

2012-2013

GRADUATE STUDENT HANDBOOK

DEPARTMENT OF PLANT PATHOLOGY



WELCOME!

To All Graduate Students in Plant Pathology:

It is my pleasure to welcome you to the Department of Plant Pathology and Washington State University! You are joining a department with a distinguished history of excellence in teaching, research and extension. The second Ph.D. degree awarded by Washington State University was by this department! Over the years the department has awarded approximately 138 M.S. degrees and 161 Ph.D. degrees.

Information provided in this handbook is intended to help you during your stay at WSU. I encourage you to read it carefully and familiarize yourself with various rules, regulations and procedures pertaining to the graduate program in our department.

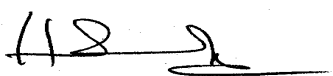
We, at WSU, strive to provide and sustain an atmosphere of a sense of belonging, mutual respect and a collective belief and conviction to strive for excellent in whatever we do. I encourage you to join this collective endeavor. If you have any questions or are unclear about something, please ask the departmental staff and/or your major professor.

We are committed to helping you succeed in your graduate program and achieve your professional goals. If I can be of assistance in anyway, please do not hesitate to contact me. I am available by email and phone, or to meet with you in person.

I encourage you to make every effort to meet with your fellow graduate students, and all faculty and staff as soon after your arrival as possible. Please make sure that you visit the departmental web site (<http://plantpath.wsu.edu>). It has a wealth of useful information including faculty, staff and student listings, and information on current happenings in the department. We offer numerous professional development opportunities and chances to network both at work and in social settings. I encourage you to take advantage of these and I expect your active participation.

If you have questions or need assistance, do not hesitate to contact me (hrp@wsu.edu). I wish you all the best.

Sincerely,



Hanu R. Pappu, Ph.D.
Chair

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THINGS TO DO UPON ARRIVAL – FALL 2012

Check in at the Johnson Hall Graduate Center (JHGC) and talk with either Mary Stormo (Rm 129) or Deb Marsh (Rm 125).

Stop at the main departmental office (in Johnson Hall, Room 345) for the following:
Introduce yourself to Cheryl Hagelganz, our Administrative Manager
Desk Assignment See: Cheryl Hagelganz, Administrative Manager for Plant Path

Graduate Student Information & Checklist sheets See: [New Student Checklist](#) Please see the JHGC if you have questions after reading & reviewing the New Student Checklist.

Residency requirements and restrictions. (Out-of-state waivers are only guaranteed for one year.) Requirements are found on WSU's homepage at:
<http://www.registrar.wsu.edu/Registrar/Apps/Residency.ASPX>

Keys: building, lab, office and greenhouse (optional)
See: Cheryl Hagelganz, PI Path Administrative Manager.
NOTE: Some keys require your major professor's approval by email.

Copy of your Personnel Action Form (PAF) See: Katrina Shelton, Johnson Hall Business Center (hereafter referred to as 'JHBC') in Room 201.

Map of the university (ask us if you'd like one!). Maps can also be obtained at Cougar Depot or [Parking Services](#).

If you have a paid assistantship, you will also need to complete the following on your first day of employment. Please see Katrina in the JHBC (Rm 201) to complete these items.

I-9 Forms – must be completed on the 1st day of employment.

W-4 Forms

Automatic payroll deposit is recommended. The form is available from the Office Staff, the Payroll Office in the French Administration Building, or on-line at:

<http://www.wsu.edu/payroll/stntpay/stntpay.htm>

You will need a deposit slip from your bank account.

Social Security Numbers

If you do not have one, a social security number needs to be obtained as soon as possible (*if* you are employed by WSU). The Moscow Social Security Office is open limited hours each semester; please see Mary for schedule. The Moscow Social Security Office is located in the Federal Building, 2nd floor, 220 E. 5th St., Moscow, Room 230. There is no local telephone number.

The Lewiston Social Security Office is open all year Monday-Friday, 9:00 am-4:00 pm. They are located at 1617 19th Avenue in Lewiston, Idaho. Their phone number is (208) 746-2995 or 1 (800) 772-1213. It is not easy to get past the voice message to a real person on the 746 number. The on-line address is <http://www.ssa.gov/online/ss-5.html> and gives you information on filling out the form, printing it, and where to send it.

International students can usually apply for a social security card at the orientation meeting scheduled before school starts at the beginning of each semester. Please ask Katrina Shelton for a copy of the letter you will need in order to apply during orientation.

GENERAL INFORMATION

Purpose of Handbook

The purpose of this handbook is to clarify requirements of the Department of Plant Pathology that co-exist with those of the Graduate School. This handbook is not intended to replace the *Graduate School Policies and Procedures* (GSPP) nor any other University document. Each graduate student should read the GSPP, the Guidelines for Good Practices in Graduate Education

(<http://www.gradsch.wsu.edu/CurrentStudents/PoliciesAndProcedures/>) located in the far right hand column; and Graduate Student Code of Rights and Responsibilities which are PDF documents

<http://www.gradsch.wsu.edu/CurrentStudents/PoliciesAndProcedures/TableOfContents.aspx> (Chapter 12 of P&P Manual), along with the Plant Pathology Graduate Handbook so they understand the requirements set forth for graduation both by the Graduate School and the Department of Plant Pathology. When the Department regulations are stricter than those of the Graduate School, the Department regulations take precedence.

Excerpt from Graduate School Policies and Procedures, Chapter 1, 'E':

<http://www.gradschool.wsu.edu/CurrentStudents/PoliciesAndProcedures/Chapter1/>

The graduation requirements of the Graduate School, which must be met for completion of a graduate degree program, are those published in the Policies and Procedures of the Graduate School in effect at the time of the student's initial admission as a regular or provisional student. Departmental requirements are those in effect at the time the student files a program of study.

If a student is dropped from the University for failure to maintain continuous enrollment, the requirements of the Graduate School are those in effect at the time of re-admission to the Graduate School. Modification of certain aspects of Graduate School policy may be necessary to conform to legislation enacted by the Washington State Legislature.

Address Change

Address Changes – You can update your address by going to <http://zzusis.wsu.edu>.

Paychecks will not be forwarded. **International students: Know the SEVIS rules.**

Failure to update your new address within 10 days of moving can get you deported.

Please also inform the Johnson Hall Grad Center (via email) if you change your address.

Bulletin Boards

The large bulletin boards (between rooms 346 and 348) list seminar notices, fellowship announcements, organizational brochures, etc. The small board (between rooms 348 and 350) is for official use only: for safety and other important notices. Please ask for permission

before posting anything on these boards. The bulletin boards in the hall adjacent to the student carrels are for graduate student related use only. Scholarship opportunities are posted on the board above the telephone in room 337.

Child Care Center

Full- and part-time child care for 6 weeks to 12-year-old children; call 335-8847. Child Care Resource & Referral Services offers information to all center and family day care homes in Whitman County, call 335-7625, or visit The Children's Center, Room 108.

Computing and Data Networking – See [New Student Checklist](#)

Compton Union Building (CUB)– Please visit their [website](#) for a list of amenities including wireless internet access, increased student meeting space, an upgraded & relocated home for the Student Book Corporation (Bookie), and a multitude of new vendors. Should you need further assistance, please call 335-9444.

Counseling Services

The WSU Counseling Services office offers free and confidential assistance to students with personal, social, and vocational problems. Stop by Lighty Student Services Building, Room 280, call 5-4511, or visit their [website](#).

If you have a crisis situation after regular office hours, call: (509) 335-2159.

Copier and Printing

The copier in room 347 is for office and faculty use. Copy and print work must be related to assigned research projects. With permission of your major professor you will be assigned a number code that allows you to operate the copy machine. ***The copier is not to be used for copying class notes, articles, or books used for study purposes. Under no circumstances should the copier in Johnson 347 OR any of the student printers be used to duplicate your thesis or dissertation.*** There are copy machines available at [Cougar Copies](#) (CUB Rm 80), [Coug Prints](#) and at [Kinkos Copies](#).

Departmental Office

The main office of the Department of Plant Pathology is located in Johnson Hall 345. Office hours are: 8:00 a.m. - 12 Noon & 1:00 p.m. - 5:00 p.m (Monday-Friday).

Email – See [New Student Checklist](#)

Equipment

Equipment should not be moved without permission of the person in charge of the equipment.

Facilities

The department provides laboratory, greenhouse, and field plot facilities to conduct research. These are generally assigned by research projects and are under the supervision of the project leader who may also function as the major professor. Students should arrange for the use of such facilities through their major professor.

Orville A. Vogel Plant BioSciences Building (PBS): Those students working in labs which are located in Orville Vogel PBS need to see Cheryl once they have obtained a Cougar Card in order to activate their access to the facility.

C. Gardner Shaw Mycological Herbarium: The department maintains one of the most comprehensive mycological herbaria in the U.S. This is located in the new Orville Vogel Plant Biosciences (PBS) Building in Rooms B6 and B8, and is curated by Professor Jack D. Rogers. Those wishing to use this resource should consult with Dr. Rogers and/or Dr. Carris.

Fischer Agricultural Sciences Library Collection: A comprehensive plant pathology library was recently incorporated into WSU's Owen Science & Engineering Library on the 2nd floor. This is administered by personnel of the University Library system and conducted under the same policies as the central library. It includes a plant pathology collection of over 70,000 reprints collected by personnel of this department over many years. If you need assistance, please see Linda Crook, librarian working with this collection. She can be reached at: 335-7601 or at linda.crook@wsu.edu.

Media Center: The department maintains equipment for digitizing and editing images from photographic slides and printed materials for seminars, presentations at meeting, posters, publications, and Internet applications. A network is established for transfer of digitized images to personal computers that allows the majority of preparation of a presentation to be completed in the researcher's office. Our classrooms are equipped with projection equipment for full multimedia presentations. Mike Adams is in charge of scheduling, training, and general supervision of this facility. Its use is limited to working days and hours.

Outlying Experiment Stations: The faculty and research-teaching facilities at Pullman, as well as some at the outlying experiment stations (Prosser, Puyallup, Wenatchee, and Mt. Vernon), are all part of the department. Students at Pullman are encouraged to visit the experiment stations and become acquainted with the plant pathologists conducting research or teaching classes at the stations. Students are likewise encouraged to visit with experiment station faculty on the frequent occasions when they come to Pullman to lecture or present seminars.

