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GRADUATE STUDENT HANDBOOK

DEPARTMENT OF PLANT PATHOLOGY

Plant Pathology Graduate Students with invited speaker, Dr. Ullman 4/2016

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!

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 (scot_hulbert@wsu.edu). I wish you all the best.

Sincerely,

Scot Hulbert, Ph.D.
Chair

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INTRODUCTION

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 and the Graduate Student Code of Rights and Responsibilities along with the Plant Pathology Graduate Handbook in order to 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 GSPP, Chapter 1.E:
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.

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

THINGS TO DO UPON ARRIVAL

Check-In

Check in at the Johnson Hall Graduate Center (JHGC) with Deb Marsh and Lisa Lujan (Johnson Hall 131).

- Map of the university—ask us if you'd like one! Maps can also be obtained at WSU Visitors Center or WSU Parking Services.

Check in at the main departmental office (Johnson Hall, Room 345).

- Introduce yourself to Cheryl Hagelganz, Administrative Manager
- Receive desk assignment from Cheryl.
- Obtain from Cheryl any necessary keys for building, lab, office and greenhouse (optional) **NOTE:** Some keys require your major professor's approval by email.

New Student Checklist

Review once again the New Student Checklist to ensure all items are complete and understood. If you have questions after your review, please contact Deb or Lisa.

- **IMPORTANT: Pay particular attention to residency requirements and restrictions. Out-of-state waivers for domestic students are only guaranteed for one year. Most items need to be in place for one year**, so it is important to take the necessary steps now to ensure a successful WA residency application at the 1 year mark. **Review the information here: http://gradschool.wsu.edu/establishing-residency/**

  Important IMMEDIATE steps to establish your residency:

  ☐ Change your vehicle registration to Washington State
  ☐ Change your driver's license to Washington State (even if you do not drive).
  ☐ If you do not have a driver's license in another state, have you applied for a Washington State ID card?
  ☐ Establish proof of independence documentation, such as income tax return or permanent full-time employment
  ☐ Keep copies of your lease agreement, utilities, phone bills, etc.
  ☐ Register to vote in Washington.
  ☐ Make sure all supporting documentation is updated to a Washington address, such as bank statements, utility bills, etc.
  ☐ Keep your mailing address updated

Employment Preparation Documents

If you have a paid assistantship, you will also need to complete the following items **on or before your first day of employment.** Please see the Personnel desk in the Johnson Hall Business Center (JHBC; Rm 201) to do this. Students beginning at the R&E center will need to contact the R&E Center's main office for assistance).

- **I-9 Forms** – must be completed on or before the first day of employment.
- **W-4 Forms**
- **Automatic payroll deposit is recommended**. The form is available from the Business Center, or 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.
- To receive a copy of your Personnel Action Form (PAF), contact the Personnel desk in the JHBC (Rm 201).

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). There is a special Social Security application session at the International Student Orientation session (Bryan Hall) in the week prior to the first day of instruction (Fall semester only). Check the Orientation schedule for exact date and time of the session. **DON'T MISS THE SESSION!!!** You are required to present a letter that verifies your WSU employment, as well as bring photocopies of your DS2019, I94, VISA, and Passport. The JHGC will arrange the employment letter be waiting for you at the session in Bryan Hall. *Students beginning at the R&E who do not have a social security number should contact the R&E office staff for assistance in getting one.*

If you miss the session, you will likely miss your first paycheck, and also have to drive to the Lewiston Social Security office to apply (2 hour drive, round trip), which 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. This website https://www.ssa.gov/ssnumber/ gives you information on filling out the form, printing it, and where to send it.

GENERAL INFORMATION

Address Change

You can update your address by going to https://my.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.**

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

Follow the link for instructions on how to set up your wireless connection.

To connect to the HP 400 Printer in 350 Johnson Hall, sign into computer using AD.

Start
In 'Search all programs and files" or "Computer"
Type: \\134.121.80.28
Find: pp350 HP 400
Click on printer to install

Or, you can simply click the IP address link above, find printer, and install.

These instructions were successfully tested using Windows 7.

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

Review the information on the Information Technology website to learn about your WSU email.

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 the Vogel Plant BioSciences Building 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.

Owen Science Library

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.

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. 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 are automatically enrolled in the Graduate Student Health Insurance Medical Plan (including dental). Effective dates for this plan are 8/16-12/31 for Fall appointments, and 1/1-8/15 for Spring appointments. No premiums are deducted during the summer months if the policy was in effect during spring semester. International students not eligible for the aforementioned plan, will automatically be enrolled in the iSHP health insurance plan and are responsible for the premium. Likewise domestic graduate students not eligible are invited to review the HWS

website for other available options and will be responsible for the related premiums. Health cards, plan information and effective dates can be found at the Health & Wellness Services website.

Dependents such as spouse and/or children may be added to the insurance policy but the student is responsible for the additional premiums. If premiums are being paid for a dependent, spring semester rates will be higher than fall semester rates because of the summer coverage.

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). Unfortunately, at the beginning of the term, it sometimes takes a week or two for services to align in WSU systems, depending on a number of situations. If you need medical attention and your health card is not yet available, please contact Merry Lawrence (509-335-5293) at Health and Wellness services. Explain your situation, graduate assistantship appointment etc. and she can arrange a visit for you.

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 Services is located in Bryan Hall, room 108, phone (509) 335-4508, or email them at: ip.globalservices@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 JHGC and JHBC.

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

Mail – U.S. Postal Service

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 l 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.

Pre-paid and/or pre-addressed envelopes 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.

