External Advisory Committee

Ben Bolusky, Chief Executive Officer, Florida Nursery, Growers and Landscape Association
Reggie Brown, Executive Vice President, Florida Tomato Exchange
Trevor Smith, State Plant Regulatory Official/Director, FDACS-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
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
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
Diane Rowland, Agronomy Department
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 Byron, Secretary
Amanda Hodges, Faculty Advisor

DPM Program Staff

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

http://ufplantdoctors.org/

Dr. Carrie Harmon has been employed with the University of Florida since 2003 in her role as Associate Director of the regional project the Southern Plant Diagnostic Network (SPDN). In 2009, Dr. Harmon also became the Director of the Plant Diagnostic Center. Currently, Dr. Harmon serves as Associate-In Extension Scientist for UF. Her appointment is 80% extension and 20% research.

In the Plant Diagnostic Center, Dr. Harmon places priority on the extension clinic. Her daily duties include keeping track of samples from anywhere in the world, providing recommendations and identifications, checking in on research with graduate students, and organizing various trainings. Her passion for plant pathology and educating others lends itself to successful hands-on detection and ID workshops for extension agents and international groups as well as valuable lectures for graduate students. Each training oversees 9-12 people on average and occur three to four times per semester.

Additionally, Dr. Harmon facilitates two graduate-level courses and one professional internship in the PDC.

- **Applied Disease Management (PLP6905)** - 7 week online course offered next Summer A, is an integrated resource and review for students (no prerequisites or lab required) learning about plant pathogens and helping students develop a holistic sense of disease management; an undergraduate version of the class is available as well

- **Plant Disease Diagnosis (PLP6291)** - This course has not been offered in 8 years, but will be offered Fall 2016 (possibly every other Fall). This course is meant to teach the art and science of disease diagnosis in general, using plant pathogens as the model system, but is applicable to diagnosis of disease in other disciplines, as well. Emphasis is placed on learning the techniques and theory that support diagnosis; much of the course is hands-on laboratory and exercises in critical thinking.
We would like to welcome our new Fall 2015 students!

**Ploy Kurmongkoltham**

**Academic Credentials:**
- B.S. in Biology (Cell and Molecular) – Jacksonville State University Jacksonville, AL.
- M.S. in Biology – Jacksonville State University Jacksonville, AL.

**Why DPM?**
I knew early on in my undergrad that I wanted to pursue my doctorate in plant science. I came across the DPM program at the end of my masters and was intrigued at the idea of multidisciplinary approach to plant health. I came for a visit and after just an hour of meeting the students and seeing the work in the plant disease clinic, I knew this was a perfect fit. I was very impressed with the amount of knowledge the students were able to obtain in 4 years of study, and I was ready to be a part of it.

**NEW STUDENT PROFILES**

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**If a student was interested in working in your lab, what are some of the tasks and responsibilities he or she could expect?**

- Wear close-toed shoes and lab-appropriate clothing
- Have a willingness to ask questions
- Everything is governed by a written protocol
- Apply the best and the most appropriate science
- Learn to wash dishes, properly and safely use an autoclave, culturing to PCR
- Real samples, no “busy work”
- Participate in “triage” – starting the investigation...asking first *what is it?*
- Develop a hypothesis and a plan of action
- Diagnosis prompts critical thinking and ultimately management solutions
- Professional development: interacting with clients and organizing data

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“The most exciting phrase to hear in science, the one that heralds, new discoveries, is not ‘Eureka!’ but ‘That’s funny...’”
– Isaac Asimov

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“When you have exhausted all possibilities, remember this – you haven’t.”
– Thomas Edison
Ariane McCorquondale

Academic Credentials:
- B.F.A. in Interactive Media Design – The Art Institute of Washington, Arlington, VA
- Currently Co-enrolled in M.S. Entomology and DPM

Why DPM?
Even though I grew up playing in the dirt and had a natural interest in the sciences from an early age, my path to entomology and the Doctor of Plant Medicine program is a bit atypical. I received a bachelor of fine arts degree in Interactive Media Design in 2007 and worked as a web developer in Northern Virginia. Eventually my yearning for outdoor spaces could no longer be ignored and I joined the AmeriCorps Florida State Parks program which was followed by my hiring as a park ranger in the Florida Park Service. I got to work intimately with Florida’s natural communities and learned a lot about land management and the threats invasive species pose upon our natural resources. I gained experience treating invasive plants and using prescribed fire to maintain habitat in addition to public outreach.

