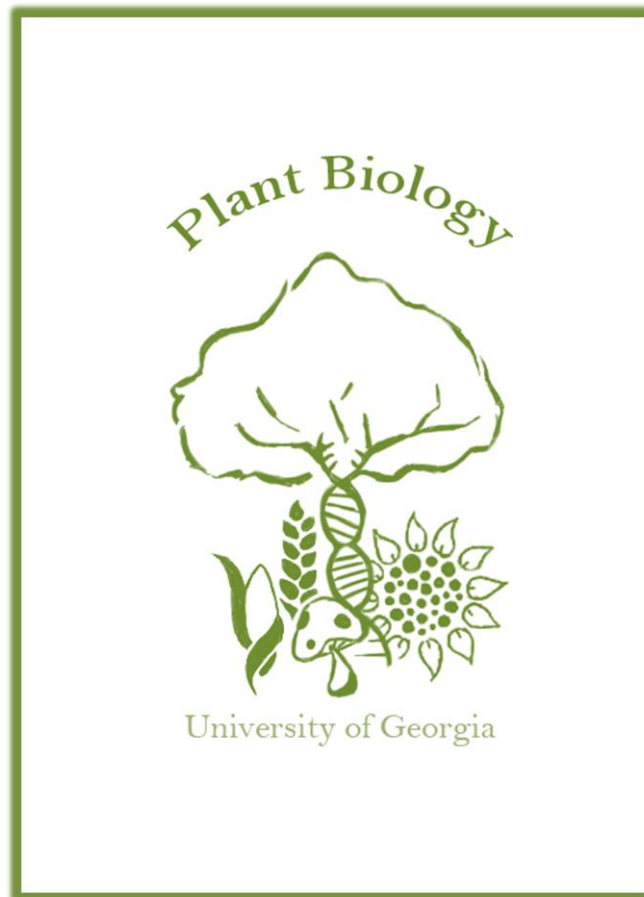


# PLANT BIOLOGY DEPARTMENT HANDBOOK 2014-2015



**University of Georgia  
Athens, GA**

Updated: August 7, 2014

# Plant Biology Handbook

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# General Information and Operating Procedures

## Departmental Personnel

### Plant Biology Department Faculty

Maor Bar-Peled, Ph.D., Weizmann Institute, Israel, 1993, biochemistry and plant cell biology.  
Marguerite Brickman, Ph.D., U.C. Berkeley, 1993, college science education.  
Brigitte Bruns, Ph.D., Universitat Freiburg, gene expression in temperature and light-stressed symbiotic dinoflagellates.  
John Burke, Ph.D., University of Georgia, 1999, plant evolutionary biology.  
Shu-Mei Chang, Ph.D., Duke, 1997, plant evolutionary biology.  
R. Kelly Dawe, Ph.D., California, Berkeley, 1989, plant cell and molecular biology.  
Katrien M. Devos, Ph.D., State University Shent, Belgium, 1992, genomics and evolution.  
Lisa A. Donovan, Ph.D., Utah, 1992, plant physiological ecology.  
Glenn A. Galau, Ph.D., California Institute of Technology, 1976, plant molecular biology.  
Michael G. Hahn, Ph.D., Colorado, 1981, carbohydrates in growth and development.  
James L. Hamrick, Ph.D., California, Berkeley, 1970, population genetics.  
Forest Isbell, Ph.D., Iowa State University, 2010, ecology & evolutionary Biology  
Chang Hyun Khang, Ph.D., Pennsylvania State University, 2005, fungal molecular genetics  
Richard Lankau, Ph.D., University of California, Davis, 2007, Ecology  
Jim Leebens-Mack, Ph.D., University of Texas, 1995, systematic and evolutionary biology.  
Wolfgang Lukowitz, Ph.D., University of Munich and University of Tubingen, Germany, 1995, plant developmental biology.  
Russell L. Malmberg, Ph.D., Wisconsin, 1976, genetics.  
Michelle Momany, Ph.D., Texas, Austin, 1992, experimental mycology.  
Andrew H. Paterson, Ph.D., Cornell, 1988, plant genetics.  
Chris J. Peterson, Ph.D., Rutgers, 1992, plant community ecology.  
Kathrin Stanger-Hall, Ph.D., Eberharat Karl Universitat, 1993, biology.  
Dorset Trapnell, Ph.D., University of Georgia, 2003, Plant Biology  
Zheng-Hua Ye, Ph.D., Washington University, 1994, plant biology.  
Xiaoyu Zhang, Ph.D., University of Georgia, 2003, plant functional genomics.  
Wendy Zomlefer, Ph.D., University of Florida, 1991, taxonomy.

