



The Pyle Center
702 Langdon Street
Madison, WI 53706



PROGRAM

2014

North Central
Division American
Phytopathological
Society Meeting

June 11, 12, 13,
2014 Madison,
Wisconsin

HOSTED BY THE
UNIVERSITY OF
WISCONSIN
DEPARTMENT OF
PLANT PATHOLOGY

1630 Linden Drive
Russell Laboratories
Madison, WI 53706

www.plantpath.wisc.edu

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Proceedings of Academic Contributions to Meeting.....	Separate Document in Registration Folder

Welcome

On behalf of the University of Wisconsin Department of Plant Pathology, I extend a warm welcome to you to Madison, Wisconsin. We are pleased that you could visit our city and participate in the 2014 North Central Division American Phytopathological Society Meeting. We have 2 unique field trips, 4 exciting symposia, a large and content-rich poster session, and several meetings and workshops to engage your interests during our June 11-13 meeting.

I would like to acknowledge our many UW-Plant Pathology and APS volunteers that made this event possible. We started our planning efforts early, and we hope all enjoy the fruits of the labor!

Again, welcome and enjoy the meeting!

Best regards,

Amanda Gevens
APS North Central Division President 2014

About the Department of Plant Pathology at UW-Madison

The Plant Pathology Dept. was founded in 1910 as a Dept. within the College of Agricultural and Life Sciences. Dean H. L. Russell hired L. R. Jones as the first Professor of Plant Pathology and the Dept. Chairperson. He remained in this position until 1935. During his tenure, he was successful in attracting many talented people, helping to create a world-wide reputation for excellence in research. The Dept. houses 15 permanent faculty members, 7 affiliated faculty/trainers, 35+ graduate students, 20+ scientists, researchers and postdoctoral fellows, and over 40 support staff persons. The Dept. occupies 8 floors of the southern wing of Russell Laboratories. Research laboratories are furnished with modern equipment with outstanding computer resources. Campus libraries are excellent; Steenbock Memorial Library is adjacent to Russell Laboratories. Nearby is the Biotron, which provides selective control over physical conditions and permits duplication of environmental

conditions almost anywhere on earth. Ten experimental farms offer various conditions for field research.

Helpful Notes from the Pyle Center

- Meeting room locations will be posted on an electronic sign board in Main Lobby.
- Wireless internet passcodes can be picked up at Guest Services at the Front Desk.
- UW Campus staff, faculty, and students can use UW NetID.
- Web-based e-mail terminals are located on each floor of the Pyle Center for use at no charge.
- All messages will be held at the Front Desk, unless urgent.
- Urgent messages will be brought immediately to your meeting room.
- Please use tack strips and acoustic panels for hanging material on walls in meeting rooms.
- Nursing mothers have access to a dedicated room, please see Front Desk for key and location.
- Parking information and directions can be found at <http://conferencing.uwe.edu/location.cfm>.

SPECIAL THANKS TO OUR MEETING SPONSORS

The Wisconsin Fresh Market Vegetable Growers Association

The Wisconsin Turfgrass Association

Monsanto

BASF

UW-Department of Plant Pathology

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Cheminova



WI Fresh Market Vegetable
Growers Association



Acknowledgement of Contributions to NC-APS Meeting 2014

UW-Plant Pathology & APS Headquarters

Laurie Ballentine	Patricia McManus
Breann Bender	An Nguyen
Amy Charkowski	Aurelie Rakotondrafara
Kenneth Cleveland	Sara Rodock
Tyler Engel	Douglas Rouse
Tom German	Cindy Scheller
Brian Hudelson	Ryan Shepherd
R. Vaughan James	Damon Smith
Stephen Jordan	Jose Pablo Soto-Arias
Mehdi Kabbage	Joseph Spraker
Paul Koch	Bryan Webster
Dixie Lang	Margaret Webster

And many other faculty, staff, students of UW-Plant Pathology, APS Headquarters, and the Pyle and Lowell Centers.

Special note on our cover artwork: Images typical of the Wisconsin countryside . . . Farm buildings are nestled in rolling hills with contour crops of grain, corn and alfalfa. Apples grow (near Gays Mills), cranberries (north central), cherries (Door County), corn (Southwestern WI) and potatoes in the Central Sands. Cows, a horse, sheep grazing on a hillside and a farmer driving his tractor complete the agricultural picture. The Baraboo Bluffs, lakes and rivers, a hint of the north woods and trillium on the verge of a deciduous forest complete this country view of Wisconsin. The artist, Dr. R. Vaughan James, is an Emeritus Academic Staff member of the UW-Plant Pathology and currently supports website and disease forecasting features for potato and vegetable disease control with Dr. Amanda Gevens.

