DOCTOR OF PLANT MEDICINE PROGRAM

NEWSLETTER
SPRING 2015
External Advisory Committee

Ben Bolusky, Chief Executive Officer, Florida Nursery Growers and Landscape Association
Reggie Brown, Executive Vice President, Florida Tomato Exchange
Richard Gaskalla, Director, Florida Department of Agriculture and Consumer Services, Division of Plant Industry
Mary Hartney, President and Executive Director, Florida Fertilizer and Agrichemical Association
Gary Hein, Doctor of Plant Health Director, University of Nebraska
Joe Hodges, Vice President, The Andersons, Inc., Plant Nutrient Group Southern Region
Paul Hornby, Florida State Plant Health Director, USDA-APHIS-PPQ
Lisa Lochridge, Director of Public Affairs Division, Florida Fruit and Vegetable Association
Madeline Mellinger, President, Glades Crop Care-Committee Chair
Lacey Mount, Dellavalle Laboratory, Inc. Chair of the DPM Alumni Support Committee
Martha Rhodes Roberts, Former FDACS, Deputy Commissioner of Agriculture, Adjunct Professor, University of Florida

Faculty Advisory Committee

Billy Crow, Entomology and Nematology Department
Rebecca Darnell, Horticultural Sciences Department
Nick Dufault, Department of Plant Pathology
Jeff Jones, Department of Plant Pathology
Norman Leppla, Entomology and Nematology Department
Oscar Liburd, Entomology and Nematology Department
Greg MacDonald, Agronomy Department
Heather McAuslane, Entomology and Nematology Department
Kimberly Moore, Environmental Horticulture Department, Ft. Lauderdale Research and Education Center
Aaron Palmateer, Department of Plant Pathology, Tropical Research and Education Center
Keith Schneider, Food Science and Human Nutrition Department
Jason Smith, School of Forestry and Resources and Conservation
J. Stacy Strickland, County Extension Director, Hernando County

DPM Student Organization (DPMSO)

Wael Elwakil, President
Lisbeth Espinoza, Vice President
Nicole Casuso, Treasurer
Eric Leveen, Historian
Morgan Conn, Secretary
Amanda Hodges, Faculty Advisor

DPM Program Staff

Amanda Hodges, DPM Director
Elena Alyanaya, DPM Program Assistant
Greetings!

Welcoming Remarks!

Dear Students, Faculty, Alumni, and Friends:

The success of the DPM Program depends upon our outstanding students, faculty mentors, and alumni. In this edition, we are pleased to feature Agronomy faculty mentor Dr. John Erickson and our alumni spotlight, Dr. Leroy Whilby, Florida State Survey Coordinator for the Cooperative Agricultural Pest Survey (CAPS) Program at FDACS-DPI. We have also included various student and alumni news, and congratulatory remarks for our three fall 2014 graduates. Furthermore, we extend our congratulations to DPM alumnus Dr. Raj Singh for receiving the LSU AgCenter 2014 Edmiston Extension Award. Thank you for your support of the University of Florida, DPM Program!

~ Amanda Hodges, DPM Program Director

Inside this issue:

Welcoming Remarks 3
Faculty Highlight 3-4
New Student Profile 4
Edmiston Extension Award Recipient 2014 5
Visiting EPI 6
Program Exhibits and Student Recruiting 6
2015 SD-APS Meeting 7
Summer Internship Highlight 7
Congratulatory Remarks 8
DPMSO: Fundraising 8-9
Updates from Alumni 9
Alumni Spotlight 9-10
If the shoe fits... 10

Dr. John Erickson is an Associate Professor and Environmental Agronomist at the University of Florida. He joined the Gator Nation faculty in the summer of 2007 after completing his post-doctoral research at the Smithsonian Environmental Research Center, Edgewater, MD. That same year Dr. Erickson became an Affiliate for the UF School of Natural Resources and Environment (SNRE). His post-doctoral research focused on wetland responses to elevated CO₂ levels resulting from global climate change. Prior to working at the Smithsonian, Dr. Erickson completed his Bachelor’s and Ph.D. in Physiology within the Forestry Department at the University of Wisconsin.

Between his undergraduate and doctoral degrees, Dr. Erickson traveled to Florida Atlantic University for his Master’s degree. While in South Florida, he worked at the UF Fort Lauderdale Research and Education Center (FLREC) on minimizing the environmental impacts of urban landscapes.

Many of the projects currently underway in Dr. Erickson’s lab involve reducing the environmental impacts of agriculture through the use of best management practices and crop phenotypes that increase fertilizer and water use efficiency. Specific crops of interest include sorghum, wheat, corn, peanuts, and turf.

