ANNOUNCING THE 2016 NPDN/USDA-APHIS BELTSVILLE ADVANCED DIAGNOSTIC WORKSHOPS

Karen L. Snover-Clift and Tricia Allen, Cornell University & Mark Nakhla and Vessela Mavrodieva, USDA-APHIS-PPQ-S&T, Beltsville Laboratory

The NPDN diagnostics program area committee and members of USDA-APHIS-PPQ-Science & Technology Beltsville Laboratory are pleased to announce the 2016 advanced diagnostic workshops. The workshops will begin on February 29, 2016 and a number of topics will be covered. We have planned the workshops in consecutive weeks again this year (but with a break for the week of the NPDN national meeting) so that the Beltsville staff can focus on these sessions during this five week period and then devote the rest of the year to other activities.

The following topics will be offered:

Week 1 (first half): Bioinformatics workshop, February 29–March 2, 2016, 3 days

Week 1 (second half): Phytoplasmas workshop-session #1, March 3–4, 2016, 2 days

Week 2: NPDN national meeting-tours and workshops coordinated through the meeting website

Week 3 (first half): Phytophthora 101 workshop—Session #1, March 14–16, 2016, 3 days

Week 3 (second half): Phytoplasmas workshop—session #2, March 17–18, 2016, 2 days

Week 4: Plum Pox Virus workshop, March 22–23, 2015, 2 days

Week 5 (first half): Phytophthora 101 workshop—session #2, March 28–30, 2016, 3 days

Week 5 (second half): Citrus pathogens (citrus leprosis & citrus black spot), March 31–April 1, 2016, 2 days

Issue Highlights

• STAR-D pre-conference workshop: document roundup
• NPDN IT/diagnosticians meeting
• A new Bugwood Images

NPDN 4th national meeting
Registration is open!
See page 3 for details.
Week 1 (Monday through Wednesday): Bioinformatics workshop, February 29–March 2. In previous years this workshop has been offered as a Part I and a Part II and finally as a combination of the two parts. This 3 day workshop includes detailed guidance on sequencing PCR amplified fragments either directly or after cloning. The session will cover analysis of obtained sequences from both plus and minus strands, editing sequences, blasting sequences, understanding blast results based on size and gene target, when to directly sequence PCR products or clones, which genes are used for sequence analysis for fungi, bacteria, and viruses, what sequence analysis programs are available commercially or as freeware, and hands-on use of sequence analysis programs using sequences from case studies for different pathogen types, and allowing the participants to work with their own sequences.

Week 1 (Thursday and Friday): Phytoplasmas workshop, March 3–4, 2016 and week 3 (Thursday and Friday): Phytoplasmas workshop, March 17–18. The phytoplasmas workshop was a new topic offered for the first time in the spring of 2015. It was so popular, we needed three sessions and we needed to expand the number of places from 8 to 9 in each of those sessions to provide a spot for everyone interested in attending. The interest is continuing this year so we are offering two sessions in 2016 to accommodate those that hope to attend this workshop. It will use apple proliferation as a model for phytoplasma disease analysis. It is a 2 day session that includes lecture and hands on training on DNA extraction, conventional and real-time PCR, and sequence analysis.

Week 3 (Monday through Wednesday): Phytophthora 101 workshop, March 14–16, 2016 and week 5 (Monday through Wednesday): Phytophthora 101 workshop, March 28–30. The Phytophthora 101 workshop is most likely the most requested workshop and we fill the available spaces every year. Because of these reasons, we will again offer the always popular Phytophthora 101 training session. The session is 3 ½ days long and covers ELISA, DNA extraction, conventional PCR (nested and multiplex), real-time PCR (ITS and Elicitin), and interpretation of results.

Week 4 (Tuesday and Wednesday): Plum Pox Virus workshop, March 22–23. The Plum Pox Virus workshop was offered in 2015 for the first time in a few years. Our survey requesting topics indicated that it is needed again in 2016. It is a 2 day session that includes lecture and DAS ELISA instruction for PPV screening.

Week 5 (Thursday and Friday): Citrus pathogens, March 31–April 1. The citrus pathogens workshop has been offered in the past and included three pathogens requiring 4 days. This year we have reduced it to two pathogens, citrus leprosis & citrus black spot to keep the workshop to 2 days. The training will cover disease symptoms, methods of detection and identification of each disease causing agent. The molecular diagnostics will include PCR, real-time PCR, RT-PCR and RT-real-time PCR.