Mail – United Parcel Service (UPS)

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

Mail – 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 research technologist Mike Adams 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

To obtain a Network ID, visit the Information Technology website for information and follow the link to create your Network ID (you will need your WSU ID number for this).

Notary

Notary services are available at the Office of the Dean of Students, located in French Administration Building Room 134.

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. Online 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

NOTE: 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 $15.00 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. All order requests must be initiated using the CBS online ordering system. POs are generally completed within 48 hours. The JHBC 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.

Registration

NOTE: see also the Academic Information section of this handbook.
Registration is done online through your MY WSU portal. Go to: https://myWSU.edu, sign on using your Network ID and from there your myWSU 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

Student Recreation Center

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 is located across from the student recreation center on North Fairway Drive. For questions regarding specific equipment, call 335.1892. The Outdoor Recreation program 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 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 generate '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.

International Travel Requirement

The required 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—including graduate research while enrolled in research credits.

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.

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.

Visitors

The 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.

ASSESSMENT AND LEARNING OUTCOMES

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.

Plant Pathology Graduate Program Learning Outcomes Assessment [adopted June 30, 2008]

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.

Objectives

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.

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 one seminar (PlP 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 (PlP 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:

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:

- Understanding, interpretation and synthesis of scientific literature pertaining to plant pathology and related disciplines
- Formulating hypotheses; developing experimental designs to test these hypotheses; establishing and maintaining experiments
- Collecting data in an objective way and conducting appropriate statistical analyses
- Interpretation and presentation of research results in oral and written formats
- Presentation of research at professional meetings and local commodity meetings
- Publication of research in peer-reviewed scientific journals and other discipline-appropriate outlets such as commodity newsletters

To maintain a leadership role in plant pathology and related disciplines at the state, national and international levels, the program aims to:

- Attract, retain and train high quality graduate students.
- 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.
- 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 (below); an evaluation rubric (below) 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

Evaluation Rubric – Thesis or Dissertation Defense

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:

Evaluation Rubric – Oral Preliminary Exam

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:

Each of you should retain a fully signed copy of the annual review prior to submitting the signed originals and CV to Deb Marsh by the May 12, 2017 deadline.

Graduate Student Annual Review for 2016-2017

Crop and Soil Sciences, Horticulture, Plant Pathology, Food Science (WSU), Entomology

The evaluation period for the annual review is May (or starting date) to May. Each student is responsible for completing Sections A and B, and then forwarding it **electronically** with a curriculum vita (CV) to their advisor in advance of the review meeting. **The student is responsible for arranging the annual review meeting.** The student's advisor will complete Sections C and D and review them with the student at the annual review meeting. Both parties will complete Section E (if applicable). Annual reviews must be completed and submitted (including CV) to Debra Marsh, Academic Coordinator, by **Friday, May 12, 2017**.

This form must be typed

Section A

Name:	
WSU ID#:	
Term Entered (i.e. Fall 2016):	
Degree Objective (MS or PhD):	
Degree Program:	
Advisor:	
Co-Advisor:	
Campus Advisor (if applicable):	
Other Committee Members:	
Number of committee meetings since last review:	
Date of most recent committee meeting:	
Program of Study approval date:	
Or program of study anticipated filing date:	
Cumulative GPA:	
Seminar Date(s):	
Thesis Dissertation subject title:	
Thesis/Dissertation proposal approval date:	
Or thesis/dissertation proposal anticipated approval date:	
PhD preliminary exam completion date:	
Or anticipated preliminary exam completion date:	
Anticipated term for completion of degree requirements:	

Section B. Self Assessment

Summarize your academic and research progress and plans. Please address the following items:

1. What academic/research goals did you propose to accomplish in your last review *(not applicable for first year students)*?
2. What have you accomplished since your last review?
    a. Discuss your academic and research progress
    b. Describe your publications to date. Please list published manuscripts and book chapters, manuscripts in preparation (and expected date of submission), abstracts (professional papers and posters presented).
    c. List professional activities such as awards/scholarships, meetings attended, abstracts/papers published, presentations given, and teaching experience.
    d. Discuss your departmental and professional stewardship.
3. What are your greatest challenges and how will you overcome them?

Discuss your future directions and goals as follows:

1. Overall.
2. For the next review period.

Section C. Advisor Assessment

Note to Advisor—be sure to also review the CV your student is required to prepare and provide with this review.

Performance, Skill Ratings	Excellent	Good	Average	Fair	Poor	NA
Academic Performance						
Research Performance						
Work Habits						
Technical Skills						
Rate of Progress						
Communication Skills						
Teaching Performance						
Overall Rating						

Please provide an assessment of your student's research progress and accomplishments for the current review period (or research potential for a first year student). Comment on the student's strengths and weaknesses and provide specific recommendations or requirements on areas that need improvement. Consider the student's understanding of the scientific literature, recent proposal defense (PhD), seminar performance, and other research benchmarks.

Outline specific conditions or expectations that must be fulfilled prior to the next review and discuss the student's probable success in completing their degree requirements in a timely manner. If the probability is not good, please indicate why.

Section D. ***Recommendations***

Overall assessment is ____ satisfactory or ____ unsatisfactory*

If the evaluation is **unsatisfactory, enrollment should be ___ continued or___ discontinued*
*Conditions or recommendations for continued enrollment if evaluation is **unsatisfactory**:*

Signature of Advisor: _____ Date: _____

Signature of Student: _____ Date: _____
My handwritten signature above acknowledges this evaluation has been discussed with me.