During my employment as a ranger I began my master’s degree in Entomology online through the University of Florida’s distance program. I learned of the DPM program through my exploration of entomology career paths. Insects and plants are so deeply intertwined and the multidisciplinary approach of the DPM program will have me well-positioned when I begin my career as an entomologist and plant professional.

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/.

Integrated Plant Medicine - ALS6925

The Integrated Plant Medicine course (ALS6925) provides opportunities for students to synthesize and apply the concepts and methodologies of plant medicine to plant problem diagnosis and management. The learning environment is highly interactive and includes reviews of current literature, practice with scientific writing and presentations, group research, and intensive field trips.

This semester, nine students participated in the class. In-class crop profile presentations were completed by pairs of students throughout the first half of the semester. Presentation topics included: vegetables, fruits, greenhouse/ornamentals, fruits, and row crops. A research project on comparing the effects of mulching on pest, weed, and disease pressures in cabbages was conducted in the latter half of the semester. Supplemental guest lectures and field trips were the highlight of the course.

Left: Dr. Amanda Hodges (instructor), Rebecca Barocco, Blaire Colvin, Lisbeth Espinoza, Christopher Ferguson, Daniel Mancero, Cory Penca, and Kayla Thomason; Christopher Kerr (not shown)
September 18, 2015 - UF/IFAS Hernando and Sumter Counties Extension Office & Bushnell Nursery of Speedling, Inc.

The IPM class met with DPM alumnus, Stacy Strickland, the Multi-Country Extension Director for Hernando and Sumter Counties. Dr. Strickland gave the class an inside look at careers in extension. At Speedling, Inc (right), students met John Guarino, the Bushnell nursery Manager, and had the opportunity to see sub-irrigation tactics of large scale celery production.

October 25-31, 2015 - Arizona & California Production

DPM Director and IPM course instructor Dr. Amanda Hodges provided students enrolled in the fall 2015 course with an opportunity to 1) tour production systems in Arizona and southern California and 2) visit the Los Angeles USDA-APHIS-PPQ inspection station. Although a diverse understanding of production systems and regulatory plant health is foundational to the DPM degree, substantial out-of-state field trips are new to the program.

Dr. John C. Palumbo, Extension Entomologist and Associate Research Scientist of Vegetable Crops for The University of Arizona at Yuma, AZ generously provided two days of field visits and instruction to DPM students. Specifically, Dr. Palumbo arranged for students to visit with 9 crop consultants and growers! For example, Crop Advisor Mr. Brad Brchan with Crop Production Services provided instruction for students at several field locations.

...continued on next page.
On October 29, 2015, Mr. Steven Spalla, USDA-APHIS-PPQ Smuggling, Interdiction, and Trade Compliance (SITC) Director of Operations for California and the San Diego Plant Inspection Station (PIS) arranged for presentations and a tour of the Los Angeles Plant Inspection Station and Animal Import Center. Specifically, presentations were delivered by Mr. Nicholas Porzio, SITC Los Angeles Work Unit Supervisor, Mr. Luis Huerta, SITC Officer Los Angeles, Mr. Michael Hennessey, Supervisory PPQ Officer for Southern California Operations, and Mr. Greg Bartman, Entomologist, PPQ Officer, Los Angeles, CA PIS.

As a conclusion to the Arizona-California field trip, Dr. Amanda Hodges scheduled a winery tour with Palumbo Family Vineyards and a private tour with Temecula Olive Oil Company on October 30, 2015.

December 4, 2015 - Syngenta and East Coast Packers Inc.

Dr. Jorge Cisneros and staff at the Syngenta office in Vero Beach hosted the IPM class. Students were able to tour the facility and learn about Syngenta’s current objectives as well as possible careers within industry. From pesticide trials and pest management, to development of better seeds and traits, the class was able to gain insight into the company’s wide array of research.