More specifics about travel and lodging will be sent directly to participants before the end of December so that they can make their travel plans. Expenses for travel, lodging and meals will be covered from a supplemental grant for diagnosticians training so you will not need to use your funds from this year’s NPDN allocation. All expenses will be processed through Cornell University. There is no registration charge for the workshops or for meeting materials. These expenses are covered by our colleagues at the CPHST Beltsville laboratory. Funds for reimbursement of travel expenses are limited. Priority will be given on a first come, first served basis in order by requests received until funds are exhausted. Please sign-up as soon as possible to ensure your spot in the workshop and your expense coverage! If you are interested in participating in any of these workshops please contact Tricia Allen at tra42@cornell.edu. Thank you! © Jan Byrne, Michigan State University

Jennifer Flynn from the University of Minnesota during the 2015 phytoplasma workshop
REGISTRATION IS OPEN!

IMPORTANT DEADLINES

Abstract Submission Deadline
December 9, 2015

Early Registration Deadline
December 9, 2015

Awards Nomination Deadline
December 18, 2015

Hotel Reservation Deadline
January 31, 2016

Register today at http://conference.ifas.ufl.edu/npdn/reg_info.html

NPDN AWARDS

Recognize NPDN members and friends who have performed outstanding service to the NPDN and its collaborating agencies.

• NPDN outstanding service
• NPDN outstanding team service
• Most unique sample

Learn more about these opportunities on the national meeting website at http://conference.ifas.ufl.edu/npdn/awards.html

Award recipients will be recognized at a ceremony at the meeting on Thursday, March 10, 2016.

Tours—Friday, March 11

• Two-part guided garden walking tour: Smithsonian Gardens—beautiful winter gardens for wildlife habitat & U.S. Botanic Garden—making IPM work in conservatory displays
• USDA facilities bus tour

Workshops—Saturday, March 12

• Morphological identification of microfungi—a primer
• Identification of common and important bark and ambrosia beetles
• Phytophthora identification
• Virus diagnostics

national meeting tours & workshops
STAR-D pre-conference workshop: document roundup
Karen Snover-Clift and Dawn Dailey O’Brien, Plant Pathology and Plant-Microbe Biology, Cornell University

Are you interested in getting your STAR-D documents started? Have you already started some documents but have questions about specific situations in your laboratory? Are you unsure how to incorporate documents you already use into your STAR-D system? If you answered yes to any of these questions or have your own questions, consider attending the STAR-D document roundup workshop at the 2016 NPDN national meeting.

This workshop is a pre-conference workshop that will be held following the regional meetings on Tuesday, March 8. It is designed for NPDN members that are interested in developing the core STAR-D-Quality Management System (QMS) documents needed to implement STAR-D in their laboratories. Whether your laboratory has absolutely no STAR-D-QMS documents started or has numerous documents in place—or anywhere in between—we encourage you to participate in this workshop. We understand that setting aside a block of time to create these documents may be difficult when samples are constantly arriving at your laboratory door. And even if you find the time, questions may arise as you begin customizing the templates for your situation, making you feel kind of stuck in the process. Our goal is for participants to leave the session having completed many of the core quality management system documents and knowing what documents are still needed to finish the initial set-up.

Participants should bring a laptop computer to the session (we may have a few available for use if you are not able to bring your own computer) and any QMS documents you have created. No documents are necessary to participate in the workshop. We will provide participants with a thumb drive containing the STAR-D document templates and the NPDN Requirements and Standard. A number of instructors will be available to assist in group topic discussions and to help individuals answer laboratory specific questions in a one-to one-setting.

If you are interested in attending the STAR-D document round-up workshop, you must sign-up for it when you register for the NPDN national meeting. There is no cost to attend but we need to know the number of participants so we can plan according. The workshop will be held on Tuesday, March 8, 2016, from 1:00pm to 5:00pm.

The NPDN STAR-D laboratory accreditation program has officially launched its new STAR-D logo. The acronym has been changed from the “System for True, Accurate, & Reliable Diagnostics” to the “System for Timely, Accurate, & Reliable Diagnostics.” This subtle change more precisely describes the objectives of the program.

The previous logo was created when the STAR-D program was first developed and has served the program for more than half a decade. During that period, STAR-D has gone from simply a concept to an actual functioning program with three NPDN plant diagnostic labs already accredited and four more which have completed the first stage of preparation, the gap audit.
**NPDN IT/diagnosticians meeting**

*Mike Hill, Eileen Luke and Cindy Music, CERIS, Purdue University*

The NPDN/IT Diagnosticians meeting was hosted at Purdue University on October 28–29, 2015. The purpose was to focus on the critical IT needs of the network in the short-term while looking strategically as to how IT will operate in the long-term as a sustainable resource. Dawn Parks, the assistant director of Sponsored Program Development in the College of Agriculture at Purdue, served as the facilitator keeping the group on track while still being flexible enough to allow the time necessary to work on the ‘nitty-gritty’ issues. Several break-out sessions were featured where participants were randomly assigned to various groups in order to obtain fresh ideas and perspectives.