Comments on review by student may be attached

Certification of Assistantship Duties

Student: **The graduate assistantship position that you have held during this past year and the related tuition waivers were contingent upon factors as outlined in your offer letter. By signing below you certify you have met the following contingent factors for the preceding semester(s) during which you held an assistantship.**

(✓) check the terms you held assistantship:

___Spring 2016 / ___ Summer 2016 / ___ Fall 2016 / ___Spring 2017

- I remained enrolled full time (at least 10 *[3 cr in summer]* credits as defined in Graduate School policy manual, chapter 9) during the period of the appointment.
- I maintained a 3.0 cumulative GPA during the period of the appointment (or approved exception to policy)
- I met the service requirement of an average of 20 hours per week for 0.5 FTE as scheduled by my department/supervisor (or based on hours required for partial FTE appointment).

Student Signature Date RA Advisor **or** TA Supervisor Signature Date

ACADEMIC INFORMATION

Academic Calendar

The Academic Calendar provides relevant deadlines for registration, fees, applications, enrollment, and exams.

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 Integrity website.

Catalog of WSU Courses

The WSU Catalog is found only online. It 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.

Course Offerings in Plant Pathology (PL_P): Description of Courses

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.

301 Food Mycology 3 (2-3) Course Prerequisite: MBIOS 101. Survey of the biology and uses of fungi important in the production and storage of foods and beverages. (Crosslisted course offered as PL P 301, FS 301).

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: Open to UI degree-seeking students.

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. NOT AVAILABLE TO PULLMAN STUDENTS

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: Open to UI degree-seeking students.

511 Viruses and Virus Diseases of Plants 3 Course Prerequisite: MBIOS 503 or 504. Nature of plant viruses, vector-virus relationships and virus diseases of plants. Cooperative: Open to UI degree-seeking students.

512 Topics in Plant Pathology V 1-3 May be repeated for credit; cumulative maximum 6 hours. Concepts of plant pathogen interactions and disease management.

513 Plant Nematology 3 Anatomy and morphology of plant-parasitic nematodes, molecular plant-nematode interactions, genomics, symptoms, identification, techniques and control. Cooperative: Open to UI degree-seeking students.

514 Phytobacteriology 3 Isolation and characterization of bacteria having a saprophytic, symbiotic or pathogenic association with plants, molecular structure, function, and genetics. Cooperative: Open to UI degree-seeking students.

515 Seminar 1 May be repeated for credit.

521 General Mycology 3 The structure, life histories, classification, and economic importance of the fungi. Cooperative: Open to UI degree-seeking students.

525 Field Plant Pathology and Mycology 3 Diverse plant diseases, disease diagnosis and management in fields, orchards, nurseries; interact directly with diverse agricultural stakeholders. Field trip required. Recommended preparation: PL P 429 or PL P 521.

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: Open to UI degree-seeking students.

535 Molecular Genetics of Plant and Pathogen Interactions 3 Genetic and molecular biological aspects of host-pathogen interactions. Cooperative: Open to UI degree-seeking students.

551 Epidemiology and Management of Plant Diseases 3 Principles of plant disease epidemiology, control and ecology of pathogens. Recommended preparation: PL P 429. Cooperative: Open to UI degree-seeking students.

570 Techniques in Plant Pathology 3 (1-6) Laboratory techniques for isolating, cultivating, and identifying the major groups of plant pathogenic organisms. Cooperative: Open to UI degree-seeking students.

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, U 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, U grading.

Course Semester Rotation (anticipated)

Course #	Course Name	Coop Status	Instructor	Credits	Term/Rotation
150	Molds, Mildews & Mushrooms: The Fifth Kingdom		Carris	3	no longer taught
300	Diseases of Fruit Crops		Rayapati	2	Fall Even Years
301	Food Mycology		TBD	3	has not been taught
403	Advanced Cropping Systems		Burke	3	Fall
429	General Plant Pathology		Peever/Pappu	3	Fall
499	Special Problems		arranged	Arr	Fall/Spring
501	Biol/Control of Plant Diseases *Online--Not Available to PLP or Pullman Students*		TBD	3	Spring
503	Advanced Cropping Systems	WSU CoOp	Burke	3	Fall
511	Viruses & Virus Diseases of Plants	WSU CoOp	Pappu	3	Spring Odd Years
512	Special Topics in Plant Pathology		TBD	V 1-3	TBD
513	Plant Nematology		Gleason	4	Spring Odd Years
514	Phytobacteriology	WSU CoOp	TBD	3	Fall Even Years
515	Seminar		TBD	1	Fall/Spring
521	General Mycology	WSU CoOp	Carris	3	Fall Odd Years
525	Field Plant Pathology & Mycology		duToit	3	Summer Even Years
526	Advanced Fungal Biology	WSU CoOp	Peever	4	Spring Even Years
535	Molecular Genetics/ Plant & Pathogen Interactions	WSU CoOp	Tanaka	3	Spring Even Years
551	Epidemiology & Management of Plant Diseases	WSU CoOp	Johnson	3	Spring Even Years
570	Techniques in Plant Pathology	WSU CoOp	TBD	3	Fall
700/800	Research Credits		Advisors	V 1-18	X

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 Add an Academic Program Degree Level form from the Graduate School—facilitated by the Johnson Hall Graduate Center.

Degree Sought

Students with a Bachelor's degree are typically considered as a candidate for the M.S. degree. In some cases, a student may display a high 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. Students with a B.S. applying directly to a Ph.D. program must document research experience by describing the research project(s) with which they were involved. This should include the nature of the research project, duration, supervisor, role and involvement in the project, what was learned from the project, and any publications or conference presentations resulting from the project. The applicant should also include a *Statement of Purpose* that addresses specifically why they want to go directly into a Ph.D. program instead of first completing an M.S. degree, their interests in pursuing a Ph.D., and their career goals. Applicants should have a GPA of at least 3.25. If they are not a native English speaker, test scores of either TOEFL or IELTS must be submitted. GRE scores are not required.

