

NCAC14 Meeting January 2015
State Report
Department of Plant Pathology, The Ohio State University
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1. *Faculty*

- We currently have 12 tenure-track, 1 associated, and 3 USDA/ARS adjunct faculty. The publication output for these faculty was 46 refereed journal papers, 6 book chapters, 6 technical bulletins, and 9 PDMRs. Despite dismal funding rates, the faculty have been successful in garnering extramural support.
- We are actively searching for two new tenure-track faculty members, one in Biochemistry of Plant Pathogenesis and Immunity (perhaps focusing on secondary metabolites), and one in Fruit Crop Pathology. Both positions were authorized at the Assistant Professor level, to replace recently retired professors.
- We have been authorized to begin a search for a new faculty member at the Assistant/Associate Professor level focusing on the ecology of plant pathogens in relation to emerging and re-emerging plant diseases. This will a new position for us, tied to the OSU Discovery Themes Initiative (overview and details at <https://discovery.osu.edu/focus-areas/infectious-diseases.html>).

2. *Staff*

- We employed approximately 43 staff members (including postdoctoral scientists, research scientists, academic program specialists, and program directors) and a number of others in inter-program positions.

3. *Graduate program*

- We have 43 graduate students, comprising 32 MS/PhD and 11 Master in Plant Health Management (Plant Pathology-Entomology joint program).
- The MPHM program was approved in 2013, and the online MPHM program was approved in 2014. We have run into a significant roadblock with the online program relative to state authorizations, which at present must be negotiated state-by-state. Currently, we can only enroll students from 11 states (which are not the ones in our “target” geography, the Midwest).
- MPHM graduated the program's first two students in Spring 2014, and two more students in Autumn 2014. Two of the graduates are working as Extension educators, 1 in industry, and 1 international student who is planning a short-term laboratory experience.
- Our MS/PhD graduate student population is approximately 50% male and 50% female, and also approximately 50% domestic and 50% international. Graduate student support comes from OARDC and individual PIs; three of the MPHM students are funded on graduate associateships in Extension, and the rest are either self-funded or supported by companies.

- Our Department is taking an active role in a pilot group for graduate assessment at OSU. Our assessment tool has been used as a model for other departments.
- Notable student accomplishments in 2014: Anna Testen, Ph.D. student, was named a U.S. Borlaug Fellow in Global Food Security and was recognized in the OSU Vice President's State of Research Address to the university. David Showalter, Ph.D. student, and Michael Falk, Plant Pathology undergraduate intern, received first place in the Entomological Society of America's outreach video contest for their entry, Can We Save Ash Trees from the Emerald Ash Borer? (P. Bonello, advisor), Anna Stasko was awarded the United Soybean Fellowship (A. Dorrance, advisor). Karasi Mills, Ph.D. student, received Best in Show in the APS Art in Phytopathology contest for her watercolor, "Eight Reasons to Quake" (Larry Madden, advisor). Anna Conrad, Ph.D. student, was a selected presenter to the Melhus Graduate Symposium at the APS Annual Meeting. (P. Bonello, advisor)

4. *Undergraduate Program*

- Undergraduate students: 11 Plant Pathology majors, 8 Plant Health Management majors (Plant Pathology-Entomology joint program), and about 20 minors.
- The total 2014 undergraduate enrollment in the College of Food, Agricultural, and Environmental Sciences was 2210, which was a 4.9% increase from 2013.
- We hosted ca. 30 summer interns and student assistants on the Columbus and Wooster campuses.
- "Molds, Mushrooms and Mankind," our natural science general education course taught by Thomas K. Mitchell, built enrollment to 49 students in Spring 2014. John Schoenhals (Plant Pathology BS 2014) was named one of 20 Outstanding Seniors in the College of Food, Agricultural, and Environmental Sciences and a Newcomb Scholar (highest GPA).

5. *Budget*

The budget for FY 2015 remained flat from 2014. The College is currently undergoing a major revision of the budget model, so the future is uncertain at best.

6. *News*

The inhabitants of Kottman Hall (the Columbus home of about half of our Department) will be enjoying the benefits of a habitable building next year, after the completion of a ~\$12 million renovation project.

NCAC-14 2015 Meeting

Department of Plant Pathology

Kansas State University

University:

- NBAF (Plum Island replacement facility) construction. Site preparation is complete and work on the utilities plant is in progress. Remaining funding (\$310/714 million) for the main building is in the Homeland Security budget, which has not yet been funded by Congress. A contract for the construction of the main building is expected to be let in May of this year with construction starting somewhat later in the year. Construction was originally projected to be complete by 2016 and for the facility to be fully operational in 2018, but this date has been delayed by at least two years with 2020 now the current target date for it to be operational.
- The College has hired three new Department Heads – Agricultural Economics (Allen Featherstone), Horticulture Forestry & Recreational Resources (Candice Shoemaker), and Grain Science and Industry (Gordon Smith).
- The university's Australia Initiative began a formal interaction with the Australian American Fulbright Commission this year. There were two Australians coming to K-State for six months (John Pluske in Animal Science and Zed Rengel in Agronomy). Additionally, all faculty level Fulbrighters from Australia have been invited to campus to present a seminar and interact with colleagues here.
- The university is engaged in a major strategic planning process, termed 2025. The process has been top down, with university and College level plans completed. Department plans were due in December 2013. Ours was turned in and has now been accepted as written.
- The Plant Pathology department together with the departments of Entomology and of Grain Science and Industry continues participation in the Australian Plant Biosecurity Collaborative Research Center (CRC). K-State's portion of the project is estimated to be ~ \$6 million through June 2018.

Budget matters:

- The university budget was flat for FY 2015 as approved by the legislature last May, with reductions of 6% through a "salary cap" rescinded. The legislature provided a \$250 one-time bonus for every state employee that was paid in the first paycheck in December 2014. Major changes made to the state health insurance program will result in most employees selecting a high deductible insurance plan.
- FY '15 budget discussions have begun in the state legislature (again), as the income estimates overestimated real income so far by ~\$270 million. The Governor's proposal to fix

this problem does not require a mid-year reduction by the universities. Other than K-12 and higher education, state agencies received a 4% budget cut that must be satisfied before the end of the current fiscal year in June. The legislature needs to endorse these actions, but has not yet done so. Work on the FY '16 and FY '17 budgets has begun. The state current faces A ~\$740M deficit for the FY '16 year (11-12% of total budget), due to a continuing reduction in income taxes approved during the 2012 legislative session. The governor has recommended a “flat” state budget for higher education. The state currently is involved in a law suit that could result in increased funding for K-12 education of ~\$550 million. If the suit is decided in favor of the school districts then the money will need to come from somewhere and the amount of money to be found will exceed \$1 billion.

- There were 2% average merit raises for faculty and staff in both January and July of 2014. A third average raise of 2% is scheduled for July. All three were/will be internally funded.