### Plant Biology Department Assistant Research Scientist

Magdy S. Alabady, Ph.D., 2007 Cairo University of Egypt & University of California, Davis  
Sangho Jeong, Ph.D., 2002, University of Michigan, molecular, cellular and developmental biology

### Plant Biology Department (Emeritus) Faculty

William E. Barstow, Ph.D., Purdue, 1973, ultrastructure of fungal development.  
Marie-Michele Cordonnier-Pratt, Ph.D., Rouen, France, 1977, cellular biology.  
W. Marshall Darley, Ph.D., California, San Diego, 1969, physiological ecology of algae.  
Melvin S. Fuller, Ph.D., California, Berkeley, 1959, development in lower fungi (Emeritus-1995).  
David E. Giannasi, Ph.D., Iowa, 1972, biochemical systematics (Emeritus-2004).  
Stephen P. Hubbell, Ph.D., California, Berkeley, 1969, zoology.  
Samuel B. Jones, Ph.D., Georgia, 1964, systematics of flowering plants (Emeritus-1991).  
Joe L. Key, Ph.D., Illinois, 1959, biochemistry of plant growth and development (Emeritus-2001).  
Gary D. Kochert, Ph.D., Indiana, 1967, plant genetics and systematics (Emeritus-2003).  
Burlyn E. Michel, Ph.D., Chicago, 1950, plant water relations (Emeritus-1988).  
Carl D. Monk, Ph.D., Rutgers, 1959, species diversity; plant communities (Emeritus-1990).  
Barry A. Palevitz, Ph.D., Wisconsin, 1971, cell biology; motility.  
David Porter, Ph.D., Washington, 1967, biology of marine fungi; cell biology.  
Lee H. Pratt, Ph.D., Oregon State, 1967, plant physiology and photobiology.  
Gregory W. Schmidt, Ph.D., S.U.N.Y., Stony Brook, 1975, chloroplast and photosynthetic membrane biogenesis.  
Rebecca R. Sharitz, Ph.D., North Carolina, 1970, Savannah River Ecology Laboratory, plant population ecology.  
Susan R. Wessler, Ph.D., Cornell University, 1980, Plant Molecular Biology.

## Adjunct and Courtesy Faculty Appointments

Mike Arnold, Ph.D., Australian National University, 1985, Genetics Department, evolution and genetics.

Jeff Bennetzen, Ph.D., University of Washington, 1985, Genetics Department, genome structure, function, and evolution.

Alan Darvill, Ph.D., University College of Wales, 1976, CCRC, biochemistry and botany.

Mark Farmer, Ph.D., Rutgers University, 1988, Cellular Biology Dept., ultrastructure and evolution of protists and algae.

Zachary Lewis, Ph.D., Texas A & M, 2004, Microbiology.

Jacqueline E. Mohan, Ph.D., Duke University, 2002, Biology.

Debra Mohnen, Ph.D., University of Illinois, 1985, plant biology.

David Nelson, Ph.D., University of Wisconsin, 2006, Genetics.

Robert Schmitz, Ph.D., University of Wisconsin, 2007, Genetics

Andrea Sweigart, Ph.D., Duke University, 2006, Biology.

## Postdoctorals

Adam Bewick                                 Burke

Jonathan Corbi                               Burke

Jonathan Gent                               Dawe

Savithri Nambeesan                       Burke

Youxi Yuan                                  Ye

## Departmental Staff

Raj Aygampalayam                         Scientific Computing Professional, Leebens-Mack Lab

Kelly Bettinger                             Research Professional II, Donovan Lab

Gretchen Bowen                            Accountant

Michael Boyd                               Horticulture Research Specialist, Greenhouse

Stephanie Chirello                        Administrative Specialist I

Megan Connell                             Administrative Associate II

Greg Cousins                               Research Technician III, Greenhouse

Le'Ann Fleisher                            Laboratory Technician II, Autoclave & Dishwashing Facility

Tyler Fletcher                             Research Technician III, Burke Lab

Richard Hare                               IT Professional Specialist

Dat Hoang                                  Research Technician II, Trapnell/Leebens-Mack Labs

