

Soil and Water Diagnostic Laboratories

contents

Biogeochemistry of Trace Metals Laboratory	2
Soil Microbiology Laboratory	2
Pedology-Mineralogy Laboratory	2
Organic Contaminants Analytical Research Laboratory	3
Stable Isotope Mass Spectrometry Laboratory	3
Soil Chemistry Laboratory	3
Wetland Biogeochemistry Laboratory	4
Analytical Services Laboratories	5
Environmental Toxicology and Chemistry Trace Organics Laboratory at the Indian River Research and Education Center, Fort Pierce	6
Everglades Research and Education Center Laboratories, Belle Glade	6
Soil and Water Laboratory at the Tropical Research and Education Center, Homestead	6
Soil and Water Science Laboratory at the Indian River Research Education Center, Ft. Pierce	7
Edward A. Hanlon Retires	7
Faculty, Staff, and Students	8



From the Chair...

The Soil and Water Science Department (SWSD) faculty and students use a wide range of analytical and field instrumentation in their research programs. To maximize the use of these analytical instruments, the SWSD established several core laboratories not only to support faculty and students but also to provide analytical services and expertise to our clientele in the State of Florida and elsewhere. This group of **Soil and Water Diagnostic Laboratories** (located both in Gainesville and select UF-IFAS Research and Education Centers) house state-of-the-art instrumentation for analysis of soil, water, plant, and other environmental samples for plant nutrients and a range of inorganic and organic contaminants. These services are available at a nominal cost to our clientele. Details of costs associated with the services provided by these laboratories can be obtained from the coordinator of each laboratory. A brief description of the core laboratories is presented in this newsletter.

Join us at...

The 14th Annual Soil and Water Science Research Forum

The 14th Annual Soil and Water Science Research Forum is scheduled to be held on September 06 2013, in Gainesville, Florida. The forum is designed to bring together representatives from state and federal agencies as well as private industry, faculty, graduate students, and prospective students interested in soil and water science. The forum will provide an opportunity for all those interested in soil and water science to interact with our students, faculty, and administrators on campus. This year's theme for the forum is on "Sustainability of Land and Water Resources". **Dr. Linda Lee**, Professor and Associate Director, Discovery Park Center for the Environment, Department of Agronomy, Purdue University, is the featured keynote speaker at this year's forum. We look forward to your participation in the forum. If you are planning to attend, please register at <http://soils.ifas.ufl.edu/forum/>. For additional information, contact James Jawitz at: Jawitz@ufl.edu.

<http://soils.ifas.ufl.edu>

EDITORS:
Susan Curry
scurry@ufl.edu

Dr. Vimala Nair
vdn@ufl.edu

Michael Sisk
mjsisk@ufl.edu

Laboratories at the Gainesville Campus

Biogeochemistry of Trace Metals Laboratory



The Biogeochemistry of Trace Metals Laboratory (BTML) provides expertise and service for analysis of environmental samples. In addition to conventional instrumentation, the BTML houses a NexION 300X inductively coupled plasma mass spectrometer (ICP-MS). ICP-MS can accurately measure up to 82 elements per liquid sample either as single elements or in multi-element analysis with high precision and sensitivity. Samples can be measured qualitatively or quantitatively to concentrations as low as 0.1 part per trillion (ppt). Due to the accuracy and low detection limits of ICP-MS, it is the best available option for trace metal/element analysis. In addition to water and soil samples, analysis can be performed on a variety of materials including but not limited to: blood, plant tissues, food, manure, fly ash, dust, gases, oil, fertilizers, sludge, etc. A fee structure for the ICP-MS has been setup in order to cover basic operating costs and consumables. For more information, contact Jay Lessl at: jlessl@ufl.edu or Lena Ma at: lqma@ufl.edu

Soil Microbiology Laboratory

The Soil Microbiology Laboratory provides support for a range of soil microbial analyses, including analyses and training regarding mycorrhizal fungi and molecular ecology. Much of our work involves training on a variety of services regarding mycorrhizal fungi. Much of our consulting work is supporting companies and individual growers by conducting Mycorrhizal Spore Count and Mycorrhizal Inoculum Potential (MIP) Bioassay to estimate the activities of mycorrhizal fungi in samples. Spore Count Tests can be available in one week and the MIP test results are available after 28 days of greenhouse incubation.



