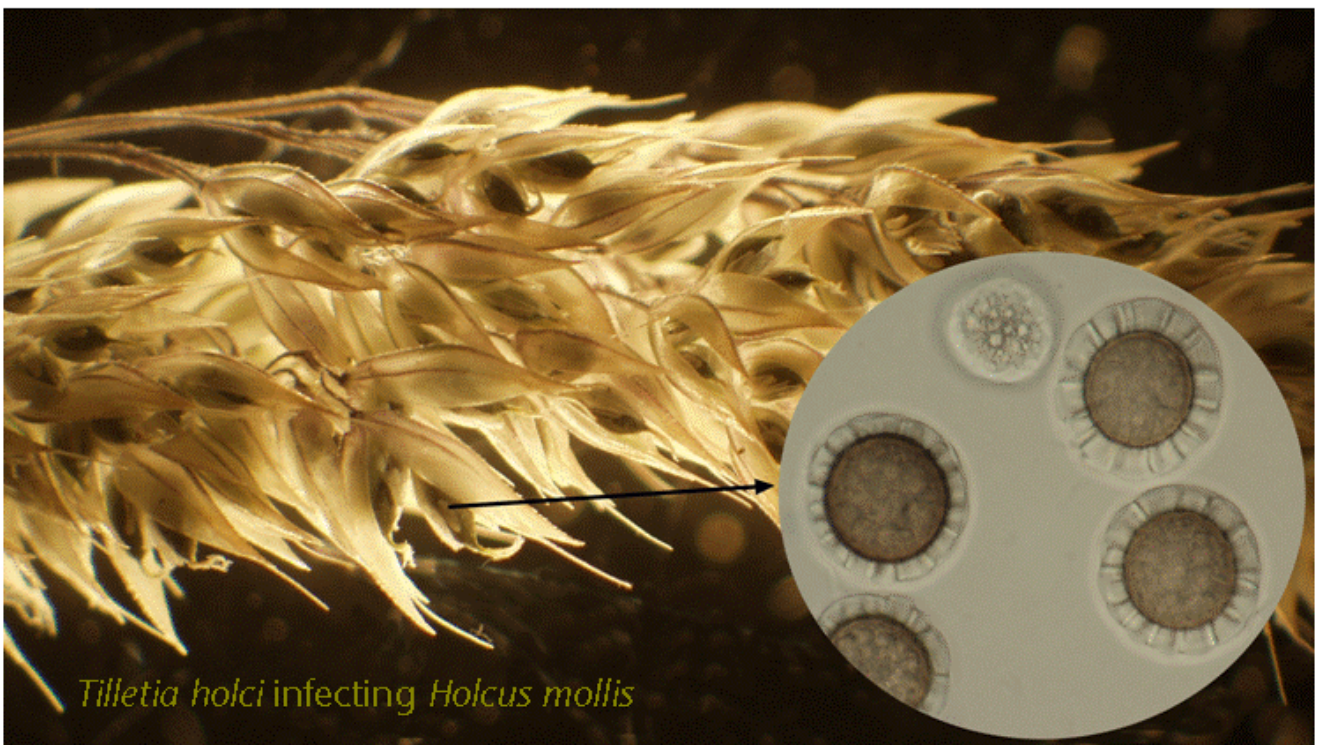


2007-2008

# GRADUATE STUDENT HANDBOOK

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DEPARTMENT OF  
PLANT PATHOLOGY



## WELCOME!

To All Graduate Students in Plant Pathology:

Welcome to the Department of Plant Pathology and Washington State University. You are joining a department with a distinguished history of excellence in teaching, research and extension. The second Ph.D. degree awarded by Washington State University was by this department. Over the years the department has awarded approximately 117 M.S. degrees and 149 Ph.D. degrees.

The following information is intended to help you during your stay at WSU. I want you to feel you are a member of the department as soon as possible. Being familiar with and following the suggestions and procedures contained herein will help you do so. If you have any questions or are unclear about something, please ask the departmental staff and/or your major professor.

Shortly after you arrive, please make an appointment with me so we can become acquainted. I maintain an “open door” policy and hope you will feel welcome to visit with me at any time.

I also encourage you to become acquainted with the other graduate students immediately after your arrival and with all faculty members and staff as soon as possible. The department maintains a website listing faculty, staff, and students, as well as program descriptions and notices about current events. Please visit the site for more information: <http://plantpath.wsu.edu>

I hope you will find your experience with us to be rewarding.

Sincerely,

Timothy D. Murray  
Professor and Chair

TDM/mcs

## THINGS TO DO UPON ARRIVAL – FALL 2007

See the Office Staff (in Johnson Hall, Room 345) for the following:

Office Assignment See: Mary Stormo

Graduate Student Information & Checklist sheets See: Mary  
Residency requirements and restrictions. (Out-of-state waivers are guaranteed for only one year.) Requirements are found on WSU's homepage at: <http://www.gradsch.wsu.edu/currentstudents/residency.html>

Keys: building, lab, office and greenhouse (optional) See: Administrative Coordinator. **NOTE:** Some keys require your major professor's approval

Copy of your Personnel Action Form (PAF) See: Cheryl Hagelganz

Map of the university (optional)

If you have a paid assistantship, you will also need to do the following:

**I-9 Forms** - (available from the Office Staff) must be completed within 3 days of arrival.

**W-4 Forms**- must be signed and on file in the Payroll Office (French 236) before a paycheck will be issued. Forms are available at the Payroll Office, from the Office Staff, or on-line.

**Automatic payroll deposit is recommended.** The form is available from the Office Staff, the Payroll Office in the French Administration Building, or on-line at: <http://www.ba.wsu.edu/payroll/stntpay/stntpay.htm>  
You will need a deposit slip from your bank account.

### Social Security Numbers

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

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

International students can usually apply for a social security card at the orientation meeting scheduled before school starts at the beginning of each semester.

## GENERAL INFORMATION

### Purpose of Handbook

The purpose of this handbook is to clarify requirements of the Department of Plant Pathology that co-exist with those of the Graduate School. This handbook is not intended to replace the *Graduate School Policies and Procedures* (GSPP) found at <http://www.gradsch.wsu.edu/publications.htm>, nor any other University document. Each graduate student should read the GSPP and this document so they understand the requirements set forth for graduation both by the Graduate School and the Department of Plant Pathology. When the Department regulations are stricter than those of the Graduate School, the Department regulations take precedence.

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.

### Address Change

Address Changes – You can update your address by going to [my.wsu.edu](http://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. The board between the office and the stairwell is for University announcements and information. Please ask for permission before posting anything on these boards. The bulletin board in the hall adjacent to the student carrels is for graduate student related use only. Scholarship opportunities are posted on the board above the telephone in the student carrels.

