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John Peterson, Environmental Horticulture Department
Aaron Palmateer, Department of Plant Pathology, Tropical Research and Education Center
Keith Schneider, Food Science and Human Nutrition Department
Jason Smith, School of Forest Resources and Conservation
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DPM Student Organization (DPMSO)

Blaire Colvin, President
Ploy Kurdmongkoltham, Vice President
Matt Borden, Treasurer
Nicole Casuso, Historian
Morgan Byron, Secretary
Amanda Hodges, Faculty Advisor

DPM Program Staff

Amanda Hodges, DPM Director
Elena Alyanaya, Academic Advisor I
Greetings!

http://dpm.ifas.ufl.edu/

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Welcoming Remarks!

Dear Students, Faculty, Alumni, and Friends,

Our Spring 2017 edition of DPM News includes the following highlights:

· A Faculty Highlight for Dr. John Peterson, Professor of Environmental Horticulture
· Student Service and Outreach Information
· Student Internship Highlights, and Student Accomplishments
· Congratulatory remarks for our Fall 2016 graduate, Dr. Chris Kerr
· Our Alumni Spotlight article featuring Dr. Tatiana Sanchez!
· DPMSO News, fun quizzes, and much more!

I hope you enjoy reading DPM News, Volume X, Spring 2017! Thank you for your interest in the UF, DPM Program!

-Amanda Hodges, DPM Program Director

Faculty Highlight: Dr. John Peterson

Dr. John Peterson (see above photo left) received his B.S. in Horticulture and Plant Science from the University of Rhode Island and his Ph.D. in Horticulture and Plant Physiology from Rutgers University. Dr. Peterson is a Professor in the UF Environmental Horticulture Department and the Director of the Plant Science Major at UF.

Before coming to UF he served as a Horticulture Professor, Department Head for the Horticulture and Crop Science Department, and Director of the Wine and Viticulture Program at California Polytechnic State University at San Luis Obispo. He has also served in many other positions including: Horticulture Professor at The Ohio State University; President of the AmeriFlora ’92 International Flower and Garden Exposition in Columbus, Ohio; President of the Massachusetts Horticulture Society in Boston, MA; President of Turtle Bay Exploration Park in Redding; CA; and Director of the San Francisco Botanical Garden and Conservatory of Flowers in San Francisco, CA. In these roles he has conducted research related to the production of floriculture crops and tropical foliage in indoor environments, plant nutrition and water quality, and research related to attracting students to majors and careers in plant science. Dr. Peterson first had the opportunity to come to UF on sabbatical leave and then decided to stay as a faculty member. He has been in his current role as Professor and Director of the Plant Science Major for 1.5 years.

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In Dr. Peterson’s role as the Director of the Plant Science Major he works collaboratively with five departments in the College of Agriculture and Life Sciences to help coordinate an interdisciplinary educational program with these departments. The collaborating departments include the Agronomy, Entomology and Nematology, Environmental Horticulture, Plant Pathology, and Soil Science Departments. Since becoming the Director, Dr. Peterson has worked with the faculty, staff and students in these departments to revise and expand the offerings of specializations in the Plant Science Major. The new Plant Health and Protection Specialization will soon serve as a good pathway into the DPM program at UF. Other specializations that will soon be offered will also serve as pathways into advanced degree programs relating to agronomic crop production, plant breeding and genetics, native plant restoration and conservation, controlled environment plant production, plant pathology and entomology, ornamental plant production and many other areas relating to plant science. One of the goals for the major is to provide educational training and a four-year degree that leads to wide-ranging career opportunities in the plant professions as well as a pathway into graduate studies covering numerous aspects of plant science. Since there is currently a shortage of plant science professionals, Dr. Peterson along with collaborators in the UF Plant Science Major are also focused on raising awareness of careers in the plant science profession to prospective students. Dr. Peterson believes that the training of highly competent and capable plant science professionals is critical to the needs and challenges of our future world, and that the University of Florida is one of the most important places in our nation for that training to occur.

In addition to serving as the Director for the Plant Science major Dr. Peterson also teaches a Sensory Gardening course (ORH 2752). This course is focused on the important role of plants in our environment and human lives, as well as the links between plants and the five human senses. This course is often a gateway for students interested in transferring into the Plant Science major and is also a valuable course for students already in the major.