Training on mycorrhizal associations is organized by our laboratory every year during the summer on campus to help organic farmers, scientists, researchers, students, or others. Off campus training sessions can also be arranged for an additional fee. Training includes technical procedures for examining and estimating mycorrhizal inoculum and spore extraction and quantification. It also includes techniques to estimate percentages of mycorrhizal root colonization, mycorrhizal identification, and mycorrhizal inoculum production. The molecular ecology component of the core facility has worked with companies and academic labs to enumerate specific microorganisms in soils. This typically involves extraction of DNA and enumeration of specific genes by quantitative PCR. For additional information, contact Andy Ogram at: aogram@ufl.edu

Pedology-Mineralogy Laboratory

The overarching mission of the Pedology-Mineralogy Core Laboratory is to provide basic physical, chemical, and mineralogical analyses for soils and sediments. The emphasis is on analyses related to soil genetic and environmental issues not typically covered in other Departmental labs. Examples include particle-size distribution, cation exchange, selective dissolution (metals and carbonates), and x-ray diffraction. A goal is to maintain capability of performing the suite of analyses generally included under the term "soil characterization," some of which are needed to classify soils under USDA-NRCS soil taxonomy. The laboratory houses a variety of instruments, including a computer-controlled x-ray diffractometer, petrographic and dissecting microscopes (with digital camera), UV-visible spectrophotometers, and other basic laboratory equipment. For additional information, contact Willie Harris at: apatite@ufl.edu



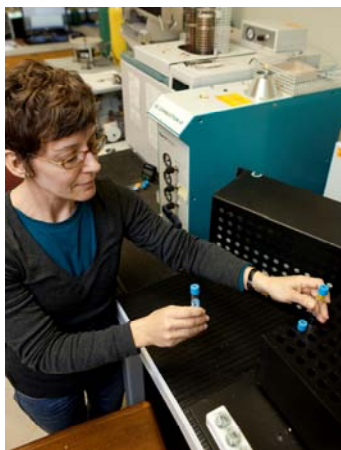
Organic Contaminants Analytical Research Laboratory

Organic Contaminants Analytical Research Laboratory (OCARL) provides service for faculty and students interested in studying fate and transport of contaminants in soils and waters. These contaminants may include endocrine-disrupting compounds (EDCs), pharmaceuticals and personal care products, degradation metabolites of nonionic surfactants used in household and industrial detergents, petroleum refining (DNAPL and LNAPL), pulp and paper production, crop protection chemicals, waste products from plastics and textiles manufacturing. Our facilities include laboratories for microbial, chemical, and radioactive analyses. Currently our two main areas of research are focused on finding alternative fumigants to methyl bromide and bioremediation of organic contaminants.



The OCARL is equipped with a high pressure liquid chromatograph with UV-Visible detector and a high pressure liquid chromatograph coupled to a triple quadrupole mass spectrometer (LC-MS/MS), two gas chromatographs with various detectors (nitrogen-phosphorus, electron capture, thermal conductive, and flame ionization), and a UV-visible spectrometer. The radioactive laboratory is used predominantly for radio-labeled contaminant degradation studies. For additional information, contact John Thomas at: thomas@ufl.edu

Stable Isotope Mass Spectrometry Laboratory



The Stable Isotope Mass Spectrometry Laboratory (SIMS) is located in the SWSD (McCarty Hall A, Room G179) at the UF campus. The SIMS laboratory maintains and operates a ThermoFinnigan MAT Delta^{plus} XL Isotope Ratio Mass Spectrometer (IRMS) interfaced via a Conflo-III device to a Costech ECS 4010 elemental analyzer for continuous flow measurement of stable carbon (C) and nitrogen (N) isotope ratios of organic and inorganic samples. Additional peripherals interfaced with the mass spec include a ThermoFinnigan GasBench II and a ThermoFinnigan GC-Combustion III. The SIMS provides the following services: (1) Analysis stable isotopes (¹⁵N and ¹³C), as well as total nitrogen and total carbon data for soil, plant, and other organic and inorganic materials using the Delta plus XL coupled to a Costech ECS 4010 elemental analyzer, (2) stable isotopic analysis of ¹³C of pure CO₂ or atmospheric CO₂ using the GasBench prep system coupled to the Delta plus XL, (3) stable isotopic analysis of ¹³C of dissolved inorganic carbon (DIC) of water using the GasBench prep system coupled to the Delta plus XL, (4) stable isotopic analysis of ¹⁵N of N₂O of water using the GasBench prep system coupled to the Delta plus XL, and (5) analysis of ¹³C of compound specific organic carbon using a Gas Chromatograph and Combustion unit coupled to the Delta Plus XL. (6)The