Photographic Laboratory: The department provides a photographic darkroom to be used by the faculty, staff, and graduate students for research and teaching functions. Mike Adams is in charge of scheduling and general supervision of this facility. It is not to be used until proficiency is established with the major professor. Individual researchers supply film and chemicals. *This facility is not for personal use.*

Reprint Library: The department maintains a reprint collection that contains reprints published by WSU plant pathologists. The reprints are catalogued alphabetically by first author, and then by year under the author's name. Where only limited numbers of reprints are available, please consult with the Program Coordinator before taking one. *Please do not take the last available reprint.* You may make a copy of the last reprint.

Reprint Request Cards: These preprinted post cards are stored in the copy/storage room in Johnson Hall 347. They are used to order reprints by mail. To ensure

proper delivery, include your name above the department's return address - this is often used as the return-mailing label for your reprint.

Thesis Library: M.S. and Ph.D. theses of departmental alumni are in the main office and may be checked out. Please check with the Program Coordinator in the office. All M.S. and Ph.D. students are required to submit a hardbound copy of their thesis and/or dissertation upon completion of their degree.

Insurance

Graduate students on a paid assistantship who maintain a 3.0 grade point average and are enrolled for a minimum of 10 credit hours are entitled to the Graduate Student Health Insurance Medical Plan. Graduate students not on assistantships who are not eligible for this plan may enroll in the Student Medical Insurance Plan, but they must pay the premium. The insurance policy is effective beginning the first day of the semester. However, because it takes a little time for it to reach the insurance company and be keyed into their system, it is suggested that you not use it for about 6 weeks unless you have an emergency.

Dependents such as spouse and/or children may be added to the insurance policy but the student is responsible for the additional premiums. Coverage from spring semester runs through August 15. If premiums are being paid for a dependent, spring semester rates will be higher than fall semester rates because of the summer coverage. No premiums are deducted during the summer months if the policy was in effect during spring semester.

[Health & Wellness Services](#) administers the WSU student health insurance plan.

For student health needs covered by Health and Wellness, an appointment can be made by calling 335-3575. Health and Wellness facilities are located in the Washington Building on the WSU campus (intersection of Stadium Way and Nevada & Washington Streets).

The [PASS Program](#) enables spouses or partners of eligible graduate/professional students (Pullman campus only) to access health care services available at Health and Wellness Services (HWS). The PASS Program is not a substitute for [health insurance](#).

International Programs/SEVIS Information

The [International Programs Office of International Students & Scholars/Global Services](#) (OISS) is located in Bryan Hall, room 108, phone (509) 335-4508, or email them at: oiss@wsu.edu. *Students are responsible for maintaining their legal status within the country.* If there are any changes to a student's I-20, that student is responsible for reporting the change to the department and JHBC.

All SEVIS information, including required entry and departure documents, is available through the International Programs office.

Mail (United States Postal Service(USPS) and Federal Express Mailing)

USPS: Students are assigned a mailbox here in the department. Please check your mailbox frequently as the office staff puts phone messages and important notices in your mailbox as necessary. Mail is picked-up and delivered on weekdays at approximately 11:30 a.m. There is a basket in the office for outgoing USPS mail and a plastic WSU mailing services tub for

interdepartmental mail. All USPS mail must have the departmental return address on the envelope. International mail over 1" thick or over 1 lb. must have a green customs sticker attached. When sending interdepartmental mail, you must use a four-digit campus zip code, which can be found in the campus phone directory, our four-digit code is 6430.

Envelopes provided by professional societies must also be stamped with Department of Plant Pathology address in the return area.

No personal mail should be sent to or from your university address. There is a USPS mail drop box across the street in front of the French Administration building. Personal mailboxes are available *only* at the Post Office located on Grand Avenue. The U.S. Postal Service sorts mail electronically. For the quickest delivery, the complete address should be in capital letters with **no** punctuation. Mail sent to you at the department should be addressed as follows:

YOUR NAME
DEPARTMENT OF PLANT PATHOLOGY
WASHINGTON STATE UNIVERSITY
P O BOX 646430
PULLMAN WA 99164-6430
Note: Please do not include Johnson Hall or a room number.

UPS/packages: If you are receiving a package via United Parcel Service, the sender should address the package as follows:

YOUR NAME
345 JOHNSON HALL
100 DAIRY ROAD
PULLMAN, WA 99164

Federal Express: The JHBC sends out Federal Express packages. Be sure your packages are completely prepared for mailing. If you have any question, please see the Business Center for assistance. Federal Express envelopes and pouches are available in the JHBC.

If sending a box it should be weighed and measured. A scale is available in the Department's main office.

*NOTE: Any packages shipped via Federal Express or UPS must have a completed Shipping Request form. You can obtain this form at the JHBC. ANY shipments must be completed by 11:00 a.m.

Microscopes

The department maintains a number of microscopes for its teaching program. Please consult with Dr. Jack D. Rogers before microscopes are used for any purpose or moved.

Motor Pool Vehicle

WSU Motor Pool vehicles are to be used for approved business travel. Requests are made through the JHBC and should be placed early to ensure availability. A valid driver's license

is required along with your supervisor's permission and budget code numbers for the use charges. Questions can be directed to the JHBC. The use of personal vehicles is an exception to policy and must be justified and approved in advance.

Network ID and Password – See [New Student Checklist](#)

Office Equipment

Equipment in the main office, except for the fax machine, is for use of the office staff only.

Office Supplies

Office supplies are intended for teaching and research only and should be requested from the office staff. They are not supplied for personal use.

Parking Regulations

Parking regulations are enforced every day, 24 hours a day, all year. If you have a car and intend to park on campus, you need to purchase a parking permit. You should also pick up and read the Parking Rules pamphlet. Permits and pamphlets are available at [WSU Parking Services](#) located on the corner of Colorado and D Street. Phone: (509) 335-PARK.

Payroll Deductions

Graduate students on assistantships may authorize Payroll Services to deduct the total amount of their tuition and fees owed over eight (8) pay cycles beginning the second pay date of the semester. Deductions may be authorized for 1) full operating fee or residual operating fee, 2) service/activity/building fees, and 3) spouse and/or dependent medical insurance (fees vary). Payroll deduction is an optional service provided at a fee of \$8.00. Forms must be completed *each semester* and must be submitted before the last date to pay tuition before late fees accrue (to avoid paying late fees). The payroll deduction service is not offered for summer appointments.

Photo Identification Cards - Cougar Card

This card is required to obtain access to the Vogel PBS building.

New students may obtain their Cougar Card in the [Cougar Card Center](#) located in the Compton Union Building (CUB), room 60. Returning students will continue to use their previously issued card. The Cougar Card Center is open from 8:00 a.m. to 5:00 p.m., Monday through Friday. A \$10.00 replacement fee is charged for replacement cards. For any information or to report lost or found ID cards, call 335-CARD or visit their website.

Purchasing

The university makes purchases both on and off campus. Permission should be obtained from the faculty member whose budget you will be using before buying anything. Some type of purchase order is required before you make any kind of purchase. It is not appropriate to make a purchase and then request a purchase order. Forms are available in the JHBC to request purchase orders (POs). POs are generally completed within 48 hours. The Business Center staff places and receives all orders from vendors outside of the Pullman area. Selected vendors on campus have blanket POs whereby a requisition number is used for transactions. The faculty member with whom you work can provide these numbers. All receipts should be submitted to the office. Your lab retains packing slips. You should plan

ahead as much as possible for purchasing as variable circumstances such as shipping, product availability, and office staffing could delay receipt of your orders.

Cheryl Hagelganz can answer your purchasing questions here in our department.

Re-Entry Office

Designed for the adult entering as a first-time student, this office can give advice to one who has left college for a period of time and is now returning. Go to Lighty Student Services Bldg., Room 360 or call 5-1464.

Registration (see also: **Enrollment on page 22**)

Registration is done online through your MY WSU portal. Go to: <https://zzusis.wsu.edu>, sign on using your Network ID and from there your zzusis portal page will appear and you can register. **Please consult with your advisor before registering.**

Registration from the first day of classes through the 10th day of classes will be assessed a \$25.00 late fee. Those registering after the 10th day without prior approval of the Registrar's office, will be assessed a \$100.00 late fee.

For a listing of available courses for the semester, please visit:

<http://www.schedules.wsu.edu/Schedules/Apps/HomePage.ASP>

Student Recreation Centers

[The Student Recreation Center](#) offers a wide range of activities, including intramural sports, fitness classes, weight training, track, pools and spa. Full-time students become automatic Student Recreation Center members with their payment of tuition and fees. For more information phone 335-UREC, see their website or visit their campus location on North Fairway Drive across from the university golf course. For information on the [Palouse Ridge Golf Course](#), please visit their website

[The Outdoor Recreation Center](#), located in the WSU Hollingberry Field house Annex, room 101, offers classes, information and equipment rentals for outdoor activities including camping, rock climbing and various water and winter sports.

Taxes

Questions about taxes should be addressed to the Payroll Office, Alice Smethurst, Tax Compliance Officer, French Administration Bldg, Room 240, or the International Programs Office in Bryan Hall. Professional tax consultants are available throughout the community as well.

Telephones

There are restricted telephones (Pullman, Moscow, and campus calls only) in the student carrels. It does not have access to "Information". Any calls outside the local area should be made only for official business, with your major professor's approval, and on his/her telephone when possible. For local calls:

Campus 5 – xxxx (last four digits)
Pullman/Moscow 7 and the 7 -digit phone number
Dial '7' for an off-campus line, dial

Calls to WSU Research & Extension Centers (using the 'tie-line'):

Mount Vernon	8-6-xxx (last three digits)
Prosser	6-1-xxx (last three digits)
Puyallup	8-4-xxx (last three digits)
Wenatchee	direct dialing, (long distance)

Travel

The department reimburses students for travel costs associated with their programs and approved by their advisors for travel lasting more than 12 hours. All arrangements should be made using the most economical accommodations available. Please follow the procedures as outlined below.

Travel Authority

A travel authority is required for any travel and must be completed prior to travel. Forms are available in the main office. A travel advance may be requested in order to help with anticipated expenses. An advance should be requested at least 2 weeks before travel begins. Conference registrations will be paid directly by the university if received at least 2 weeks before the registration due date. If registration payment requests are not received in time for the university to pay directly, the traveler will have to make the payment and will be reimbursed for the expense. Once your travel authority is approved, you can make airline reservations using local travel agents. Ask the agent to call Bev Brantner at the JHBC (335-3943) for approval to purchase the tickets. The university pays the airfare directly for you. *Tickets for approved travel may not be purchased through online sites.*

The JHBC can do 'Blanket TAs' for routine/repeat travel, such as collecting data at research sites. Usually done for an entire fiscal year, you should list all the places where the routine travel occurs. For instance, you may have a blanket TA for doing field research at a particular site. This can save a lot of paperwork so use this method when you are able.