Students in the second year of graduate study working towards an M.S. in Plant Pathology may decide they would rather work directly towards a Ph.D. degree instead of finishing their M.S., if they realize this is a good career goal and their project can be suitably expanded into a Ph.D. project. This option, referred to as a 'by-pass option', is available under some conditions. 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. 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 their 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. If the Department Chair concurs with the committee's recommendation the student will be allowed to transfer to the Ph.D. program. The Chair reserves the right to consult with other department faculty to seek input on the request. 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—facilitated by the Johnson Hall Graduate Center. The student is also required to file a 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 10-12 credits per semester. Full-time 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 may be used to 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 International Student Services site.

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 JHGC for placement in the student's file.

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.

Good Practices in Graduate Education

Found here, 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 (GSPP)

Referenced frequently, the Graduate School's Policies and Procedures manual serves as a guide to students, faculty and staff to insure that proper advising occurs leading to the completion of a graduate degree.

Schedule of Classes

In addition to myWSU, the **web version** of the Schedule of Classes (SOC or Time Schedule) lists times and places for all courses offered each semester. Students may find this version easier to review.

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.

Seminar Abstracts (PL P 515)

Each M.S. student must enroll in Seminar (PLP 515) once for their degree; PhD. Students must enroll in Seminar (PLP 515) twice for their degree. See Degree Requirements. Effective for students entering Fall 2011 and thereafter: these seminar presentations must be on topical subjects other than the student's thesis/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 Cheryl Hagelganz (chagelganz@wsu.edu) 10 days prior to your seminar in final form for duplication and distribution; the student must also indicate in the message to Cheryl that it has been approved by both advisor and PLP 515 course instructor. 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 and approval.

EXAMPLE

TITLE: Investigation of the mode of action of two fungal elicitors, *Fsph* 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* (*Fsph*), 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 ∃-1,4-linked glucosamine, and a DNase are released from *Fsph* during its interaction with pea tissue (1,2). These components elicit pea defense responses (4,6). Moreover, *Fsph* 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 *Fsph* 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 *Fsph* 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 *Fsph* 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 *Fsph* 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 YOURREFERENCES ON THE BACK

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 found in the Assessment section of 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 ½ 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 GSPP's and discuss the requested transfer with your major advisor.

Writing Center

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

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 committee must include a minimum of three (3) members including the Major Advisor as Chair. At least one member must be tenured or tenure-track Plant Pathology Graduate Faculty; USDA-ARS researchers appointed as WSU adjunct Plant Pathology faculty are entitled to Chair, Co-Chair, or serve as a committee member of graduate student committees. At least one member must be located on the Pullman campus; ***for students whose major advisor is located off campus, the Pullman designated committee member will serve as campus advisor while the student is Pullman*** and provide lab space in which to work, if needed. Other individuals internal to WSU serving as Graduate Faculty in their own program or discipline may serve as a committee member with approval of the Plant Pathology Chair. External committee members are approved on a case-by-case basis. **The Graduate School strongly recommends the majority of the committee be Graduate Faculty in Plant Pathology.**

Master's Program of Study

The M.S. program form should be submitted to the Graduate School by way of the JHGC no later than the beginning of the second semester of graduate work. ***Please be sure to submit the completed program form (including committee signatures) to the JHGC.*** 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 the500-level with a maximum of 6 credit hours of non-graduate 300-and 400-level course work. The program must include one credit hour of Seminar (Pl P 515)

4 credit hours minimum of Pl P 700 research credits

The maximum number of Pl P 700 credit hours that may be recorded on the form is 15; you may enroll for more than 15 credit hours of Pl 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's 'forms' 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 Graduate School's 'Deadlines and Procedures for Graduation' for relevant deadlines. 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.*

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.

To inform yourself as to the committee's expectations for a successful defense, see the Final Defense Rubric in the Assessment 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.

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 non-credit 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.

A final oral examination is also required of all M.S. candidates. Refer to the Assessment section of 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 Pl P 700 for the semester in which the final exam is to be taken.

Scheduling your Exam

The examination must be scheduled at least 10 or more working days after the submission of the completed thesis Acceptance/Final Examination Scheduling Form. The student must present an electronic copy of the thesis complete in format along with the scheduling form to the department chair for signature. ***Please provide a courtesy copy of the completed scheduling form (includes all***

signatures) to the Johnson Hall Graduate Center before filing it with the Graduate School. **AND,** in addition to the advance digital copy the Graduate School requires, send the same electronic copy to Deb Marsh (marshdj@wsu.edu). This will serve as the display copy and made available to the state-wide faculty via secure Sharepoint. **Copies must also be furnished to each of the candidate's committee members at least (5) working days before the final examination.**

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.

Thesis Formatting and Submission: All theses and dissertations must be submitted in digital (.pdf) format according to the Graduate School's digital formatting guidelines. Additionally, students are 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. Refer to the Dissertation and Thesis Guidelines posted on the Graduate School website.

Hardbound Thesis Requirement for Plant Pathology Library: All students are required to submit one (1) copy of their thesis binding, arranged by the JHGC, for the Plant Pathology library. There is no departmental requirement on the type of paper to be used. We suggest you include a completed signature page.

More Information: For more information on the Master's Degree, please go to Chapter 7 of the GSPP.