### 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

Information Technology (IT) provides computing services, telephone, data networking, and media services. All students must have a WSU Network ID. To obtain a Network ID, visit: [www.wsu.edu/NID/](http://www.wsu.edu/NID/). Students are eligible for a free account. See handbook section on "Email" for sign-up procedures. Or go to the Information Technology (IT) building room

2005 or call 335-4357 for assistance. All students *must* have a WSU email account to receive University email information, be included on the campus listserv, and to register for courses. **New Computers/Students needing to use the WSU Network in department's grad student office**

For any of you that are planning to connect your computer in the graduate student carrels or wanting to have wireless service, you will need to register to get a DHCP before you are able to access email or the internet. Below are the instructions on how to find the MAC (Media Access Control) Adapter Address for your Ethernet or wireless network card, follow the instructions below that pertain to your computer's operating system.

## **PC Operating Systems**

### **Windows XP, 2000, or NT**

#### **Standard Ethernet Card**

1. Click on the **Start** button and select **Run**.
2. In the Open box, type the following: **command**
3. Click on **OK**. The command prompt will appear.
4. At the command prompt, type: **ipconfig /all**
5. If your computer has an Ethernet card or Ethernet adapter, the last section will be listed as *Ethernet Adapter*. Under this section, there will be an item listed as *Physical Address*. The combination of twelve letters and numbers shown next to the *Physical Address* is the MAC address.

#### **Wireless Network Card**

1. Click on the **Start** button and select **Run**.
2. In the Open box, type the following: **command**
3. Click on **OK**. The command prompt will appear.
4. At the command prompt, type: **ipconfig /all**
5. If your computer has a wireless network card, information will appear under *Ethernet adapter Wireless Network Connection*. Under this section, there will be an item listed as *Physical Address*. The combination of twelve letters and numbers shown next to the *Physical Address* is the MAC address.

### **Windows ME, 98, or 95**

#### **Standard Ethernet Card**

1. Click on the **Start** button and select **Run**.
2. In the Open box, type the following: **winipcfg**
3. Click on **OK**. The *IP Configuration* window will open.
4. On the first item in the window, click on the down arrow in the white box to see a list of adapters. Your Ethernet card or USB Ethernet adapter should be listed. (Note: If no adapters are listed or if PPP Adapter is the only one listed, your computer probably does not have an Ethernet card.)
5. Click once on the Ethernet listing to select it. Once it is selected, a combination of twelve letters and numbers will appear in the *Adapter Address* box. This combination of letters and numbers is the MAC address.



## II. Macintosh Operating Systems

### OS X

#### Standard Ethernet Card

1. Click once on the desktop.
2. On the menu bar at the top of the screen, click on **Go** and select **Applications**.
3. Double-click on the **Utilities** icon.
4. Double-click on the **Network Utility** icon and look for *Hardware Address*. If you have a wireless network card in addition to a standard Ethernet card, make sure the Ethernet card is selected in the **Please select a network interface for information** box. To determine which card is selected, look for a card description under *Interface Information*. The combination of twelve letters and numbers to the right of *Hardware Address* is the MAC address.

#### Wireless Network Card

1. Click once on the desktop.
2. On the menu bar at the top of the screen, click on **Go** and select **Applications**.
3. Double-click on the **Utilities** icon.
4. Double-click on the **Network Utility** icon. If you have a standard Ethernet card in addition to a wireless network card, make sure the wireless network card is selected in the **Please select a network interface for information** box. To determine which card is selected, look for a card description under *Interface Information*. The combination of twelve letters and numbers shown next to the *Hardware Address* is the MAC address.

### OS 9.X or OS 8.X

#### Standard Ethernet Card

1. Click on the Apple icon in the upper left-hand corner of your screen.
2. Select **Control Panels**.
3. Next, select **TCP/IP**.
4. Click on **File** and select **Get Info**.
5. In the TCP/IP Info box, look for *Hardware Address*. The combination of twelve letters and numbers to the right of *Hardware Address* is the MAC Address.

#### Wireless Network Card

1. Go to the Apple icon and select **AirPort**.
2. If necessary, click on the word **Settings** so that the AirPort settings appear.
3. If the **Turn AirPort On** button appears, click on it to turn on your AirPort connection.
4. The combination of twelve letters and numbers shown next to the *AirPort ID* is the MAC address.

Once you retrieve the numbers, you can go to the website to register for DHCP. The web address is <http://www.wsu.edu/dhcp/>. Once you are there, you will need to click on the WSU Pullman **Non-Yakama Apartment** and **Non-Residence Hall**. It will then send you to a prompt asking for your network ID and password. Once you input that information, it will take you to the screen where you will input information to set up your DHCP. Follow the instructions and then submit. You should be set up within a few minutes once you

submit the information. There are separate registration options for wired and wireless connections. (Wireless info - continued on next page)

**There are a few more steps for the wireless service.**

Anyone wanting to use the wireless network is required to install VPN client software on their computer in order to gain access to the WSU network and the Internet. This software will provide secure access to the WSU network using data encryption. For instructions on how to install the VPN client software go to this web site: <http://www.wsu.edu/vpn>. If you are having difficulties, you can contact the Computing and Web Resources. Their web site is: <http://cru.cahe.wsu.edu/support/index.htm>. You may also call 335-5396 for help from the Information Technology Technical Assistance Center (TAC).

**Compton Union Building – The CUB is currently being renovated and completion is scheduled for 2008.**

The CUB is the community center for WSU. Due to student demand and support the Compton Union Building is currently undergoing the largest renovation of any building in WSU history! When open in 2008, the new CUB will feature many 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.

All campus offices, auxiliaries, and organizations housed in the CUB have been closed or relocated to other points across campus. Please utilize the web to assist you in finding what you are looking for (visit: <http://cub.wsu.edu/temporary.aspx>). 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 at: <http://www.counsel.wsu.edu/>

If you have a crisis situation after regular office hours, call: (509) 334-1133.

**Copier**

The copier in room 347 is for office and faculty use. Copy 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 be used to duplicate your thesis or dissertation.*** There are copy machines available downstairs in the Fischer Agricultural Science Library, at Cougar Copies (in French Ad), and at Kinkos.

**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

### **Email**

All students must have a WSU email account. This allows for University and Departmental communications with the students on a regular basis. Please check your e-mail daily.

To set up a WSU email account you must first have a WSU Network ID. To obtain a Network ID, visit: [www.wsu.edu/NID/](http://www.wsu.edu/NID/). Once you have your Network ID, please see Mary Stormo and she will contact CAHNRS computer personnel to complete the set-up for your 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 labs in Orville Vogel PBS need to see Cheryl once they have obtained a Cougar Card in order to activate their access to the facility.

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

Fischer Agricultural Sciences Library: A comprehensive plant pathology library is presently consolidated into the Fischer Agricultural Sciences Library located in Johnson Hall Annex. 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 67,000 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. Please check with the Program Coordinator in the office. All M.S. and Ph.D. students are required to submit a hardbound copy of their thesis and/or dissertation upon completion of their degree.

### **Insurance**

Graduate students on a paid assistantship who maintain a 3.0 grade point average and are enrolled for a minimum of 10 credit hours are entitled to the Graduate Student Health Insurance Medical Plan. Graduate students not on assistantships who are not eligible for this plan may enroll in the Student Medical Insurance Plan, but they must pay the premium.

The insurance policy is effective beginning the first day of the semester. However, because it takes a little time for it to reach the insurance company and be keyed into their system, it is suggested that you not use it for about 6 weeks unless you have an emergency.