Department

- No faculty were promoted or tenured (and none applied) this past academic year.
- Two Assistant Professors, Richard Todd and Chris Toomajian, applied for promotion to Associate Professor with tenure this year. The decision-making process is currently in the hands of the Provost.
- Two full Professors, Frank White and Karen Garrett, have been hired by the Plant Pathology Department of the University of Florida (Gainesville), and retired or resigned from the department in January 2015. It is not clear whether we will have these positions returned to us, or whether we will be allowed to recruit for the MPMI position that was promised to us for the coming fiscal year.
- With the departure of Drs. White and Garrett, the department has two Instructors, four Assistant Professors, four Associate Professors, five Professors, and three University Distinguished Professors.
- Bikram Gill continues in the second year of his five-year phased retirement plan. An endowed chair named for Dr. Gill has been established and will be available to the next Director of the WGRC. A search for a replacement for Dr. Gill is expected to occur during the 2017-2018 academic year.
- The Department received ~\$8.6 million in outside grants during the past year, which was 3rd highest in the university.
- The *Fusarium* Laboratory Workshop was held as scheduled with 34 participants in June 2014 at Seoul National University in Seoul, Korea. The next workshops are scheduled for June 2015 in Manhattan and June 2016 in Pretoria, South Africa.

University of Arkansas, Department of Plant Pathology

Report to the NCAC-14, February 3 -4, 2015 – Atlanta, GA.

The Department of Plant Pathology at the University of Arkansas was founded in 1909 and traditionally receives strong support from the state's large and diverse agricultural base. The Department maintains well balanced research programs ranging from basic molecular studies of host pathogen interactions to more applied commodity-orientation. The Department has nine (9) campus faculty with predominant research appointments and minor teaching responsibilities. Two faculty members retired in 2014. Two extension assistant professors were hired in 2011 to address critical extension needs in rice and row crops. One additional extension faculty was hired in 2013 who focuses on soybean diseases. With these faculty additions, the Department has four (4) extension faculty located at the Division of Agriculture state office in Little Rock and at Research and Extension Centers throughout the state. The Department is recruiting to fill a phytobacteriologist position (70% research, 30% teaching). At the start of 2015, the Department had a total of twenty four (24) graduate students, 14 M.S. and 10 Ph.D. of which three (3) students were accepted on assistantship for the spring 2015 semester. These include four M.S. and one Ph.D. candidates in the interdisciplinary Cellular/Molecular Biology Program (CEMB). We completed the 2014 calendar year with twenty seven (27) graduate students. Approximately one third of the graduate students are funded on state assistantships with the remaining two thirds funded on grants. State research assistantship stipends are \$16,000 for M.S. and \$18,000 for Ph.D. students although most are grant supplemented.

The Plant Pathology Department offers an M.S. degree in plant pathology and a Ph.D. degree in Plant Sciences (joint with Horticulture) with an opportunity for undergraduates to minor in plant pathology. In 2014, the department hosted a 10-Year External Review of our academic, research and extension programs. As a result, the department held a Faculty Retreat to implement a productivity enhancement plan to maximize excellence in teaching, research, extension and service to the College of Agricultural Food and Life Sciences and Division of Agriculture. We strived to maintain and improve upon the synergy and balance between teaching, research and extension relative to faculty interests, stakeholder needs, and funding opportunities.

The Department remained sound fiscally, provided equipment upgrades and operationally maintained facilities. In particular, major renovations were made to the Plant Health Clinic in Fayetteville. The faculty and staff received a merit-based pay increase in fiscal year 2014 but base funding from the state remained "flat" for the fifth consecutive year.

Department of Plant Pathology
University of Wisconsin-Madison
NCAC-14 State Report
February 2015

Faculty: We have currently have 15 faculty: 8 women and 7 men. In 2014 we brought on two new assistant professors: Paul Koch (turfgrass pathology, 70% extension/20% teaching/10% research) and Erin Silva (organic and sustainable systems, 75% extension/25%research). In July 2015, Richard Lankau, currently an assistant professor at University of Georgia Department of Plant Biology, will join us as an assistant professor in the area of ecology/epidemiology of plant-associated microbes.

In addition to these faculty with tenure homes in Plant Pathology, there are nine faculty from other departments who are “Plant Pathology Graduate Trainers,” meaning that they can serve as major professor to students in the Plant Pathology graduate program.

Students: In the Plant Pathology graduate program we have 23 Ph.D. and 7 M.S. students. There are another 13 Ph.D. students getting their degrees in other programs (e.g., Microbiology, Cell and Molecular Biology, Plant Breeding and Plant Genetics) being advised by Plant Pathology faculty and working in their labs. We have 31 undergraduates majoring in Plant Pathology and many more undergraduates doing research with our faculty.

Curriculum: Enrollment in our introductory plant pathology course (PP300) has more than doubled in recent years, to about 80 enrolled in Fall 2014. Several factors have contributed to this. The lead instructor, Doug Rouse, also teaches in the campus introductory biology courses, and he attracts students to PP300. We have also opened up two evening lab sections, and now more students can work PP300 into their schedules. Our non-majors course, PP123: Plants, Parasites, and People, attracts 100-120 students in each of Fall and Spring semesters, and last summer was offered for the first time in blended format.

Budgets: Governor Scott Walker is proposing a 15% budget cut to the UW-System plus a tuition freeze until 2017, in exchange for allowing the System more independence from the state and flexibility in managing its own budget and operations. While the Republican majority legislature has lined up behind Walker on most issues, some of them are balking at cuts this severe. The Chancellor of UW-Madison is proposing a “responsibility-based” budget model, whereby colleges/schools who teach the most students and have the most majors declared will be rewarded proportionally. This would be implemented gradually and at least in the near future, less than 50% of state dollars would be distributed according to the model. Nevertheless, it is a concern for those units who are currently more engaged in research and extension/outreach, and less so in classroom teaching.

University of Missouri
Plant Stress Biology Graduate Program
Division of Plant Sciences
NCAC-14 Meeting
Atlanta, GA
February 3 – February 4, 2015

General:

Total student enrollment at MU continued to increase to record levels at 35,441 in September 2014. The total includes record enrollment of 6,565 graduate students. The College of Agriculture Food and Natural Resources (CAFNR) has approximately 2,424 enrolled students. Undergraduate enrollment in Division of Plant Sciences programs was 115 students for fall of 2014.

February 2015, Garnett Stokes assumed the title of Provost, University of Missouri. Dr. Stokes was previously the Executive Vice-President for Academic Affairs at Florida State University.

The University of Missouri strategic plan continues to target improved performance on AAU metrics. Indicators being used to assess performance include competitive federal funding, NAS and other memberships, NRC faculty quality rankings, faculty fellowships and awards, and journal citations.

Budget and Faculty Salaries:

The University strategic plan continues to call for five years of 2% annual budget rescissions of hard funding from each administrative unit. Recovered dollars are being used to establish a pool from which new positions can be created with the goal of enhancing MU's performance on AAU metrics. The 2% annual rescission is roughly equivalent to 1 starting faculty position salary for the Division of Plant Sciences. The rescission plus reallocations required for mandated raises in the future represent the equivalent loss of 10 faculty positions over the next five years. The university proposes to utilize savings to fund up to 20 "targeted" high profile research faculty positions with significant salaries, facilities improvements and needed startups.