Travel Expense Voucher (TEV)

Expenses are reimbursed up to a set amount for the travel destination. This is called the per diem rate. Check with the office for these rates prior to travel so you can plan your expenses. You will need original, itemized receipts for all lodging and any expenses over \$50. If you share a room with WSU personnel, you will be reimbursed one-half of the room rate. A travel expense voucher (TEV) should be submitted by the fifth of the month following travel. If a travel advance is received, the TEV must be completed immediately upon return from travel. Reimbursements are generally received within three weeks of completing the TEV.

International Travel - [The International Travel Registry](#) is an online registration system that provides WSU with a secure means of documenting international travel plans for undergraduate and graduate students participating in not-for-credit travel for WSU-related activities. International travel is defined as travel to any non-U.S. location outside of the 50 states (including Hawaii, Alaska, and District of Columbia) and the U.S territories (Puerto Rico, Guam, U.S Virgin Islands, Northern Mariana Islands, American Samoa, and Swains Island).

Please see the JHBC for answers to all your travel questions.

Typing

The office staff does not type letters, job applications, resumes, theses, seminar abstracts, manuscripts, etc. for students. You can access all Graduate School Program Forms [on-line](#) where you can complete the forms at your computer and then print them off. If you have any questions, please see Mary in Johnson Hall, Room 129.

Visitors

The Plant Pathology Department hosts several visitors throughout the year. **Students are expected to actively participate and attend receptions, meals, and seminars for these visitors to the department.** These events may be hosted in the evenings and on weekends.

ACADEMIC INFORMATION

Academic Integrity

As an institution of higher education, Washington State University is committed to principles of truth and academic honesty. All members of the university community share the responsibility for maintaining and supporting these principles. When a student enrolls in Washington State University, the student assumes an obligation to pursue academic endeavors in a manner consistent with the standards of academic integrity adopted by the university. To maintain the academic integrity of the community, the university cannot tolerate acts of academic dishonesty including any forms of cheating, plagiarism, or fabrication. Washington State University reserves the right and the power to discipline or to exclude students who engage in academic dishonesty. To that end, the university has established rules defining prohibited academic dishonesty and the process followed when such behavior is alleged. These rules incorporate Washington State University's Academic Integrity Policy, the university-wide document establishing policies and procedures to foster academic integrity. This policy is applicable to undergraduate and graduate students alike, as it pertains to dishonesty in course work and related academic pursuits. In cases of dishonesty in research and original scholarship, the University's Policy and Procedural Guidelines for Misconduct in Research and Scholarship may take precedence over the policies and procedures contained herein. More information regarding the rules governing academic integrity can be found at the [Academic Policies and Resources](#) site.

Learning Outcomes Assessment

The Department of Plant Pathology is committed to providing a high quality graduate program at the M.S. and Ph.D. levels. The following Graduate Program Learning Assessment Plan includes a mission statement for the department and the broad objectives that define what we consider to be indicators of an effective graduate program. A variety of data will be collected and compiled annually to assess the graduate programs, and the plan for collection of these data is included in this document.

Please note that in addition to annual evaluations of each graduate student, we will also use a rubric for assessing performance on oral preliminary examinations (PhD) and final defense examinations (M.S. and PhD). Each member of the student's committee will fill out a rubric, and a copy will be maintained as part of the student's permanent file. Copies of the annual evaluation forms and rubric are included in the assessment document.

Overview

The mission of the Department of Plant Pathology is to provide instruction, extension, and research directed toward all aspects of plant diseases, including causes, protection, prevention, and control, as they affect commercial crop and landscape plants in Washington and worldwide. The mission is accomplished by providing quality graduate education, conducting applied and basic research for the state and the scientific community at large, and disseminating information to the public through extension education.

The Department of Plant Pathology offers M.S. and Ph.D. programs. The Department has had a long-standing policy that a student must first obtain an M.S. degree before pursuing a Ph.D. degree. The primary reason for this policy is to insure that only students who are academically capable and prepared for in-depth research as evidenced by prior grades, courses, and research experience are admitted to the Ph.D. program. Moreover, most students entering the graduate program have a limited background, or no background, in plant pathology owing to the few undergraduate programs in the discipline in the nation and worldwide. However, in recognition that some students may display an unusually high aptitude for graduate study and research, the Department has developed a policy to describe circumstances under which a student may bypass the M.S. degree and proceed directly to the Ph.D. This policy is described in the Plant Pathology Graduate Student Handbook, which is updated annually and provided to all continuing and incoming students. The handbook is also available online at:
<http://plantpath.wsu.edu/students/currentstudents.htm>.

Objectives

1. To enable students earning the M.S. and Ph.D. in Plant Pathology to understand and apply the scientific method to plant pathological problems, to develop critical thinking and professional skills needed for successful careers in the public and private sectors at a national and international level. In addition, students earning the Ph.D. will conduct novel research in an independent manner (i.e., with limited input from their major advisor) and be able to interpret and write up their research for publication in peer-reviewed journals.
2. To maintain a leadership role in plant pathology and related disciplines at the state, national and international levels.

Requirements

For the M.S. degree, students are expected to fulfill all of the academic requirements of WSU, present two seminars (PIP 515) to the Department of Plant Pathology, attend the weekly departmental seminar series during the academic year to learn about plant pathology research and other issues outside of their thesis project, conduct research, and prepare and defend an acceptable thesis under the direction of their major advisor and advisory committee in an oral examination.

For the Ph.D. degree, students must fulfill all of the academic requirements of WSU for the Ph.D. degree, present two seminars to the Department of Plant Pathology (PIP 515), pass an oral preliminary examination after completion of the majority of their coursework, and conduct independent, original research and prepare an acceptable

dissertation with oversight and advising from their major advisor and advisory committee. Successful defense of the dissertation in an oral examination is required.

Outcomes for each of the program's objectives are:

1. To enable students earning the M.S. and Ph.D. in Plant Pathology to understand and apply the scientific method to plant pathological problems, to develop critical thinking and professional skills needed for successful careers in public and private sectors, the program provides training and coursework to help students develop the following skills:
 - a. Understanding, interpretation and synthesis of scientific literature pertaining to plant pathology and related disciplines
 - b. Formulating hypotheses; developing experimental designs to test these hypotheses; establishing and maintaining experiments
 - c. Collecting data in an objective way and conducting appropriate statistical analyses
 - d. Interpretation and presentation of research results in oral and written formats
 - e. Presentation of research at professional meetings and local commodity meetings
 - f. Publication of research in peer-reviewed scientific journals and other discipline-appropriate outlets such as commodity newsletters

2. To maintain a leadership role in plant pathology and related disciplines at the state, national and international levels, the program aims to:
 - a. Attract, retain and train high quality graduate students.
 - b. Place students earning the M.S. into positions including extension agents, state and federal plant pathologists, instructors at the community college level, support scientists in public or private sector research programs, and Ph.D. programs.
 - c. Place students earning the Ph.D. as leaders of scientific research programs in the public or private sector including industry, and faculty positions at the University level.

Outcomes Assessment Plan

Data will be collected via several different mechanisms, including application statistics; annual review of graduate students (see attached document); an evaluation rubric (see attached documents) for oral preliminary examinations (Ph.D.), thesis defense examinations (M.S.), and dissertation defense examinations (Ph.D.); graduate student exit interviews with department chair; and job placement statistics. Data will be summarized in a report provided annually to the Graduate School. The means by which the specific outcomes will be assessed is detailed in the following table.

Objective 1. To enable students earning the M.S. and Ph.D. in Plant Pathology to understand and apply the scientific method to plant pathological problems, to develop critical thinking and professional skills needed for successful careers in public and private sectors.

Outcome	Data	Source	Collected
1a. Understanding and interpretation of scientific literature pertaining to plant pathology and related disciplines	Course grades in plant pathology classes; rubric completed at oral preliminary exams and thesis/dissertation defense exams.	Faculty teaching plant pathology courses; thesis advisory committee members	Annually
1b-d. Formulating hypotheses; experimental design; establishing and maintaining experiments; collecting data and conducting appropriate statistical analyses; interpretation and presentation of research results in oral and written formats.	Rubric completed at oral preliminary exams and thesis/dissertation defense exams; annual evaluations of graduate students	Thesis advisory committee members; major advisor	Annually
1e & f. Presentation of research at professional meetings ¹ , publication of research in peer-reviewed scientific journals and other outlets appropriate to the discipline ² .	Annual evaluations of graduate students	Major advisors	Annually

¹ Meetings sponsored by professional societies, government organizations and commodity groups

² Examples include trade journals, commodity newsletters, and conference proceedings

Objective 2. To maintain a leadership role in plant pathology and related disciplines at the state, national and international levels.

Outcome	Data	Source	Collected
2a. Attract, retain and train high quality graduate students	Application statistics (number of applicants, percentage of applicants accepted, GPAs of accepted students)	Plant Pathology Program Coordinator; Graduate School	Annually
2b. Place students earning the M.S. into positions discipline appropriate positions including Ph.D. programs.	Job placement statistics	Faculty advisors; exit interviews with Department Chair	Annually
2c. Place students earning the Ph.D. as leaders of scientific research programs in the public or private sector and academic positions.	Job placement statistics	Faculty advisors; exit interviews with Department Chair	Annually

PLANT PATHOLOGY EVALUATION RUBRIC: THESIS OR DISSERTATION DEFENSE

Candidate: _____ Degree: _____

Title: _____

Evaluator: _____ Date: _____

Criteria	Poor	Competent	Excellent
Understands and is able to interpret scientific literature relevant to research topic			
Demonstrates ability to independently formulate hypotheses, develop experimental design, establish and maintain experiments			
Demonstrates ability to collect data and conduct appropriate statistical analyses			
Demonstrates ability to defend research methodology and interpretation and to entertain alternative interpretations			
Demonstrates ability to interpret and present research results in oral and written formats			
Demonstrates ability to obtain funding to support professional travel and/or research			

Comments:

PLANT PATHOLOGY EVALUATION RUBRIC: ORAL PRELIMINARY EXAM

Candidate: _____

Title: _____

Evaluator: _____ Date: _____

Criteria	Poor	Competent	Excellent
Demonstrates familiarity with and understanding of the primary literature relevant to the discipline			
Able to synthesize knowledge from courses and primary literature and apply this to a novel research question			
Demonstrates breadth of understanding of scientific principles outside of, but relevant to, the field of plant pathology			
Demonstrates ability to answer questions pertaining to understanding scientific problems involving plant diseases, plant pathogens, and emerging methodology			
Demonstrates ability to apply the principles and terminology of the discipline to a novel problem			