Faculty Highlight: Dr. John Erickson
NEW STUDENT PROFILE

We would like to welcome our new Spring 2015 student!

Iris Strzyzewski

Academic Credentials:
- B.S. in Chemistry – Winthrop University, Rock Hill, SC
- Currently co-enrolled in M.S. in Entomology and DPM

Why DPM?

It wasn’t until my senior year of college that I discovered how much I love the natural sciences, in particular entomology. I spent a year after I graduated in 2013 to research the programs at different universities, and I was drawn to the University of Florida having one of the top entomology programs, cutting-edge research, and close relationships with growers and industry. After a few meetings and some lab volunteer experience, I knew I wanted to start my Master’s at UF. I was introduced to the idea of co-enrolling in the Doctor of Plant Medicine Program, which was a unique opportunity and appealed greatly to me. I believe that everything is tied to something else in nature, and I think the DPM program encompasses that belief through its diversity and opportunities.

Through the DPM program, I will be able to expand my knowledge and apply both my research and practical knowledge to address real-world agricultural and environmental issues. It will enable me to become a well-rounded professional entomologist who can better aid growers in solving any problems or questions they encounter.

“...In every walk with nature, one receives far more than he seeks.” – John Muir
Program News & Development

For more details on each of the following stories and to stay informed of the most recent events and important announcements regarding the DPM program, be sure to check out our Facebook page at: https://www.facebook.com/pages/UF-Doctor-of-Plant-Medicine-Program/179188882121511

You can also tune into our IFAS blog, updated regularly by Dr. Amanda Hodges, available at: http://blogs.ifas.ufl.edu/plantmedicine/.

Edmiston Extension Award for 2014 Recipient - DPM Alumnus, Dr. Raj Singh

(Dec. 22, 2014) Raj Singh, assistant professor in the Department of Plant Pathology & Crop Physiology, received the Floyd S. Edmiston Extension Award for 2014. This award is made annually to the LSU AgCenter extension specialist, who during the past three years, has made the most outstanding contributions toward improving the extension mission.

Dr. Singh was recognized for his outstanding extension program that provides accurate and timely diagnoses of plant diseases and other pests and educational programs to the agronomic and horticultural industries and homeowners of Louisiana. In addition, he provides diagnostic services in support of the Louisiana Department of Agriculture and Forestry and serves as a liaison to the National Plant Diagnostic Network. He has transformed the Plant Disease Clinic into a Plant Diagnostic Center with state-of-the-art diagnostic equipment and streamlined sample handling and results reporting. He has successfully processed over 10,000 samples that have led to the identification of seven new diseases from a number of ornamental, landscape and other plant species. Further, he has definitively identified these pathogens by developing and applying serological and molecular techniques. For example, he recently discovered a new disease of boxwoods caused by Colletotrichum thoebromicola. After his discovery, several other states have confirmed the disease in the United States. He also instituted the Rapid Turfgrass Diagnostic Service for the Louisiana in and out-of-state turfgrass industries. This service provides sound information within a 24 hour period on whether the turfgrass problems observed were either biotic or abiotic.

Dr. Singh has provided up-to-date presentations on plant diseases to diverse organizations, such as Master Gardeners, Orchid Society, Louisiana Nursery and Landscape Association, and participated in delivering diagnostic information at a bunch of garden shows/field days as well as at meetings/symposium/conferences in Louisiana and 12 other states. These are just a few examples of the positive impact that Dr. Singh’s extension program in plant disease/pest diagnostics is having on the agronomic and horticultural industries in Louisiana and even in other states. His impact is especially noteworthy in the successful urban interface his program provides for the LSU AgCenter.
Program Exhibits and Student Recruiting

During Spring 2015, the DPM Program participated in several conferences and student recruiting events.

- **February 1-2, 2015** - DPM Student Rebecca Barocco attended the Southern Division American Phytopathological Society Meeting in Atlanta, GA (Read an article about the meeting on the next page!)

- **Tuesday, March 3, 2015** - Carla Calvert Burkle, DPM alumna from 2014 and current UF post-doctoral associate, had the honor of representing the UF DPM Program at the Palm Beach State College Science Day in Lake Worth, FL.

- **March 15-18, 2015** - DPM student Eric Leveen presented his Master’s project at the Southeastern Branch Meeting for the Entomological Society of America held in Biloxi, MS. DPM student Nicole Casuso also presented her extension-based project as part of the Turf and Ornamental Symposium at the conference. The projects presented by both Eric LeVeen and Nicole Casuso were under the direction of Dr. Amanda Hodges.