Deadlines and Procedures for M.S. Graduate Degrees

Graduate School
Washington State University

Summer 2016 – Fall 2017 Deadlines and Procedures for Master's Degree
For a list of all Graduate School Forms, click HERE

Procedure	Deadlines
1. Obtain an advisor/committee chairperson	As soon as possible after admission to the Graduate School
2. Submit Program of Study for Master's Degree to the Graduate School no later than the semester ***before*** the semester in which you take your Final Exam (dates listed at right). *Programs/Departments with previous authorization to submit Master's Degree Programs of Study at a date other than what is listed: See the program's handbook for specific deadline.	Graduation — Deadline Summer 2016 — 2/1/2016 Fall 2016 — 2/1/2016 Spring 2017 — 9/1/2016 Fall 2017 — 2/1/2017
3. Submit Application for Degree form (Graduation) to the Graduate School. This deadline is also the last day to apply for a **Graduate Certificate.** All students pay a $50 graduate processing fee, valid for one year only. Payment is made at the time of completing/submitting the online Application for Degree using *myWSU.* *Apply by the initial Deadline for your name to appear in the Commencement Program for that semester. If you miss the deadline, your name will not appear in the Commencement Program.	Graduation — *App Deadline **Summer 2016 — 5/27/2016** (applications open 1/1/2016) w/$50 late fee: 5/28/16 – 6/30/16 w/$75 late fee: 7/1/16 – 7/29/16 **Fall 2016 — 10/9/2016** (applications open 6/13/16) w/$50 late fee: 10/10/16 –10/31/16 w/$75 late fee: 11/1/16 – 11/23/16 **Spring 2017 — 3/3/2017** (applications open 10/10/2016) w/$50 late fee: 3/4/17 – 3/31/17 w/$75 late fee: 4/1/17 – 4/21/17 **Summer 2017 — 5/26/2017** (applications open 1/1/2016) w/$50 late fee: 5/27/17 – 6/30/17 w/$75 late fee: 7/1/17 – 7/28/17 **Fall 2017 — 10/6/2017** (applications open 6/12/17)

Deadlines/Procedures for Master's Degree — Updated 05/20/2016

<table>
<tr>
<td>NEED to UPDATE your Application for Degree?

Already paid your fee but discovered you cannot complete your requirements for the semester in which you applied?

The Graduate School will email you a form to complete, which must be returned to the Graduate School (scanned and emailed). We will update your semester of graduation without any additional fees. Your $50 graduation fee is good for one calendar year.</td>
<td>You must UPDATE your Application for Degree using the following steps:

a. Email Gradschool@wsu.edu
b. Subject Line: Your name – UPDATE App for Degree
c. In body of email, provide:
1. Name
2. WSU Student ID# (very important)
3. Type of degree (master or doctoral)
4. NEW semester for graduation (spring, summer, fall), and year
d. WATCH for an email from the Graduate School. Complete and return the form sent to so you can be updated.</td>
</tr>
<tr>
<td>4. ALL Master's degree students must submit a Final Scheduling form! Submit:
• *Completed Final Exam Scheduling Form no later than 2 full weeks (10 working days) prior to the exam date. Retaking the final exam? You must submit the form 3 weeks (15 working days) in advance.

• Draft Thesis: Thesis track master's students must submit an electronic draft of their final thesis (formatted in as complete a form as it will be before formal defense). Send your thesis draft to gradschool@wsu.edu in pdf format. In the email, provide your name, WSU student ID, and exam date.

*Completed means all signatures, thesis title, date/time/location(s) identifying where each committee member will attend the exam. Including research protocol permissions.</td>
<td>Graduation — Scheduling Deadline

Summer 2016 — 7/15/2016
Fall 2016 — 11/9/2016
Spring 2017 — 4/7/2017
Summer 2017 — 7/14/2017
Fall 2017 — 11/8/2017</td>
</tr>
<tr>
<td>5. Conduct Final Examination (Last possible date)
We have extended the time to defend to the last possible date. We are unable to make exceptions beyond these deadlines. We do not encourage you to wait until the last date to defend. Please meet with your committee to identify your final exam date well in advance to ensure you graduate on time and avoid having to postpone your final exam/defense or graduation to the next semester.</td>
<td>Graduation — Exam Deadline

Summer 2016 — 7/29/2016
Fall 2016 — 11/23/2016
Spring 2017 — 4/21/2017
Summer 2017 — 7/28/2017
Fall 2017 — 11/22/2017
Spring 2018 — 4/20/2018</td>
</tr>
</table>

6. Submit all required final documents to the Graduate School French Administration Building, Room 324 Final theses must be submitted **within 5 working days** of a successful defense. Submission includes uploading a copy to the library at dissertations.wsu.edu and delivering the properly formatted (on 100% cotton paper) title page, signature page (signed in black ink), and abstract to the Graduate School, along with the signed/witnessed Release/Hold Harmless Agreement by 5:00 p.m. on the 5th workday following your successful defense. All forms are found on the Graduate School forms web page.	If exam is held on final day listed above: Graduation — Final Docs Deadline Due Summer 2015 — 8/4/15 Fall 2015 — 12/4/15 Spring 2016 — 4/29/16 Summer 2016 — 8/5/16 Fall 2016 — 12/2/16
Master's students who plan to participate in Commencement in the May (Spring) ceremony can complete their degree requirements in either Spring OR Summer 2016. http://gradschool.wsu.edu/chapter-ten/ If you wish to attend Commencement, register at the Grad Fair or visit: http://commencement.wsu.edu.	**Commencement:** Fall 2016 — 12/10/16 Spring 2017 — 5/6/17

DOCTORAL DEGREE IN PLANT PATHOLOGY

The period of study for the Ph.D. is at least 3 years regardless of the degree status of the student before they begin their program. At least one semester 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