SWS Stable Isotope Mass Spec Lab can also provide simple sample prep by weighing samples using a microbalance and loading them for isotopic analysis. For additional information, contact Kathryn Curtis at: venz@ufl.edu

Soil Chemistry Laboratory

In addition to all standard equipment, the Soil Chemistry Laboratory has a Fast Sequential Atomic Absorption Spectrophotometer (AAS), model 220FS, and a high-performance liquid chromatography unit (HPLC - Waters 2695 separation Module system). The HPLC can be used in soil chemistry, soil biology, analyses of ions, polymer analyses, and organic-inorganic compounds for research and other uses in agriculture, food industry, medical, legal, and manufacturing process. The AAS is used for flame-source atomic absorption analysis of aqueous solutions for elements such as calcium, magnesium and iron. Also available is a spectrophotometer for analysis of phosphorus in solution. The instruments are available to students for research purposes; analytical services for others will be considered on an individual basis. For use of the HPLC, contact Abid Al Algely at: aaag@ufl.edu. For additional information, contact Vimala Nair at: vdn@ufl.edu



Congratulations!
Spring 2013 Graduates

PhD

Rupesh Bhomia (Reddy)

MS

Joseph Andress (Osborne)

Casey Beavers (Ellis)

David Clark (Ellis)

Ben Coppenger (Thomas)

Jing Guan (Jawitz)

Rebecca Hellmuth (Hochmuth)

Kassidy Klink (He)

Sean Rochette (Ellis)

Chris Weidow (Ogram)

BS

Cassandra Admire - SLS - SS (Bonczek)

Carlos Lopez - SLS - WS (Bonczek)

Brenda Harden - IS - EMANR (Curry)

Javier Lopez - IS - EMANR (Curry)

Welcome Incoming Students
Summer 2013!

PhD

Alexandre Ferreira Da Silva (Reddy)

Evandro Barbosa Da Silva (Ma)

MS

Kristin Benbow (Osborne)

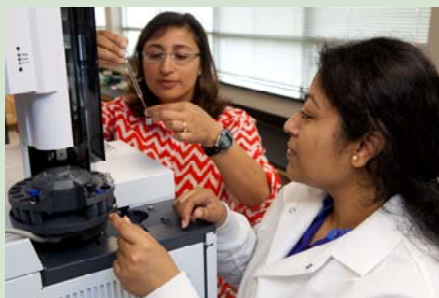
Kenneth Henderson (Li)

BS

Jacqueline Hyams (Bonczek)

Wetland Biogeochemistry Laboratory

The Wetland Biogeochemistry Laboratory (WBL) part of the Soil and Water Science Department is a collection of centralized labs and services offering state-of-the-art instruments and resources to faculty and students. The Wetland Biogeochemistry Laboratory is a NELAP certified facility in the category of General Chemistry for water, soil, and plant tissue samples. Two laboratories on the third floor of McCarty Hall provide instrumentation and equipment for a range of sample processing, digestion, and chemical analysis tasks. The sample processing and digestion lab (3170A) is equipped with a muffle furnace and two acid resistant fume hoods for hot plate and tube/block digestions, as well as a fiber analyzer for plant tissue. The analytical lab (3153) houses three flow analyzers for nitrogen and phosphorus analysis, four gas chromatographs, an ion chromatograph (Dionex), a CN analyzer (Thermo Flash EA), a dissolved carbon analyzer, and other instruments such as UV/Vis and fluorescence spectrophotometers. The WBL also houses a Membrane Inlet Mass Spectrometry for measurement of denitrification rates in wetlands and aquatic systems. The laboratory also provides specialized services (e.g., experimental design) to our collaborators working on joint projects. For additional information, contact Patrick Inglett at: pinglett@ufl.edu