When asked what he most enjoys about his job Dr. Peterson replied, “The thing I enjoy about my job is knowing that I am helping to train the next generation of plant science professionals who will make sure that we are effectively caring for the plants in our environment and we are going to be able to efficiently, responsibly and sustainably produce the food plants and plant products that we will need in our future world. I’m really enthused about knowing there will be individuals working in my profession who will succeed me and do more important and exciting things than I have been able to do in my career.”

Dr. Peterson is supportive of the DPM program and currently serves as a member of the DPM Program faculty advisory committee. He looks forward to working with DPM students and hopes to be able to contribute to the program by enhancing the student experience in the DPM program. When asked what he thought about the DPM program, Dr. Peterson shared the following: “I believe the DPM program is a unique and special program and is offered at a great university. It presents an opportunity to have a very special and unique role in the plant science profession that is offered at very few other institutions of higher learning. This program offers in depth training and instills a wide spectrum of plant science knowledge that makes graduates of the program the ultimate and very best plant doctors.”

“My advice for students is to look carefully and consider unique opportunities that present themselves…. be prepared to take some risks... try to sustain an outlook that enables you to always embrace change...... and always be respectful of and take the time to consider alternative views.”

PROGRAM NEWS & DEVELOPMENT

You can stayed informed of the most recent events and important announcements regarding the DPM Program by checking out our Facebook page at: https://www.facebook.com/UFPlantDoctors/

You can also tune into our IFAS blog available at: http://blogs.ifas.ufl.edu/plantmedicine/.
High School Outreach Events

To raise awareness about plant health issues amongst middle and high school age youth, the DPM Program launched the DPM Outreach Program, funded by the USDA-APHIS-PPQ and the Florida Farm Bill, for the 2016-2017 academic year.

DPM student Nicole Casuso served as the Graduate Student Outreach Coordinator and conducted 29 events throughout the year at 7 different high schools. Several other DPM and Biosecurity Research and Extension Lab students assisted with the events including: Blaire Colvin, Ploy Kurdmongkoltham, Matthew Borden, Morgan Pinkerton, Sage Thompson, and Nick Goltz.

The DPM Outreach Program reached out to more than 500 students at the following high schools: Buchholz High School, Hawthorne Middle/High School, North Marion High School, West Port High School, Vanguard High School, Colonial High School, and Jupiter High School.

The events consisted of a 7-question pre- and post-survey, PowerPoint presentation, discussion, and hands-on activity. High school instructors had the opportunity to select from 2 topics: “Plant Biosecurity: Local and Global Perspectives” and “Overview: Invasive Species that Affect Plants”. Students were encouraged to actively participate and ask questions throughout the presentation. Afterwards, they were given the opportunity to view live insects and preserved specimens that represented a range of common as well as invasive agricultural and landscape pests.

Moving forward, there will be additional topics available, revised curriculum for middle school audiences, and a website for students and instructors to request an event, print materials, and be directed to other important resources.

AgVentures with Marion County Farm Bureau

This spring DPM students volunteered at AgVentures, a program hosted by the Marion County Farm Bureau in Ocala. During AgVentures over 1100 Marion county second graders had the opportunity to learn about the diversity of Florida agricultural commodities and where their food comes from. DPM students Ploy Kurdmongkoltham., Brandon Jones, Benjamin Waldo, and Alex Gannon assisted with the row crop and vegetable booth. DPM students spoke to second graders about crop health and soil nutrition. Each second grader had the opportunity to plant their own watermelon seed to take home and apply what they learned to their own plant. This was a fun and rewarding way for DPM students to give back to the local community and make learning about Florida agriculture fun!
**Program Exhibits and Student Recruiting**

- **February 8, 2017** - Elena Alyanaya, Academic Advisor, represented the DPM program at the College of Agricultural and Life Sciences Career Expo on campus. This was an excellent opportunity to talk with prospective students and tell them about what the DPM program has to offer.

- **February 11, 2017** - DPM students Matt Borden and Ploy Kurdmongkaltham represented the DPM program at the Florida State Fair in Tampa, FL. They assisted with the UF/IFAS Entomology booth as well as the USDA-ARS booth. This was a great event to interact and engage with the public. DPM Student Nicole Casuso also assisted with the design and execution of the FDACS DPI booth and created a diorama representing Florida agriculture.