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

Questions should be directed to Benefits Services, French Administration Building, Room 232. The phone number is 5-4589.

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).

### **International Programs/SEVIS Information**

The International Programs office is located in Bryan Hall, room 206, phone (509) 335-2541, or email them at: [intlprog@wsu.edu](mailto:intlprog@wsu.edu). Their website is <http://www.ip.wsu.edu/>. *Students are responsible for maintaining their legal status within the country.*

All SEVIS information will be available through the International Programs office.

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

**USPS:** Students are assigned a mailbox here in the department. Please check your mailbox frequently as the office staff puts phone messages and important notices in your mailbox as necessary. Mail is picked-up and delivered on weekdays at approximately 11:30 a.m. There is a basket in the office for outgoing USPS mail and a plastic WSU mailing services tub for interdepartmental mail. All USPS mail must have the departmental return address on the envelope. International mail over 1" thick or over 1 lb. must have a green customs sticker attached. When sending interdepartmental mail, you must use a four-digit campus zip code, which can be found in the campus phone directory, our four-digit code is 6430.

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

**No personal mail should be sent to or from your university address.** There is a USPS mail drop box across the street in front of the French Administration building. Personal mailboxes are available *only* at the Post Office located on Grand Avenue or in the UPS Store located in the Wheatland Shopping Center in Pullman.

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

*Please do not include Johnson Hall or a room number.*

**Federal Express:** The Department's Administrative Coordinator sends Federal Express Mailings. Be sure your packages are completely prepared for mailing. If in question please see the Administrative Coordinator for assistance. Federal Express envelopes and pouches are available in the Department's main office.

Please provide: Recipient Name

Title

Mailing address (complete mailing address w/ zip codes)

Phone number (including country and area codes)

Budget number (to charge mailing to)  
Contents of mailing  
Special instructions for mailing (i.e., refrigerate)  
Type of mailing (overnight, priority, standard, etc.)

If sending a box it should be weighed and measured. Scales are available in the Department's main office.

### **Microscopes**

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

### **Motor Pool Vehicle**

WSU has a variety of vehicles available for use by students for approved travel. Requests are made through the departmental office 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 Administrative Coordinator here in the department.

### **Network ID and Password**

A network ID allows you to register online and modify and check student and academic information. You will need to know your WSU ID number, your Social Security number and your date of birth. To obtain a Network ID, visit: [www.wsu.edu/NID/](http://www.wsu.edu/NID/). Next, follow the instructions on the screen. Further information about this can be found on the web at: <http://infotech.wsu.edu/itroot/> or call the Help desk in the Information Technology building at 335-HELP.

### **Office Equipment**

Equipment in the main office, except for the fax machine and typewriter, 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 the Parking Office located on the corner of Colorado and D Street, just around the corner from the Bookie. Phone: (509) 335-PARK. Web address: <http://www.wsu.edu/parking/>.

### **Payroll Deductions**

Graduate students on assistantships may authorize Payroll Services to deduct the total amount of their tuition and fees owed over eight (8) pay cycles beginning the second pay date of the semester. Deductions may be authorized for 1) full operating fee or residual operating fee, 2) service/activity/building fees, and 3) spouse and/or dependent medical

insurance (fees vary). Payroll deduction is an optional service provided at a fee of \$8.00. Forms must be completed *each semester* and must be submitted before the last date to pay tuition before late fees accrue (to avoid paying late fees). The payroll deduction service is not offered for summer appointments.

### **Photo Identification Cards - Cougar Card**

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

New students may obtain their Cougar Card in the Cougar Card Center located in the Washington Building. Returning students will continue to use their previously issued card. The Cougar Card Center is open from 8:30 a.m. to 5:00 p.m., Monday through Friday. A \$10.00 replacement fee is charged for replacement cards. For any information or to report lost or found ID cards, call 335-CARD or visit their website at: <http://cougarcard.wsu.edu/>.

### **Purchasing**

The university makes purchases both on and off campus. Permission should be obtained from the faculty member whose budget you will be using before buying anything. Some type of purchase order is required before you make any kind of purchase. It is not appropriate to make a purchase and then request a purchase order. Forms are available in the main office to request purchase orders (POs). POs are generally completed within 48 hours. The department secretary 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.

The Administrative Coordinator can answer your purchasing questions here in our department.

### **Re-Entry Office**

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

### **Registration**

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

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

For a listing of available courses for the semester, please visit:  
<http://www.schedules.wsu.edu/Schedules/Apps/HomePage.ASP>

### **Student Recreation Centers**

The 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 at <http://urec.wsu.edu/urec/src/index.jsp> or visit their campus location on North Fairway Drive across from the WSU Golf Course (the Golf Course is currently closed for expansion).

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

### **Taxes**

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

### **Telephones**

There is a restricted telephone (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. If the main office telephone is used, the same restrictions apply.

For local calls:

Campus	5 – xxxx (last four digits)
Pullman/Moscow	9 and the 7 -digit phone number

Calls to WSU Research & Extension Centers:

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 main office at 335-9541 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.*

#### 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.

The Administrative Coordinator can answer your travel questions here in our department.

#### Typing

The office staff does not type letters, job applications, resumes, theses, seminar abstracts, manuscripts, etc. for students. There is a typewriter that you may use. You can access all Graduate School Program Forms on-line at: <http://www.gradsch.wsu.edu/forms.htm> where you can complete the form at your computer and then print them off. If you have any questions, please see the Program Coordinator in Johnson Hall, Room 345.

#### Visitors

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

## **ACADEMIC INFORMATION**

### **Academic Integrity**

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

### **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 Application for Admission to Doctors Program (yellow card) from the Graduate School. Students accepted initially to the department for the PhD program by the University should not complete the yellow card.

### **Degree Sought**

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

### **Process and Requirements for a Student to Transfer to a Ph.D. Program without First Obtaining an M.S.**

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

1. During the second year of graduate study, the student must submit in writing his/her desire to transfer to the Ph.D. program to his/her Major Advisor, with copies to the Graduate Coordinator, and the Department Chair. The request should include the reasons why the student believes she/he is ready to begin study toward the Ph.D. and bypass the M.S.
2. After initial discussion with and approval by the Department Chair, the major advisor will convene the student's thesis committee to discuss the request. To be considered ready for transfer to the Ph.D. program, a student must:
  - demonstrate evidence of significant progress in research during the first year of graduate study in which she/he is registered as an M.S. student, and
  - demonstrate strong academic performance in graduate-level courses completed at WSU.The totality of the student's performance in course work, research and other professional activities must be considered by the committee. The committee will then vote; 75% of the committee, or unanimous if there are only 3 committee members, must vote in favor in order for the student to be recommended for the Ph.D. program.
3. The major advisor will submit in writing the committee's recommendation to the Department Chair and the Graduate Coordinator describing the rationale for either recommending or denying the student's request to bypass the M.S. The student will be notified in writing of the committee's and Chair's decision.  
If the Department Chair concurs with the committee's recommendation and the student is recommended for transfer to the Ph.D. program, he/she will be informed of the requirements to complete the transfer (see below). The Chair reserves the right to consult with other department faculty to seek input on the request.
4. When a student is recommended for transfer to the Ph.D. program, the Department Chair will appoint an ad-hoc committee composed of four members of the Plant Pathology faculty, not currently serving on the student's M.S. thesis committee, to evaluate and make a final recommendation on whether the student should be advanced to the Ph.D. program.