The laboratory also offers a variety of chemical and biochemical based analyses to characterize and quantify microbial community structure (Phospholipid Fatty Acid Analysis, PLFA), and microbial functions (fluoresce based enzyme analyses, denitrification assays, respiration (methane, CH₄ and carbon dioxide, CO₂). Phospholipid fatty acids are a main component of the cell membrane

of all microorganisms and therefore its analysis provides direct information on the entire microbial community for viable microbial biomass, fingerprinting community composition, and microbial activity. WBL core lab houses three gas chromatographs equipped with different detectors (Electron capture detector, flame ionization detector and thermal conductivity detector). These gas chromatographs are configured to measure three different greenhouse gases nitrous oxide, methane and carbon dioxide. Use of Gas chromatographs and Fluorometer is also a fee-for-service based operation open to researchers from all departments within University of Florida. For additional information, contact Kanika Inglett at: kanika@ufl.edu

Analytical Services Laboratories

The Analytical Laboratories consists of four laboratories, two research laboratories and two extension laboratories, located in Gainesville on the main campus of the University of Florida. These laboratories are equipped with the following instrumentation: six segmented flow auto-analyzers, each set up for specific nutrient; two Seal AQ2+ Discrete Analyzers; three ICP Spectrometers - Spectro ARCOS Radial, Spectro CIROS Axial, PerkinElmer 5300DV; and several routine instrumentation.



Analytical Research Laboratory

The Analytical Research Laboratory (ARL) offers researchers high quality analytical services for an appropriate selection of standard tests in a timely manner, following standard procedures and quality assurance protocols. The ARL offers analysis of water quality samples, soil and plant tissue for metals, nutrients and other parameters. Researchers are requested to contact the Lab in advance regarding their analytical needs and for scheduling analyses. All information on analytical services, available schedules and sample submission forms are available at: <http://arl.ifas.ufl.edu/> or by contacting ARL at: arl@ifas.ufl.edu.

Environmental Water Quality Laboratory

The Environmental Water Quality Laboratory (EWQL) offers National Environmental Laboratory Accreditation Program (NELAP) Certified water quality analysis to all UF researchers state-wide. The EWQL is certified by the State of Florida for analysis of nutrients, metals and other water quality parameters. More information on sample submittals, fees and available analyses can be found at: <http://arl.ifas.ufl.edu/EWQL>.



Extension Soil Testing Laboratory

The UF/IFAS Extension Soil Testing Laboratory (ESTL) offers a variety of diagnostic tests for mineral soils, container media, tissue (blueberry and pecan), pine nursery and irrigation water. Test results will include recommendations and general guidelines for lime and nutrient applications and for improving irrigation water quality. These services are available to all Florida residents for a fee. Information about the available tests, fee schedule and free sample boxes/bags can be obtained by contacting ESTL at: soilslab@ifas.ufl.edu or by contacting your local County Extension Office. Additional information can be found at <http://soilslab.ifas.ufl.edu/>.

Livestock Waste Testing Laboratory

The UF/IFAS Livestock Waste Testing Laboratory offers analytical tests, interpretations and nutrient recommendations for animal manure and other waste by-products. The laboratory services and the educational programs are available to all citizens of Florida and are provided as a fee-based service. Additional information can be found at: <http://soilslab.ifas.ufl.edu/LWTL>



Andy Ogram - Graduate Coordinator

Andy Ogram served as the SWSD Graduate Coordinator for the past three years (July 2009 to June 2013). We would like to express our thanks to Andy for an outstanding leadership as the graduate coordinator and his dedicated service to the Department. Andy plans to spend more time on his research and teaching programs.

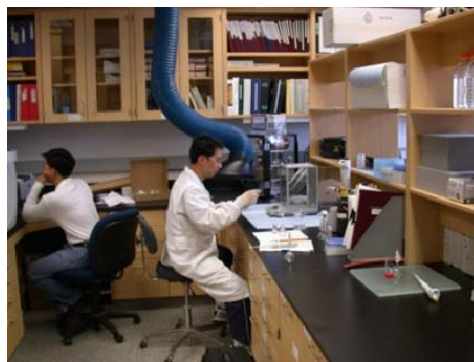


Max Teplitski - New Graduate Coordinator

Max has been appointed as the SWSD Graduate Coordinator. He will assume this responsibility effective July 1, 2013. Max is an associate professor of microbial ecology. Max brings a wealth of experience in working with graduate students. His passion and dedication in mentoring graduate students makes him an ideal graduate coordinator for the department.