Benjamin Hsieh                            Scientific Computing Professional, Burke Lab

Steven Hughes                             Research Professional I, Herbarium Collections Manager

Shannon Kennedy                         Business Manager III

Dong won Kim                              Research Technician III, Khang Lab

Rachel Nodurft                            Research Professional II, Lankau Lab

Shana Pau                                 Laboratory Technician II, Chang Lab

Beth Richardson                         Laboratory Coordinator, Electron Microscopy

Will Rogers                                Research Professional II, Malmberg Lab

Amy Smith                                 Research Professional I, Momany Lab

Alex Summerour                         IT Student Worker

Kevin Tarner                               Research Technician III, Greenhouse

Susan Watkins                             Admissions Counselor II, Graduate Program

Ruiqin Zhong                               Research Professional IV, Ye Lab

## **Plant Biology Department Administration**

### **Department Head**

Lisa Donovan

### **Arts and Sciences Senate**

Maor Bar-Peled

### **Equipment and Supplies**

Gretchen Bowen

### **Executive Committee**

Lisa Donovan (Chair)

Zheng-Hua Ye

Kelly Dawe

Katrien Devos

Michael Hahn

Rick Lankau

### **Graduate Student Association**

President – David Higgins

Vice President – Chelsea Cunard

Treasurer – Jeff Cannon

Secretary – Caitlin Ishibashi

Peer Teaching Evaluation – Alan Bowsher

### **Graduate Studies Committee**

Chris Peterson (Graduate Coordinator)

John. Burke

Shu-Mei Chang

Wolfgang Lukowitz

Xiaoyu Zhang

### **Growth Facilities Committee**

Michael Arnold

Michael Boyd

Lisa Donovan

Shu-Mei Chang

Zheng-Hua Ye

### **Herbarium**

Wendy Zomlefer

### **Electron Microscopy Facility**

Zheng-Hua Ye

Beth Richardson

### **Registration**

Susan Watkins

Glenn Galau

### **Seminar Committee**

Forest Isbell

Chang Hyun Khang

### **Teaching Evaluation Committee**

Zheng-Hua Ye

### **Undergraduate Coordinator**

Glenn Galau

### **Computer Facility**

Jonathan Hardy

Richard Hare

Alex Summerour

### **Computer Committee**

John Burke

Kelly Dawe

Jim Leebens-Mack

### **Life Sciences Promotion and Tenure, Plant Biology Representative**

Jim Hamrick

### **Representative to Biology Curriculum Committee**

Chris Peterson

### **Webpage Committee**

Jonathan Hardy (Chair)

Megan Connell

Rick Lankau

## Continuing Graduate Students

### Ph.D. Students

Bowsher, Alan  
Cannon, Jeff  
Christopher, Dorothy  
Comer, Jason  
Cunard, Chelsea  
Deen, Cecile  
Doerter, Ilkay  
Ellis, Nate  
Engle, Kristen  
Esserman, Lauren  
Guo, Hui  
Haghighat, Marziyeh  
Harkess, Alex  
Heyduk, Karolina  
Higgins, David  
Ishibashi, Caitlin  
Johnson, Alex  
Levin, Laura  
Li, Zi  
Masalia, Rishi  
Mason, Chase  
Matte-Santos, Alex  
McAssey, Edward  
Nagendra, Uma  
Pilote, Alex  
Pim, Ashley  
Putney, Katie  
Spiekerman, John  
Stephens, Jessica  
Wang, Li  
Wyatt, Graham  
Yang, Yiwen  
Zhang, Si  
Zhang, Tiantian  
Zhou, Chengbo

### M.S. Students

Bartelme (Wygant), Elise  
Coatney, Caroline

### New Ph.D. Students

Eilbert, Emily  
Evans, Greg  
Kang, Earl  
Mela, Alex  
Nodurft, Rachel  
Peralta, Angelo  
Reyes, Cristy  
Riley, Rachel  
Soto, Maria

### New M.S. Students

None

### Major Professor

Donovan  
Peterson  
Chang  
Zomlefer  
Lankau  
Chang  
Momany  
Dawe  
Mohnen  
Leebens-Mack  
Paterson  
Ye  
Leebens-Mack  
Leebens-Mack  
Dawe  
Burke  
Devos  
Zhang  
Bar-Peled  
Burke  
Donovan  
Zhang  
Burke  
Peterson  
Donovan  
Donovan  
Chang  
Ye  
Malmberg  
Zhang  
Trapnell  
Hahn  
Hahn  
Hahn  
Paterson