Program of Meeting Events

Wednesday, June 11, 2014 – Day 1

- 9:00am - 12:00pm** American Phytopathological Society Divisional Forum meeting (by invitation) – coffee/tea service provided
Organized by Tamra Jackson Ziems, Univ. of Nebraska-Lincoln
Pyle Center Room 317
- 9:00am - 3:00pm** NCERA 184 wheat working group (by invitation) – coffee/tea service provided
Organized by Kiersten Wise, Purdue Univ. & Damon Smith, UW-Madison
Pyle Center Rooms 325 & 326
- 1:00pm - 5:00pm** Registration desk opens in hallway outside of Pyle Center Main Lobby
- 1:00pm - 5:00pm** Poster set up (2-sided poster boards will be provided)
Pyle Alumni Lounge
- 1:00pm - 5:00pm** Portrait of a Pathogen: the collision of creative minds and destructive pathogens art exhibit
Organized by Joe Spraker, UW-Madison
Hallway of Pyle Center Main Lobby
- 1:00pm - 5:00pm** Grapes & Grass: Wine Grape and Turf Grass Industries of Wisconsin Field Trip, Visit to Wollersheim Winery and Visit to the O.J. Noer Turf Grass Research Center
Organized by Patricia McManus and Paul Koch, UW-Madison & WI Turfgrass Assoc. & WI Winery Association
Meet in Upper Lounge of Lowell Center to join the group no later than 1PM
- 2:30pm - 5:00pm** The Most of Madison Field trip – UW-Plant Pathology graduate students show off the city by bike through food, culture, and science
Organized by J.P. Soto Arias & Breann Bender, UW-Madison, PPGC
Meet in Upper Lounge of Lowell Center to join the group no later than 2:30PM
- 6:00pm - 8:30pm** Welcome reception (hors d'oeuvres & cash bar) - Welcome remarks from North Central APS President Amanda Gevens; Vice President of APS Sally Miller, and Vice Chair of UW-Plant Pathology Patty McManus - *Music by The de-Bary-tones (UW-Plant Pathology's own band!)*
Pyle Center Rooftop Terrace

Thursday, June 12, 2014 – Day 2

- 7:00am - 8:30am** Continental breakfast buffet
Pyle Alumni Lounge
- 7:00am - 8:30am** Posters available for viewing
Pyle Alumni Lounge
- 8:30am - 8:50am** Welcoming remarks from UW CALS Dean Kate Vandenbosch; North Central APS President Amanda Gevens; Vice Chair of UW-Plant Pathology Patricia McManus
Pyle Center Rooms 325 & 326
- 8:50am - 12:00pm** Symposium: Impact of genomic research and advancements on production agriculture: is science translating to the field?

Coordinated by Amy Charkowski. Moderated by Alejandra Huerta, Graduate Research Assistant, Dept. of Plant Pathology, UW-Madison

Pyle Center Rooms 325 & 326

- **Dr. Gwyn Beattie** Professor, Department of Plant Pathology and Microbiology, Iowa State University, Ames, IA. Phytobiomes initiative
- **Dr. David Douches** Professor, Potato Breeding and Genetics, Michigan State University, East Lansing, MI. Insights and applications of genome-wide SNPs in potato
- **Dr. Courtney Jahn** Assistant Professor, Department of Bioagricultural Sciences and Pest Management, Colorado State University, Fort Collins, CO. Translation of molecular biology and physiology to improve bioenergy traits in rice and sorghum
- **Dr. Amanda Gevens** Assistant Professor, Department of Plant Pathology, University of Wisconsin-Madison, WI. Pathogen genomics and IPM via improved diagnostics

- 8:50am - 5:00pm** Portrait of a Pathogen: the collision of creative minds and destructive pathogens art exhibit

Organized by Joe Spraker, UW-Plant Pathology
In hallway of Pyle Center Main Lobby

- 12:00pm - 1:00pm** Buffet lunch
Pyle Center Main Dining Room

- 1:00pm - 3:00pm** Welcome by APS Vice President Dr. Sally Miller, *The Ohio State University* -
Student oral competition

Moderated by Tamra Jackson-Ziems, Univ. of Nebraska-Lincoln

Pyle Center Rooms 325 & 326

- 1:00pm-1:15pm **Luke Steere** – Michigan State University - Using geostatistics to study soil borne pathogens in Michigan potato fields
- 1:15pm-1:30pm **Tiffany Lowe** – University of Wisconsin-Madison - Hydroxycinnamic acid (HCA) degradation contributes to *Ralstonia solanacearum* virulence by eliminating plant defense molecules
- 1:30pm-1:45pm **Sandesh Dangi** – Michigan State University - Seed treatments, in furrow and early foliar treatments for control of seed-borne *Phytophthora infestans*
- 1:45pm-2:15pm BREAK
- 2:15pm-2:30pm **Nik Mohd Izham Mohammed Nor** – Kansas State University - The pathogenicity of the interspecific hybrids between *Fusarium fujikuroi* and *F. proliferatum* towards white pearl onion
- 2:30pm-2:45pm **Erica Arcibal** – University of Wisconsin-Madison - Engineering resistance to Potato Virus Y in various potato varieties
- 2:45pm-3:00pm **Suzanne Slack** – Michigan State University - A microbiological examination of *Erwinia amylovora* exopolysaccharide ooze, the most important component of fire blight disease epidemiology