Comments:

GRADUATE STUDENT EVALUATION
Department of Plant Pathology

STUDENT: _____ EVALUATION DATE: _____

DEGREE: _____

STATUS

1. Date enrolled: _____

2. Program of Study filed? _____ Yes _____ No

If No, anticipated date to file:

3. Advisor: _____

Committee: _____

4. Has the committee met? Yes (date of most recent meeting): _____

No (anticipated date of meeting): _____

5. Preliminary examination completed (Ph.D. only): _____ Yes _____ No

Date examination completed or planned: _____

6. Cumulative GPA in graduate program: _____

7. Title or subject of thesis project: _____

8. List any awards or scholarships received since the last review:

9. List abstracts and papers presented or published by graduate student since the last review:

ACADEMIC PERFORMANCE

1. Overall rating of academic performance:

_____ Superior
_____ Good
_____ Average
_____ Below Average
_____ Poor

2. Comments on academic performance since last review:

RESEARCH PERFORMANCE

1. Overall rating of research performance:

_____ Superior
_____ Good
_____ Average
_____ Below Average
_____ Poor

2. Comments on research performance since last review, including progress on thesis project, strengths, weaknesses, work habits, research skills:

3. Specific conditions or expectations that must be fulfilled prior to the next review:

RECOMMENDATIONS

1. Overall evaluation is: _____ SATISFACTORY
_____ UNSATISFACTORY

If evaluation is UNSATISFACTORY:

_____ Continue Enrollment (list conditions or recommendations below)

_____ Discontinue Enrollment

Conditions or recommendations for continued enrollment if evaluation is
UNSATISFACTORY:

Signature of Advisor: _____ Date: _____

To be signed by student:

This evaluation has been discussed with me. _____

Signature

Date

Comments on review by student (optional):

END OF LEARNING ASSESSMENTS OUTCOME SECTION

Continuing Graduate Study after M.S.

If study beyond the Master's Degree is planned, the student must write a letter of application to the Department of Plant Pathology Graduate Admission Committee. If the student is recommended into the Ph.D. program, the Graduate School should be notified using the [Plan and Degree Level Change Form](#) from the Graduate School.

Degree Sought

A student with a Bachelor's degree will be considered as a candidate for the M.S. degree. The Department of Plant Pathology has had a long-standing policy that a student must first obtain an M.S. degree before pursuing a Ph.D. degree. In rare cases, a student may display an unusual aptitude for graduate study and research and be considered ready to proceed directly to a Ph.D. program without first obtaining an M.S. degree. Please see the Plant Pathology Department's By-Pass Option policy as follows:

BY-PASS OPTION - Process and Requirements for a Student to Transfer to a Ph.D. Program without First Obtaining an M.S.

The Department of Plant Pathology has had a long-standing policy that a student must first obtain an M.S. degree before pursuing a Ph.D. degree. The primary reason for this policy is to insure that only students who are academically capable and prepared for in-depth research as evidenced by prior grades and research experience are admitted to the Ph.D. program. Moreover, most students entering the graduate program have a limited background, or no background, in plant pathology owing to the few undergraduate majors in the discipline, i.e. as contrasted with chemistry, etc. where entering students have undergraduate experience in the field. In rare cases, a student may display an unusual aptitude for graduate study and research and be considered ready to proceed directly to a Ph.D. program without first obtaining a M.S. degree. The purpose of this policy is to describe the circumstances under which a student may bypass the M.S. degree and proceed directly to the Ph.D. Only truly exceptional students will be considered for an exception to this long-standing policy of completing an M.S. degree first.

1. During the second year of graduate study, the student must submit in writing his/her desire to transfer to the Ph.D. program to his/her Major Advisor, with copies to the Graduate Coordinator, and the Department Chair. The request should include the reasons why the student believes she/he is ready to begin study toward the Ph.D. and bypass the M.S.
2. After initial discussion with and approval by the Department Chair, the major advisor will convene the student's thesis committee to discuss the request. To be considered ready for transfer to the Ph.D. program, a student must:
 - demonstrate evidence of significant progress in research during the first year of graduate study in which she/he is registered as an M.S. student, and
 - demonstrate strong academic performance in graduate-level courses completed at WSU.

The totality of the student's performance in course work, research and other professional activities must be considered by the committee. The committee will then vote; 75% of the committee, or unanimous if there are only 3 committee members, must vote in favor in order for the student to be recommended for the Ph.D. program.

3. The major advisor will submit in writing the committee's recommendation to the Department Chair and the Graduate Coordinator describing the rationale for either recommending or denying the student's request to bypass the M.S. The student will be notified in writing of the committee's and Chair's decision.

If the Department Chair concurs with the committee's recommendation and the student is recommended for transfer to the Ph.D. program, he/she will be informed of the requirements to complete the transfer (see below). The Chair reserves the right to consult with other department faculty to seek input on the request.

4. When a student is recommended for transfer to the Ph.D. program, the Department Chair will appoint an ad-hoc committee composed of four members of the Plant Pathology faculty, not currently serving on the student's M.S. thesis committee, to evaluate and make a final recommendation on whether the student should be advanced to the Ph.D. program.

5. The student must prepare a written Ph.D. research proposal and make an oral presentation of this proposal to the ad-hoc committee before the end of the third semester of the M.S. program. The student will then be expected to defend this proposal in a question and answer session with the committee following the presentation. The research proposal will be no less than 10 pages long and follow the USDA-NRI format. The oral presentation will be approximately 20 to 30 minutes long; all members of the ad hoc committee must be present, but the presentation will be open to all members of the Department. The presentation will be followed by questions from the ad-hoc committee and other interested faculty members that are not part of the student's committee to determine if the student has mastered the basic concepts of Plant Pathology expected of a Master's level student at the point of graduation. Total time for the presentation and oral questioning should be at least 2 hours. The ad-hoc committee will then vote. Three-quarters (75%) of the committee vote must be positive in order for the student to be recommended for the Ph.D. program. The Major advisor shall be able to provide direction to the student on the written proposal and presentation, but will not be present for the oral exam.

6. The student will be notified by the Department Chair of the decision of the committee. If the committee recommends the student for a Ph.D., he/she will be allowed to transfer to the Ph.D. program. The transfer will be complete upon submission and approval of the Ph.D. program of study. If the student is not recommended for a Ph.D., he/she will continue on to complete their M.S. program. Successful transfer from the M.S. to the Ph.D. program does not eliminate any of the requirements for the latter degree as described by the Graduate School or the Department of Plant Pathology Graduate Student Handbook.

Enrollment

All students must remain enrolled continuously unless they have applied (and been approved) for leave status. International students must be enrolled full time. Self-supported domestic students must be enrolled for a minimum of 2 graduate credits. If students are not continuously enrolled, and have not been approved for leave, they will have to reapply in order to finish their program. For further information, please see [Chapter 5](#) of the Graduate School Policies and Procedures.

Students on assistantships must be enrolled full time (minimum 10 credits) with a recommended average of 18 credits per semester. Students must enroll for at least one credit per semester of either PL P 700 or 800 during the spring and fall semesters

Enrollment during the summer session is not mandatory. However, if a summer class is needed for a student's program, a minimum of 3 credit hours is required to put the individual on appointment. Should the class be for 2 credit hours, a research credit hour must make up the difference. All summer classes must be within the student's program. *Enrollment in any course not on the Program of Study must be approved by the student's major professor.*

Reduced Course Load (RCL) status *may* be an option for international students who are in their last semester of study in Plant Pathology IF the student is either self-supported or on timeslip. Students on assistantships cannot apply for RCL. For additional criteria which must be met, please visit the [RCL](#) site and the [Continuous Enrollment/Leave site](#) at International Programs.

Plant Pathology students applying for RCL must:

1. Obtain the proper form at the International Programs Office;
2. Obtain the department chair's signature/approval, along with the student's advisor's signature; and
3. Provide a photocopy to the Johnson Hall Graduate Center for placement in the student's file.

**Course Offerings in Plant Pathology:
Description of Courses
PI P**

150 [BSCI] [Q] Molds, Mildews, Mushrooms: The Fifth Kingdom 3 A survey of the socio-historical impact of fungi and their role in development and application of the scientific method.

300 Diseases of Fruit Crops 2 Course Prerequisite: BIOLOGY 120, HORT 310, or HORT 313. Comprehensive understanding of the diseases of fruit crops grown in the state of Washington.

403 Advanced Cropping Systems 3 Course Prerequisite: HORT 202. Understanding the management of constraints to crop production and quality; biological, physical, and chemical approaches to crop health management. Field trips required. (Crosslisted course offered as CROP SCI 403, PL P 403). Recommended preparation: CROP SCI 305; PL P 429. Offered at 400 and 500 level. Cooperative course taught by WSU, open to UI students (XXXX 999).

429 General Plant Pathology 3 (2-3) Classification, symptoms, causes, epidemiology, and control of plant diseases.

499 Special Problems V 1-4 May be repeated for credit. Independent study conducted under the jurisdiction of an approving faculty member; may include independent research studies in technical or specialized problems; selection and analysis of specified readings; development of a creative project; or field experiences. S, F grading.

501 Biology and Control of Plant Diseases 3 (2-3) Introduction to the biology and control of plant diseases covering disorders caused by fungi, viruses, bacteria, and nematodes.

503 Advanced Cropping Systems 3 Understanding the management of constraints to crop production and quality; biological, physical, and chemical approaches to crop health management. Field trips required. (Crosslisted course offered as CROP SCI 403, PL P 403). Recommended preparation: CROP SCI 305; PL P 429. Offered at 400 and 500 level. Cooperative course taught by WSU, open to UI students (XXXX 999).

511 Viruses and Virus Diseases of Plants 4 (3-3) Course Prerequisite: MBIOS 503 or 504. Nature of plant viruses, vector-virus relationships and virus diseases of plants. Cooperative course taught jointly by WSU and UI (PLSC 511).

513 Plant Nematology 4 (3-3) Anatomy and morphology of plant-parasitic nematodes, molecular plant-nematode interactions, genomics, symptoms, identification, techniques and control. Cooperative course taught by WSU, open to UI students (PLSC 513).

514 Phytobacteriology 4 (3-3) Isolation and characterization of bacteria having a saprophytic, symbiotic or pathogenic association with plants, molecular structure, function, and genetics. Cooperative course taught by WSU, open to UI students (PLSC 514).