### Major Professor

Donovan  
Dawe

### Major Professor

Rotation  
Rotation  
Rotation  
Rotation  
Rotation  
Rotation  
Rotation  
Rotation  
Rotation

### Major Professor

### Major Field

Ecology/Evolution  
Ecology/Evolution  
Ecology/Evolution  
Organismal/Systematics  
Ecology/Evolution  
Ecology/Evolution  
Cellular/Molecular  
Cellular/Molecular  
Cellular/Molecular  
Cellular/Molecular  
Cellular/Molecular  
Cellular/Molecular  
Cellular/Molecular  
Cellular/Molecular  
Cellular/Molecular  
Cellular/Molecular  
Cellular/Molecular  
Ecology/Evolution  
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Cellular/Molecular

### Major Field

Ecology/Evolution  
Cellular/Molecular

### Major Field

Cellular/Molecular  
Ecology/Evolution  
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Cellular/Molecular  
Ecology/Evolution  
Cellular/Molecular  
Ecology/Evolution  
Ecology/Evolution  
Cellular/Molecular

### Major Field



Excerpts from UGA's Non-discrimination and anti-harassment policy. The complete Policy can be found here:

<http://eoo.uga.edu/pdfs/NDAH.pdf>

## **NON-DISCRIMINATION AND ANTI-HARASSMENT POLICY OFFICIAL POLICY STATEMENTS**

### **SEXUAL AND DISCRIMINATORY HARASSMENT**

The University of Georgia ("the University") is committed to maintaining a fair and respectful environment for living, work and study. To that end, and in accordance with federal and state law, Board of Regents' policy, and University policy, the University prohibits any member of the faculty, staff, administration, student body, volunteers or visitors to campus, whether they be guests, patrons, independent contractors, or clients, from harassing and/or discriminating against any other member of the University community because of that person's race, sex (including sexual harassment), sexual orientation, ethnicity or national origin, religion, age, genetic information, disabled status, or status as a disabled veteran or veteran of the Vietnam era. Incidents of harassment and discrimination will be met with appropriate disciplinary action, up to and including dismissal from the University.

### **NON-DISCRIMINATION AND EQUAL OPPORTUNITY**

Consistent with federal and state law and University policy, the University of Georgia restates its commitment to the concepts of affirmative action and equal opportunity. Neither employment nor study, nor institutional services, programs, and activities should be hindered by such prohibited bias factors as race, color, religion, national origin, sex, sexual orientation, age, genetic information, veteran status, or disability. Prohibited bias factors will not be permitted to have an adverse influence upon decisions regarding students, employees, applicants for admission, applicants for employment, contractors, volunteers or participants in and/or users of institutional programs, services, and activities. The University of Georgia will continue in its efforts

to maintain an institutional environment free of such bias and restates its policy prohibiting the interference of such bias factors in institutional processes.

Every member of this university community is expected to uphold this policy as a matter of mutual respect and fundamental fairness in human relations. Every student of this institution has a responsibility to conduct himself/herself in accordance with this policy as a condition of enrollment. Further, every University employee has an obligation to observe UGA policies in implementation of federal and state law as a term of employment. In addition, one aspect of performance appraisal for University personnel at all levels of supervision and administration will include the qualitative evaluation of their leadership in implementing this non-discrimination policy and in seeking resolution of problems in this area at the point nearest their origin.

Merit and productivity, free from prohibited bias, will continue to guide decisions relating to employment and enrollment.

No person will be penalized for good faith utilization of channels available for resolving concerns dealing with prohibited bias. Within any limits imposed by concurrent jurisdiction of the University System of Georgia Board of Regents and other agencies of the state of Georgia, no internal procedure or process for resolution of such concerns will be used for the purpose of abridging the access of any member of this institutional community to the courts or to compliance agencies.

### **SUPERVISORY/AUTHORITY RELATIONSHIPS**

No individual who is in a position of authority over another, either in the employment or educational context, has the authority to discriminate against or harass others by virtue of his or her role. The University does not in any way, expressly or impliedly, condone discrimination or harassment by a person in a position of authority, an administrator, or a supervisor. Furthermore, a supervisor, administrator, or person in a position of authority who does not appropriately handle reports or incidents of discrimination and/or harassment, or who does not report incidents about which he/she becomes aware to the NDAH Officer, may be subject to disciplinary 5 action.