The university instituted a voluntary separation program (VSP) for "tenure buyout" that pays qualifying faculty members (those 62 years or older) 1.5 times their annual salary up to \$200,000. Acceptance of the buyout requires retirement by August 31, 2015. There is a mechanism in place to immediately hire back faculty for purposes of teaching, etc.

Division of Plant Sciences Faculty:

The division currently has 49 faculty members involved in research, teaching, and extension/outreach. Within the division, the Plant Stress Biology graduate program includes 22 faculty members. Eleven members of this group work with plant pathogens or plant-associated microbes. The remaining members of this program are aligned with entomology and abiotic stress.

New faculty and positions:

Dr. Arianna Bozzolo was hired as Viticulture Assistant Research Professor in September 2014. Dr. Dean Volenberg was hired as Viticulture Assistant Extension Professor in February 2015.

Retirements:

Dr. Grover Shannon, soybean breeder, has announced his retirement for 2015. Dr. Wayne Bailey, field crop and forage entomology, has also announced that he will retire this year.

Graduate Students: The division graduate degree program entitled, Plant, Insect and Microbial Sciences, currently has 97 students. Plant Stress Biology is one of five areas available for study within the graduate degree program. Plant Stress Biology has 25 students (22 PhD and 3 MS). Of those students, 11 are pursuing research related to plant pathology. Divisional stipends are \$18,500 and \$21,000 for MS and PhD students, respectively. Stipends are generally leveraged with matching funds from a student's advisor. Students on stipend receive a tuition waiver.

Faculty Salaries: Average raises were 2% and covered by internal reallocations within the division.

NCAC14 Meeting January 2015
State Report Iowa
Department of Plant Pathology & Microbiology; Iowa State University
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1. *Faculty*

The department currently employs 20 state-funded faculty members (12 professors, 3 associate professors, 3 assistant professors, and two lecturers). Two ARS scientists are embedded in the department. The department search for a faculty position in systems biology of plant-microbe interactions identified 2 highly qualified applicants who recently have joined our department at the assistant professor level. Currently, we are preparing to advertise one faculty position in Microbiology to replace a faculty member retiring in 2016. Our department has entered a phase where a number of faculty retirements become likely or already have been committed to and critical strategic planning for future faculty needs has begun.

2. *Staff*

In 2014, the department employed 51 staff members (11 postdoctoral scientists, 38 Professional and Scientific employees and two USDA affiliated staff). The Plant Pathology and Microbiology department also hosted 13 visiting scholars during the course of 2014.

3. *Graduate Students*

The Plant Pathology and Microbiology Department is home to approximately 50 students each year. By the end of 2014, fourteen of our grad students had successfully completed their degrees: 9 MS and 5 PhD. In 2014, the student number in PLPM was maintained at about forty nine. The latest number reflects: 25 Plant Pathology majors, and twenty-four Interdepartmental majors. The Interdepartmental majors included: 6 in Genetics, 1 in Plant Physiology, 4 in Bioinformatics and Computational Biology, 4 in Microbiology, 1 in Plant Biology, and 8 in Seed Technology and Business. Of those majoring in Plant Pathology, ten are pursuing a MS degree and fifteen are in a PhD program. The Interdepartmental majors consist of 11 PhD and 13 MS candidates. Four new students were matriculated into the Plant Pathology Graduate Program in 2014.

Graduate students in the PLPM Department receive both research assistantships (RA) and 100% tuition scholarships, with the exception of a very few who were either self-supported or on some form of scholarships (foreign and domestic).

The department has completed a reorganization of its graduate program which entailed a review of all operations associated with the graduate programs and a review of the curriculum as well as its distance education offerings. In addition, the Plant Pathology

and Microbiology department now also provides the administrative staffing for the Microbiology and Plant Biology graduate student programs.

4. *Undergraduate Program*

The undergraduate Microbiology program is co-administered by the Department of Plant Pathology and Microbiology and the Department of Animal Science, and our departmental faculty is heavily involved in undergraduate microbiology teaching. The microbiology undergraduate program currently has approximately 118 students. We recently completed a major renovation of teaching lab space and are set to grow the program using these new resources. We also recently hired a lecturer with teaching responsibility for Microbiology laboratories.

5. *Budget*

The departmental support from the college has remained steady in the FY14 and FY15 budget years and modest salary increases were provided for the department's faculty and staff members.

6. *Latest Developments*

- a. The Advanced Teaching and Research Building project is in the planning stages with an expected completion date in early 2018. The Plant Pathology & Microbiology department expects to move into our new building in the spring of 2018.
- b. We are currently exploring the construction of a dedicated plant pathology research farm.
- c. Performance-based funding of the three state Regents Universities is being discussed, which could mean increased funding to ISU.

Prepared by Sandy Pierson

PLPM discovers new knowledge in plant pathology, plant-microbe interactions, plant health management and bioenvironmental issues critical to serving the needs of Texans. Our work is integral to the Texas A&M College of Agriculture and Life Sciences' Grand Challenges.

Research Accomplishments

- 17.86 FTE (14 on campus, 4 off campus). Lost 2 faculty.
- 21 post-doctoral, 35 grad students, 25 visiting scientists, & 34 undergrad researchers.
- 39 refereed publications and 52 invited talks.
- Academic Analytics Productivity Radar (see Figure).

Examples of Successful Impacts:

Libo Shan: Plant immunity, bacterial type III effectors on IAA production. Evolutionary conservation of innate immunity in cotton has broad impact. Charles Albert Shull Award from ASPB for contributions to the field of plant-microbe interactions. Keynote address this year.

Mike Kolomiets: Unique collection of near-isogenic corn mutant lines disrupted in ≥ 13 -member lipoxygenase (LOX) gene family. Lipid signals important in plant development, growth in Zn/Fe-deficient soils, drought tolerance, insect and pathogen resistance, aflatoxin seed contamination, and beneficial effects of the rhizosphere microbiome.

Carlos Gonzalez: Bacteriophage treatment for Pierce's Disease of grapes licensed by Otsuka Pharmaceutical. Developed methodology to address *Xyella* diseases in coffee, olives and citrus.

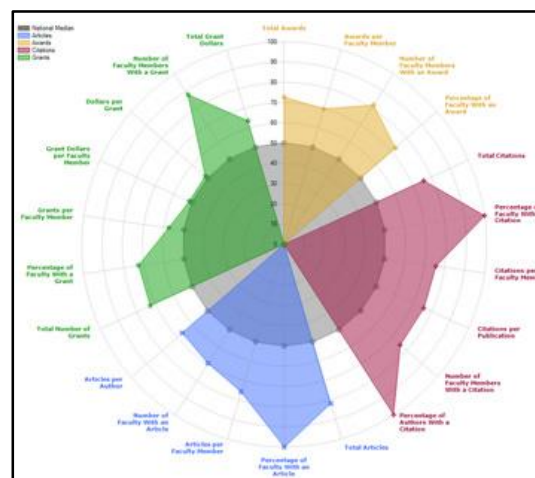
Joshua Yuan: Systems/Synthetic biology for bioenergy and plant development. Enhanced terpene production in tobacco. Photosynthesis as a metabolite source or sink. Engineered tobacco to produce squalene at 2 to 3% plant dry wt (licensed). Microbial conversion of aromatic compounds or lignin for lipid production. Enhancing lignocellulosic biomass degradation through electron transfer reactions.