This meeting was long overdue and needed, because it had been over five years since the two groups last met. Overall, it was very productive and a good first start in moving forward. The four major priority areas agreed upon by those attending were faster processing, reporting of information, a common understanding of terms, and training. In the coming months, more detailed information will follow as feedback and input is sought from all diagnosticians in each region. A special thanks to Tom Creswell and Gail Ruhl who hosted a tour of the Purdue Plant and Pest Diagnostic Lab at the close of the meeting.

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**A new Bugwood Images**

*The Bugwood Center and ITP collaborative project to enhance the user experience at Bugwood Images*

*Terrence Walters, USDA-APHIA-ITP and Joe LaForest, Center for Invasive Species and Ecosystem Health, University of Georgia*

The Bugwood Center (the University of Georgia, Center for Invasive Species and Ecosystem Health) and ITP (USDA-APHIS) have released a significant update to the end-user interfaces for four of Bugwood’s image sites (http://images.bugwood.org/). Forestry Images, Insect Images, IPM Images, and Weed Images have a new look with added navigation and functionalities to support sharing and the use of images.

Users are now offered powerful filtering capabilities, the ease of requesting and managing their image permissions, and the ability to develop personalized image collections for presentations, sharing, and embedding into other sites. All four sites now have a responsive design—so they provide optimal viewing and interaction experiences across a wide range of devices including your desktop, tablet, and mobile phone. The Bugwood Images home page and the login page also have a fresh new look.

Today, images.bugwood.org is considered the primary source by governmental agencies, NGOs, and academic institutions for images associated with natural resources and agricultural pests, diseases, and weeds. As of October 2015, the site has 239,759 available images and averages 4,800 daily image views from over 900 users. Images from the site are used globally for a multitude of purposes including education, presentations, reporting, outreach, and publications. During the month of September 2015, over 150 countries accessed Bugwood.org for images.

Screen shot of the new image gallery view for Bugwood Images showing the ITP Node image gallery with the project “Oncid ID” and “close-up” selected as filters.
Bugwood’s IPM Images (http://www.ipmimages.org/nodes.cfm) includes five image database nodes—Colorado State University, Cornell University, International Society of Arboriculture, ITP, and the Ohio State University. These nodes, which were also part of the recent update at Bugwood Images, were created to support institutions and organizations wanting to develop and maintain a specific image collection while offering their users the access and functionality provided through Bugwood Images.

The ITP Node @ IPM Images offers over 23,000 images contained within 24 project image collections. All of the Node’s images provide support for the USDA mission to protect U.S. agriculture and natural resources. Twenty three of these projects include images taken by or supervised by entomologists, pathologists, horticulturists, or botanists for the purpose of incorporating them into an ITP identification tool (http://idtools.org/). Examples of a few projects at the Node include, Flat Mites of the World, Palm Symptoms, Scale Insects, and Antkey. Over the next 12 months, hundreds of images will be added to the Node through five new projects, including: Buprestid ID, Scarab Beetles of Hawaii, Fruit Fly Larvae, and Bee Mites ID.

Users accessing the new Bugwood Images ITP Node will find two valuable links on the image detail page. The “Project” link allows viewing of other images associated with the selected image. The “Image Source” link allows direct access to the ITP identification tool associated with the image. These tools offer fact sheets and keys about the image specimen. Since the Node now has a responsive design, individuals undertaking field screening for plant pests can search and filter, via their mobile devices. The “Share” option on the image detail page offers sharing of your favorite ITP Node image with your colleagues.

The Bugwood Center has released a 2-minute video (Welcome to the New Bugwood Images) that highlights the enhancements users will experience at the new Bugwood Images. Two videos to assist users with Requesting Permission to Use Images and Finding Image Information are also available. The release of seven additional instructional videos is planned for the near future.

For additional information about The Bugwood Center, contact laforest@uga.edu. For further information on the ITP Image Node at Bugwood Images, contact itp@usda.gov.
UPCOMING EVENTS

Meetings
March 8–12, 2016
NPDN 4th National Meeting
Washington DC

CONTRIBUTE

Share Tips and News with Your Colleagues
Recently write an article for a trade journal? Do you have a tip, announcement, regional news or network update you would like to include in the NPDN News? Email Rachel McCarthy at rachel.mccarthy@cornell.edu