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

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

## **Enrollment**

Whereas the *Graduate School Policies and Procedures* gives the minimum conditions for enrollment under a number of different circumstances, the Department of Plant Pathology requires all graduate students to enroll for the maximum number of 18 credit hours per semester unless prior approval has been arranged.

Enrollment during the summer session is not mandatory, unless a student is supported by a Project Assistantship the prior [spring] semester. 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, research credit hours must make up the difference. All summer classes need to 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.*

## Course Offerings in Plant Pathology:

### Description of Courses

#### PI P

**150 [Q] Molds, Mildews, Mushrooms: The Fifth Kingdom** 3 A mycocentric approach to natural and anthropological history including the diverse niches occupied by molds, mildews and mushrooms.

**300 Diseases of Fruit Crops** 2 Prereq: Bot 120, Hort 310 or Hort313. To provide undergraduate students with a comprehensive under-standing of the diseases of fruit crops grown in Washington State.

**331 Forest Pathology** 2 (0-6) Prereq Biol 107. Parasitic and non-parasitic diseases of forest and shade trees; life histories of fungi as related to diseases.

**403 Advance Cropping Systems** 3 Same as CropS 403. Credit not granted for both PI P 403 and 503.

**421 General Mycology** 4 (2-6) Rec Biol 107 or 120. The structure, life histories, classification, and economic importance of the fungi. Credit not granted for both PI P 421 and 521. Cooperative course taught by WSU, open to UI students (PISc 421).

**429 General Plant Pathology** 3 (2-3) Rec Biol 107 or 120. Classification, symptoms, causes, epidemiology, and control of plant diseases. Credit not granted for both PI P 429 and 529.

**490 Special Topics: Study Abroad** V 1-15 May be repeated for credit. S, F grading.

**499 Special Problems** V 1-4 May be repeated for credit. S, F grading.

**503 Advance Cropping Systems** 3 Graduate-level counterpart of PI P 403; additional requirements. Credit not granted for both PI P 403 and 503.

**511 Viruses and Virus Diseases of Plants** 4 (3-3) Prereq course in biochemistry or advanced genetics. Nature of plant viruses, vector-virus relationships and virus diseases of plants. Cooperative course taught jointly by WSU and UI (PISc 511).

**513 Nematodes and Nematode Diseases of Plants** 2 (1-3) Prereq PI P 429. Anatomy, identity, and diseases caused by nematodes; techniques and control.

**514 Phytobacteriology** 4 (3-3) Prereq MBioS 302, 303. Isolation and characterization of bacteria having a saprophytic, symbiotic or pathogenic association with plants, molecular structure, function, and genetics. Cooperative course taught by WSU, open UI students (PISc 514).

**515 Seminar** 1 May be repeated for credit.

**521 General Mycology** 4 (2-6) Graduate-level counterpart of PI P 421; additional requirements. Credit not granted for both PI P 421 and 521.

**525 Field Plant Pathology and Mycology** 1 (0-3) or 2 (0-6) May be repeated for credit; cumulative maximum 4 hours. Rec plant pathology and/or mycology course; by interview only. Field trips, forays, and demonstrations dealing with various aspects of plant pathology and mycology.



**526 Advanced Fungal Biology** 4 (2-4) Prereq PI P 421, 521 and graduate standing. Advanced topics in fungal biology, ecology, systematics, evolution and coevolution via discussions of literature and special laboratory projects. Cooperative course taught by WSU, open to UI students.

**529 General Plant Pathology** 3 (2-3) Graduate-level counterpart of PI P 429; additional requirements. Credit not granted for both PI P 429 and 529.

**534 Fungal Genetics** 4 (3-3) Prereq MBioS 301. Classical and molecular approaches to genetic analyses in fungi.

**535 Molecular Genetics of Plant and Pathogen Interactions** 3 Prereq MBioS 301, 303. Genetic and molecular biological aspects of host-pathogen interactions. Cooperative course taught by WSU, open to UI students (PISc 535).

**551 Epidemiology and Management of Plant Diseases** 3 Prereq PI P 429 or 529. Principles of plant disease epidemiology, control and ecology of pathogens. Cooperative course taught by WSU, open to UI students (PISc 506).

**600 Special Projects or Independent Study** Variable credit. S, F grading.

**700 Master's Research, Thesis, and/or Examination** Variable credit. S, F grading.

**800 Doctoral Research, Dissertation, and/or Examination** Variable credit. S, F grading.

**List of Courses – Best Estimate** (Pl P 600, 700 & 800 offered all semesters).

Class #	Course Name	U of I (PISc)	Instructor	Credits	Fall 2007	Spring 2008	Summer 2008	Fall 2008	Spring 2009	Summer 2009	Fall 2009	Spring 2010	Summer 2010	Fall 2010	Spring 2011	Summer 2011
150	Molds, Mildews & Mushrooms: The Fifth Kingdom		Carris/Rogers	3		X			X			X			X	
300 (a/y)	Diseases of Fruit Crops		Rayapati	2				X						X		
331 (a/y)	Forest Pathology (NATRS Xlist)		Rogers	2					X						X	
403	Advanced Cropping Systems	412	Hulbert	3	X			X			X			X		
421	General Mycology	421	Carris	4	X			X			X			X		
429	General Plant Pathology		Murray/Pappu or Peever/B.Schroder	3	X			X			X			X		
499	Special Problems		arranged	arranged	X	X	X	X	X	X	X	X	X	X	X	X
503	Advanced Cropping Systems	512	Hulbert	3	X			X			X			X		
511 (a/y)	Viruses & Virus Diseases of Plants	511	Pappu	4					X						X	
513 (a/y)	Nematodes & Nematode Diseases of Plants		Riga	2						X						X
514 (a/y)	Phytopathology	514	B.Schroeder	4				X						X		
515	Seminar		See attached	1	X	X		X	X		X	X		X	X	
521	General Mycology	521	Carris	4	X			X			X			X		
525	Field Plant Pathology		Grove	1 or 2			X						X			
526	Advanced Fungal Biology	526	Carris/Rogers	4		X						X				
529	General Plant Pathology		Murray/Pappu	3	X			X			X			X		
534 (a/y)	Fungal Genetics		Peever	4					X						X	
535 (a/y)	Molecular Genetics/ Plant & Pathogen Interactions	535	Hulbert	3		X						X				

551 (a/y)	Epidem. & Mgmnt of Plant Disease	506	Johnson	3		X				X		
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### **Incomplete Grades**

Graduate students may not carry a grade of “I” (incomplete) longer than one semester or summer session while on appointment. Incomplete grades for courses numbered 499 and below revert to “F” if not completed within 1 year.