Won-Bo Shim: Co-PI NIFA CAP grant on *Fusarium* fumonesin on corn. Developed microfluidic method for fungal transformation. Collaborating with Korean Inst Ocean Sci & Tech (KIOST) to develop fungi able to saccharify kelp for bioenergy.

Evidence of Impact: Awards (5th) & Citations (7th) **Recognition:** M. Dickman (ASM Fellow); L. Shan (Charles Albert Schull); B. Shaw (MSA Fellow); S. Pierson Vice-chair of AULF for American Phytopathological Society, Secretary NCAC-14.

Development: Established Donald & Melba Ross Graduate Student Scholarship; BESC Endowment continuing to grow, one focus of a BESC Professional Board sub-committee.

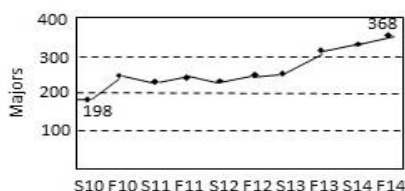
Grand Challenges: S. Pierson, lead PI of "Root/Rhizosphere Interface", co-author of 84th Texas legislative Exceptional Item on "Insect-Vectored Pathogens".



Teaching Accomplishments

REDESIGN OF CURRICULUM ASSESSMENT: New committee (Sep '14) meets monthly to discuss curriculum and assessment. Topics: new Instructional Assistant Professor position, review of assessment to date and revamp in approach, graduate module assessment after first run. All teaching faculty encouraged to attend. Creating an online community in eCampus to document discussions.

UNDERGRADUATE PROGRAMS: Bioenvironmental Sciences (BESC), Environmental Studies (ENST), University Studies—Environmental Business (USAL).



	BESC	ENST	USAL	TOTAL NUMBER
ENROLLMENT 2014	287	58	23	368
African American	8%	2%	9%	27
Asian	9%	3%	4%	30
Hispanic	26%	14%	13%	86
First Generation	28%	26%	22%	101

- **High Impact Learning:** 31 Research; 59 Internships; 20 Study Abroad
- **2nd Year Study Abroad:** FAFU China Student Exchange Program; 7 and 10 visiting non-degree seeking students enrolled F & Sp terms, respectively; Sp lab rotations in PLPM faculty.
- **Student Organization:** National Association of Environmental Professionals (NAEP)
 - 30% growth in membership (59 to 83); 16 Events (6 service; 4 outreach; 2 social; 4 networking); 2 grants - \$2500 Career fair (COALS Council); \$500 TCEQ Fair (COADC)
 - **1st Annual NAEP Environmental Professional Internship & Career (EPIC) EXPO**
 - Day-long event with 5 Texas A&M Entity and 12 Industry Partner Exhibitors
 - 237 students attended, 30 majors, 7 colleges, all levels
 - **Texas Center for Environmental Quality (TCEQ) Trade Fair** – 12 students with Dr. Wilkinson, May 7, 2014, Austin, TX
- **BESC Professional Board**
 - **Fall and Spring Meetings;** Development, Curriculum and Mentoring Programs
 - **>\$10,000 contributions,** matching student grant and direct to excellence fund
 - **3rd Annual BESC Tailgate @** fall meeting, outreach to current and former students, industry partners, faculty and administrators. Sponsored by board member (Anderson).
 - **4 Board new members inducted:** Craig Halloway (URS), Laura Fiffick (BNSF), Candice Boeke (Cyera Strategies), David Edge (RPS)
 - **2nd Annual Board-NAEP-CAREER CTR Student Mentoring Panel**– Students participate in mock interviews with industry partners. 6 Panelists directly engaged audience of ~60 students.
- **BESC Poster Symposium & Awards Ceremony September 12, 2014:**
 - **31 student posters;** awards for research, study abroad, and industrial posters.
 - **4 Senior Merit:** Jacob Alpuerto, Patrick Kelly, Miranda Reinhard, Corinne Rhodes
 - **Texas Association of Environmental Professionals Award:** Drew Pendleton
 - **Keynote Address:** Mr. Hector Rivero (President, Texas Chemical Council)

GRADUATE PROGRAM: MS and PhD in Plant Pathology & Microbiology

- **Enrollment:** 37 students; Domestic: 24 (64.9%); International: 13 (35.1%).
- **Graduated:** 2 PhD (now post-docs) and 1 MS (teaching in Houston)
- **Enrolled 6 new students fall 2014;** 4 COALS Excell. and 2 TAMU Diversity Fellowships.
- **Publications:** At least 12 students were authors on peer-reviewed papers.

- **Graduate student awards:** At least 7 graduate students received awards, including an *NSF Pre-doctoral Fellowship* (Zach Schultzhaus), 3 travel awards, 2 poster presentation awards, and 1 oral presentation award

Extension Accomplishments

There were 8 Extension Specialists and 1 Program Specialist in PLPM during 2014. A retirement at the Uvalde Center resulted in the loss of one FTE during the year. Due to several split appointments with research and teaching (including TAMU, Texas Tech University, and TAMUK), the number of Extension FTEs was 6.95. The current statewide distribution includes College Station (n = 5), Amarillo (1), Lubbock (1), Weslaco (1) and TAMU Kingsville (1).

Educational Accomplishments:

- Specialists participated in 168 Extension educational activities, including workshops, growers meetings, field demonstrations, and other venues,
- A total of 9,696 face-to-face contacts and 27,877 contact hours resulted from the participation of PLPM Specialists in the meetings,
- The group responded to 14,679 email and phone requests for help with plant diseases,
- The group published 2 conference/short course proceedings, 1 extension proceedings, 32 extension manuals, 25 popular press articles, 18 news releases, and 26 peer-reviewed journal articles and abstracts.

Grants, Contracts and Gifts:

- 18 gifts from 13 corporations to establish disease control research and demonstration projects.
- 22 competitive grants or contracts to conduct plant disease management-related research, from a variety of entities including USDA, Cotton Inc., Valent, Monsanto, and others.
- Received 2 assistantships and one-time funding for infrastructure/ equipment needs from the Director's Office.

Diagnostic Services:

- The Texas Plant Disease Diagnostic Laboratory in College Station, TX,
 - Over 2,200 samples were processed for growers, homeowners, nurseries, Extension Specialists/volunteers, and Special Projects,
- The Texas High Plains Diagnostic Laboratory in Amarillo, TX,
 - 3,984 samples processed (includes wheat virus and Zebra Chip surveys).

Selected Major Accomplishments and Plant Disease Issues Addressed:

- A PLPM Specialist first proved that citrus nursery stock in the Rio Grande Valley was infected with the Citrus greening pathogen, elucidating a source of probable spread,
- Developed an on-line module for plant pathology training of Master Gardeners accessible through the eXtension website,
- Working with TDA, the TPDDL has assisted in delineating the range of Texas Phoenix Palm Decline in South Texas for regulating movement of nursery stock,
- Goss's wilt of corn, papaya ringspot virus, and the sugarcane aphid in sorghum are just a few of the new, expanding disease threats being monitored in their respective hosts,
- Major projects are underway to better understand and control aflatoxins on corn, root knot nematodes on cotton, cotton root rot on winegrapes, citrus greening, zebra chip of potatoes, take-all patch and large patch of turfgrass, and basil downy mildew.