- **March 23-26, 2015** - Dr. Amanda Hodges and Dr. Carla Calvert Burkle attended the 8th International IPM Symposium, "IPM: Solutions for a Changing World," held in Salt Lake City, UT. Dr. Gary Hein, University of Nebraska-Lincoln, and Drs. Norman Leppla and Amanda Hodges, University of Florida, co-organized an educational session entitled "Educating IPM Practitioners: Critical Component for Sustainable Agricultural Systems" at the 8th International IPM Symposium, "IPM: Solutions for a Changing World," held in Salt Lake City, UT. DPM alumna Dr. Carla Calvert Burkle also had an opportunity to present a poster highlighting some of her graduate and post-doctoral work at the conference. Drs. Amanda Hodges and Gary Hein also co-coordinated an exhibit booth that discussed opportunities for graduate study at the University of Florida or University of Nebraska-Lincoln in DPM/H programs.

- **Saturday, April 11, 2015** - The UF Entomology and Nematology Department Annual BugFest took place at Steinmetz Hall, UF. The DPM Program had an informational booth at the event for prospective undergraduate students.
Summer Internship Highlight

Summer Internship with Syngenta - By Kayla Thomason

Last summer, I had the opportunity to work with Syngenta at their research station in Vero Beach, FL in their weed control department. I learned how to conduct and evaluate field and greenhouse trials as well as how to effectively identify some major weeds. Some of the trials included the following topics: nozzle efficacy tests, herbicide tests for to-be-labeled-chemicals for minor crop use, and dose response tests for rotational crops.

Overall, the experience was quite enjoyable. I was able to work with many talented scientists who took any opinions I had about the trials into consideration while pushing me to think outside the box and further develop my problem-solving abilities. This opportunity has allowed me to create memorable connections for the future.

Photo Captions

Top Right: Rating a nozzle efficacy test
Bottom Right: Applying a herbicide via a soil drench for a minor crop test
**Congratulatory Remarks for our Graduates**

**Congratulations to our Fall 2014 DPM Graduates!**

We wish each of you the very best!

Carla Calvert Burkle
Tamika Garrick
Tatiana Sanchez

“I knew the Doctor of Plant Medicine Program was right for me from the moment I considered applying. The multidisciplinary educational foundation combined with the applied focus appealed to my ravenous interest in knowing as much as I can about everything. As a DPM student, I gained the academic foundation a plant doctor needs in plant pathology, entomology and nematology, and plant science; perhaps more importantly, I learned to think well, to integrate current knowledge and synthesize new ideas, and to be mentally tough and resilient. I have colleagues that I also call dear friends thanks to the supportive, collaborative learning environment of the DPM Program. I feel strong and prepared as a plant doctor and professional as I take these next steps in my career.”

~ Carla Calvert Burkle, DPM ~

“Following my graduation in the Fall of 2014, I obtained a post-doctoral associate position at the plant pathology Department at the University of Florida. The integration of all the disciplines encompassing the DPM program has benefited me greatly by allowing me to analyze a situation in the field in a comprehensive manner. Unlike other programs, the DPM permitted me to interact and network with other faculty and students in different areas which has helped me moving forward in my career. The DPM is more than just a graduate degree. This program took me on a journey of personal development.”

~ Tatiana Sanchez, DPM ~

**DPMSO - FUNDRAISING**

*The DPMSO Officers*

The Doctor of Plant Medicine Student Organization (DPMSO) hosted two vegetable plant sale fundraisers this semester. We had dozens of transplants for sale, including: tomatoes, summer squash, several varieties of sweet and hot peppers, ornamental *Triteleia* spp., lettuce, kale, collard greens, brussel sprouts, and more. We had a very successful turnout for both sales and we would like to thank all those that came out to support DPMSO. Be sure to stay tuned for program announcements about any future fundraisers!
Are you looking for a professional yet comfortable polo that is both field and office appropriate? Already own other DPM t-shirts but can’t get enough program “swag”? Stop by the front desk of the Entomology and Nematology Department to visit Ms. Nancy Sanders and Ms. Elena Alvanaya and order one (or more) of these moisture-wicking dark blue polo shirts! The polo has the new Gator-spirited DPM logo and is embroidered with the UF/IFAS CALS logo as well. Theses shirts are currently being sold for $25. Cash and checks made payable to the Doctor of Plant Medicine Program will be accepted. The traditional ash grey DPM and “Investi-Gator” t-shirts are also still available through the Doctor of Plant Medicine Student Organization (DPMSO) for $15 each. Stop by the front office or contact an officer to place an order.