### **Non-resident Students**

Non-resident U.S. students with assistantships are guaranteed a non-resident tuition waiver for *one year only*. Upon your arrival, please begin taking the necessary steps to become a Washington State resident. To do this, visit: <http://www.wsu.edu/future-students/admission/residency.html>

### **Scholarship Standards**

Read Chapter Six, “Academic Standards” of the *Graduate School Policies and Procedures*.

### **Seminar**

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

### **Student’s Progress**

The major professor regularly, at least annually, assesses the student’s progress during his or her tenure in the department. This applies to maintaining required grades, research progress, and meeting other departmental and university requirements toward fulfillment of degree requirements. Each student will receive annually a letter from the Chairman assessing the student’s performance.

### **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 our department. For more information on transfer credit and transfer credit restrictions see the *Graduate School Policies and Procedures Manual* and discuss the requested transfer with your major advisor.

## MASTER'S DEGREE IN PLANT PATHOLOGY

### Major Professor

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

### Master's Advisory Committee

During the first semester, an advisory committee should be chosen. The student, the major professor and the committee plan the student's program of study. The master's thesis committee should include at least three faculty members; the major advisor and two additional committee members. *For students whose major advisor is located off campus*, it is strongly recommended: student must have at least one committee member in Pullman who can advise the student while he/she is in Pullman and also provide lab space in which to work, if needed.

### Master's Program of Study

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

- 30 credit hours minimum of total credit

- 21 credit hours minimum of graded course work, 15 of which must be at the 500-level with a maximum of 6 credit hours of non-graduate 300-and 400-level course work. The program must include 2 credit hours of Seminar (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 Deadlines and Procedures page (<http://www.gradsch.wsu.edu/forms.htm>).

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

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



### **Master's Thesis**

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

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

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.

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

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

### **Final Master's Examination**

A final oral examination is required of all M.S. candidates. The student must have completed or be enrolled in all the required course work and registered for a minimum of 2 credit hours in PIP 700 for the semester in which the final exam is to be taken. The examination must be scheduled 10 or more working days after the submission of the completed thesis Acceptance/Final Examination Scheduling Form. The candidate must present a typed copy of the thesis, complete in format, with the scheduling form. A copy of the candidate's thesis must be available for public inspection in the main Plant Pathology office, for at least 5 working days prior to the final examination. Copies must also be furnished to each of the candidate's committee members at least (5) working days before the final examination. **\*\*Note: Please give a completed copy of the scheduling form to your graduate program's secretary before filing it with the Graduate School.**

### **Final Master's Examination** (cont'd)

Note for final defense: The student should bring several copies of the thesis signature page and a black pen to have committee members sign them while everyone is together.

### **More Information**

For more information on the Master's Degree, please read Chapter 4 of the Graduate School Policies and Procedures or find it at <http://www.gradsch.wsu.edu/policiesprocedures.html>.





## 2007-2008 Deadlines and Procedures for Graduate Degrees

All forms can be found at <http://www.gradsch.wsu.edu/forms.htm>

Procedure	Master's Deadlines	Doctoral Deadlines										
1. Obtain an Advisor/ Committee Chairperson		<b><u>BOTH</u></b> As soon as possible after admission to Graduate School										
2. Submit <i>Program of Study</i> to the Graduate School	<table><tr><th><u>Deadline</u></th><th><u>Term of Graduation</u></th></tr><tr><td>11-17-2006.....</td><td>Spring 2007</td></tr><tr><td>03-30-2007.....</td><td>Summer 2007</td></tr><tr><td>06-08-2007.....</td><td>Fall 2007</td></tr><tr><td>11-16-2007.....</td><td>Spring 2008</td></tr></table>	<u>Deadline</u>	<u>Term of Graduation</u>	11-17-2006.....	Spring 2007	03-30-2007.....	Summer 2007	06-08-2007.....	Fall 2007	11-16-2007.....	Spring 2008	No later than one semester preceding Preliminary Exam, Orals or Final Exam
<u>Deadline</u>	<u>Term of Graduation</u>											
11-17-2006.....	Spring 2007											
03-30-2007.....	Summer 2007											
06-08-2007.....	Fall 2007											
11-16-2007.....	Spring 2008											
3. Schedule Preliminary Exam	N/A	After approval and completion of most of the Program. No later than 10-working-days (2 weeks) prior to the Exam.										
4. Preliminary Examination	N/A	At least 4 months (one semester) prior to Final Oral Examination										
5. Submit <i>Application for Degree (Graduation)</i> to the Graduate School		<table><tr><th><u>App Deadline</u></th><th><u>Graduation</u></th></tr><tr><td>03-09-2007.....</td><td>Spring 2007</td></tr><tr><td>06-22-2007.....</td><td>Summer 2007</td></tr><tr><td>10-12-2007.....</td><td>Fall 2007</td></tr><tr><td>03-07-2008.....</td><td>Spring 2008</td></tr></table>	<u>App Deadline</u>	<u>Graduation</u>	03-09-2007.....	Spring 2007	06-22-2007.....	Summer 2007	10-12-2007.....	Fall 2007	03-07-2008.....	Spring 2008
<u>App Deadline</u>	<u>Graduation</u>											
03-09-2007.....	Spring 2007											
06-22-2007.....	Summer 2007											
10-12-2007.....	Fall 2007											
03-07-2008.....	Spring 2008											
6. Pay Graduation Fee (\$50); and Microfilm Fee (\$75) for Doctoral Students; Optional (\$65) Copyright Fee for Doctoral Students		Pay at <i>Cashier's Office</i> <i>Phone: (509)335-2018</i> Prior to scheduling Final Exam										
7. Submit <i>Final Exam Scheduling Form</i> no later than 10-working-days prior to the exam. Submit a draft copy of thesis/dissertation. (Ph.D: Be aware of * below when scheduling)		<table><tr><th>Scheduling <u>Deadline</u></th><th><u>Graduation</u></th></tr><tr><td>04-13-2007.....</td><td>Spring 2007</td></tr><tr><td>07-06-2007...</td><td>Summer 2007</td></tr><tr><td>11-02-2007.....</td><td>Fall 2007</td></tr><tr><td>04-04-2008.....</td><td>Spring 2008</td></tr></table>	Scheduling <u>Deadline</u>	<u>Graduation</u>	04-13-2007.....	Spring 2007	07-06-2007...	Summer 2007	11-02-2007.....	Fall 2007	04-04-2008.....	Spring 2008
Scheduling <u>Deadline</u>	<u>Graduation</u>											
04-13-2007.....	Spring 2007											
07-06-2007...	Summer 2007											
11-02-2007.....	Fall 2007											
04-04-2008.....	Spring 2008											
8. Conduct Final Examination		<table><tr><th>Exam <u>Deadline</u></th><th><u>Graduation</u></th></tr><tr><td>04-27-2006.....</td><td>Spring 2007</td></tr><tr><td>07-20-2007...</td><td>Summer 2007</td></tr><tr><td>11-16-2007.....</td><td>Fall 2007</td></tr><tr><td>04-18-2008.....</td><td>Spring 2008</td></tr></table>	Exam <u>Deadline</u>	<u>Graduation</u>	04-27-2006.....	Spring 2007	07-20-2007...	Summer 2007	11-16-2007.....	Fall 2007	04-18-2008.....	Spring 2008
Exam <u>Deadline</u>	<u>Graduation</u>											
04-27-2006.....	Spring 2007											
07-20-2007...	Summer 2007											
11-16-2007.....	Fall 2007											
04-18-2008.....	Spring 2008											

## 2007-2008 Deadlines and Procedures for Graduate Degrees (cont'd)

All forms can be found at <http://www.gradsch.wsu.edu/forms.htm>

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### 9. Submit final thesis/dissertation to

#### Graduate School

\*Doctoral students wishing to participate in Commencement must pass defenses successfully and committee must have the ballot paperwork to the Graduate School Office prior to Commencement.