Important Calendar Year 2014 Initiative:

- A search has been initiated to replace the Specialist Position at the Uvalde Research and Extension Center.

2014 REPORT FOR THE DEPARTMENT OF PLANT PATHOLOGY & CROP PHYSIOLOGY

Graduate Student Enrollment

Enrollment class was outstanding, 15 new students started and hailed from the states of Arkansas, Georgia and Louisiana as well as the countries of China, Brazil, Honduras, Kenya, Nepal, Nigeria and Serbia. The Department now has over 30 graduate students.

Graduate Student Recruitment

Brazilian Science without Borders – attracted 3 Ph.D. students (~\$200,000)

William Richardson, V. P. of Agriculture & Dean CoA, initiated a higher paying assistantship (\$26,000 plus tuition/fee waiver) to try and attract higher caliber American students.

Recent M.S. and Ph.D. graduations

In 2014, our department graduated 7 M.S. and 2 Ph.D. students. Two Ph.D. students landed academic positions at Mississippi State University and University of Minnesota.

New Departmental Position-Mycology

Vinson Doyle-Bioinformatics, systematics and population genetics.

Student and Faculty Awards and Recognitions

APS Fellow – Chris Clark

LSU AgCenter

Doyle Chambers – Ray Schneider

Floyd Edmiston – Raj Singh

Gamma Sigma Delta

Distinguished Achievement in Agriculture – Charles Overstreet

Outstanding Ph.D. Student -

Rebecca Melanson

Departmental Funding

Research Awards (Federal, Commodity, Misc. Unrestricted): > \$1,200,000

Other Departmental Activities

External and Internal review of M.S. and Ph.D. programs from October 2013-February 2014 was conducted since the last review was performed in 2005. Both degree programs were found to be satisfactory.

Plant Pathology Teaching Laboratory – \$200,000 allocated in next state budget for re-modeling.

New Departmental Social Activity

Lab Sponsored Departmental Gatherings

Georgia Report
John L. Sherwood
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University:

- Provost moving towards academic year appointment for faculty with research-teaching appointments. Faculty with primarily extension appointment on fiscal year appointment.
- 4% salary adjustment pool for FY4-15. First general adjustment salary pool in 5 years.

College:

- Budget appears to be stable. Some increase in college budget to support additional county extension agents.

Department:

- 37 graduate students in spring 2015
- Filled two positions: a) phytobacteriology (phytobiome) to start Aug 2015 (retirement of Dr. Tim Denny); b) vegetable extension to start April 2015 (departure of Dr. David Langston)

SUMMARY OF TOTAL LOSSES DUE TO DISEASE DAMAGE AND COST OF CONTROL IN GEORGIA – 2013

Crop or Commodity	Estimated Crop Value (\$ Millions)	% Reduction in Crop Value¹	Value of Damage (\$ Millions)	Cost of Control (\$ Millions)	Total Disease Loss (Damage & Control) (\$ Millions)	Total % of Loss^{1,2}
Apple	11.16	4.1	0.4763	0.3075	0.783	7.0
Blackberry	10.84	7.8	0.918	3.886	4.805	44.3
Blueberry	312.76	4.8	15.804	11.182	28.663	9.1
Bunch Grape	4.23	12.7	0.6163	0.306	0.922	21.8
Corn	510.3	19.8	101.0	5.0	106.0	20.7
Cotton	1210.0	19.6	237.1	22.7	258.6	21.3
Muscadine Grape	4.23	3.5	0.153	0.151	0.304	7.1
Ornamentals	462.95	9.1	42.12	25.7	67.82	14.6
Peach	55.42	1.3	0.7471	3.890	4.637	8.35
Peanut	507.4	8.35	42.4	35.7	78.0	15.3
Pecan	315.57	16.0	50.4	31.4	81.8	25.9
Soybean	125.4	4.4	5.4	3.85	9.25	7.3
Strawberry	9.07	2.3	0.2145	0.8955	1.110	12.2
Turfgrass	1860.0	4.2	78.12	48.36	126.48	6.8
Vegetable	998.0	2.4	22.76	27.2	49.0	4.9
Wheat	154.58	1.6	2.15	1.53	3.68	2.3
TOTALS	6551.91	---	600.38	222.06	821.85	12.55

¹ This column is not additive.

² Total % loss for each crop and the grand total is figured on the basis of: $\frac{\text{Value of Damage} + \text{Cost Control}}{\text{Crop Value}}$

University of Missouri
Plant Stress Biology Graduate Program
Division of Plant Sciences
NCAC-14 Meeting
Atlanta, GA
February 3 – February 4, 2015

General:

Total student enrollment at MU continued to increase to record levels at 35,441 in September 2014. The total includes record enrollment of 6,565 graduate students. The College of Agriculture Food and Natural Resources (CAFNR) has approximately 2,424 enrolled students. Undergraduate enrollment in Division of Plant Sciences programs was 115 students for fall of 2014.

February 2015, Garnett Stokes assumed the title of Provost, University of Missouri. Dr. Stokes was previously the Executive Vice-President for Academic Affairs at Florida State University.

The University of Missouri strategic plan continues to target improved performance on AAU metrics. Indicators being used to assess performance include competitive federal funding, NAS and other memberships, NRC faculty quality rankings, faculty fellowships and awards, and journal citations.

Budget and Faculty Salaries:

The University strategic plan continues to call for five years of 2% annual budget rescissions of hard funding from each administrative unit. Recovered dollars are being used to establish a pool from which new positions can be created with the goal of enhancing MU's performance on AAU metrics. The 2% annual rescission is roughly equivalent to 1 starting faculty position salary for the Division of Plant Sciences. The rescission plus reallocations required for mandated raises in the future represent the equivalent loss of 10 faculty positions over the next five years. The university proposes to utilize savings to fund up to 20 "targeted" high profile research faculty positions with significant salaries, facilities improvements and needed startups.

The university instituted a voluntary separation program (VSP) for "tenure buyout" that pays qualifying faculty members (those 62 years or older) 1.5 times their annual salary up to \$200,000. Acceptance of the buyout requires retirement by August 31, 2015. There is a mechanism in place to immediately hire back faculty for purposes of teaching, etc.

Division of Plant Sciences Faculty:

The division currently has 49 faculty members involved in research, teaching, and extension/outreach. Within the division, the Plant Stress Biology graduate program includes 22 faculty members. Eleven members of this group work with plant pathogens or plant-associated microbes. The remaining members of this program are aligned with entomology and abiotic stress.

New faculty and positions:

Dr. Arianna Bozzolo was hired as Viticulture Assistant Research Professor in September 2014.

Dr. Dean Volenberg was hired as Viticulture Assistant Extension Professor in February 2015.

Retirements:

Dr. Grover Shannon, soybean breeder, has announced his retirement for 2015. Dr. Wayne Bailey, field crop and forage entomology, has also announced that he will retire this year.