DPM students were then able to visit East Coast Packers Inc, in Fort Pierce, FL. The citrus packinghouse managed by Kevin Thomason receives thousands of tons of citrus each growing season. Students saw the overall layout of the assembly line starting with incoming harvest shipments and ethylene treatment to bagging, boxing, and distribution. In addition, the class observed and helped conduct a Brix test of grapefruit (see left).
Mr. Steve Hildebrandt, Certification Specialist with the Florida Department of Agriculture and Consumer Services, Division of Plant Industry (FDACS-DPI) arranged for an opportunity for DPM students to interact with FDACS-DPI and USDA-APHIS-PPQ staff involved in the Oriental Fruit Fly and Giant African Land Snail Eradication programs. DPM students had observed a daily general staff meeting for the Oriental Fruit Fly, learn about both the Giant African Land Snail and Oriental Fruit Fly eradication programs, and visit field locations for Oriental Fruit Fly traps. Also, students had the opportunity to learn about the ways “Detector Dogs” are used by FDACS-DPI and USDA-APHIS-PPQ in order to sniff out pests!

For the latest information regarding the Oriental Fruit Fly and the Giant African Land Snail eradication programs, visit the Florida Department of Agriculture and Consumer Services website!


You can view quarantine maps of Florida as well as subscribe to a list-serve for email updates. Additional information on Florida pest and disease problems can be found here: [http://www.freshfromflorida.com/Divisions-Offices/Plant-Industry/Pests-Diseases](http://www.freshfromflorida.com/Divisions-Offices/Plant-Industry/Pests-Diseases)
CERTIFICATE IN PLANT PEST RISK ASSESSMENT AND MANAGEMENT

- Are you interested in protecting U.S. agricultural and natural areas from exotic and invasive plant pest and pathogens?
- Do you want to increase your knowledge of local, national, and international plant health policy?
- Do you want to learn about international standards associated with plant health and risk analysis?
- Are you interested in an exciting and rewarding career in regulatory plant health?

If you answered yes to one of the above questions, you may want to consider the University of Florida, Graduate Certificate in Plant Pest Risk Assessment and Management.

Applicants to the Graduate Certificate in Plant Pest Risk Assessment and Management must be a currently enrolled University of Florida graduate student or meet eligibility requirements for non-degree seeking students in Graduate Certificate programs. Coordination of the Graduate Certificate in Plant Pest Risk Assessment and Management occurs through the University of Florida, DPM program. Course requirements may be completed through online distance education.

Visit our website for more information, ufplantdoctors.org or contact DPM Program Assistant Elena Alyanaya by e-mail at ealyanaya@ufl.edu, or by phone at (352) 273-3903 or contact DPM Program Director Dr. Amanda Hodges by e-mail at achodges@ufl.edu or by phone at (352) 273-3957.

www.ufplantdoctors.org
The DPM program provides students with unique opportunities to explore regulatory plant health and associated career options. As of fall semester 2015, the Certificate in Plant Pest Risk Assessment and Management offered by the DPM Program is currently available online. Non-degree seeking students may complete the certificate only by meeting the University of Florida’s requirements for graduate-level certificate programs. Major revisions associated with core certificate courses have recently occurred. Students complete an exam prior to receiving the certificate. Additionally, students are required to complete 16 credits from the following courses:

**Core Courses/Internships (10 Credits)**
- Principles of Plant Pest Risk Assessment and Management, ALS 6942, 3 credits
- Colloquium on Plant Pests of Regulatory Significance, ALS 6921, 1 credit
- Internship in Plant Pest Risk Assessment and Management, ALS 6943, 6 credits

**Elective Courses (At Least 6 Credits)**

Students must select at least one course from each group.

**Group 1 – Technical (3 credits)**
- Exotic Species and Biosecurity Issues, ALS 6166, 3 credits
- Epidemiology of Plant Disease, PLP 6404, 4 credits
- GIS and Remote Sensing in Agriculture and Natural Resources, AOM 5431, 3 credits

**Group 2 – Policy (3 credits)**
- Special Topics, AEB 6933, 1-6 credits
- Ag and Natural Resources Communications Theory and Strategy, AEC 6540, 3 credits
- Environmental Institutions and Regulations, ENV 6932P, 3 credits
- Environmental Policy, ENV 5075, 3 credits
- Special Problems in Environmental Engineering, ENV 6932, 1-4 credits
- Natural Resources and Environmental Policy, ENV 6932, 3 credits
- Policy Evaluation, PUP 6006, 3 credits
- Policy Process, PUP 6007, 3 credits
- Public Opinion and Agricultural and Natural Resource Issues, AEC 5060, 3 credits
- Public Policy Analysis, PUP 6009, 3 credits
- Public Policy and Agribusiness Firm, AEB 6225, 3 credits
DOCTOR OF PLANT MEDICINE NEWS

Program Exhibits and Student Recruiting

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

- **September 26, 2015** - The DPM program was well represented by several students at UF CALS TailGator! Special thanks to Nicole Casuso and Wael Elwakil for their student leadership in preparing and planning the hands-on displays. Arjun Khadka, and Chris Ferguson also attended and helped with the booth.