## CONSENSUAL RELATIONSHIPS IN REGARD TO SEXUAL HARASSMENT

When one party has a professional relationship toward the other, or stands in a position of authority over the other, even an apparently consensual sexual relationship may lead to sexual harassment or other breaches of professional obligations. The University prohibits all faculty and staff, including graduate assistants, from pursuing or engaging in dating or sexual relationships with students whom they currently supervise, teach, or have authority over. Anyone involved in or who commences a dating or sexual relationship with someone over whom he or she has supervisory power or authority (employment or academic) must immediately disclose the existence of the relationship to his/her immediate supervisor. Anyone involved in or who commences a dating or sexual relationship with someone over whom he or she has supervisory power (employment or academic) or authority cannot participate in any decisions that affect the compensation, evaluation, employment conditions, instruction, and/or the academic status of the subordinate involved.

## Administrative Procedures

### Use of Telephones

All faculty offices and laboratories have telephones that are available for persons occupying or working in these rooms. Lab phones are the means to communicate with the PBIO main office regarding received packages, request vehicle use or reserve conference rooms. You can best learn about these phones by reading the instructions on page 2 of the UGA Campus Directory. The phones may be used for campus and local calls without any charges over and above the monthly service charge. For all long distance calls in the U.S. begin your dialing with a 9-1 and then the area code and number. Calls outside the U.S. dial 9 then 011 and then the country code, city code, and local telephone number.

The Department has one telephone line (706-542-1805 dedicated to FAX. The office staff can instruct you on the use of the FAX on the departmental copier. Contact Stephanie to request changes or report a problem with your phone. If your phone needs repair and Stephanie is not available go to <http://www.eits.uga.edu/telephone/> website, select *Incident/Repair* to submit your repair request (effective June 1, 2011).

## Departmental Seminars

Departmental seminars normally occur every Monday at 4:00 p.m. in Room 2401. Speakers for these seminars will be faculty members, postdoctoral students, our Ph.D. candidates completing their degrees and visiting scientists. Refreshments will be provided starting at 3:45 outside room 2401. Seminars afford each of us an opportunity to keep up with diverse areas of Plant Biology and the coffee period before seminars is a good opportunity to talk with departmental colleagues outside your immediate circle. **All graduate students and faculty are expected to attend these seminars for their own professional development and as a courtesy to the speakers. Students must enroll for PBIO 8830 every semester unless you are approved by your major professor to be absent for field work. Students are required to attend 2/3 of the seminars to pass the course.**

A graduate student lunch at 12:30 in the Palfrey Room (2507) is scheduled for every outside seminar speaker.

**Meal expenses.** For **dinner** meals with official Departmental visitors, we will pay up to \$160 for a maximum of 4 persons including the guest. This includes any gratuity. For **lunch or breakfast** we will pay up to \$20 per person for a maximum of 4 persons, including gratuity. **Reimbursement for alcohol is not allowed.** You must provide a detailed receipt in order to be reimbursed, do not submit a credit card receipt only.

### Mail

Campus and U.S. mail comes to the department once a day in the morning, Monday through Friday by 10:00AM. Our mail handling facilities are for professional use; the Department does not pay postage on personal mail. **Do not have personal mail sent to your departmental address.**

### Library

We have an excellent science library in the Boyd Graduate Research Center. New journals are placed on the tables daily. New books are placed on separate shelves before they are put in the stacks. The librarians will show you where these two areas are located.

If you go to the libraries and are unable to find journals or books that you need in your work, or you see advertisements for new books you feel would be useful please call them to the attention of the department head and she will have them ordered by the library. The UGA Science library has created a Plant Biology specific library page for us, found at <http://guides.libs.uga.edu/plantbiology>. The page has pertinent information such as popular journals and e-books used in the field of plant biology. 6

## Office Staff

Our office staff consists of a Business Manager III, Accountant, Administrative Specialist I, Admissions Counselor II, and Administrative Associate II. Shannon Kennedy is responsible for office procedures, personnel, payroll and budgetary matters. Gretchen Bowen's primary responsibilities include handling purchase requests for research and teaching supplies and keeping books on departmental, sponsored research grants, and Foundation accounts, and processing faculty travel requests (and student travel not through Graduate School). Stephanie Chirello is the assistant to the department head. She prepares the Plant Biology Department handbook, is the Physical Plant and Telephone liaison, and organizes department events. Susan Watkins is the admissions counselor to the Graduate Coordinator and keeps records relating to such matters including graduate student personnels. She is responsible for processing Graduate School travel requests. Megan Connell handles matters relating to mail and its distribution, issues keys, seminar speaker notices, travel arrangements and reimbursements, duplication of materials, vehicle checkout and reserving computers and projectors, as well as handing out basic office supplies and ordering other needed supplies. Megan is also the Plant Center Secretary. For your convenience, mailboxes for the office staff are located in the mail room. The computers in the office should not be used by students or faculty.