515 Seminar 1 May be repeated for credit.

(course list continued on next page)

521 General Mycology 4 (2-6) The structure, life histories, classification, and economic importance of the fungi. Cooperative course taught by WSU, open to UI students (PLSC 521).

525 Field Plant Pathology and Mycology V 1 (0-3) to 2 (0-6) May be repeated for credit; cumulative maximum 4 hours. Field trips, forays, and demonstrations dealing with various aspects of plant pathology and mycology.

526 Advanced Fungal Biology 4 (2-6) Course Prerequisite: PL P 521. Advanced topics in fungal biology, ecology, systematics, evolution and coevolution via discussions of literature and special laboratory projects. Cooperative course taught by WSU, open to UI students (PLSC 526).

535 Molecular Genetics of Plant and Pathogen Interactions 3 Genetic and molecular biological aspects of host-pathogen interactions. Cooperative course taught by WSU, open to UI students (PLSC 535).

551 Epidemiology and Management of Plant Diseases 3 Principles of plant disease epidemiology, control and ecology of pathogens. Recommended preparation: PL P 429. Cooperative course taught by WSU, open to UI students (PLSC 506).

700 Master's Research, Thesis, and/or Examination V 1-18 May be repeated for credit. Independent research and advanced study for students working on their master's research, thesis and/or final examination. Students must have graduate degree-seeking status and should check with their major advisor/committee chair before enrolling for 700 credit. S, F grading.

800 Doctoral Research, Dissertation, and/or Examination V 1-18 May be repeated for credit. Independent research and advanced study for students working on their doctoral research, dissertation and/or final examination. Students must have graduate degree-seeking status and should check with their major advisor/committee chair before enrolling for 800 credit. S, F grading.

- [View Full Unit Information](#)
- [Plant Pathology](#)
- Courses
- [Plant Pathology](#)

List of Courses – Best Estimate (Pl P 700 & 800 offered all semesters).

Course #	Course Name	U of I (PISc)	Instructor	Credits	Fall 2012	Spring 2013	Summer 2013	Fall 2013	Spring 2014	Summer 2014	Fall 2014	Spring 2015	Summer 2015	Fall 2015
150	Molds, Mildews & Mushrooms: The Fifth Kingdom		Carris/ Rogers	3		X			X			X		
300	Diseases of Fruit Crops (a/y)		Rayapati	2	X		X				X			
403	Advanced Cropping Systems		Hulbert	3	X		X	X			X			X
429	General Plant Pathology		Murray/ Pappu-even yr Peever/Schroeder-odd	3	X			X			X			X
499	Special Problems		arranged	Arr	X	X	X	X	X	X	X	X	X	X
501	Biol/Control of Plant Diseases (On-line MS inAg)		Glawe	3	X			X			X			X
503	Advanced Cropping Systems	512	Hulbert	3	X			X			X			X
511 (a/y)	Viruses & Virus Diseases of Plants	511	Pappu	4		X						X		
513 (a/y)	Plant Nematology (fna: Nematodes & Nematode Diseases of Plants)		Elling	4		X						X		
514 (a/y)	Phytobacteriology	514	B.Schroeder	4	X						X			
515	Seminar		See next page	1	X	X		X	X		X	X		X
521 (a/y)	General Mycology	521	Carris	4				X						X

Course #	Course Name	U of I (PISc)	Instructor	Credits	Fall 2012	Spring 2013	Summer 2013	Fall 2013	Spring 2014	Summer 2014	Fall 2014	Spring 2015	Summer 2015	Fall 2015
525 (a/y)	Field Plant Pathology		duToit	1 or 2						X				
526 (a/y)	Advanced Fungal Biology	526	Carris/ Peever	4					X					
535 (a/y)	Molecular Genetics/ Plant & Pathogen Interactions (a/y)	535	Hulbert '07-	3					X					
551 (a/y)	Epidem. & Mgmt of Plant Dis. (was Diseases of Plants) (a/y)	506	Johnson	3					X					

PI P 515 Seminar Instructor Schedule:

Fall 2012 Dr. Linda Thomashow
Spring 2013 Dr. Axel Elling
Fall 2013 Dr. Lori Carris
Spring 2014 Dr. Pat Okubara
Fall 2014 Dr. Deven See
Spring 2015 Dr. Tim Murray

Grades

700/800-Level Research Grades. 700-level credit is for students working on their master's research, thesis and/or examination. The 800-level credit is for doctoral research, dissertation and/or examination. Credits are variable and grading is satisfactory/unsatisfactory (S/U). Credit is awarded for a grade of 'S'; no credit is awarded for a grade of 'U'. The S/U grade does not carry any quality points and is not calculated in the grade point average (GPA). **In the event of exam failure, a 'U' grade should be recorded for that semester's 700 or 800 credits. Two 'U' grades for 700 or 800 credits will lead to dismissal from the program.** Faculty should set requirements for each semester that a student is enrolled in research credits, and provide an S/U grade at the end of the semester based on the student's performance in meeting those requirements. In extenuating circumstances, faculty may use the 'X' grade to indicate continuing progress toward completion of those requirements. The 'X' grade should be changed when the faculty member determines that the student has successfully met the requirements for that semester; the 'X' grades should be changed by the faculty no later than the semester of the final defense. Generally, students enroll in a minimum of 2 credits of the appropriate 700/800 level in the semester in which they take their final oral examination.

Incomplete grades: Students will have up to one year (unless a shorter time is specified by the instructor) to complete work for which they received an 'I' grade; after one year the 'I' grade will become an "F" if not completed.

Non-resident Students

Non-resident U.S. citizens with assistantships are guaranteed a non-resident tuition waiver for *one year only*. Upon your arrival, please begin taking the necessary steps to become a Washington State resident. To do this, visit the [residency website](#).

Scholarship Standards

Read Chapter Six, "[Academic Standards](#)" of the *Graduate School Policies and Procedures*.

Seminar

Seminar is scheduled every Monday at 4:10 PM. All students are expected to attend all seminars unless there is a course conflict. Course conflicts must be approved by the major professor.

Student's Progress

The major professor regularly, at least annually, assesses the student's progress during his or her tenure in the department. This applies to maintaining required grades, research progress, and meeting other departmental and university requirements toward fulfillment of degree requirements. Each student will receive annually a letter from the Chairman assessing the student's performance. Refer to the annual review form, Graduate Outcomes Assessment, found in this handbook.

Teaching Experience

The department does not have a formal requirement for teaching experience in any of its degree programs. However, the Faculty is on record that teaching experience on the part of the graduate students should be encouraged in all possible ways. Such experience becomes an important part of a student's qualifications in subsequent recommendations for certain

positions. Presenting workshops, extra seminars, or assigned TA responsibilities in the department would constitute such experience.

Time Limitations

Ordinarily, the length of time a student may hold an appointment is limited to 2 years for Master's candidates and 4 years for Doctoral aspirants.

Transfer of Graduate Credit hours

PhD Programs often include transfer credits from the student's M.S. program. Up to 1/2 of the 34 graded credits for the Ph.D. program can be transferred from another university, which is determined by the Graduate School.

Appropriate credit hours (with a grade of B or higher) earned in other accredited graduate schools may be applied to a limited extent toward an advanced degree; however, they may not be substituted for residence requirements. Acceptability of transfer credits is determined by the Graduate School, not the department. For more information on transfer credit and transfer credit restrictions see the *Graduate School Policies and Procedures Manual* and discuss the requested transfer with your major advisor.

MASTER'S DEGREE IN PLANT PATHOLOGY

Major Professor

Each student in the Department of Plant Pathology is chosen by a professor and agrees to be that professor's student. The professor is known as the student's major professor and also functions as his/her academic advisor. The major professor is the chair of the student's advisory committee and supervises the thesis research.

Master's Advisory Committee

During the first semester, an advisory committee should be chosen. The student, the major professor and the committee plan the student's program of study. The master's thesis committee must include a minimum of three active faculty members, at least one of whom must be a WSU tenured or tenure-track faculty member; the major advisor and two additional committee members. *For students whose major advisor is located off campus, it is strongly suggested* that the student have at least one committee member in Pullman who can advise the student while he/she is in Pullman and also provide lab space in which to work, if needed. This 'co-advisor' will share the 700 research credit each semester the student is in Pullman and in the co-advisor's lab.

Master's Program of Study

The M.S. program form should be submitted to the Graduate School no later than the beginning of the second semester of graduate work. Please submit a copy of the completed program form to the Plant Pathology program office in room 345 and a copy to each committee member. The program for the Master of Science in Plant Pathology must include:

30 credit hours minimum of total credit

21 credit hours minimum of graded course work, 15 of which must be at the 500-level with a maximum of 6 credit hours of non-graduate 300-and 400-level course work. The program must include 2 credit hours of Seminar (PI P 515)

4 credit hours minimum of PI P 700 research credits

The maximum number of PI P 700 credit hours that may be recorded on the form is 15; you may enroll for more than 15 credit hours of PI P 700, they just can't be shown on the program form.

Copies of the forms and directions can be found on the [Graduate School Deadlines and Procedures](#) page.

Front of Program Form: If a definite thesis title has not been decided upon, the general subject area should be reported. Please obtain appropriate departmental and committee members' signatures.

Back of Program Form: The student should supply appropriate information regarding courses taken and proposed, utilizing the WSU catalog, Graduate Study Bulletin, WSU academic records, and official transcripts from other institutions. Transfer credit, if requested should be reported exactly as it appears on the original transcript. Transfer credit hours should be reported in semester hours. All credits should be listed by year.

Master's Thesis

A thesis based on original research is required for the M.S. in plant pathology. The thesis is a scholarly study that is a significant contribution to the knowledge of Plant Pathology. A draft of the thesis that has been read and approved by the major advisor must be given to all committee members **at least one (1) month prior to the date of your defense*. Refer to the Academic Calendar published in the WSU Time Schedule for relevant deadlines. The committee members must read, edit, and return drafts of theses to the student within a reasonable period of time. The Graduate Studies Committee recommends that committee members hold drafts for no longer than 30 days.

**Students:* Be aware that your committee may require more time to review/comment on your thesis. *Communicate with your advisor and committee early in the thesis writing process to establish the specific timelines for your thesis.* It is strongly advised that the student call a committee meeting one (1) semester prior to their anticipated defense date to discuss the timeline for the actual defense date, committee members' availability, etc.

To inform yourself as to the committee's expectations for a successful defense, see the Final Defense Rubric in the 'Outcomes' section of this handbook. Talk to your advisor and committee members for any clarification you need.

It is also strongly advised that *the Application for Degree* be submitted at least one semester prior to the final examination is scheduled so the student can be notified of graduate requirements (to-do lists) before enrolling their last semester.