Laboratories at the Research and Education Centers

Environmental Toxicology and Chemistry Trace Organics Laboratory at the Indian River Research and Education Center, Fort Pierce



The Environmental Toxicology and Chemistry Trace Organics Laboratory was established to provide analytical support for quantifying pesticides, endocrine disruptors, emerging contaminants, and other organic contaminants in water, soil, and biota. The lab has a full complement of gas chromatographs (GCs) and high performance liquid chromatograph (HPLC) detectors for quantification of most organic contaminants at trace levels. Specific instrumentation includes GC-MSⁿ (Varian 3800/Agilent 240), HPLC-MS/MS (Waters 26 95/Micromass Quattro), HPLC-Fluorescence-Photodiode Array, GC-Dual Thermionic Selective Detectors, GC- Dual Electron Capture Detectors, GC-Flame Ionization, Cary 300 Bio UV/Visible spectrophotometer, and an OX-500 R.J. Harvey Biological Oxidizer for working with ¹⁴C and ³H-labeled contaminants. Sample preparation equipment includes automated shakers for

liquid-liquid partitioning extractions, solid phase extraction systems, sonicators, fume hoods, water baths, dry baths, soxhlet systems, nitrogen gas drying stations, and a Labconco RapidVap system for concentrating extracts. While this lab is primarily dedicated to on-going research projects within the Environmental Toxicology and Chemistry Laboratory and with collaborators, it is also available to others during low-use periods. Training for sample preparation and analysis is provided for students and visiting researchers when needed. Costs vary depending on the level of services provided (e.g. equipment use only, training, method development, extraction and analysis, etc.). Collaborations are most desirable. For additional information, contact Chris Wilson at: pcwilson@ufl.edu

Everglades Research and Education Center Laboratories, Belle Glade

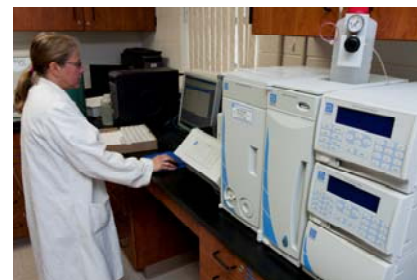
The Water Resources Group (WRG) at the Everglades Research and Education Center (EREC) has a NELAC certified laboratory in the category of General Chemistry. The lab is equipped with four flow analyzers used mainly for phosphorus analyses, a discrete analyzer mainly used for nitrogen analysis, an ion chromatograph and other standard laboratory instruments. The laboratory provides analytical services to our research collaborators. For additional information on the WRG laboratory, contact Samira Daroub at: sdaroub@ufl.edu



The EREC also hosts a Soil Testing Laboratory (ESTL) that serves clients throughout the Everglades Agricultural Area by conducting soil tests on organic and sandy soils and providing calibrated fertilizer recommendations. In addition to routine instrumentation, the ESTL laboratory has an Atomic Absorption Spectrometer and an Inductively Coupled Plasma Atomic Emission Spectrometer. For additional information on the ESTL laboratory, contact Mabry McCray at: jmmccray@ufl.edu

Soil and Water Laboratory at the Tropical Research and Education Center, Homestead

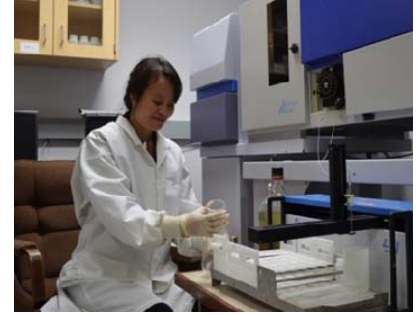
The Soil and Water Laboratory (SWL) at the Tropical Research and Education Center in Homestead (south of Miami) is certified by the National Environmental Accreditation



Conference (NELAC). The lab is equipped with state-of-the-art instruments. These instruments include Atomic Absorption Spectrophotometer (Shimadzu AA-6300 with GFA-EX7i), Autoanalyzer (Bran and Luebbe AutoAnalyzer III), Carbon Nitrogen Sulfur (CNS) analyzer (Elementar Vario MAX), Total Organic Carbon/Total Nitrogen (TOC/TN) Liquid Analyzer (Elementar), Discrete Analyzer (AQ2, Seal-Analytical), and Ion Chromatograph (Dionex ICS-2500). The SWL provides services only to their own research team and collaborators. The SWL is interested in collaborating with other researchers on research and extension projects related to new fertilizer development, water quality, soil chemistry, nutrient and waste management, ecosystem restoration, etc. For further information visit <http://trec.ifas.ufl.edu/yuncong/> or contact Yuncong Li at: yunli@ufl.edu.