#### Submission

##### Deadline

##### Graduation

05-04-2007.....Spring 2007 (Comm. is 05-05-2007)

07-27-2007.....Summer 2007

11-30-2007.....Fall 2007 (Comm. is 12-08-2007)

04-25-2008.....Spring 2008 (Comm. is 05-03-2008)



## DOCTORAL DEGREE IN PLANT PATHOLOGY

Students in plant pathology must have an M.S. degree to be admitted into the doctoral program, unless exercising the department's By Pass Option, explained on page 14. The period of study for the Ph.D. is at least 3 years beyond the M.S. degree, one of which shall be in residence at WSU on the Pullman campus.

### **Major Professor**

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

### **Doctoral Advisory Committee**

The Doctoral committee must include the major professor as chair and at least three other faculty members. *For students whose major advisor is located off campus, it is strongly recommended:* student must have at least one committee member in Pullman who can advise the student while he/she is in Pullman and also provide lab space in which to work, if needed.

An additional member who holds the highest appropriate degree and whose special knowledge is particularly important to the proposed program, but who is not a member of the faculty, may be appointed to the committee and shall vote. At least one faculty member of the committee must be from the minor department/program if a minor is declared on the doctoral program. When no minor is declared, no outside member is required. However, when outside supporting work is included in the program, an outside member is recommended.

### **Doctoral Program of Study**

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

- 72 credit hours minimum of total credit

- 34 credit hours minimum of graded course work at the 500-level with a maximum of 9 credit hours of non-graduate credit (300 or 400 level). Only ½ of the graded coursework is transferable from another university. (Approximately 17-18 credits of the 34 semester hours) See page 19.

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

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

- 20 credit hours minimum of PIP 800 research credit hours

**Note:** 600 level courses are all graded Pass/Fail. They count toward total credit hours but not toward the graded Plant Pathology credits.

Copies of the forms and directions can be found on the Graduate School Deadlines and Procedures page (<http://www.gradsch.wsu.edu/forms.htm>).

### **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. The student's dissertation advisory committee will give the examination. A 'Graduate Mentor' (appointed by the Grad School) can be requested if the advisor or student feels there is a need. There are three possible outcomes of the preliminary examination: the committee votes to pass the student based on satisfactory performance; the committee votes to fail the student based on unsatisfactory performance but recommends the student be allowed to take the examination again after a minimum period of 3 months; or the committee votes to fail the student based on unsatisfactory performance and recommends the student be terminated from the graduate program. The committee may also make recommendations to correct deficiencies that become evident during the preliminary examination.

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

### **Doctoral Dissertation**

A dissertation based on original research is required for the Ph.D. in plant pathology. The dissertation is a scholarly study that represents a significant publishable contribution to the science of Plant Pathology. A draft of the thesis that has been read and approved by the major advisor must be given to all committee members ***\*at least one (1) month prior to the date of your defense*** and preferably, much earlier (i.e. more than 1 month in advance of the defense date). A copy of the thesis in final draft must be provided to the Graduate school and to the Graduate School Representative (if one was requested) at the time of scheduling the candidate's exam. Refer to the Academic Calendar published in the WSU Time Schedule for relevant deadlines. All members of the student's committee must read, edit, and return drafts of the dissertation to the student within a reasonable period of time. The Graduate Studies Committee recommends that committee members return drafts within 30 days.

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

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

### **Doctoral Dissertation Defense**

A final oral defense is required of all Ph.D. candidates. The student must have completed or be enrolled in all the required course work and registered for a minimum of 2 credit hours in PIP 800 for the semester in which the final exam is to be taken. To schedule your final examinations you must have an approved *Application for the Degree* on file with the Graduate School. It is strongly advised that *the Application for Degree* be 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.

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.

The completed scheduling form and a copy of the dissertation must be submitted to the Graduate School at least 10 working days prior to the examination date. *It is required that a copy of the dissertation be cleared by the Graduate School for compliance of format at the time of scheduling the final examination.* See Doctoral Dissertation for further directions regarding the dissertation. **\*\*Note: Please give a completed copy of the scheduling form to your graduate program's secretary before filing it with the Graduate School..**

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

Note for final defense: Student should bring several copies of the thesis signature page and a black pen to have committee members sign them while everyone is together.

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

Bindery information: There are several binderies located in the State, and we do not require that you use a particular bindery. In the past, many students have used a local bindery (J&S Bindery) in Uniontown. If you decide to use this vendor, their phone number is: 509/229-3363. In the past, they have picked up thesis and returned the hardbound copy(ies) to the main office. Call them for current pricing, etc. 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 Doctoral Degree, please read Chapter Five in the Graduate School Policies and Procedures manual or find it at:

[http://www.gradsch.wsu.edu/polproc\\_doctoral.html](http://www.gradsch.wsu.edu/polproc_doctoral.html).

## **ASSISTANTSHIPS**

### **Appointment**

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

Appointments are at .50 FTE (full-time equivalent). The required academic load is 18 credit hours during fall and spring semester, and if necessary, 3 for the summer. The required workload is 20 hours per week. For the RA the work required is at the discretion of the major professor; for the TA, at the discretion of the professor to whom the TA is assigned. All study, whether for classes, exams or defense, is to be done on the student's own time. 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 vacation days in advance.

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

### **Funding Source**

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

### **Reappointment**

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

### **Residency Requirement**

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

Information on establishing residency can be found at <http://www.wsu.edu/future-students/admission/residency.html>.

### **Seminar Abstracts (PL P 515)**

Seminar abstracts should be sent *electronically* to the Program Coordinator 10 days prior to your seminar. This time is needed to send seminar announcements to the statewide plant pathology faculty and research stations, to other departments on campus, University of Idaho faculty, Fischer Ag Science Library and our own faculty, staff, and students. 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 and #, place, date, and time. (See example on the following page.)

Consult with your advisor.

Make corrections or rewrite as indicated by your advisor.

Consult with the seminar instructor

Make corrections or rewrite as indicated by the seminar instructor and return to the seminar instructor for final proofing.

Please send it to Program Coordinator **electronically and in final form** for duplication and distribution.

**(student's responsibility:** both the advisor and Pl P 515 course director must have reviewed & approved it before submitting it to the Program Coordinator).

E-mail the final version to <plpathstudents@wsu.edu>.