Graduate Students: The division graduate degree program entitled, Plant, Insect and Microbial Sciences, currently has 97 students. Plant Stress Biology is one of five areas available for study within the graduate degree program. Plant Stress Biology has 25 students (22 PhD and 3 MS). Of those students, 11 are pursuing research related to plant pathology. Divisional stipends are \$18,500 and \$21,000 for MS and PhD students, respectively. Stipends are generally leveraged with matching funds from a student's advisor. Students on stipend receive a tuition waiver.

Faculty Salaries: Average raises were 2% and covered by internal reallocations within the division.

UNIVERSITY OF MINNESOTA
DEPARTMENT OF PLANT PATHOLOGY
ANNUAL REPORT – 2014

Prepared by Jim Bradeen, Department Head
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Department Overview

The Department of Plant Pathology at the University of Minnesota emphasizes teaching, research, Extension, and outreach in the areas of plant health and plant-microbe interactions. The Department offers MS and PhD degrees in plant pathology with or without an emphasis on molecular biology and, beginning in the fall of 2014, an undergraduate program of study emphasizing Sustainable Plant Health within the Plant Science major. Research priorities include (1) Disease biology and management; (2) Genetic disease resistance; and (3) Pathogenomics and microbiology. Extension activities and appointments align closely with the needs of farmers and other stakeholders at a state or regional level and focus on horticultural crops (e.g., vegetable production, nursery stock, turf, etc.), sugarbeets, row crops such as soy and maize, small grains, and canola. Some Extension and research faculty are physically located at UMN Research and Outreach Centers located throughout the state. Departmental outreach to the broader public entails several facets and it is a priority to unite and strengthen departmental outreach activities moving forward. The Department maintains a Plant Disease Clinic, offering for-fee plant disease diagnoses, and a Mycotoxicology Laboratory, which mainly supports UMN and affiliated research efforts to reduce mycotoxins in small grains. The Department is one of 14 units in the College of Food, Agricultural and Natural Resource Sciences. Strategic partnerships with other units in our College include joint appointments of faculty, shared facilities, interdisciplinary teaching and degree programs, and multidisciplinary research emphases. It is a priority for the Department to maintain disciplinary identity as a stand-alone department while positioning itself as a leader in interdisciplinary activities.

PERSONNEL

Faculty

The Department of Plant Pathology includes 15 state-funded tenured or tenure-track faculty, 2 non-tenure track faculty, and 10 adjunct faculty (8 USDA-ARS scientists, 1 Minnesota Department of Agriculture scientist, and 1 tenured faculty member from another department). Distribution of faculty across appointment rank categories is presented in Table 1. One faculty member is currently going through promotion from Associate to Full Professor.

Table 1. UMN Plant Pathology faculty distribution across ranks.

	Professor Rank			Total
	Assistant	Associate	Full	
State funded TT	4	2	9	15
Non-TT	2			2
USDA-ARS Adjunct	1	2	5	8
MDA Adjunct	1			1
Other Adjunct		1		1
	8	5	14	27

In 2014, the Department added three faculty:

(1) Dr. Ashok Chanda joined the Department as a tenure-track faculty member with a research and Extension appointment emphasizing sugarbeet pathology. Ashok replaces Carol Windels, who retired from the Department several years ago. This position is made possible by generous funding from three sugarbeet cooperatives in our state. Ashok is stationed at the UMN Northwest Research and Outreach Center in Crookston, MN.

(2) Dr. Brett Arenz joined the Department as a (non-tenure-track) Teaching Assistant Professor. This is a new position for the Department and this is the first time that the Department has hired a non-tenure-track Teaching faculty (although we currently have one non-tenure-track Research faculty member as well). Brett's primary responsibility is to develop and teach courses that align with the teaching mission of the Department, including courses that serve graduate majors and courses that attract undergraduate students to the field of Plant Pathology. Brett co-developed and co-taught a new undergraduate course called "Insects, Microbes, and Plants", which is required for undergraduate majors in Plant Science and Food Systems. Brett continues to teach an undergraduate course called "Plague, Famine, and Beer" and will develop on-line delivery of this class for Spring Semester, 2016. Brett also serves as administrative director of the

Department's Plant Disease Clinic and is explicitly charged with incorporating the facility into the Department's teaching portfolio.

(3) Dr. Loretta Ortiz-Ribbing joined the Department as an Adjunct Assistant Professor. Loretta is a scientist with Minnesota Department of Agriculture and works in the area of pesticide registration. With a research and teaching background in plant pathology, Loretta is interested in establishing research collaborations with other faculty in the Department, especially in the area of biocontrol. Loretta is the first MDA scientist to be appointed to the faculty in our Department.

In 2014, the Department lost one faculty member:

Assistant Professor Scott Bates, a fungal biologist, left his position, citing personal reasons. Scott was the first joint appointment between the Department and the college's Bell Museum of Natural History and he provided good linkage between the fields of systematics and curation (interests of the Bell Museum) and plant pathology. This position is targeted for replacement.

Students

Our graduate student population remains at approximately 25. While we have capacity to train significantly more students, funding (currently at about \$45,000 per year) remains a challenge for many faculty. Our current graduate students are supported by a combination of funding from Departmental endowments (3 students), University fellowships (2 students), corporate partnerships (3 students), and grant or other faculty funding. Strengthening Department-industry relationships appears to offer the potential for increased support of graduate students and novel training opportunities to prepare graduate students for careers in the plant science industries.

MISSION-RELATED ACTIVITIES

Research Initiatives

During 2014 the Department repositioned the existing Stakman-Borlaug Cereal Rust Center as the Stakman-Borlaug Center (SBC) for Sustainable Plant Health. The vision for this center is to foster interdisciplinary research and outreach among diverse scientists and social scientists to solve plant health problems that impact food security and ecosystem health. Like Normal Borlaug, we believe that “food is the moral right of all who are born into this world”. We also believe that food production should not and cannot come at the expense of the environment. Within the mission of the SBC, we define “plant health” in broad, inclusive terms. Both biotic and abiotic stresses impact plant health. We define “sustainable” as indicative of best production and stress management practices based on contemporary scientific understanding. The SBC is led by co-Directors (the Head of Plant Pathology and one SBC member elected at large) and a staff Managing Director. In recent months we have expanded SBC membership to include more than 70 scientists from 11 different units within our college. In coming months we will partner with researchers and institutes outside of UMN, forming a global network of responders to plant health threats. The establishment of the SBC represents a significant, multidisciplinary shift within the plant science community at the University of Minnesota and has brought considerable visibility to our respective professions from upper administration, potential donors, and research funding agencies.

The Department is actively exploring opportunities to expand and support research in the areas of crop wild relatives as sources of genetic disease resistance and “phytobiome” research with an emphasis on manipulation of rhizosphere communities to enhance crop plant health and productivity.