Soil and Water Science Laboratory at the Indian River Research Education Center, Ft. Pierce

The Soil and Water Science Laboratory (SWSL) at the Indian River Research and Education Center (IRREC) in Fort Pierce is a self-supporting laboratory. Its mission is to provide legally defensible and scientifically credible analytical and technical support to the Research and Education Programs in Soil and Water Science at the IRREC. The laboratory is equipped with inductively coupled plasma optical emission spectrometry (Ultima, JY Horiba, NJ), TOC-analyzer (liquid TOC trace, Elementar Analysensysteme GmbH, Hanau, Germany), CN analyzer (Vario Max, Elementar Analysensysteme GmbH, Hanau, Germany), N/P discrete analyzer (EasyChem Plus, Systea Scientific, Inc., Italy), Ion Chromatograph (ICS-2000, Dionex, CA, USA), and liquid scintillation analyzer (Tri-Carb 2910 TR, Perkin Elmer, IL, USA) for environmental chemistry studies; and real time quantitative PCR system (CFX96™, Bio-Rad, CA, USA), mastercycler gradient (5321, Eppendorf, Germany), gel DOC™ XR imaging system (Bio-Rad, CA, USA), DNA detector (Nanodrop 2000, Thermo Scientific, USA), and standard duala cooled gel electrophoresis Unit (SE600 Ruby, Amersham Biosciences, NJ, USA) for molecular biology and microbial ecology research. The SWSL is currently not certified as a commercial lab and therefore, is not qualified to provide analytical services to outside clients. However, the laboratory provides services to our collaborators working on joint projects. For additional information, contact Zhenli He at: zhe@ufl.edu



Edward A. Hanlon Retires! We wish him all the best in his retirement years.

Edward Hanlon grew up in New Jersey, received his BS and MS degrees from the University of Arizona, and his PhD from Oklahoma State University. He worked as a private consultant for 7 years in land restoration and crop production before accepting a position with the University of Florida in 1984. Prior to his current position as professor at the Southwest Florida Research and Education Center (SWFREC), Ed Hanlon served as Center Directors of the SWFREC, the Gulf Coast Research and Education Center, and the Everglades Research and Education Center during selected periods from 1997 to 2004. Before his administrative duties, Ed worked as the UF/IFAS Extension Soil Management Specialist and Director of the Analytical Research Laboratory and Extension Soil Testing Laboratory in Gainesville from 1984 to 1997.

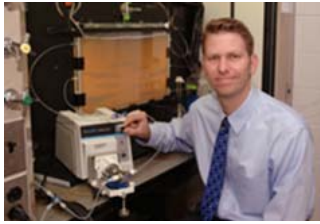


As the principal investigator of the Hendry County Sustainable Biofuels Center, Ed was responsible for primary oversight of the project, which includes reporting, development of stakeholder consensus, team development, center facility planning, life cycle analysis, cost benefit analysis, sustainable farming systems, ecosystem services compensation, curriculum development, youth development, and economic development. His professional activities included development of environmentally sound fertilization practices for vegetables and agronomic crops in Florida using modern analytical testing in conjunction with proper crop and fertilizer management. He also has developed soil management techniques for mined lands in central Florida. Ed Hanlon serves as a member of the Southwest Florida Feasibility Study, the Peace River Management Plan Stakeholders Committee, the Southwest Florida Resource Conservation and Development Council, the Southwest Florida Watershed Council, the Big Cypress Basis Restoration Coordination Team, and the Charlotte Harbor Restoration Coordination Team.

Ed Hanlon has served as an Associate Editor (Soils) of the Agronomy Journal (6 years), serves on the Editorial Board of Communications in Soil Science and Plant Analysis (13 years), as an elected Board member on two national societies, and has held several leadership positions within professional societies. He served on the Florida State Board of the Certified Crop Advisor Program, and served as Treasurer with the Executive Committee of the Council on Agricultural Sciences and Technology (CAST), an organization supplying science-based information to the United State Congress, as well federal and state agencies regarding issues dealing with agriculture, and representing more than 170,000 scientists in more than 38 professional societies. He has been a Fellow of the American Society of Agronomy since 2000.

