florida.* Journal of Forestry 109(2): 82-88.

**Celis, G.** and C. Pieterston. 2009. *It's in the Bag.* Wildland Weeds 12: 11.

Vargas, G.; **G Celis**, and Vieira, D. 2001. *Guía de Árboles y Arbustos del Centro de Conservación Santa Ana.* Fundación Pro Zoológicos, San José, Costa Rica.

## data publications

Natali, S., E. A.G. Schuur, and **G. Celis**. 2014. *The impact of warming on ecosystem carbon balance: Half-hourly soil moisture and temperature data from the CIPEHR project, Healy AK, 2008-2013, Bonanza Creek LTER - University of Alaska Fairbanks.* BNZ:477, [http://www.lter.uaf.edu/data\\_detail.cfm?datafile\\_pkey=477](http://www.lter.uaf.edu/data_detail.cfm?datafile_pkey=477).

Schuur, E. A.G., S. Natali, and **G. Celis**. 2014. *The impact of permafrost thaw on ecosystem carbon balance: hourly meteorological data from Eight Mile Lake watershed, 2004-2013, Bonanza Creek LTER - University of Alaska Fairbanks.* BNZ:453, [http://www.lter.uaf.edu/data\\_detail.cfm?datafile\\_pkey=453](http://www.lter.uaf.edu/data_detail.cfm?datafile_pkey=453).

**Celis, G.**, E. A.G. Schuur, and S. Natali. 2014. *The impact of drying and warming on ecosystem carbon balance: Half-hourly soil moisture and temperature data from the DryPEHR project, Healy AK, 2010-2013, Bonanza Creek LTER - University of Alaska Fairbanks.* BNZ:576, [http://www.lter.uaf.edu/data\\_detail.cfm?datafile\\_pkey=576](http://www.lter.uaf.edu/data_detail.cfm?datafile_pkey=576).

## thesis, dissertation, and reports

**Celis, G.** 2012. *Ecological assessments of impact and management of Coral Ardisia (Ardisia Crenata), a shade tolerant invasive shrub in North Central Florida.* Ph. D. dissertation, University of Florida, Gainesville, Florida.

**Celis, G.** 2007. *Restoring abandoned pasture land with native tree species in Costa Rica: An ecophysiological approach to species selection.* Master's thesis, University of Florida, Gainesville, Florida.

**Celis, G.** and Ávalos G. 2003. *Do patterns of seed germination and seedling biomass allocation reflect a shade tolerance syndrome in Gnetum leyboldii Tul. (Gnetaceae)?* In: Proceedings of REU Program 2003. Organization for Tropical Studies (OTS), San José, Costa Rica.

## publications—in preparation

**Celis, G.**, M. Mauritz, R. Bracho, V. G. Salmon, E. E. Webb, J. Hutchings, S. M. Natali, C. Schädel, K. G. Crummer, E. A.G. Schuur. *The tundra is a net source of CO2 measured by autochambers and eddy covariance techniques during five years in a site with permafrost thawing.* Inteded for Journal of Geophysical Research: Biogeosciences.

**Celis, G.**, K. Kitajima, and A. Fox. *Invasive Exotic shrub, Ardisia crenata, reduces native plant diversity in forest understories in Florida.* Intended for Biological Invasions.

**Celis, G.**, K. Kitajima, and S. Jose. *Influence of shade tolerant invasive shrub, Ardisia crenata on oak seedling regeneration in mesic forest in Florida.* Intended for Functional Ecology.

**Celis, G.**, MacDonald, G. and Kitajima, K. *Does herbicide translocation correlate with seasonal carbohydrate balance in an evergreen shrub Ardisia crenata.* Intended for Restoration Ecology.

## conference participations

**Celis, G.** and K. Kitajima. 2013. *Influence of shade tolerant invasive shrub, Ardisia crenata on oak seedling regeneration in mesic forests in Florida.* Association for Tropical Biology and Conservation (ATBC).

**Celis, G.**, G. MacDonald, and K. Kitajima. 2013. *Does Herbicide Translocation Correlate with Seasonal Carbohydrate Balance in an Evergreen Shrub Ardisia crenata?* Florida Exotic Pest Plant Council (FLEPPC).

**Celis, G.**, and S. Jose. 2007. *Restoring abandoned pasture land with native tree species in Costa Rica: An ecophysiological approach to species selection.* Joint coference Ecological Society of America (ESA) and Society for Ecological Resotration (SER).