Teaching Initiatives

Expanding the Department’s teaching footprint is critical to increasing resource allocations to the Department. The faculty have dedicated themselves to expanding undergraduate teaching while maintaining excellence in our graduate courses. Our plan is multi-pronged. First, in partnership with the Departments of Entomology and Soil, Water & Climate, we established a Sustainable Plant Health program of study within the College’s newly formed Plant Science major. Second, the Department appointed a (non-tenure-track) Teaching Assistant Professor in order to expand teaching capacity. Brett Arenz assumed this position in January, 2014 and has focused on development of large enrollment classes that serve the Plant Science major and/or target the broader University undergraduate student population. Brett is actively pursuing approval of his courses for liberal education designation (which is likely to expand the undergraduate base since each University of Minnesota student must fulfill a set number of approved courses) and is developing on-line delivery of his courses. Other faculty are developing novel course ideas (e.g., antibiotics), targeting freshman seminar or honors seminar courses as incubators to ‘try out’ new classes. Especially successful classes may be targeted for expansion in future years. We are also exploring opportunities to uniformly and aggressively market our classes to students

and their advisers using traditional and nontraditional means. Finally, nine of our senior faculty have committed to serving as undergraduate advisors in the Plant Science and Food Systems majors, giving opportunity to raise awareness of plant pathology courses among students.

Extension & Outreach Activities

We recognize that outreach to the broader community is critical to foster a sense of connection with University activities, to build an advocacy base to support our efforts, and to encourage philanthropic support of University/Departmental initiatives. The establishment of the Borlaug Commons student study/group project/public engagement space, the launch of the Stakman-Borlaug Center (SBC) for Sustainable Plant Health, and the prioritization of dedicated Departmental staff to foster communications and outreach activities present new opportunities in the area of outreach. At this point, several ideas are being considered including on-line publication of a 'food security' journal, development of a series of documentary style videos on plant pathology research, and establishment of a public-engagement lecture series. Expansion and refinement of outreach activities will be a priority throughout 2015.

RESOURCES

Facilities

The Department, in cooperation with the University's Library system, maintains a dedicated Plant Pathology Library. This facility occupies three rooms encompassing approximately 2,800 square feet directly adjacent to classrooms and teaching labs in Borlaug Hall. While the space is well used as a student-study space, the Plant Pathology Library collection is underutilized, with less than 10% of the physical collection *ever* circulating. In the meantime, more and more of the collection is available electronically and the vast majority of students and scientists are accessing materials in this manner. More than a year of discussions with library experts have led the Plant Pathology faculty to conclude that our Library space and associated endowments are best utilized in a manner consistent with current trends in library spaces. Specifically, it is noted that libraries are increasingly becoming public engagements spaces and creators of content. Consistent with this trend, the Plant Pathology Library has developed a robust on-line portal, the physical collection is currently being relocated to other UMN Library facilities, and at the end of spring semester, the physical Plant Pathology Library space will close. During the summer, the space will be transformed into a modern student study/group project/public engagement space called Borlaug Commons. This project is funded by student fees and a very generous gift from a commercial donor in support of electronic engagement. The new space will be a showcase of modern learning and will be a hub of student activity on our campus. We have made a strong case that this vision aligns well with modern trends and thus demonstrates good stewardship of donor funds. We will develop a short video documenting the transition of the Plant Pathology Library to the Borlaug Commons. I anticipate that this video will be an important tool for the engagement of existing and potential donors.

Communications and Alumni & Donor Relations

Historically, communications and alumni and donor relations have been managed in a piecemeal fashion in our Department. The Department has an Alumni and External Relations Committee, the activities of which mostly focus on producing our annual alumni periodical, the *Aurora Sporealis*. Communications activities and resources include a Departmental website, an occasionally utilized Facebook page, and a regularly maintained Twitter account (run by the Department Head). Despite current efforts, the Department has significant unmet communications and alumni and donor relations needs/opportunities. It is a current priority to identify dedicated staff to foster activities in these arenas that further the Department. Specific goals include making students and student advisors aware of Plant Pathology courses and degree programs with the outcome of enhancing student credit hours taught, raising the profile of Departmental staff and activities within the College, the University, and the profession, better engaging alumni and potential donors, and enhancing the visibility of our associated Stakman-Borlaug Center (SBC) for Sustainable Plant Health. Restructuring of our communications and alumni and donor relations is a priority for 2015.

In 2013, I initiated the Living Legacy Project, a one-stop web portal that will capture the Department's historical and present contributions to the field of plant pathology and simultaneously engage alumni and potential donors. This project has made progress with significant support from UMN Libraries and College Alumni Relations and Communications staff. I project that the web portal associated with this project will launch in 2015.

In 2013, in conjunction with the APS meeting held in Minneapolis, the Department sponsored an invitation-only campus event called "CFANS International Agricultural Showcase: What is Plant Pathology Doing for International Agriculture?". The event included a 45-minute presentation that served as a christening of a new BSL2 greenhouse facility associated with the USDA-ARS Cereal Disease Lab on our campus and a kick-off event for the Stakman-Borlaug Center (SBC) for Sustainable Plant Health. The evening also included a cocktail and networking hour. The event was attended by approximately 100 individuals including Plant Pathology faculty and students, alumni, University administration, industry partners, and representatives from USAID and USDA-ARS. The event was recorded: <http://z.umn.edu/agshowcase>.

The Department also sponsored a booth at the APS conference site. The booth included banners and literature about UMN programs of study and facilities, and a big table with a messy pile of historic photos (which proved irresistible to many alumni and friends). The Department also sponsored a social media scavenger hunt and gave away two compendia as prizes.

Financial Trends, Projections, & Impacts

Despite improving (good) financial conditions for our state and the University of Minnesota, significant financial cuts at the College level are anticipated this year. This will translate into allocation reductions to the Department, although the magnitude and impact of these cuts is unknown at present. Cuts to the College are the result of a sharp reduction in student credit hours taught, caused in part by recent restructuring of two undergraduate majors, and redistribution of funding within the University to align with "Grand Challenges" defined in recent University strategic planning efforts. (Interestingly, "Safe and Secure Food" is one of the Grand Challenges identified by the University, which, on the face, should translate into enhanced support for efforts within our College of Food, Agricultural and Natural Resource Sciences!) Cuts to the College will be offset, to some degree, by a recently announced retirement incentive plan for faculty and selected staff. In light of projected funding cuts, the College is unofficially in a period of faculty hire slowdown, which will directly impact our ability to replace our currently open mycology position in the near future.

University of Nebraska-Lincoln
Department of Plant Pathology
NCAC-14 Annual Meeting 2015

Faculty

The department currently has 17.5 state-funded faculty members (9 professors, 2 associate professors, 5 assistant professors, 1 associate professor of practice (.5), and 1 assistant extension educator), as well as 2 federally funded USDA adjunct faculty members who are housed in the department. Three of our faculty members have appointments in the Center for Plant Science Innovation of which two are actually located there. Two are located in the Nebraska Center for Virology. One extension faculty member is located at a Research & Extension Center in Scottsbluff and another extension faculty member is located at the West Central Research & Extension Center at North Platte. Anne Vidaver is an active emerita. Four new faculty members (virologist, host-pathogen interaction, soil fungal biocontrol, quantitative ecologist) joined us. We are advertising for a plant/soil microbiologist. Total of 17 + 4 new + 1 advertised = 22.