- **March 12-15, 2017** - The Southeastern Branch of the Entomological Society of America (SEB ESA) was held this year in Memphis, TN. DPM students Matt Borden, Arjun Khadka, Ariane McCorquodale, and Cory Penca along with Program Director, Amanda Hodges attended this meeting. DPM students were an active part of the program and presented research as well as promoting the DPM program in Memphis. The UF Entomology team won first place at the Linnaean games held at the meeting. DPM student Cory Penca was a team member and DPM director Amanda Hodges served as a coach.

- **April 5, 2017** - Program Director Amanda Hodges attended Gator Day at the Capital in Tallahassee, FL. This was an excellent opportunity to spread the word about the DPM program and what it has to offer students.

- **April 8, 2017** - Elena Alyanaya, Academic Advisor and DPM students Lisbeth Espinoza, Daniel Mancero, Benjamin Waldo, Ploy Kurdmongkaltham, and Matt Borden represented the DPM program at the Entomology and Nematology Department BugFest held on campus. This was a great opportunity to interface with the public about the DPM program as well as sell some of the DPMSO fundraising items.
Student Internship Highlights

Every DPM Student is required to complete two substantial internships to earn their degree. We asked some of our students to share their experience.

Kayla Thomason: Glades Crop Care

This Spring I had the opportunity to intern with Glades Crop Care in Jupiter, FL with Madeline and Charlie Mellinger. Working with a team of trained scouts and crop consultants, I learned how to identify many insect and disease pests in sweet corn, cabbage, green beans, tomatoes, radishes, and potatoes. Sweet corn was the crop I spent the most time scouting during my internship. This internship has helped me take the technical information that I’ve learned in classes, apply it to field settings, and pinpoint problems that growers were facing. My internship was extremely valuable and has contributed to my knowledge base.

Nicole Casuso: FDACS DPI

During my internship with the Technical Assistance Department at DPI, I was granted the creative freedom to develop a innovative, visual, and interactive displays that represented the Division at the Florida State Fair held in Tampa, FL in February 2017. Celebrating the theme, DPI: 100 Years of Protecting Florida's Plant and Apiary Industry, the Division's presence was going to be larger than previous years and stand as the central feature in the Ag Exhibit Hall at the fairgrounds. As an adoring fan of museums and creative, hands-on education tactics, I dove into the vastness of the internet and utilized personal experiences to draft many ideas for the state fair exhibit. We wanted the DPI exhibit to tell a story and highlight the importance of the Division for audiences of all ages and professional backgrounds.

I designed the overall exhibit layout as well as several key display items with assistance from my coworkers in TA and staff from the Division's five technical Bureaus (Plant and Apiary Inspection; Entomology, Nematology, and Plant Pathology [includes Botany]; Methods Development and Biological Control; Citrus Budwood Registration; and Pest Eradication and Control).

Continued on next page...
A few main exhibit components included: Florida’s Agriculture at a Glance (a diorama depicting common or intercepted pests and diseases in ornamental, agricultural, and natural landscapes along with general statistics about FL agriculture and the importance of soils); Endangered Flora of Florida (a reference guide containing factsheets based on 12 of the 49 federally listed endangered plants present in the state); and Trap Tree (real-life traps used in pest surveying efforts hanging from a structure that placed the size, texture, color, and shape into perspective for fairgoers).

My experiences with DPI and TA allowed me to hone several leadership qualities, from prioritizing and effective communication to balancing confidence and humility. I gained exposure to tasks that I had not before endeavored to complete. I formed new professional connections and integrated myself into the Division network. Many people, fairgoers and DPI staff alike, do not realize how much preparation and comprehensive planning is undertaken to prepare a successful, informative, and visually appealing display for events such as the state fair. College-level curriculum and external work/internship experiences are equally important to students, such as myself, and young professionals interested in pursuing careers in agricultural extension and education.

**Continued from page 7…..**

### Congratulatory Remarks for our Graduate

**Congratulations to our Fall 2016 Graduate! We wish you the best!**

We asked our Fall 2016 graduate to share a few words regarding his recent graduation and current employment. Below is his reply:

**Dr. Chris Kerr**

“I recently graduated in the fall of 2016 with a DPM degree and a dual M.S. degree in Entomology and Nematology. I thoroughly enjoyed my time in the DPM program. I most enjoyed the great variety that the DPM program offers students. Due to the interdisciplinary nature of the program I had the opportunity to work with students, professors, and industry professionals across many different disciplines related to plant health. I am currently working as a Biological Scientist IV with the Florida Department of Agriculture Division of Plant Industry. I supervise and conduct research for two large biological control programs targeting *Diaphorina citri*, the Asian citrus psyllid; and *Dioscorea bulbifera*, the air potato. The DPM degree has allowed me to improve various aspects of our mass rearing systems including identification of host plant nutrient deficiencies to pathogen identification on our reared plants and insects; along with implementing various corrective measures. Without my DPM training, I wouldn’t have had the capability of approaching so many aspects of these complex systems. I still have a lot to learn though, and probably the best preparation I’ve gained from the DPM program is a large network of experts with whom to discuss issues and ideas.”