## Computing Resources

Plant Biology IT is made up of Richard Hare, and Alex Summerour, Richard Hare is the IT Professional Specialist responsible for daily IT operations and support services such as desktop installation/maintenance, both hardware and software. Alex Summerour is the IT Student Worker responsible for inventory, poster printing, and general desktop support tasks. Due to the volume of requests we receive, please ensure to email your support requests to [pbio-helpdesk@franklin.uga.edu](mailto:pbio-helpdesk@franklin.uga.edu) <http://helpdesk.franklin.uga.edu>. In an emergency, you can check the IT office (room 2510)

## Department Computers

The department has a Computing Lab (room 2205) that has 8 Dell PCs and 2 MACs for anyone in the department to use. You can sign into the computers in this lab using your UGA MyID credentials. There are also 2 Dell laptops you can check out with Megan Connell in the Main Office. Teaching gets priority over other uses when checking out these laptops.

## Printing

When printing in the 2205 computer lab, we have dropped the per-page fees charged in previous years. The lab has both a black and white LaserJet and a color LaserJet. These printers are to be used for departmental print jobs, NOT for personal use. Also, printing from personal computers is not allowed. We are on the honor system, so if people are found abusing the system, per-page fees will be reinstated for all print jobs.

## Poster Printer

The department has an HP Design Jet used to print posters. The max paper width is 42", so one of your dimensions (preferably width) should not exceed 42". The fee to print a poster is broken down in the chart below. This fee can be paid using grant account numbers or with a personal check made out to the Plant Biology Department. Please give IT the UGA Account Name, Number, and justification if you are using a grant account. If you are paying by personal check, please give this to Megan Connell. IT tries to turn poster prints around in a timely manner, however if they are not given proper time to handle a job they may not have paper, ink, or time allotted to accommodate requests.

**You must give IT a minimum of 3 days' notice when you need a poster printed and give them the electronic file no later than 24 hours before needing the actual poster. If you need a glossy poster printed, you need to give IT a minimum of 1 week notice to ensure proper supplies are in stock to accommodate.**

Width (inches)	Height (inches)	Heavy Coated Paper (normal)	Premium Photo Paper (glossy)
36	1 – 50	\$30	\$60
36	51 – 100	\$45	\$90
36	> 100	add \$3 for each additional 10 inches	add \$6 for each additional 10 inches
42	1 – 50	\$40	\$80
42	51 – 100	\$55	\$110
42	> 100	add \$4 for each additional 10 inches	add \$8 for each additional 10 inches

## Wireless Network

Wireless (PAWS-Secure) has been upgraded and now covers the entire building. Please note that a UGA MyID is required to use the PAWS wireless network. Any guest with the department that does not have a UGA MyID can contact the EITS Helpdesk at 706-542-3106 to request a temporary account for use on the "Welcome to UGA" wireless network. All personal computers will need to rely on the wireless network for internet usage. **Personal computers are no longer allowed on the wired building network due to campus policy.**

## Faculty Laboratory Computers

Each faculty member usually has several lab computers that are available for lab members. Please see appropriate faculty member for rules and guidelines for using the computers in their lab. These lab machines will be replaced semi-regularly to ensure they can perform the required tasks for each respective lab. Faculty members (or a designated lab manager) must notify IT of any changes to the personnel in order to ensure only those permitted to use the computers in that lab may do so. Please email [pbio-elpdesk@franklin.uga.edu](mailto:pbio-elpdesk@franklin.uga.edu) with the MyIDs of any persons that should be added or subtracted.

## Software

The University of Georgia has made agreements with various software vendors to lower the price of commonly used software packages: Microsoft products, Adobe products, SAS, SPSS, JMP, ArcGIS, et cetera. Both the college and the Department have taken advantage of these and have purchased multiple licenses available on either unlimited or a "first come, first served" basis. Please consult with IT prior to purchasing new software, as they may be able to save you money and time.