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 Doctoral committee must include a minimum of four (4) members including the Major Advisor as Chair. At least two members must be tenured or tenure-track Plant Pathology Graduate Faculty; USDA-ARS researchers appointed as WSU adjunct Plant Pathology faculty are entitled to act as Chair, Co-Chair, or member of graduate student committees. At least one member must be located on the Pullman campus; ***for students whose major advisor is located off campus, the Pullman designated committee member will serve as campus advisor while the student is Pullman*** and provide lab space in which to work, if needed. Other individuals internal to WSU serving as Graduate Faculty in their own program or discipline may serve as a committee member with approval of the Plant Pathology Chair. External committee members are approved on a case-by-case basis. **The Graduate School strongly recommends the majority of the committee be Graduate Faculty in Plant Pathology.**

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 course 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 be sure to submit a copy of the completed program form (including all signatures) to the JHGC before filing it with the Graduate School.*** 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)

14 credit hours minimum of Plant Pathology coursework are required (including PLP 515; the 14 credit hours may include transfer credits if they are accepted by the Graduate School.)

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

The program of study form and directions are found on the Graduate School's website.

Degree Deadlines

Doctoral students have two deadlines: 1) the oldest coursework on the Program of Study cannot be over 10 years old at time of graduation; and 2) the degree must be earned within three years of successfully passing the Preliminary Exam.

Preliminary Examination

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 the Assessment section of 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. ***The preliminary exam must be scheduled a minimum of 10 working days in advance of the exam date. Please provide a completed copy of the scheduling form (includes all. signatures) to the Johnson Hall Graduate Center before filing it with the Graduate School.*** Check deadlines!

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: 1) the committee votes to pass the student based on satisfactory performance; 2) 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 three months; 3) 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 Assessment 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 dissertation 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 Graduate School's 'Deadlines and Procedures for Graduation' for relevant deadlines. Committee members 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 hold drafts for no longer than 30 days.

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

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.

To inform yourself as to the committee's expectations for a successful defense, see the Final Defense Rubric in the Assessment 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.

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 non-credit 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.

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 Pl P 800 for the semester in which the final exam is to be taken. To schedule your final examination 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 the Assessment section of this handbook for a copy of the rubric that will be used for all 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 examination must be scheduled at least 10 or more working days after the submission of the completed thesis Acceptance/Final Examination Scheduling Form. The candidate must present an electronic copy of the thesis complete in format along with the scheduling form to the department chair

for signature. ***Please provide a courtesy copy of the completed scheduling form (includes all signatures) to the Johnson Hall Graduate Center before filing it with the Graduate School.*** **AND,** in addition to the advance digital copy the Graduate School requires, send the same electronic copy to Deb Marsh (marshdj@wsu.edu). This will serve as the display copy and made available to the state-wide faculty via secure Sharepoint. **Copies must also be furnished to each of the candidate's committee members at least (5) working days before the final examination.**

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 dissertation 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.

Dissertation Formatting and Submission

All theses and dissertations must be submitted in digital (.pdf) format according to the Graduate School's digital formatting guidelines. Additionally, students are 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. Refer to the Dissertation and Thesis Guidelines posted on the Graduate School website.

Hardbound Dissertation Requirement

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 thesis. You may be copying their mistakes and/or rules may have changed. The JHGC coordinates binding with J&S Bindery ($20 each), a long-time area vendor (or you may arrange an alternate vendor of your choice). There is no departmental requirement on the type of paper to be used. We suggest you include a completed signature page. Open access and copyright are options you can choose, but you will be charged for it. Payment would be made directly to UMI.

More Information

For more information on the Ph.D. Degree, please go to Chapter 8 in the Policies and Procedures.

Deadlines and Procedures for PhD Graduate Degrees

Graduate School
Washington State University

Summer 2016 – Fall 2017 Deadlines and Procedures for Doctoral Degree
For a list of all Graduate School Forms, click HERE

Procedure	Deadlines
1. Obtain an advisor/committee chairperson	As soon as possible after admission to the Graduate School
2. Submit Program of Study for Doctoral Degree to the Graduate School. Doctoral students must submit the Program of Study before the end of their third semester of study (October 1 deadline for fall; March 1 deadline for spring). Students who have recently completed their Master's degree at WSU and plan to continue for a Ph.D. may want to file their Program of Study early: one full semester before taking the Preliminary Exam. Preparation of the Program of Study form is the responsibility of the student, advisor, and doctoral committee. Department approves the form before submitting to the Graduate School.	If your **third** Semester is: — Deadline Summer 2016 — 3/1/2016 Fall 2016 — 10/1/2016 Spring 2017 — 3/1/2017 Summer 2017 — 3/1/2017 Fall 2017 — 10/1/2017
3. Schedule Preliminary Exam (doctoral students only). Submit at least 10 working days before exam. NOTE: Preliminary exams can be held throughout the semester except no prelims can be held during final exam week. Taking your prelim for the second time? You must submit the Preliminary Scheduling form at least 3 weeks (15 working days) in advance if you are re-taking your final exam. Student should have 6 graded credits (or less) left to complete on their program of study coursework. This includes credits for which the student is currently enrolled (or further documentation is required).	Schedule after approval and completion of most of your program and no later than 10 working days (2 weeks) prior to the date you wish to take the preliminary examination.
4. Preliminary Examination (doctoral students only). NOTE: Preliminary exams can be held throughout the semester except during final exam week.	At least 4 months (1 semester) prior to taking a Final Oral Examination/defense.
5. Apply for Degree in MyWSU (to Graduate). This deadline is also the last day to apply for a **Graduate Certificate**. If a student does not apply by the initial deadline, their name will not appear in the Commencement Program. All students pay a $50 graduate processing fee, valid for one year only. Payment is made at the time of completing/submitting the online Application for Degree (*MyWSU*). **Apply for Degree in MyWSU** (to Graduate) continued…	Graduation — *App Deadline **Summer 2016** — **5/27/2016** (applications open 1/1/2016) w/$50 late fee: 5/30/16 – 6/30/16 w/$75 late fee: 7/1/16 – 7/29/16