Faculty, Staff, and Students

Congratulations to our Faculty and Students



James Jawitz - Associate Chair

James Jawitz is appointed as the Associate Chair of the SWSD. As Associate Chair, Jim will provide leadership in promoting water science aspect of the department by enhancing linkages with UF interdisciplinary centers and institutes and academic departments.

Max Teplitski and **Alan Wright** were selected as 2013-15 University of Florida Research Foundation (UFRF) Professors. The UFRF Professorships are awarded to tenured faculty members who have a distinguished current record of research. <http://www.research.ufl.edu/ufrf/professorship.html>

K. Ramesh Reddy was awarded the "INTECOL Wetlands 2012 Lifetime Achievement Award" by the International Association for Ecology presented at the 9th INTECOL Wetlands Conference held (June 2012) in Orlando, Florida.

Ann Wilkie and **Samira Daroub** were among the 2012 Top 25 Women Professors in Florida. The goal of the top professors list is to highlight post-secondary educators awarded recently for excellence in the classroom, on campus, and/or in the community. <http://onlineschoolsflorida.com/top-college-professors-in-florida/women/>

Julius Adewopo (Silveria/Gerber) was awarded a USDA-SARE Graduate Student Grant and was one of the recipients of the Marilyn Little Altrusa Scholarship.

Rupesh Bhomia (Reddy) and **Julius Adewopo** are organizing a special session on Soils Science Research in the 21st Century - Opportunities Beyond Disciplinary Boundaries at the upcoming ASA/CSSA/SSSA annual meetings in Tampa in November 2013.

2012-2013 Grinter Awardees: **Chumki Banik** (Harris); **Biswanath Dari** (Nair & Mylavarapu); **Rajendra Gautam** (Hochmuth); **Amy Hylkema** (Morgan & Hanlon); **Debjani Sihi** (P. Inglett); **Minjune Yang** (Jawitz & Annable)

Southern Branch ASA Awards (February 2013)

Biswanath Dari: 1st Place in the graduate student soils poster presentation

Sutie Xu (Silveria): 3rd Place in the graduate student soils poster presentation

Julius Adewopo: 3rd Place in the graduate student soils oral presentation

2012 Soil and Water Science Department Excellence in Graduate Research Award: (MS Level): **Aja Stoppe** (Comerford) (PhD Level): **Lisa G. Chambers** (Reddy) and **Jason T. Lessl** (Ma & Teplitski)

Julius Adewopo, **Rupesh Bhomia**, and **Christine VanZomerem** (Reddy) received travel scholarships to participate in the International Conference on "Soil Systems and Critical Zone Processes Integrating Life Support Functions across Disciplines," held at Monte Verita, Ascona, Switzerland in April 2013.

Biswanath Dari was a recipient of the 2012-2013 Outstanding Achievement Award from the UF International Center. He was a recipient of a Soil Science Society of America Travel Grant for presenting at the 2012 ASA/CSSA/SSSA Annual Meetings, Cincinnati, OH

CALS presented a Presidential Service Award, Division of Student Affairs to **Eva Christensen** (Hochmuth) for her contribution to 2012 service hours to the Homemaker Health Services.

CALS Dean's List for Fall 2012. (President's Honor Roll - names in *italics*) SLS: **Cassandra Admire**, **Jason Bloom**, **Kelly Ladd**. IS-EMANR: **Scott Clark**, **Brooke Giuliano**, **Kimberly Jones**, **Javier Lopez**, **Kayla Thomason**.

Alumni news

Kim Jongsung's second son, Jasen, was born in March. Jasen was 5 lbs at birth. The Jongsungs have a 21 month old son as well. Kim Jongsung is currently a post-doctoral research assistant at the Entomology & Nematology Department, UF.

Sarah Jane was born 3/20/13 at 9:41pm (19in, 5 lbs. 14oz) to Lisa and John Chambers. Mother and baby are doing great! Lisa is a post-doctoral associate at the Fisheries and Aquatic Sciences, UF.