- **October 14, 2015** - Gator Day at Santa Fe College is an open house catered to Santa Fe students aiming to transfer to UF for their continued higher education. Program Assistant Elena Alyanaya represented the DPM Program by tabling alongside the UF Entomology Club and distributing program information to interested students.

- **October 15, 2015** - The UF Graduate and Professional Schools Fair was hosted by the Career Resource Center (CRC) at the Reitz Union Grand Ballroom Fair. The event included booths from schools and professional organizations across the country. Program Assistant Elena Alyanaya and a few DPM students maintained a booth at the event, answering questions from attendees about the DPM program.

- **October 26, 2015** - The UF Graduate School hosted the Graduate School Information Day at the Reitz Union. Undergraduates were able to explore over 50 programs and departments available at UF, including the DPM Program.

- **November 7, 2015** - Various departments, Extension offices, and REC’s joined the IFAS Showcase at the Swamp for an Ag and Gardening Day at the stadium when the Gators took on Vanderbilt. Gator fans from all over the state had a chance to find out about the DPM program at this event (see bottom right).

- **November 15-18, 2015** - The Entomological Society of America and the Agronomy Society of America hosted a joint annual meeting in Minneapolis, MN. Students from the University of Florida and University of Nebraska co-hosted a booth providing the latest Plant Doctor (DPM/H) program information to interested meeting attendees. DPM student Kayla Thomason participated Graduate Student Poster Competition for ASA while Iris Strzyzewski presented her Master’s research at ESA. Cory Penca participated in the ESA Linnean Games.

Summer Internship Highlight

**Summer Internship with Dow AgroSciences - By Nicole Casuso**

“This summer I had the privilege of working at the Indianapolis Global Headquarters for Dow AgroSciences (DAS). I served as an intern in Discover Biology - Crop Protection in Insect Management. My supervisor was Dr. Frank Wessels, a UF Entomology Department alumnus.

I spent most of my time in the lab conducting behavioral bioassays with vinegar flies and grasshoppers. At the end of my 13 week substantial internship in Indy, I had the opportunity to present my project results during a student poster session with the other summer interns. The experience I had working with DAS was very enriching. I gained exposure and insight into what a career in industry entails as well as valuable lab training and poster presentation skills I did not previously have.”
Congratulations to our **Summer 2015** DPM Graduate
Alicyn Ryan Smart! We wish you the very best!

Dr. Alicyn Ryan Smart was asked to share a few words regarding her recent graduation and current employment by the Maine Farm Bureau. Here is what she wanted to share,

“Prior to graduation, I accepted the position of Executive Director of the Maine Farm Bureau. During one of the many internships we as DPM’s have to take, I was hired to create a Harmonized Good Agricultural Practices (GAP’s) program on the farm of the Massachusetts Farm Bureau President, Rich Bonanno, Ph.D. Through the internship I learned about the Farm Bureau and the impact the organization has on legislature in a positive way for farmers and ranchers at the state, national and global level.

My focus in the DPM program was plant pathology, but fortunately the program prepares you for areas you would never dream to use in the future. This was clear within the first few weeks on the job. Overnight I had become a boss, lobbyist, program coordinator, the go-to person for ANY farming issue, web designer, and commercial landlord. All of which I had no to very little experience in, except for farm issues, but so far to aspects of my job have been entomology, nematology, plant pathology or plant science based.

However, I have figured out how to carry out all of the responsibilities so far presented to me, I credit the DPM program for this. One area the program doesn’t advertise is the confidence you build through the program and by the end you have the courage to take tasks on that beforehand you would have had no idea how to even start. The “Well, I have done just as hard or harder tasks”, motto is what I have relied on the past four months, along with the willingness to put my ALL into something, which is what I and all other DPM alumni have become very good at.