Departmental requirement: Hardbound thesis. *All students are required to submit one (1) hardbound copy of their thesis with name, degree and year on the spine, and title, name and year on the front to the department within 1 month of completing the oral exam. Samples are available by request from the library in the copy room.* Do not follow the format of some else's dissertation. You may be copying their mistakes and/or rules may have changed. Download from the Graduate School website, the Information Sheet for Students Planning Final Examinations, located under Thesis Guidelines at: <http://www.gradsch.wsu.edu/Forms/>

Bindery information: There are several binderies located in the State, and we do not require that you use a particular bindery. In the past, many students have used a local bindery in Uniontown. If you decide to use this vendor, their phone number is: 509/229-3363. In the past, they have picked up thesis and returned the hardbound copy(ies) to the main office. Call them for current pricing, payment info., etc. See JHGC for samples of the colors for covers and lettering used by the local bindery. There is no departmental requirement on the type of paper to be used. We suggest you include a completed signature page.

Final Master's Examination

Effective for students beginning their studies in fall semester of 2011 and thereafter, all students will be required to give an Exit Seminar. The date and time are to be decided after consultation with the student's advisor. The exit seminar will be part of the requirements for graduation and is in addition to the topical seminars that are to be given for credit in Pl P 515. The format and other requirements, such as an abstract that needs to be distributed prior to the exit seminar, are the same as those for Pl P 515.

(continued on next page)

A final oral examination is also required of all M.S. candidates. Refer to page 15 in this handbook for a copy of the rubric that will be used for all exams. The student must have completed or be enrolled in all the required course work and registered for a minimum of 2 credit hours in PIP 700 for the semester in which the final exam is to be taken.

Scheduling your exam: The examination must be scheduled 10 or more working days after the submission of the completed thesis Acceptance/Final Examination Scheduling Form. The Graduate School has asked that if you are defending your M.S. in the last two weeks of the semester, that the Scheduling Form be completed and filed earlier. The candidate must present a copy of the thesis (electronic), complete in format, to the department chair along with the scheduling form. A copy of the candidate's thesis must be available for public inspection in the main Plant Pathology office for at least 5 working days prior to the final examination. Copies must also be furnished to each of the candidate's committee members at least (5) working days before the final examination. ****Note: Please provide a completed copy of the scheduling form (includes all dept. signatures) to the Johnson Hall Graduate Center before filing it with the Graduate School.**

The Graduate School has asked that if you are defending your M.S. in the last two weeks of the semester, that the Scheduling Form be completed and filed earlier in the semester.

Final Defense via WECN: ALL final exams will be held in Pullman. The student and major professor must be in attendance in Pullman. Requests for exceptions must be directed to the department chair *in writing* by the advisor for the student. This must be done well in advance so as not to jeopardize the student meeting the requirement regarding submission of the Scheduling Form,

Note for final defense: The student should bring several copies of the thesis signature page (on the appropriate paper specified by the Graduate School) and a black pen to have committee members sign them while everyone is together.

More Information

All theses and dissertations must be submitted in digital (.pdf) format according to the Graduate School's digital formatting guidelines. Paper copies of theses and dissertations will no longer be accepted by the Graduate School; however, students will be required to submit a 100% cotton paper copy of the title page, signed signature page, and abstract page along with their digital submission. The cotton paper is required by the library for archiving purposes. Digital formats are easier to process, more efficient for publishing, and less expensive for the student. See the complete [*Digital Dissertation and Thesis Guidelines*](#) under the Navigating Your Degree section.

For more information on the Master's Degree, please go to [Chapter 7](#) of the Graduate School's Policies and Procedures.

If you are an M.S. student in their last semester and you are thinking about staying in our program to complete a Ph.D. degree, please talk with the department chair and/or someone in the Johnson Hall Graduate Center.

2012-2013 Deadlines and Procedures for Graduate Degrees

All Deadlines can be found at <http://www.gradsch.wsu.edu/forms> or
http://www.gradschool.wsu.edu/Documents/PDF/Deadlines_Procedures_FY12-13.pdf

<u>Procedure</u>	<u>Deadlines</u>
1. Obtain an Advisor/Committee Chairperson	<p>See PI Path Handbook – deadlines for filing program is earlier than the one specified here.</p> <p>All Deadlines can be found at: http://www.gradsch.wsu.edu/forms or http://www.gradschool.wsu.edu/Documents/PDF/Deadlines_Pr_Y12-13.pdf</p>
2. Submit <i>Program of Study</i> to the Graduate School (Master Students – No later than one semester (4 months) preceding Final Exam (Doctoral Students – No later than one semester (4 months) preceding Preliminary Exam)	
3. Schedule <i>Preliminary Exam</i> (Doctoral Students Only)	
4. <i>Preliminary Examination</i> (Doctoral Students Only)	
5. Submit <i>Application for Degree</i> (Graduation) to the Graduate School * Also last day to apply for a Graduate Certificate	
6. All students pay a \$50 graduation processing fee (valid for one year only); doctoral students also pay a \$75 publishing fee and an optional \$65 copyright fee.	
7. Submit <i>Final Exam Scheduling Form</i> no later than 10-working-days prior to the exam. At the same time thesis track and doctoral students need to submit a draft copy (electronic okay) of thesis/dissertation. (submit drafts to grad.programs@wsu.edu). (Ph.D: Be aware of the note below when scheduling)	
8. Conduct Final Examination (Last possible date)	
<p>Final theses and dissertations must be submitted within 5 working days of a successful defense. Submission includes uploading a copy to the library at www.dissertations.wsu.edu and bringing the title page, signature page and abstract to the Graduate School with the appropriate forms by 5:00p.m. on the 5th workday following your defense.</p>	
<p>Note: Doctoral students who want to participate in Commencement must have all requirements completed by noon on this date (No Exceptions). (Final Dissertations and Theses are due within 5 working days of the defense).</p>	

DOCTORAL DEGREE IN PLANT PATHOLOGY

Students in plant pathology must have an M.S. degree to be admitted into the doctoral program, unless exercising the department's By Pass Option, explained on pages 22-23. The period of study for the Ph.D. is at least 3 years beyond the M.S. degree, one of which shall be in residence at WSU on the Pullman campus.

Major Professor

Each student in the Department of Plant Pathology is chosen by a professor and agrees to be that professor's student. The professor is known as the student's major professor and also functions as his/her academic advisor. The major professor is the chair of the student's advisory committee and supervises the thesis research. (See Faculty listing in the back of this handbook.)

Doctoral Advisory Committee

The Doctoral committee must include a minimum of four (4) active graduate faculty members; the major professor as chair and three other faculty members; at least two of whom must be a WSU tenured or tenure-track faculty member (Graduate School Requirement). ***For students whose major advisor is located off campus, it is strongly suggested that*** the student have at least one committee member in Pullman who can advise the student while he/she is in Pullman and also provide lab space in which to work, if needed. This 'co-advisor' will share the 800 research credit each semester the student is in Pullman and in the co-advisor's lab.

An additional member who holds the highest appropriate degree and whose special knowledge is particularly important to the proposed program, but who is not a member of the faculty, may be appointed to the committee and shall vote. To do this, a student must petition the Graduate School [by sending a Memo via their committee chair and department chair] and attach the person's current CV, in order to add an outside member. At least one faculty member of the committee must be from the minor department/program if a minor is declared on the doctoral program. When no minor is declared, no outside member is required. However, when outside supporting work is included in the program, an outside member is recommended.

Doctoral Program of Study

The Ph.D. program form should be submitted to the Graduate School no later than the end of the first year of Ph.D. studies. Please submit the original, completed form to the Graduate School and provide completed copies to Mary in the Johnson Hall Graduate Center and all committee members. The program for the Ph.D. in Plant Pathology must include:

72 credit hours minimum of total credit

34 credit hours minimum of graded course work, 25 of which must be at the 500 level with a maximum of 9 credit hours of non-graduate credit (300 or 400 level). Only ½ of the graded coursework is transferable from another university. (Approximately 17-18 credits of the 34 semester hours) See page 27.

14 credit hours minimum of Plant Pathology coursework are required. (The 14 credit hours may include transfer credits if they are accepted by the Graduate School.)

2 credit hours minimum of Seminar (PIP 515) must be taken in the PhD program, and 20 credit hours minimum of PIP 800 research credit hours

Copies of the forms and directions can be found on the [Graduate School website](http://www.gradsch.wsu.edu/Forms/) under “Forms” <http://www.gradsch.wsu.edu/Forms/>

Deadlines – Doctoral students have two deadlines: their oldest coursework on the Program of Study cannot be over 10 years old at time of graduation; and the degree must be earned within three (3) years of successfully passing the Preliminary Exam.

Preliminary Examination – Schedule a *minimum* of 10 working days before exam.

An oral preliminary examination is required for each Ph.D. student during his/her program. The purpose of the preliminary examination is to test the student’s knowledge of plant pathology and related areas. The preliminary examination is typically [scheduled](#) after the student has completed most of his/her required course work, usually at the end of the second year of his/her program, but no later than 4 months prior to the oral dissertation defense. Refer to page 16 in this handbook for a copy of the rubric that will be used for all preliminary exams. Student must have an approved program of study on file, and permission from their committee. Check deadlines! Please go to the Graduate School website to ensure you have complied with all requirements (<http://www.gradsch.wsu.edu/>)

The student’s dissertation advisory committee will give the examination. A ‘Graduate Mentor’ (appointed by the Grad School) can be requested if the advisor or student feels there is a need. There are three possible outcomes of the preliminary examination: the committee votes to pass the student based on satisfactory performance; the committee votes to fail the student based on unsatisfactory performance but recommends the student be allowed to take the examination again after a minimum period of 3 months; or the committee votes to fail the student based on unsatisfactory performance and recommends the student be terminated from the graduate program. The committee may also make recommendations to correct deficiencies that become evident during the preliminary examination. To inform yourself as to the committee’s expectations for a successful defense, see the Final Defense Rubric in the ‘Outcomes’ section of this handbook. Talk to your advisor and committee members for any clarification you need.

NOTE: Preparation for the preliminary examination, i.e. studying, is to be done on the student’s own time.

Doctoral Dissertation

A dissertation based on original research is required for the Ph.D. in plant pathology. The dissertation is a scholarly study that represents a significant publishable contribution to the science of Plant Pathology. A draft of the thesis that has been read and approved by the major advisor must be given to all committee members ****at least one (1) month prior to the date of your defense*** and preferably, much earlier (i.e. more than 1 month in advance of the defense date). An electronic copy of the thesis [in final draft] must be provided to the Graduate school at the time of scheduling the candidate’s exam. Refer to the Academic

Calendar published in the WSU Time Schedule for relevant deadlines. All members of the student's committee must read, edit, and return drafts of the dissertation to the student within a reasonable period of time. The Graduate Studies Committee recommends that committee members return drafts within 30 days.