Deadlines/Procedures for Doctoral Degree — Updated 5/18/2016

5. Apply for Degree in MyWSU (to Graduate) – continued *Apply by the initial Deadline for your name to appear in the Commencement Program for that semester. If you miss the deadline, your name will not appear in the Commencement Program.	Graduation *App Deadline **Fall 2016 10/7/2016** (applications open 6/13/16) w/$50 late fee: 10/10/16 –10/31/16 w/$75 late fee: 11/1/16 – 11/23/16 **Spring 2017 3/3/2017** (applications open 10/10/2016) w/$50 late fee: 3/4/17 – 3/31/17 w/$75 late fee: 4/1/17 – 4/21/17 **Summer 2017 5/26/2017** (applications open 1/1/2016) w/$50 late fee: 5/27/17 – 6/30/17 w/$75 late fee: 7/1/17 – 7/28/17
NEED to UPDATE your Application for Degree? Already paid your fee but discovered you cannot complete your requirements for the semester in which you applied? The Graduate School will email you a form to complete, which must be returned to the Graduate School (scanned and emailed). We will update your semester of graduation without any additional fees. Your $50 graduation fee is good for one calendar year.	You must UPDATE your Application for Degree using the following steps: **a.** Email Gradschool@wsu.edu **b.** Subject Line: Your name – UPDATE App for Degree **c.** In body of email, provide: 1. Name 2. WSU Student ID# (very important) 3. Type of degree (master or doctoral) 4. NEW semester for graduation (spring, summer, fall), and year **d. WATCH** for an email from the Graduate School. Complete and return the form sent to so you can be updated.
6. Submit completed Final Exam Scheduling Form no later than 10 working days prior to the exam date. At the same time, doctoral students need to submit an electronic copy of the final draft dissertation. Completed mean ALL signatures, thesis title, date/time/location(s) identifying where each committee member will attend the exam. 2nd Attempt Exams: Taking your exam for the second time? You must submit your completed form ***no later than*** 15 working days (three weeks) before exam date.	Graduation Scheduling Deadline Summer 2016 7/15/2016 Fall 2016 11/9/2016 Spring 2017 4/7/2017 Summer 2017 7/14/2017 Fall 2017 11/8/2017 Spring 2018 4/6/2018

<table>
<tr>
<td>7. Conduct Final Examination (Last possible date)
We have extended the time to defend to the last possible date, but we do not encourage you to wait until the last date to defend. We are unable to make exceptions beyond these deadlines. Please meet with your committee to identify your final exam date well in advance to ensure you graduate on time and avoid having to postpone your final exam/defense or graduation to the next semester.</td>
<td>
<table>
<tr><th>Graduation</th><th>Exam Deadline</th></tr>
<tr><td>Summer 2016</td><td>7/29/2016</td></tr>
<tr><td>Fall 2016</td><td>11/23/2016</td></tr>
<tr><td>Spring 2017</td><td>4/21/2017</td></tr>
<tr><td>Summer 2017</td><td>7/28/2017</td></tr>
<tr><td>Fall 2017</td><td>11/22/2017</td></tr>
<tr><td>Spring 2018</td><td>4/20/2018</td></tr>
</table>
</td>
</tr>
<tr>
<td>8. Submit all required final documents to the Graduate School
(French Administration Building, Room 324)

Final dissertations must be submitted within 5 working days of a successful defense. Submission includes uploading a copy to the library at dissertations.wsu.edu and bringing the properly formatted (on 100% cotton paper) title page, signature page (signed in black ink), and abstract to the Graduate School, along with the signed/witnessed Release/Hold Harmless Agreement and the SED information by 5:00 p.m. on the 5th workday following your successful defense.

Visit the Graduate School forms web page for:
• Graduation (preparation) Checklist
• Thesis/Dissertation Submission Guidelines & Required
• Formatting
• Final Checklist and any other Graduate School forms you may need.</td>
<td>If exam is held on final day listed above

<table>
<tr><th>Graduation</th><th>Final Docs Deadline</th></tr>
<tr><td>Summer 2016</td><td>8/5/2016</td></tr>
<tr><td>Fall 2016</td><td>12/2/2016</td></tr>
<tr><td>Spring 2017</td><td>4/28/2017</td></tr>
<tr><td>Summer 2017</td><td>8/4/2017</td></tr>
<tr><td>Fall 2017</td><td>12/1/2017</td></tr>
<tr><td>Spring 2018</td><td>4/27/2018</td></tr>
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<tr>
<td>9. Doctoral students who want to participate in Commencement
Must have all requirements completed by noon on this date. There are NO exceptions. This includes your dissertation cleared by the Graduate School (ALL formatting requirements completed).

Final dissertations are due within 5 working days of the successful defense.

If you wish to attend Commencement, register at http://commencement.wsu.edu.

For policies regarding graduation participation as a graduate student, visit http://gradschool.wsu.edu/chapter-ten/</td>
<td>Final Clearance for Commencement (doctoral students)

<table>
<tr><td>Fall 2016</td><td>Wednesday, 12/7/2016</td></tr>
<tr><td>Spring 2017</td><td>Wednesday, 5/3/2017</td></tr>
<tr><td>Fall 2017</td><td>Wednesday, 12/6/2017</td></tr>
<tr><td>Spring 2018</td><td>Wednesday, 5/2/2018</td></tr>
<tr><td>Fall 2018</td><td>Wednesday, 12/5/2018</td></tr>
<tr><td>Spring 2019</td><td>Wednesday, 5/1/2019</td></tr>
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</table>

ASSISTANTSHIPS

Appointments

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. Benefits for TA/RA appointments currently includes medical and dental insurance.