DPMSO News

DPMSO had a busy semester filled with fundraisers, service events, and socials! DPMSO had the most successful fundraising events in the history of DPMSO! We raised a total of $2500 this semester. DPMSO and the DPM Program had a booth at the Kanapaha Garden festival where students had lots of interaction with the public with our “Ask a Plant Doctor” sign. This was a fun event where students educated festival goers about the DPM program, answered tons of questions about plants, and sold DPMSO raised transplants, hand made succulent planters, and T-shirts. DPMSO also had two on campus transplant sales, a fundraiser at First Magnitude Brewery, and sold transplants and succulent planters at BugFest. All funds raised went towards the DPM program trip to Ecuador on May 2 - May 10. In addition, students volunteered with AgVentures put on by Marion County Farm Bureau, participated in highschool outreach events, and had many casual get togethers to bond and while enjoying good food and good company. It has been a great semester for DPMSO!

Crop Trivia!
See how many you can answer!

Answers on page 11

1. Which two peanut farmers have been elected as U.S. presidents?
2. Which town is home to the famous boll weevil monument?
3. Who is known as the “plant doctor” and the “grandfather of peanuts”?
4. Which corn disease is edible?
5. What common writing utensil is made with soybeans?
6. Which crop is commonly burned before harvest?
7. What can be made with one bale of cotton?
8. Which agronomist won the Nobel Peace Prize?
9. How many kernels are in the average ear of corn?
10. How many peanuts does it take to make a jar of peanut butter?
Students and Alumni of the DPM Program excel not only in their academic pursuits but also in professional development, extracurricular involvement, and their external work experiences. DPM News would like to acknowledge the achievements of the following students and alumni.

**Morgan Byron**
DPM student Morgan Byron was presented with a $1000 scholarship from Valent during the department Graduate Student Appreciation luncheon. Valent was so pleased with Morgan’s work during her internship they surprised her with this generous scholarship. Congratulations Morgan!

**Matt Borden**
DPM student Matt Borden presented “Conveying non-target effects of pest management practices by considering insecticide selectivity and residual activity” in the Ph.D. Student Oral Competition at the SEB ESA conference in Memphis. He also won four awards in the photography competition at the meeting, including Best in Show! Check out the front and back covers of the newsletter to see some of Matt’s photos! Congratulations Matt!

**Ariane McCorquodale**
DPM student Ariane McCorquodale published a Featured Creatures/EDIS article this semester, on the striped mealybug. Check it out here: [http://entnemdept.ufl.edu/creatures/orn/mealybug/Ferrisia_virgata.htm](http://entnemdept.ufl.edu/creatures/orn/mealybug/Ferrisia_virgata.htm). Ariane also presented “UFPlantProtection.org: A Free Online Diagnostics Resource” in the extension section at the SEB ESA meeting in Memphis, TN. Congratulations Ariane!

**Cory Penca**
DPM/PhD - Entomology student Cory Penca was first author on the paper “Abundance and Diversity of Beneficial and Pest Arthropods in Buckwheat on Blueberry and Vegetable Farms in North Florida.” published in the Florida Entomologist. Cory also presented his research titled “Dose response to pyriproxyfen in diapausing *Halyomorpha halys* (Hemiptera: Pentatomidae), *Mega-copita cribraria* (Hemiptera: Plataspidae) and their hymenopteran egg parasitoids” and competed on the UF team for the Linnaean Games, coached by Program Director Dr. Hodges (they got 1st place!) at the SEB ESA meeting in Memphis, TN. Cory also presented “Invasive Species, the Caribbean Pathway, and Cuba” to the USDA-APHIS-PPQ State Plant Health Director’s Office in Gainesville. Congratulations Cory!

**Arjun Khadka**
DPM student Arjun Khadka presented his research titled “Relative humidity: Assessment of *Halyomorpha halys* (Stål) (Hemiptera: Pentatomidae)” at the SEB ESA meeting in Memphis, TN. Congratulations Arjun!