It’s incredibly rewarding to sit at a table with the Administrator of the Environmental Protection Agency, United States Senator, Angus King, and Maine farmers to talk about EPA’s Clean Water Rule (“the Rule”) of the Clean Water Act and how it will impact Maine Farmers. I’m incredibly lucky to be in a position where I can advocate for farmers and make big differences in all sectors of agriculture within the state, all the while learning something new on a daily basis.”

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**Dr. George Fox**

Dr. Fox is now working with the USDA, specifically with APHIS International Services. He will be serving as a Foreign Service Officer, stationed internationally to represent US agricultural interests. Upon completion of an intensive training program, Dr. Fox expects to be headquartered at a U.S. Embassy in 2016. Expertise and practical knowledge of plant pests and diseases, earned by becoming a Doctor of Plant Medicine at UF, helped Dr. Fox secure high-level employment with APHIS.
Want a fresh new shirt to start off the year 2016? Want to show support for the DPM Program? Check out our latest t-shirt! This clean white tee features the new, full-color DPM logo. Stop by the front desk of the Entomology and Nematology Department to visit Ms. Nancy Sanders and Ms. Elena Alyanaya or contact a DPMSO officer to place an order. The traditional ash grey DPM and “Investi-Gator” t-shirts are also still available for purchase through DPMSO. All t-shirts are $15. (Current DPM students are eligible for a $5 discount.)

DPMSO - SOCIALS!

The DPMSO Officers

The Doctor of Plant Medicine Student Organization (DPMSO) hosted two socials this semester. DPM students and faculty work hard all year long, so we like to take a little time for rest and relaxation too! DPMSO Officers organized a barbeque and sports day at Lake Wauberg in early October. Several faculty, students, and their families joined the festivities.

At the beginning of December, DPM student, Kayla Thomason, hosted our end-of-the-semester potluck and bonfire right after the Florida vs. Alabama SEC Championship game!

Alumni Spotlight - Dr. Tomás Chiconela

by Nicole Casuso

Q. Please describe your academic background.

A. I received my B.Sc. degree in Agronomy at the Faculty of Agronomy and Forestry Engineering of Eduardo Mondlane University, in Maputo, Mozambique. Then, I moved to South Africa, where I obtained my M.Sc. degree in Agriculture (Weed Science) at the University of Orange Free State. Afterwards, I was awarded a Ford Foundation scholarship to pursue DPM program at UF. Immediately after my DPM graduation in 2006, I enrolled in the Agronomy (Weed Science) PhD Program at the same University and completed that degree in 2008.

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

A. Currently, I am Dean of the Faculty of Agronomy and Forestry Engineering of Eduardo Mondlane University. I was appointed to this position after heading the Department of Plant Production and Protection (twice), and the Department of Plant Protection, after the first department got split in two (Department of Plant Production, and Department of Plant Protection). Despite my administrative responsibility, my DPM degree has allowed me to teach several courses both at graduate and postgraduate levels. Similarly, it also allows me to supervise students working in different thematic areas.
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!

Nicole Casuso, Editor
DPM Student - University of Florida
Amanda Hodges, PhD, Co-Editor
DPM Director - University of Florida

Questions, comments, or submissions?
Email: ncasuso@ufl.edu | achodges@ufl.edu
DOCTOR OF PLANT MEDICINE NEWS

DPM Students
Interested in learning more about our current DPM students?
Visit our website at: http://www.dpm.ifas.ufl.edu/current_students.html

Rebecca Barocco
Arkansas, USA

Jamey Betts
Georgia, USA

John Bonkowski
Delaware, USA

Nicole Casuso
Florida, USA

Theresa Chormanski
Florida, USA

Blaire Colvin
Florida, USA

Morgan Byron
Florida, USA

Wael Elwakil
Egypt

Lisbeth Espinoza
Ecuador

Christopher Ferguson
Kentucky, USA

Christopher Kerr
Florida, USA

Arjun Khadka
Nepal

Ploy Kurdmongkoltham
Georgia, USA

Greg Kramer
Florida, USA

Eric LeVeen
South Carolina, USA

Daniel Mancero
Ecuador

Ariane McCorquodale
Florida, USA

Cory Penca
Florida, USA

Bruce Stripling
Georgia, USA

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Florida, USA

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Thank you for reading.