*Students: Be aware that your committee may require more time to review/comment on your thesis. *Communicate with your advisor and committee early in the thesis writing process to establish the specific timelines for your thesis.*

Note: The deadlines for submission to committee members are different for the Department of Plant Pathology from the Graduate School recommendations. Candidates for Doctoral degree must comply with both the Department and Graduate School requirements.

Doctoral Dissertation Defense

Effective for students beginning their studies in fall semester of 2011 and thereafter, all students will be required to give an Exit Seminar. The date and time are to be decided after consultation with the student's advisor. The exit seminar will be part of the requirements for graduation and is in addition to the topical seminars that are to be given for credit in PI P 515. The format and other requirements, such as an abstract that needs to be distributed prior to the exit seminar, are the same as those for PI P 515.

A final oral defense is also required of all Ph.D. candidates. The student must have completed or be enrolled in all the required course work and registered for a minimum of 2 credit hours in PIP 800 for the semester in which the final exam is to be taken. To schedule your final examinations you must have an approved *Application for the Degree* on file with the Graduate School. It is strongly advised that the *Application for Degree* be completed and submitted at least one semester prior to the final examination is scheduled so the student can be notified of graduate requirements (to-do lists) before enrolling their last semester. Refer to page 15 in this handbook for a copy of the rubric that will be used for all final exams.

It is also strongly advised that the student call a committee meeting one (1) semester prior to their anticipated defense date to discuss the timeline for the actual defense date, committee members' availability, etc. Communication between a student and their committee members is critical and must go in both directions.

Scheduling your exam: The completed scheduling form and a copy of the dissertation must be submitted to the Graduate School at least 10 working days prior to the examination date. *It is required that a copy of the dissertation be cleared by the Graduate School for compliance of format at the time of scheduling the final examination.* See Doctoral Dissertation and More Information (below) for further directions regarding the dissertation. ****Note: Please leave a completed/signed copy of the scheduling form with the Johnson Hall Graduate Center before filing it with the Graduate School.** The Graduate School has asked that if you are defending your Ph.D. in the last two weeks of the semester, that the Scheduling Form be completed and filed earlier in the semester.

A copy of the candidate's dissertation must be available for public inspection in the main Plant Pathology office. It must also be furnished to each of the candidate's committee members and the Graduate School's representative at least five (5) working days before the final examination.

Note for final defense: The student should bring several copies of the thesis signature page (on the appropriate paper specified by the Graduate School) and a black pen to have committee members sign them while everyone is together.

Defenses via WECN: ALL exams (prelims and finals) will be held in Pullman. The student and major professor must be in attendance in Pullman. Requests for exceptions must be directed to the department chair *in writing* by the advisor for the student. This must be done well in advance so as not to jeopardize the student meeting the requirement regarding submission of the Scheduling Form.

Departmental requirement: Hardbound thesis. *All students are required to submit 1 (one) hardbound copy of their thesis with name, degree and year on the spine, and title, name and year on the front to the department within 1 month of completing the oral exam. Samples are available by request from the library in the chair's office.* Do not follow the format of some else's dissertation. You may be copying their mistakes and/or rules may have changed. Download from the Graduate School website, the Procedures for Processing Dissertation/Thesis and Scheduling Final Examinations, located at <http://www.gradsch.wsu.edu/Forms/> (under Final Exams Scheduling Forms).

Bindery information: There are several binderies located in the State, and we do not require that you use a particular bindery. In the past, many students have used a local bindery located in Uniontown. If you decide to use this vendor, their phone number is: 509/229-3363. In the past, they have picked up thesis and returned the hardbound copy(ies) to the main office. Call them for current pricing, payment info., etc. See Mary for samples of the colors for covers and lettering used by the local bindery. There is no departmental requirement on the type of paper to be used. We suggest you include a completed signature page.

More Information

All theses and dissertations must now be submitted in digital (.pdf) format according to the Graduate School's digital formatting guidelines. Paper copies of theses and dissertations will no longer be accepted by the Graduate School; however, students will be required to submit a 100% cotton paper copy of the title page, signed signature page, and abstract page along with their digital submission. The cotton paper is required by the library for archiving purposes. Digital formats are easier to process, more efficient for publishing, and less expensive for the student. See the complete [*Digital Dissertation and Thesis Guidelines*](#). See also: the guidelines located on the right-hand side of the forms page: <http://www.gradsch.wsu.edu/Forms/>. Open access and copyright are options you can choose, but you will be charged for it. Payment would be made directly to UMI.

For more information on the Ph.D. Degree, please go to [Chapter 8](#) in the Policies and Procedures.

ASSISTANTSHIPS

Appointment

Within the Department of Plant Pathology there is a limited number of Research Assistantships (RA) available for students. There are two levels of compensation: one for M.S. students and one for Ph.D. students. All students on appointment are paid on a 12-month basis. Summer salary is the same as the salary for spring semester. Increases in pay from one level to the next occur only at the beginning of fall or spring semester. Compensation for TA/RA appointments currently includes medical and dental insurance.

Appointments are at .50 FTE (full-time equivalent). The required academic load is 10-12 credit hours during fall and spring semester, and if necessary, 3 for the summer. The required workload is 20 hours per week. For the RA the work required is at the discretion of the major professor. Assistantships are granted on a semester basis, and are renewed each semester at the discretion of the Graduate School and the Department. All study, whether for classes, exams or defense, is to be done on the student's own time.

Vacation/Leave Policy

There are no scheduled or guaranteed vacations. Students on appointment do not earn leave time. *During the term of their appointments, all graduate student assistants are expected to be at work each normal workday, including periods when the University is not in session with the exception of the legal holidays designated by the Board of Regents.* The major professor must approve all absences in advance.

The acceptance of admission, whether paid for from teaching funds, research grants, experiment station monies, or from public, private or foreign sources, implies a commitment on the part of the graduate student to conduct research with the major professor under a specific project. Except under extraordinary circumstances, students are discouraged from changing research projects. Doing so not only is disruptive of ongoing research, but also requires reassignment and finding other sources of financial support, both of which may be difficult, or even impossible.

The Graduate School has recently updated their forms to allow for when a student must be absent. View those policies in [Chapter 5](#) under Continued Enrollment and Graduate Student Leave at their website.

Funding Source

Not all assistants are funded from the same type of funding. Whether or not tuition can be paid depends on the stipulations regulated by the granting agency. If tuition is not allowed, the assistant will be paid a higher salary to compensate and will be expected to pay tuition him/herself. This may or may not result in a slightly higher tax responsibility. All tax responsibility rests with the student.

Reappointment

Reappointments normally will be approved if recommended by the department provided the student has maintained a 3.0 cumulative grade point average (GPA) or higher in all work since initial admission to the Graduate School, provided there are no outstanding incomplete grades of more than one semester or summer session's duration, and provided student has demonstrated satisfactory research progress and continued regular enrollment in the Graduate School.

Residency Requirement

Graduate students on RA/TA/PA appointments must live in the State of Washington.

Information on establishing residency can be found at:

<http://www.gradsch.wsu.edu/CurrentStudents/Navigating/> under 'Establishing Washington Residency'.

Seminar Abstracts (PL P 515)

Each Plant Pathology Graduate Student must enroll in Seminar (PL P 515) twice for their degree. See Degree Requirements. Effective for students entering Fall 2011 and thereafter: both seminars must be on topical subjects other than the student's dissertation, which have been approved by the faculty member directing seminar for that particular semester. Seminars must be presented from the Pullman campus.

Seminar abstracts should be sent *electronically* to JHGC 10 days prior to your seminar. The following steps will help you with preparation of the abstract:

Write the abstract using the standard format as described in the current year *Phytopathology*. Please be sure to include course name and #, place, date, and time. (See example on the following page.)

- Consult with your advisor.
- Make corrections or rewrite as indicated by your advisor.
- Consult with the seminar instructor
- Make corrections or rewrite as indicated by the seminar instructor and return to the seminar instructor for final proofing.

Please send it to stormom@wsu.edu or marshdj@wsu.edu **electronically in final form** for duplication and distribution. (Let Mary/Deb know the final abstract has been approved by your advisor and the seminar instructor in your email to her).

(student's responsibility: both the advisor and PL P 515 course director must have reviewed & approved the abstract before submission).

EXAMPLE

TITLE: Investigation of the mode of action of two fungal elicitors,
Fspb DNase and chitosan, in a mammalian system

Your Name

ABSTRACT:

In plants, non-host disease resistance is the result of the interaction between an incompatible plant pathogen and the plant. For example, an incompatible fungal pathogen of pea plants is *Fusarium solani* f. sp. *phaseoli* (*Fspb*), normally a pathogen of bean. The non-host disease resistance response in this interaction is characterized by the accumulation of about 20 proteins that temporally correlate with disease resistance. A similar pattern of defense protein accumulation occurs in response to certain DNA-damaging agents such as actinomycin D and UV_{260nm} light (6). Chitosan, a β -1,4-linked glucosamine, and a DNase are released from *Fspb* during its interaction with pea tissue (1,2). These components elicit pea defense responses (4,6). Moreover, *Fspb* DNase can cause pea DNA degradation *in vivo* (4) while chitosan has been shown to cleave DNA *in vitro* (5). Chitosan has been shown to localize in the nucleus early in the pea-*Fusarium* interaction (3).

In vertebrate cells, one particular response to DNA-damaging agents is the accumulation of the p53 protein (7). P53 is a sequence-specific transcription factor that activates many genes. In turn, these gene products play roles in the processes of cell cycle arrest or programmed cell death (8). We investigated the hypothesis that *Fspb* DNase and chitosan could induce p53 accumulation in a mammalian system. We chose this system to test our hypothesis for three reasons. First, a number of the same agents that induce p53 also induce pea defense responses (6,7). Second, since p53 has been a subject of intense study, there are a wide variety of commercial monoclonal antibodies to follow its accumulation. Finally, in addition to gaining insight on how these elicitors function in the pea system, their activity in an animal system could suggest possible therapeutic value in animals.