**Updates from 2013 Alumni!**

“*I work at the Caribbean Agricultural Research and Development Institute (CARDI). It is a regional agricultural research institution with representation in over 10 Caribbean countries including Jamaica, Barbados, Trinidad & Tobago and Dominica. CARDI also has offices in Guyana and Belize. Focus commodities for CARDI include sweet potato, cassava, hot peppers and small ruminants. My current title is that of Scientist 1. I am currently working on climate change related studies on vegetables under Protected Agricultural (PA) systems as well as cassava in Trinidad and Tobago. I also participate in extension, farmer field visits, meetings and training activities associated with CARDI.*”

Dr. Annika Minott

“*After working this past year at FDACS-DPI in Gainesville, assisting with a project based on biological control of an invasive, cactophagous moth, I was recently promoted and am now the Biological Scientist in charge of this project. My work involves breeding and rearing a braconid parasitoid, and evaluating the host-specificity of this wasp, to determine if it will be a suitable biological control agent against the invasive Lepidoptera species, Cactoblastis cactorum. I recently returned from Argentina, where I was sent to collect live specimens, to bring back to DPI for research purposes.*”

Dr. George Fox

**Alumni Spotlight - Dr. Leroy Whilby by Nicole Casuso**

**Q. Please describe your academic background.**

**A.** My general agricultural studies began at the College of Agriculture in Portland, Jamaica where I received my A.Sc. I then worked for a few years as an inspector before pursuing a B.S. in Plant Science at Lincoln University in Jefferson City, Missouri. My graduate studies began in 2001 at Florida A & M University in Tallahassee, FL where I conducted research studies in agroforestry. At the conclusion of my M.S. in Plant Science at FAMU, I received the FAMU Graduate Feeder Program Fellowship, which assisted me in acquiring the DPM degree from the University of Florida.

**Q. What is your current occupation and how has your DPM degree aided you in the tasks and responsibilities associated with your position?**

**A.** I currently serve as the State Survey Coordinator for the Cooperative Agricultural Pest Survey (CAPS) Program under FDACS-DPI. My DPM degree gave me a broad spectrum of knowledge on pathogens, nematodes, entomology, and agronomy. The DPM program enhanced my ability to apply a diverse knowledge base within CAPS while also enabling me to make rapid and holistic assessments.
If the shoe fits... why DPM might be right for you!

By Nicole Casuso

Wondering if the DPM program is a path you might want to pursue? Ask yourself the following questions and see if the shoe fits!

1. Do you want to learn more about any of these topics: plant disease management, agronomy, insects, or soil and water science?
2. Are you interested in hands-on experiences that would allow you to work both in the field and in a lab, internships with local businesses or federal agencies, and multidisciplinary studies?
3. Do you aspire to work in academia, private industry, or government?
4. Do you enjoy community outreach and extension, networking, and attending professional development workshops, seminars, and scientific conferences?
5. Do you prefer application-based science?

If you answered yes to most of the questions listed above, then we highly recommend that you explore your graduate career options with the University of Florida DPM Program!

Q. What prompted you to pursue your current career?

A. During my formative years I regularly tended the family farm where I helped with the animals and crops that we produced. I developed a passion for agriculture then, which directed me to continue education in the area of agriculture. My first job as a food storage inspector piqued my interest in plant protection and regulatory agriculture. The DPM degree offered the ideal curriculum that prepared me for the my role in the CAPS program. The program is very diverse in targeting pests and diseases, which allows creativity within the program in selecting the appropriate target pests. There is never a dull moment with regulatory projects that help protect our food supply and native flora and fauna. While I do spend time in the office, I also have the opportunity to visit the field occasionally.

Q. Why did you choose the DPM program?

A. I really enjoyed that the program prepares its students for careers outside of academia. The approach to solving plant disease problems is unique and well-rounded. There is no restriction or limitation to a specific field, organism, or research project. The program allows for adjustments to suit an individual area of interest.

Q. On a personal and professional level, how has your DPM degree influenced you?

A. I recently joined the United States Army. The DPM degree allowed me to qualify as a Medical Entomologist Officer. Previously only those with graduate degrees in entomology were able to qualify for this position. However, after proving my extensive entomological coursework through the DPM program, I was able to pave the way for future DPMers that are interested in enrolling in the Armed Forces as Medical Entomologists. The DPM degree has also made me extremely marketable and very confident in my work, whether it involves leading groups in the field or giving presentations to industry and government professionals. I can easily communicate with others who work in regulatory agriculture about numerous subjects and I am able to represent the state in both the field and official capacities.

Dr. Whilby’s Philosophy

“We don’t have to engage in grand, heroic actions to participate in the process of change. Small acts, when multiplied by millions of people, can transform the world” – Howard Zinn
DPM Students

Interested in learning more about our current DPM students? Visit our website at: [http://www.dpm.ifas.ufl.edu/current_students.html](http://www.dpm.ifas.ufl.edu/current_students.html)
Thank you for reading.