Appointments are at .50 FTE (full-time equivalent). The required academic load is 10 credit hours (10-12 average enrollment) during fall and spring semester, and if necessary, three 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.

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.

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.

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 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.

Residency Requirement

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

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.

Information on establishing Washington residency can be found on the Graduate School website here.

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.

Dr. William R. Wiley Annual Research Exposition

The Wiley Exposition held each Spring provides an opportunity for graduate and professional students to present and publish their research. Cash prizes are awarded in each of five academic divisions. 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

Graduate students can make copies for 5 cents/copy 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.

FACULTY

DEPARTMENT OF PLANT PATHOLOGY
* Indicates Adjunct Faculty

NAME & TITLE	EXPERTISE	LOCATION, PHONE, & E –MAIL
Achour Amiri, Ph.D. Asst. Professor.	Post harvest disease in tree fruit	TFREC - Wenatchee 509-663-8181 a.amiri@wsu.edu
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 and Extension Specialist	Christmas trees, turf, bulb, 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. Professor and Extension Plant Pathologist	Vegetable seed pathology, vegetable pathology	NWREC Mt.Vernon 360-848-6140 dutoit@wsu.edu

NAME & TITLE	EXPERTISE	LOCATION, PHONE, & E –MAIL
Cynthia Gleason, Ph.D. Asst. Professor	Molecular basis of plant-nematode interactions	WSU - Pullman 509-335-3742 cynthia.gleason@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 Chair and Scientist, Plant Pathology Dept.	Genetics of resistance and virulence; disease management in conservation-oriented cropping systems.	WSU - Pullman 509-335-3722 scot_hulbert@wsu.edu
Debra A. Inglis, Ph.D. Professor and Extension Plant Pathologist	Vegetable pathology	NWREC-Mount Vernon 360-848-6134 dainglis@wsu.edu
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*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
*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
Timothy D. Murray, Ph.D. Professor Extension Plant Pathologist	Cereal diseases, ecology and epidemiology of soilborne pathogens, disease resistance and chemical control	WSU - Pullman 509-335-7515 tim_murray@wsu.edu

NAME & TITLE	EXPERTISE	LOCATION, PHONE, & E –MAIL
*Roy Navarre, Ph.D. Research Plant Pathologist, USDA-ARS	Molecular biology; basis of disease resistance mechanisms and inducible defense	IAREC - Prosser 509-786-9261 rnavarre@pars.ars.usda.gov
*Patricia Okubara, Ph.D. Research Plant Pathologist USDA- ARS	Molecular plant-microbe interactions and genomics	WSU - Pullman 509-335-7824 pokubara@wsu.edu
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*Timothy C. Paulitz, Ph.D. Research Plant Pathologist USDA-ARS	Mycology and soilborne plant pathology	WSU - Pullman 509-335-7077 paulitz@wsu.edu
Tobin Peever, Ph.D. Associate Professor & Associate Plant Pathologist	Fungal population genetics, and legume pathology	WSU – Pullman 509-335-3754 tpeever@wsu.edu
*Lyndon Porter, Ph.D. Research Plant Pathologist, USDA-ARS	IPM strategies to control potato, pea, alfalfa, bean, chickpea and lentil diseases, foliar and root rotting pathogens on these crops	IAREC - Prosser lyndon.porter@ars.usda.gov
Naidu Rayapati, Ph.D. Associate Professor	Plant virology; virus-vector interactions, virus diseases of grapes	IAREC – Prosser 509-786-9215 naidu@wsu.edu
*Deven See, Ph.D. Research Geneticist USDA-ARS Director, Western Regional Small Grains Genotyping Lab.	Molecular genetics of wheat, positional cloning, manipulating and characterizing puroindoline genes, genome evolution	WSU - Pullman 509-335-5740 deven.see@ars.usda.gov
Kiwamu Tanaka, Ph.D. Assistant Professor Plant Pathologist	Molecular plant-microbe interactions and plant innate immunity,	WSU - Pullman 509-335-6418 kiwamu.tanaka@wsu.edu
*Linda S. Thomashow, Ph.D. Research Plant Pathologist USDA-ARS	Cereal root diseases, molecular plant-microbe	WSU - Pullman 509-335-0930 thomashow@wsu.edu

NAME & TITLE	EXPERTISE	LOCATION, PHONE, & E –MAIL
*George Vandemark Plant Research Geneticist USDA-ARS	Legume germplasm and basic & applied investigations of problems associated with legume improvement	WSU Pullman 509-335-9521 george.vandemark@ars.usda.gov
*David M. Weller, Ph.D. Research Plant Pathologist USDA-ARS	Interactions, and biocontrol cereal diseases, bacteriology, biocontrol, and molecular ecology	WSU - Pullman 509-335-6210 wellerd@wsu.edu
*Chang-Lin Xiao, Ph.D. Research Plant Pathologist USDA-ARS	Biology, epidemiology, and Management of diseases of fruit crops	USDA – Parlier, CA 550-596-2722 chang-li.xiao@ars.usda.gov
*Long-Xi Yu, Ph.D. Research Plant Geneticist USDA-ARS	Applying genomic tools for enhancing resistance to biotic and abiotic stress in forage crops	USDA – Parlier, CA 509-786-9259 longxi.yu@ars.usda.gov