Any current students or alumni interested in being featured in the next edition of DPM News can contact the editor, Blaire Colvin at [bcolvin14@ufl.edu](mailto:bcolvin14@ufl.edu).

We would love to hear from you!
Alumni Spotlight: Dr. Tatiana Sanchez

Q: Describe your academic background?
A: I completed my Bachelor's in Biology at the Military University in Colombia. After graduation, I worked for about a year as a research assistant and then as a science teacher until I decided to apply to grad school. I completed my Doctorate in Plant Medicine and my Postdoc in Plant Pathology, both at UF.

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 work with UF/IFAS Extension as the Commercial Horticulture Extension Agent for Alachua County. I help small and large growers identifying and resolving a number of issues that affect crop production in vegetables, ornamentals, fruits, nuts, and sod farms. The DPM degree helps me on a daily basis as I use all the disciplines we learned during the doctorate to help growers troubleshoot nutritional problems, pest and disease management among others. The pesticide research conducted during my degree provided me with an understanding of the application, the handling, and the risks of pesticides. This knowledge allowed me to quickly assume the responsibility for the pesticide and licensing training for the public, commercial, and limited pesticide licenses in the county.

Q: What prompted you to pursue your present career and where are you located?
A: I have been very lucky in terms of the professional opportunities that have been available for me from my bachelor's to my current job. I very much enjoy communicating research to farmers and helping to resolve any type of plant health issue they may encounter. While I was doing my postdoc in Plant Pathology, I had the opportunity to work closely with commercial farmers in Alachua County and it lead into a job with the extension office. I had the opportunity to experience what a job in industry or academia would be like and learning about extension clarified what the best fit for me would be.

Q: Why did you choose to enroll in the DPM program?
A: A multi-disciplinary degree like the DPM program opens up the spectrum of job possibilities which increases your chances of working in a field you really like. Work shouldn't be work, it should be passion.

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Crop Trivia Answers

1. Thomas Jefferson and Jimmy Carter
2. Enterprise, AL - the monument was built to appreciate the insect that greatly impacted the area’s agriculture and economy.
4. Corn Smut - In Mexico corn smut is considered a delicacy.
5. Crayons! One acre of soybeans can produce 82,368 crayons.
6. Sugarcane
7. A cotton bale weighs about 500 lbs. One bale can produce 215 jeans, 313,600 $100 bills, 2104 boxer shorts, and 4321 midcalf socks!
8. Norman Borlaug - this famous plant breeder is credited with “saving more lives than anyone who has ever lived” through his wheat breeding and farming practices work in developing countries.
9. An average corn ear has 800 kernels and 16 rows.
10. It takes about 540 peanuts to make a jar of peanut butter.
If the shoe fits… why DPM might be right for you!

We often find students wondering if the DPM program is a good option for them. By answering this short quiz you can see if the shoe fits!

1. Do you want to know more about plant disease management, arthropod pest or nematode management, crop nutrition and agronomy, or horticultural sciences?
2. Are you interested in hands-on curriculum that allows you to work in the field and/or in a lab, internships with local businesses or federal agencies, and interdisciplinary studies?
3. Do you aspire to work in academia, industry, extension, or regulatory?
4. Do you enjoy opportunities to get involved with community outreach, 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 recommend that you explore your graduate career options with the UF DPM Program!
DPM Students

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

Jamey Betts
Georgia, USA

Matt Borden
Virginia, USA

Morgan Byron
Florida, USA

Nicole Casuso
Florida, USA

Theresa Chormanski
Florida, USA

Blaire Colvin
Florida, USA

Wael Elwakil
Egypt

Lisbeth Espinoza
Ecuador

Craig Frey
Maryland, USA

Alex Gannon
Florida, USA

Brandon Jones
Florida, USA

Alicia Kelley
Indiana, USA

Arjun Khadka
Nepal

Ploy Kurdmongkoltham
Georgia, USA

Greg Kramer
Florida, USA

Daniel Mancero
Ecuador

Ariane McCorquodale
Florida, USA

Cory Penca
Florida, USA

Eleanor Phillips
Tennessee, USA

Rebecca Rabinowitz
Florida, USA

Bruce Stripling
Georgia, USA

Taylor Smith
Florida, USA

Lanette Sobel
Florida, USA

Kayla Thomason
Florida, USA

Benjamin Waldo
Indiana, USA
Thank you for reading.

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