### **Pl P 515 Seminar Instructor Schedule (Proposed) Fall 2006 – Fall 2012**

Fall 2006	Jack Rogers
Spring 2007	Tim Murray
Fall 2007	Frank Dugan
Spring 2008	Hanu Pappu
Fall 2008	Lee Hadwiger
Spring 2009	Xianming Chen
Fall 2009	Brenda Schroeder
Spring 2010	Ned Klopfenstein
Fall 2010	Scot Hulbert

Spring 2011	Tobin Peever
Fall 2011	Tim Paulitz
Spring 2012	Dennis Johnson
Fall 2012	Weidong Chen

Investigation of the mode of action of two fungal elicitors,  
*F.spb* DNase and chitosan, in a mammalian system

Your Name

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* (*F.spb*), 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<sub>260nm</sub> light (6). Chitosan, a  $\beta$ -1,4-linked glucosamine, and a DNase are released from *F.spb* during its interaction with pea tissue (1,2). These components elicit pea defense responses (4,6). Moreover, *F.spb* 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 *F.spb* 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 *F.spb* 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 *F.spb* 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 *F.spb* 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.

We also investigated the possibility that a p53-like-protein exists in peas. Western analysis with pea seeds and endocarp tissue revealed that the same monoclonal antibody that recognizes p53 in human cell lines also recognizes a protein in pea plants. The pea protein differed from that of the 53 kDa animal p53 in that the pea protein has a molecular weight of approximately 100 kDa. The regulation of this protein in pea tissue will be discussed.

**PLEASE PUT YOUR REFERENCES ON THE REVERSE SIDE**

## **GRADUATE AND PROFESSIONAL STUDENT ASSOCIATION**

<http://www.wsu.edu/~gpsa/>

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.

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. The Department of Plant Pathology can have 1 Senator, selected by the students.

The GPSA sponsors several activities for the benefit of graduate students including:

The body of Plant Pathology Graduate Students is now a registered student organization referred to as the 'Plant Pathology Graduate Student Organization'. For further information on meeting times and activities, contact Jason Ingram [jtingram@wsu.edu](mailto:jtingram@wsu.edu), Donna Henderson [donnah@mail.wsu.edu](mailto:donnah@mail.wsu.edu) (these two PL P graduate students will be sharing the Senator duties for 2007-08) or Dr. Lori Carris, faculty advisor for the group.

### **Dr. William R. Wiley Annual Research Exposition**

Provides an opportunity for graduate and professional students to present and publish their research. Abstracts are due in January, with the Expo. held in March. Cash prizes of \$600, \$400, and \$200 are awarded in each of five academic divisions. During the GPSA Appreciation Week in April there is a one-day colloquium, during which the winners give oral presentations.

### **GPSA Student Appreciation Week**

In April of each year, the GPSA sponsors a week to recognize the many contributions of graduate and professional students to teaching, research, and service.

### **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.

### **CopiCard Subsidy**

The GPSA offers subsidized CopiCards for use in the libraries. They may be purchased in the GPSA offices on Tuesdays and Wednesdays, from 8:30 a.m. to 3:30 p.m. Student ID card is required. For more information on GPSA copy services, please visit their website at:



<http://www.wsu.edu/~gpsa/Programs/>

**Interlibrary Loans (ILL)**

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: [www.wsulibs.wsu.edu/](http://www.wsulibs.wsu.edu/) and click on “Interlibrary Loans”.

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](mailto:ill@mail.wsu.edu) if you have further questions.

By going to the main [wsulibs.wsu.edu](http://wsulibs.wsu.edu) link referenced above, you can also take online tours and discover many other useful features of the WSU library system.

**Theater Arts Pass**

The Department of Theater & Music organizes six plays each year. GPSA funding allows graduate and professional students to attend these plays free of charge. Partners and children of the student are also admitted without any charge. Just show your graduate/professional student ID for admittance.

Contact the GPSA office for more complete information on the above activities. Offices of the Graduate and Professional Student Association are in Administration Annex Building, room 203, they may be reached at 335-9545.

## HELPFUL REFERENCES

### Plant Pathology Home Page

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

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

### Graduate Bulletin

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

### Graduate Student Code

The Graduate Student Code provides a code of ethics to be used as guidelines for faculty and graduate student interaction.

### Graduate School Policies and Procedures

This booklet is available to each student when they are admitted to the Graduate School. It is used throughout a student's degree program. It serves as a guide to students, faculty and staff to insure that proper advising occurs leading to the completion of a graduate degree.

### Graduate Student Guide

This booklet is given to each admitted student. It familiarizes new students with places around the Palouse and who to contact for necessary assistance when they arrive in Pullman. It provides guidance on registration procedures to new students beginning their classes.

### On-line Forms

Found at <http://www.gradsch.wsu.edu/forms.htm>

- New applicant

- Re-enrolling graduate student

- Current graduate student

- Doctoral student ready for preliminary exams

- Current graduate student changing their program or committee

- Graduating graduate student

- Current graduate student ready for final completion

- Summaries for all enrolled graduate student

- Thesis/Dissertation formatting guidelines

## Time Schedules

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

To view current semester class offerings, an Academic Calendar with relevant deadlines, and other general information for each semester, please visit:

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

## FACULTY

### DEPARTMENT OF PLANT PATHOLOGY

\* Indicates Adjunct Faculty

<u>NAME &amp; TITLE</u>	<u>EXPERTISE</u>	<u>LOCATION, PHONE, &amp; E –MAIL</u>
*Edward B. Adams, Ph.D. Director Spokane County Extension	Extension Administration	WSU - Spokane 509-477-2048 adams@wsu.edu
Lori M. Carris, Ph. D. Assoc. Professor & Assoc. Plant Pathologist Graduate Coordinator/Director	Mycology, Biology and Systematics of Smut Fungi	WSU - Pullman 509-335-3733 carris@wsu.edu
Gary A. Chastagner, Ph. D. Plant Pathologist	Christmas Trees, Turf, 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@mail.wsu.edu
*Xianming Chen, Ph.D. Research Plant Pathologist USDA-ARS	Cereal Rusts, Genetics and Plant Resistance	WSU - Pullman 509-335-8086 xianming@wsu.edu
*Frank M. Dugan, Ph.D. Research Plant Pathologist USDA-ARS	Ascomycetes and Associated Anamorphs, Fungi Endophytic in Higher Plants	WSU - Pullman 509-335-1783 fdugan@wsu.edu
Lindsey du Toit, Ph.D. Associate Plant Pathologist Extension Plant Pathologist	Vegetable Seed Pathology	NWREC Mt.Vernon 360-848-6140 dutoit@wsu.edu
Kenneth C. Eastwell, Ph.D. Assoc. Plant Pathologist	Plant Virology, Fruit Tree and Grape Pathology	IAREC - Prosser 509-786-2226 Ext. 385 keastwell@wsu.edu
Dean A. Glawe, Ph.D. Scientist, WSU Professor, U/W College of Forest Resources	Mycology Taxonomic databases  glawed@cfr.washington.edu OR	U/W, College of Forest Resources Box 352100 Univ. of Washington Seattle, WA 98195 Ph.: 206 616-9554 glawe@wsu.edu