By western analysis, we determined that neither *Fspb* DNase nor chitosan were capable of causing p53 protein accumulation at the time points studied in the mouse preneoplastic mammary epithelial cell line, CL-S1. At 36 hrs. similar results were obtained utilizing the human MCF-7 mammary epithelial cell line. Also, treatment of the CL-S1 cell line with *Fspb* macroconidia, capable of excreting high levels of DNase, did not result in p53 accumulation. Immunocytochemistry was used as a supplemental method in determining whether p53 accumulated at 40 hrs. The immunocytochemical data were similar to those obtained by western analysis at 36 hrs. Finally, chitosan did not inhibit the growth of CL-S1 cells in culture. Taken together, these data suggest that *Fspb* DNase and chitosan did not interact with the DNA in either of the two cultured animal cell lines, at least not in a manner consistent with p53 accumulation.

Time Date Location
Plant Pathology 515, Semester, Year

PLEASE PUT YOUR REFERENCES ON THE REVERSE SIDE

GRADUATE AND PROFESSIONAL STUDENT ASSOCIATION

The Graduate and Professional Student Association (GPSA) is the representative body for graduate and professional students at WSU. The GPSA's primary role is to provide academic and professional support services. Through active participation and membership in numerous national, state, and university organizations and committees, the GPSA seeks to provide graduate and professional students with representation and a forum to express their concerns. All graduate and professional students are encouraged to direct their concerns and questions to their respective Senators, District Representatives, or to the President and Vice President.

The GPSA sponsors several activities for the benefit of graduate students. Please see [Services](#) at their website for complete details.

There is at least one GPSA Senator from each department on campus that has a graduate program. The number of senators is based on the number of graduate students in the department. Currently, the Department of Plant Pathology can have 2 Senators, selected by the students. See our web page for the Plant Path GPSA [Senators](#).

The body of Plant Pathology Graduate Students is now a registered student organization (RSO) referred to as the 'Plant Pathology Graduate Student Organization'. For further information on meeting times and activities, contact this year's president or Dr. Carris, faculty advisor for the group. Election results for 2012-2013 officers and GPSA Reps will be posted on our registered student organization [website](#).

Dr. William R. Wiley Annual Research Exposition

Provides an opportunity for graduate and professional students to present and publish their research. Cash prizes are awarded in each of five academic divisions. This year the Wiley Expo will likely be held in early February of 2013. To find out when to register and further information regarding abstract submission, please visit the Wiley website.

TA Excellence Awards

Recognizes those graduate students who have demonstrated excellence in their role as teaching assistant. A total of 10 awards of \$300 each are given.

Travel/Registration Grants

Travel and registration grants are available to help defray transportation and registration costs for presentation of papers at significant professional meetings.

Travel grants may also be available through various professional organizations including The American Phytopathological Society (APS), Mycological Society of America, and the Society of Nematologists. These must be applied for well in advance. Consult with your advisor for potential meetings you will be attending.

Copy Services

The GPSA no longer offers subsidized CopiCards for use in the libraries and CopiCards are no longer being used on campus. Graduate students can make FREE copies in the GPSA Study Center which is located in the Holland Terrill Library. To pay for printing and copying you must have money on your Cougar Card, the same card you use to check out books. To put money on your Cougar Card online, just go to the Cougar Card [website](#), click on Add Cougar Cash, and follow the instructions. If you need to put cash on your Cougar Card, or have problems with your card, go to the Cougar Card office, CUB Room 60.

Interlibrary Loans (ILliad)

Research projects often require books, journals, or articles that the WSU libraries may not own, but can retrieve for you from another institution. Interlibrary loans are now done through the web. To learn more about Interlibrary loans or to place a request, please visit: their website.

Interlibrary Loan support personnel (335-5517) can be found at the Circulation Desk located on the first floor of the new Holland Library or email them at: ill@mail.wsu.edu if you have further questions.

By going to their [Services](#) link, you can also take online tours and discover many other useful features of the WSU library system.

HELPFUL REFERENCES

Plant Pathology Home Page

Please visit the Plant Pathology website located online at <http://plantpath.wsu.edu/> for updated information pertinent to the Department.

The following references can be found online at <http://www.gradsch.wsu.edu/>. This list is not exhaustive and we suggest you visit the Graduate School web page for more information.

[WSU Catalog](#) is only found online.

This is used by both prospective and enrolled students to inform them of the courses offered at WSU and the requirements for each degree. It also highlights the faculty research interests.

[Guidelines for Good Practices in Graduate Education](#)

(at the website, follow the link at the right side of the screen)

These guidelines provide a code of ethics to be used in creating successful practices for faculty and graduate student interaction. These Guidelines should be read and followed by all students and faculty.

[Graduate School Policies and Procedures](#)

Are available online to all students when they are admitted to the Graduate School. They are used throughout a student's degree program. The Policies & Procedures serve as a guide to students, faculty and staff to insure that proper advising occurs leading to the completion of a graduate degree.

[Resources](#) at the Graduate School lists miscellaneous information to assist you in settling in to the university.

[Notary](#) services are available at the Office of the Dean of Students, located in French Administration Building Room 134.

On-line Forms

Found at [Graduate School – FORMS section](#)

- Application for Degree
- Re-enrolling graduate student
- Current graduate student
- Doctoral student ready for preliminary exams
- Current graduate student changing their program or committee
- Graduating graduate student
- Current graduate student ready for final completion
- Summaries for all enrolled graduate students
- Thesis/Dissertation formatting guidelines

For a comprehensive list of forms, please visit the Graduate School website – Forms section.

Schedule of Classes (formerly referred to as Time Schedules)

A Schedule of Classes lists times and places for all courses offered each semester; the Academic Calendar provides relevant deadlines for scheduling examinations, and includes a lot of general information including the final exam schedule. Schedule of Classes/Time Schedules **are no longer printed.**

To view [current semester class offerings](#), an [Academic Calendar](#) with relevant deadlines, and other general information for each semester, please visit the web at:

<http://www.registrar.wsu.edu/Registrar/Apps/HomePage.ASPX>

Writing Center

In January 2008, the University's new Graduate and Professional Writing Center (GPWC) opened for business in Smith CUE 414. GPWC features one-on-one in-person consultations, peer groups, and an onsite resource library. For further information, please visit their [website](#).

FACULTY

DEPARTMENT OF PLANT PATHOLOGY

* Indicates Adjunct Faculty

<u>NAME & TITLE</u>	<u>EXPERTISE</u>	<u>LOCATION, PHONE, & E –MAIL</u>
Lori M. Carris, Ph. D. Assoc. Professor & Assoc. Plant Pathologist	Mycology, biology and systematics of smut fungi	WSU - Pullman 509-335-3733 carris@wsu.edu
Gary A. Chastagner, Ph. D. Plant Pathologist	Christmas trees, turf, gulb, and ornamental diseases	WWREC - Puyallup 253-445-4528 chastag@wsu.edu
*Weidong Chen, Ph.D. Research Plant Pathologist USDA-ARS	Fungal diseases of grain legumes, genetics of host-pathogen interactions.	WSU - Pullman 509-335-9178 w-chen@wsu.edu
*Xianming Chen, Ph.D. Research Plant Pathologist USDA-ARS	Cereal rusts, genetics and plant resistance	WSU - Pullman 509-335-8086 xianming@wsu.edu
*Frank M. Dugan, Ph.D. Research Plant Pathologist USDA-ARS	Ascomycetes and associated anamorphs, fungi endophytic in higher plants	WSU - Pullman 509-335-1783 fdugan@wsu.edu
Lindsey du Toit, Ph.D. Associate Plant Pathologist Extension Plant Pathologist	Vegetable seed pathology, vegetable pathology	NWREC Mt.Vernon 360-848-6140 dutoit@wsu.edu
Kenneth C. Eastwell, Ph.D. Professor Plant Pathologist	Plant virology, fruit tree and grape pathology	IAREC - Prosser 509-786-2226 Ext. 385 keastwell@wsu.edu
Axel Elling, Ph.D. Assistant Professor	Nematology; molecular plant- nematode interactions, effector biology, host responses, functional genomics of host- parasite interactions.	WSU-Pullman 509-335-3742 elling@wsu.edu

<u>NAME & TITLE</u>	<u>EXPERTISE</u>	<u>LOCATION, PHONE, & E -MAIL</u>
Dean A. Glawe, Ph.D. WSU Professor, U/W College of Forest Resources	Mycology; systematics and biology of pyrenomycetes, powdery mildews and yeasts; taxonomic databases	U/W, College of Forest Resources Box 352100 Univ. of Washington Seattle, WA 91895 Ph.: 206 616-9554 glawed@u.washington.edu OR glawe@wsu.edu
Gary G. Grove, Ph.D. Professor	Fruit tree diseases and epidemiology	IAREC - Prosser 509-786-9283 grove@wsu.edu
Lee A. Hadwiger, Ph.D. Professor & Plant Pathologist	Molecular biology, host-parasite interactions, and disease resistance	WSU - Pullman 509-335-3751 chitosan@wsu.edu
Scot H. Hulbert, Ph.D. R. James Cook Endowed Chair in Cropping Systems Pathology Professor, Crop & Soil Sciences Scientist, Plant Pathology Dept.	Genetics of resistance and virulence; disease manage- ment in conservation-oriented cropping systems.	WSU - Pullman 509-335-3722 scot_hulbert@wsu.edu
Debra A. Inglis, Ph.D. Plant Pathologist and Extension Plant Pathologist	Vegetable pathology	NWREC-Mount Vernon 360-848-6134 dainglis@wsu.edu
Dennis A. Johnson, Ph.D. Professor	Epidemiology and management of mint and potato diseases	WSU - Pullman 509-335-3753 dajohn@wsu.edu
*Ned Klopfenstein, Ph.D. Research Plant Pathologist USDA-Forest Service	Forest pathogens	Rocky Mtn. Res. Stn. Moscow, Idaho 208-883-2310 nklopfenstein@fs.fed.us
*Richard Larsen, Ph.D. Research Plant Pathologist, USDA-ARS	Virology of bean and cool season legumes; resistance in alfalfa to soil-borne pathogens	IAREC - Prosser 509-786-9259 richard.larsen@ars.usda.gov

<u>NAME & TITLE</u>	<u>EXPERTISE</u>	<u>LOCATION, PHONE, & E –MAIL</u>
*Mark Mazzola, Ph.D. Research Plant Pathologist, USDA-ARS	Fruit tree and strawberry pathology, soilborne fungi, molecular microbial ecology, and nematology	TFRL - Wenatchee 509-664-2280 mark.mazzola@ars.usda.gov
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Jack D. Rogers, Ph.D. Regents Professor and Plant Pathologist	Mycology and forest pathology	WSU - Pullman 509-335-3732 rogers@wsu.edu

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ADDENDUMS