Graduate Students

There are currently 20 graduate students in the department majoring in Plant Pathology. Ten students are pursuing a Ph.D. degree and 10 are working towards Masters Degrees. Stipend for the graduate students is \$23,100 plus \$6,000 for tuition and health insurance. We have M.S. and Ph.D. specialties in the Agronomy and Horticulture Department and in the School of Biological Sciences. We also have an extension specialty for M.S. students with Dec. 2010 and Dec. 2012 graduates and one student enrolled in the program.

Staff

In 2014, the department had 25 permanent staff members (5 post doctoral, 2 research assistant professors, 1 research full professor, 14 technologists (only 5 have any state support) and 3 office staff).

New Positions

We have filled our positions for a plant virologist, a plant biotic stress biologist, a cropping systems disease management specialist and a quantitative ecologist. Tenure home is Plant Pathology. The Institute of Agriculture and Natural Resources did advertise 36 new positions in 2013-14 and will advertise up to 35 in late 2015. We have a plant bacteriologist position in the 2015 hires.

Other Information

Jim Alfano is the director of the new microbiology major at UNL with 68 students. The Doctor of Plant Health professional program has brought new students into nearly all of our courses and their varied backgrounds has stimulated more blended teaching for our graduate classes. There are 10 DPH students this year. A new Innovation Campus has a ConAgra/Food Science facility and large phenotyping/greenhouse program for 2015.

Budget

The governor and UN president have forged an agreement that UN will not increase tuition and the state will increase funding by \$46M over the biennial 2013-2015 budget. The formulation of a 2015-2017 UN budget is complicated by a new president, term limit legislator turnover and a new governor.

Department of Crop Sciences
University of Illinois
2015 report to NCAC1/NCAC14/NCAC4

Changes at the University/College levels:

- Robert Hauser Dean of the College of ACES will serve until August 2016. A search for a new Dean failed during 2014.
- Timothy L. Killeen, vice chancellor for research and president of the Research Foundation of the State University of New York (SUNY), was named the 20th president of the University of Illinois. He will replaced Bob Easter (former Dean of ACES).

Faculty Changes in Crop Sciences:

- Drs. Lila Vodkin and David Williams retired.
- Dr. Alex Lipka (Statistical Genetics) joined the department in August 2014. PhD Purdue (R. Doerge), Post Doc Cornell (E. Buckler, M. Gore)
- Dr. Cameron Pittelkow (Agronomy) joined the department in August 2014. PhD UC-Davis (C. Van Kessel).
- Two searches finished in Dec 2014. Hired three people. Two in Plant breeding/Plant Pathology (one is a Monsanto Fellow). Dr. Tiffany Jamann, PhD Cornell (R. Nelson) Post Doc (J. Holland). Dr. Santiago Mideros, PhD Cornell (R. Nelson) currently with BASF in North Carolina. A position in Crop Synthetic Biology, Dr. A. Studer, PhD Wisconsin (J. Doebley) currently Post Doc at Danforth (T. Brutnell).
- New positions have to be related to undergraduate teaching. For all practical purposes Extension positions are not approved for tenure track.
- We are interviewing this month for a non-tenure track position in Water Quality.
- The total number of tenure track faculty is 37.

Financial/Business:

- The courts have stopped the overhaul of the State pension system. There is uncertainty on the future of the State pension system and contributions by employees.
- The department was asked to make a 2% reduction on the GRF for FY15.
- There was a 2.50% merit salary increase program for FY15.
- Budget distribution on campus is solely based on Undergraduate Enrollment and Instructional Units (how much we teach).
- The current contribution of the State to the GRF (basically all salaries) is 15%.
- The University has been asked to prepare for a 20% cut by the new Governor (Rauner).

Undergraduate Recruitment:

- Currently, 183 enrolled undergraduate students.
- Attracting undergraduates has improved due to the fact that we are actively recruiting (permanent undergraduate recruiter).
- The department dropped the Horticulture major to focus on one major (Crop Sciences). The number and names of concentrations are being change to accommodate hort students.
- Successful in attracting transfer students internal and from Community Colleges.

Graduate Program:

- Total number of currently registered students in our programs = 160
- This year's number of applications has gone down.

Department of Botany and Plant Pathology
Purdue University
Report for NCAC-14 meeting – February 2015

Faculty

24.25 tenure track faculty including 1 adjunct professor (USDA-ARS)

- 14 Full professors (includes 1 adjunct professor)
- 7 Associate professors
- 3.25 Assistant professors (0.25 is joint appointment with Biology)

Dan Egel (vegetable pathologist at a research station in SW Indiana), **Tom Creswell** (Director of the Plant and Pest Diagnostic Lab) and **Fred Whitford** (Director of Purdue Pesticide Programs) were promoted from their respective Administrative/Professional positions to a new faculty category called **Clinical Engagement Faculty**. These are non-tenure track positions but provide additional benefits and professional opportunities for these individuals.

In addition to the plant pathologists, other faculty in the department are in the areas of plant biology and weed science.

Purdue faculty and staff have had modest (1-2% per year) salary increases in each of the last three years..

Arrivals

Dan Szymanski (plant cell biologist) and **Mike Mickelbart** (plant physiologist) transferred into the department from Agronomy and Horticulture, respectively. These moves were part of the realignment of plant science departments. In total, five faculty switched departments.

Damon Lisch (maize genetics and epigenetics) started in August as part of a cluster hire in epigenetics. He came from a non-tenure track position at UC-Berkeley and was hired as an associate professor with tenure.

Gyeong Mee Yoon (plant hormone biology) started in January 2015 as an assistant professor. She came from a postdoc position at the University of North Carolina.

Gordon McNickle (root ecologist) will start in August 2015 as an assistant professor. He is currently a Banting Fellow at Wilfrid Laurier University in Canada.

Departures

Ray Martyn retired in January and has moved to Florida.

Teri Hughes (USDA-ARS adjunct faculty member) left in 2014 for a position with Monsanto. This leaves two open positions in the ARS group, the other being the replacement for Larry Dunkle.

New Positions

We are not recruiting new faculty specifically in Botany and Plant Pathology at the moment. We hope to get permission to hire at least one plant pathologist next year. However, the College is currently recruiting five new positions in plant biology as part of a large initiative in the plant sciences. Some of these new faculty are likely to have their tenure home in Botany and Plant Pathology. Some may work in areas related to plant pathology.

Students

We currently have 50 graduate students, divided fairly equally between MS and PhD. We have had a good pool of applicants to our programs in recent years. Approximately half of the students are in plant pathology. Stipends are ~\$20,000 per year.

Approximately 45 undergraduate students are enrolled in our undergraduate major, Plant Science – with three areas of concentration: Plant Cell and Molecular Biology, Plant Ecology and Environment, or Plant Health Management. This program continues to grow. We would like to develop a single entry point and a common first year experience for all undergraduates who are interested in studying plants, but there is some resistance to this idea. The new Plant Science Recruitment Coordinator is helping with recruitment efforts, particularly those aimed at students from urban and suburban backgrounds.

Administration

Purdue is in the middle of a prolonged discussion about a new budget model. The general belief is that we will move to some type of Resource/Responsibility Centered Management (RCM) model but no decisions have been announced on this.