<u>NAME &amp; TITLE</u>	<u>EXPERTISE</u>	<u>LOCATION, PHONE, &amp; E –MAIL</u>
Gary G. Grove, Ph.D. Professor & Plant Pathologist Director, Agweather Net	Fruit Tree Diseases and Epidemiology	IAREC - Prosser 509-786-9283 grove@wsu.edu
Lee A. Hadwiger, Ph.D. Professor & Plant Pathologist	Molecular Biology, Host-parasite Interactions, and Disease Resistance	WSU - Pullman 509-335-3751 chitosan@wsu.edu
Scot H. Hulbert, Ph.D. R. James Cook Endowed Chair in Cropping Systems Pathology Professor, Crop & Soil Sciences Scientist, Plant Pathology Dept.	Genetics of Resistance and Virulence; Disease Manage- ment in conservation-oriented cropping systems.	WSU - Pullman 509-335-3722 scot_hulbert@wsu.edu
Debra A. Inglis, Ph.D. Assoc. Plant Pathologist and Extension Plant Pathologist	Vegetable Pathology	NWREC-Mount Vernon 360-848-6134 dainglis@wsu.edu
Dennis A. Johnson, Ph.D. Professor & Extension Plant Pathologist	Potato and Mint Diseases	WSU - Pullman 509-335-3753 dajohn@wsu.edu
*Mee Sook Kim, Ph.D. Research Plant Pathologist USDA-Forest Service	Armillaria root rot disease, forest pathology and genetics of forest fungal pathogens/hosts.	Rocky Mtn. Res. Stn. Moscow, Idaho (208) 883-2362 mkim@fs.fed.us
*Ned Klopfenstein, Ph.D. Research Plant Pathologist USDA-Forest Service	Forest Pathogens	Rocky Mtn. Res. Stn. Moscow, Idaho 208-883-2310 nklopfenstein@fs.fed.us
*Richard Larsen, Ph.D. Research Plant Pathologist, USDA-ARS	Virology of bean and cool season legumes; resistance in alfalfa to soil-borne pathogens	IAREC - Prosser 509-786- rlarsen@tricity.wsu.edu
*Mark Mazzola, Ph.D. Research Plant Pathologist, USDA-ARS	Fruit Tree Pathology, Soilborne fungi, and Microbial Ecology	TFRL - Wenatchee 509-664-2280 mazzola@tfrl.ars.usda.gov
*Gerald McDonald, Ph.D. Scientist USDA-Forest Service	Forest Pathogens	Rocky Mtn. Res. Stn. Moscow, Idaho 208-883-2310

<u>NAME &amp; TITLE</u>	<u>EXPERTISE</u>	<u>LOCATION, PHONE, &amp; E –MAIL</u>
Timothy D. Murray, Ph.D. Professor, Chair & Plant Pathologist	Cereal Diseases, Ecology and Epidemiology of Soilborne Pathogens, Disease Resistance and Chemical Control	WSU - Pullman 509-335-7515 plpchair@mail.wsu.edu tim_murray@wsu.edu
*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	Plant Molecular Biology and Molecular Plant-Microbe Interactions	WSU - Pullman 509-335-7824 pokubara@wsu.edu
Hanu Pappu, Ph.D. Assoc. Prof. & Plant Pathologist	Plant Virology Dahlias, vegetables and small grains	WSU - Pullman 509-335-3752 hrp@wsu.edu
*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 Prof. & Associate Plant Pathologist	Fungal Population Genetics, and Legume Pathology	WSU – Pullman 509-335-3754 tpeevee@wsu.edu
Naidu Rayapati, Ph.D. Assistant Professor Plant Pathology	Plant Virology; virus-vector interactions, virus diseases of grapes	IAREC – Prosser 509-786-9215 naidu@wsu.edu
Ekaterini Riga, Ph.D. Assist. Plant Pathologist Assistant Professor Extension Plant Pathology	Nematology Sensory Perception of nematodes	IAREC – Prosser 509-786-9256 riga@wsu.edu
Jack D. Rogers, Ph.D. Prof.& Plant Pathologist	Mycology, Forest Pathology, and Cytogenetics	WSU - Pullman 509-335-3732 rogers@wsu.edu
Brenda K. Schroeder Assistant Scientist Plant Pathology	Microbiology, molecular Biology and genomics of Bacteria associated with plant disease.	WSU - Pullman 509-335-5805 bschroeder@wsu.edu
*Linda S. Thomashow, Ph.D.	Cereal Root Diseases,	WSU - Pullman

Research Plant Pathologist USDA-ARS <u>NAME &amp; TITLE</u>	Molecular Plant-Microbe  <u>EXPERTISE</u>	509-335-0930 thomashow@wsu.edu <u>LOCATION, PHONE,</u> <u>&amp; E -MAIL</u>
*George Vandemark Plant Research Geneticist USDA-ARS	Legume germplasm and basic & applied investigations of problems associated with legume improvement	WSU Pullman 509-335-9521 gvandema@tricity.wsu.edu
*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. Associate Plant Pathologist Extension Plant Pathologist	Tree fruit diseases, epidemiology, and postharvest pathology	TFRC - Wenatchee 509-663-8181 Ext. 229 clxiao@tfrec.wsu.edu

## RETIRED FACULTY

Peter R. Bristow, Ph.D.  
Associate Plant Pathologist &  
Extension Specialist E-3

George W. Bruehl, Ph. D.  
Prof. Emeritus & Plant Pathologist

Ralph S. Byther, Ph.D.  
Extension Plant Pathologist

R. James Cook, Ph.D.  
Prof. Emeritus & Scientist

Arlen D. Davison, Ph.D. Prof. Emeritus  
& Extension Plant Pathologist  
Former Department Chair

Ruben Duran, Ph.D.  
Prof. Emeritus & Plant Pathologist

Gene D. Easton, Ph.D.  
Plant Pathologist

Lynn R. Faulkner, Ph.D.  
Plant Pathologist

Paul R. Fridlund, Ph.D.  
Plant Pathologist

William A. Haglund, Ph.D.  
Plant Pathologist

J. Walter Hendrix, Ph.D.  
Prof. Emeritus & Plant Pathologist

John M. Kraft, Ph.D.  
Plant Pathologist, USDA-ARS

Walter Kaiser, Ph.D.  
Plant Pathologist, USDA-ARS

Roland F. Line, Ph.D.  
Plant Pathologist, USDA-ARS

Otis C. Maloy, Ph.D.  
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Gaylord I. Mink, Ph.D.  
Prof. Emeritus & Plant Pathologist

C. Lee Parish, Ph.D.  
Plant Pathologist, USDA-ARS

Gerald S. Santo, Ph.D.  
Prof. Emeritus &  
Extension Specialist E-4 Scientist

Matthew J. Silbernagel, Ph.D.  
Plant Pathologist, USDA-ARS

Cal G. Skotland, Ph.D.  
Plant Pathologist

Samuel H. Smith, Ph.D.  
Former President, WSU

Stephen D. Wyatt, Ph.D.  
Assoc. Professor Emeritus &  
Plant Pathologist