3:00pm - 5:00pm **Poster session, authors present for competition**
Pyle Alumni Lounge

6:00pm - 6:45pm Drinks/cocktails (cash bar)
Lowell Dining Room

6:45pm - 8:15pm Awards Banquet Dinner - silent auction for 'Portrait of a Pathogen' pieces (*Joe Spraker, UW-Plant Pathology*)
Lowell Dining Room

Friday, June 13, 2014 – Day 3

- 7:00am - 9:00am** Continental breakfast buffet
Pyle Alumni Lounge
- 7:00am - 11:00am** Posters available for viewing
Pyle Alumni Lounge
- 8:00am - 11:00am** Symposium: From host recognition to transmission: advances in mechanisms of infection.
Coordinated by Aurelie Rakotondrafara & Mehdi Kabbage. Moderated by Jose Pablo Soto-Arias, Graduate Research Assistant, UW-Plant Pathology
Pyle Center Rooms 325 & 326
- **Dr. Ryan Shepherd** CEO and Co-Founder of Phyllotech LLC, Madison, WI. Biochemical defenses of leaf surfaces: new strategies for disease control
 - **Dr. Anna Whitfield** Associate Professor, Department of Plant Pathology, Kansas State University, Manhattan, KS. Final transmission: Exploiting the specificity of virus-vector interactions for new disease control strategies
 - **Dr. Jean-Michel** Associate Professor, Department of Agronomy, UW-Madison, WI. Evolution and engineering of signaling pathways controlling plant-microbe symbioses
 - **Dr. Jeff Rollins** Associate Professor, Department of Plant Pathology, University of Florida, Gainesville, FL. Roles for oxalate synthesis and catabolism in *Sclerotinia sclerotiorum* pathogenesis
- 9:00am - 11:00am** North Central regional division business meeting
Pyle Center Room 112
- 11:00am** **Main Conference Adjourns.** Authors take down posters in Pyle Alumni Lounge.
- 11:00am - 3:00pm** Special Symposium: Celebrating 100 Years of Extension in the US & Extension Round Table
Organized by UW-Plant Pathology Extension Committee
Pyle Center Rooms 325&326
- 11:00am to 11:15am **Welcome & Introductions** – *Amanda Gevens, Assistant Professor and Extension Plant Pathologist, University of Wisconsin-Madison, UWEX*
 - 11:15am-12:00pm **Current Status & Future Outlook of Extension in Wisconsin and the U.S.** - *Dr.*

John Shutske, Interim Provost & Vice Chancellor of UW-Extension

- 12:00pm-1:00pm

‘Eat ‘n Greet’ Lunch Social – Buffet-style lunch
Pyle Center Main Dining Room

- 1:00pm-2:00pm

**Extension Round Table/Panel Discussion –
Topic 1: Professional Development of
Tomorrow’s Extension Plant Pathologists (A
Year in the Life of an Extension Plant
Pathologist)**

*Moderated by: Dr. Patricia McManus, Vice Chair
of Department of Plant Pathology, UW-Madison,
Professor and Extension Plant Pathologist, UW-
Madison, UWEX*

- Dr. Damon Smith – Assistant Professor and
Extension Plant Pathologist, UW-Madison
- Dr. Janna Beckerman – Associate Professor and
Extension Plant Pathologist, Purdue
- Dr. Doug Jardine – Professor and Extension
Plant Pathologist, Kansas State
- Dr. Patricia McManus – Professor and
Extension Plant Pathologist, UW-Madison

- 2:00pm-3:00pm

**Extension Round Table/Panel Discussion –
Topic 2: Effective & Progressive Extension
Plant Pathology in the Face of Budget
Constraints (funding pre-emptive and
reactive research/extension; funding
graduate students; county extension
considerations)**

*Moderated by: Dr. Amanda Gevens, Assistant
Professor Extension Plant Pathologist,
Department of Plant Pathology, UW-Madison,
UWEX*

- Mr. Carl Duley – Buffalo County, UW-
Extension
- Dr. Heidi Johnson – Dane County, UW-
Extension
- Dr. Brian Hudelson – Director of Disease
Diagnostic Clinic, UW-Madison
- Dr. Amanda Gevens – Assistant Professor and
Extension Plant Pathologist, UW-Madison
- Dr. Sally Miller – Professor & Extension Plant
Pathologist, The Ohio State University

THANK YOU!