Keep in mind that software purchased with state or grant money is not to be installed on personal Equipment. If you need software for personal use, please make use of USG SRS Personal website that offers large discounts on Microsoft, Adobe, and other common software: <http://personal.srs.usg.edu/>

**The department does not condone unauthorized use or copying of copyrighted software, nor does it assume responsibility for such actions. Moreover, the department's IT will not support unauthorized software.**

## Photocopying

1. All departmental photocopying is done on the copier in the departmental mail room. You may submit class material for copying by the office staff, or you may do it yourself. If you want the office staff to do the copying, you should check with Megan.

2. All copying must be charged to a specific source. The three possible sources are departmental supplies and expenses, personal or classes. Material to be charged to the department must be related to administration, such as lecture schedules, laboratory exercises, grants, manuscripts, departmental notices, minutes of meetings and similar items.

3. Each faculty member who has a research grant will be provided with an authorization code. Students should use their major professor's authorization code.

4. Personal copying may be done with a personal authorization code, but must be paid for immediately when Gretchen places the bill in your box (6 cents per copy). Gretchen bills for copies at the end of each semester. **We ask that faculty and teaching assistants not send students in their classes to the office to do copying; the office machines are already too busy.**

## Departmental Vehicles

The Plant Biology Department maintains three vehicles: one Suburban, and two station wagons. These vehicles are available for use by the Department subject to the following regulations:

1. To use a vehicle, you must make a request to Megan (or Susan or Stephanie if Megan is on leave). Megan will keep the vehicle keys and will maintain a vehicle log.

2. You are responsible for the vehicle during the time you are using it. Specifically:

a. All trash must be removed from the vehicle, and the vehicle must be swept out if dirt has been tracked in. If a vehicle is dirty when you go to use it, notify Megan so that the responsibility can be assigned to the previous user.

b. Do not return a vehicle with the gas tank below  $\frac{1}{2}$ . If the vehicle is below  $\frac{1}{2}$  you must go to the motor pool (near the Plant Biology greenhouses) and fill it with fuel. You will need the fuel card (located in the glove compartment) and your UGA ID to get gas. Check the oil or have it checked each time you add gas.

c. If you notice that something is wrong with the vehicle, please tell Megan when you return. You need to report anything that is not working, any suspicious noises, any accidents, etc. The Department will maintain the vehicles, but we need to know of problems in a timely fashion so that we can have them fixed.

d. You must return the keys to Megan **immediately** after using the vehicle.

e. **NO SMOKING IN UGA VEHICLES.**

**If you do not use the vehicles responsibly, you may be denied further use.**

3. You may request a specific vehicle, but Megan will decide which is the most appropriate vehicle for your use. In general, we will try to reserve the newer vehicles for “clean” trips, such as picking up someone at the airport or traveling to a meeting. Older vehicles should be used for “dirty” trips such as transporting plants in pots.

4. To insure availability of a vehicle, you may sign up in advance. In general, sign-ups are first-come, first-serve subject to the following priorities: teaching use has priority over research use; office administrative use has priority access to the station wagon. If you do not sign up in advance, you can still use any available vehicles for short trips.

**5. Only employees of the University of Georgia, students at the University, or official guests at the University may ride in University vehicles.**

**6. Vehicles may only be used for official University business. Vehicles may not be used for any personal business and may not be taken to your home and left overnight.**

7. The Department will maintain the vehicles and provide fuel for Departmental vehicles. **However, laboratories that use Departmental vehicles for research purposes (traveling to the greenhouse, etc.) will be billed \$150 every six months (in January and July).**

8. Vans can be rented from the motor pool and should be used for trips more than 50 miles from campus. Permission to use one of the station wagons for trips of more than 50 miles from campus or trips that involve an overnight absence must be obtained (see Shannon) at least one week in advance.

9. Rental rates for department vehicles (**in-state travel only**) to meetings, research collecting and similar trips are as follows: Station wagons - \$10 per day plus \$0.10 per mile and Suburban - \$12 per day plus \$0.15 per mile. Rental rates will be applied when a vehicle is taken for 6 or more hours of a day, even if it is only used for day trips. This prevents it from being available to others in the Department. . We will start you off with a full tank of gas, and you we will fill it up when you return. When you secure permission to use one of the vehicles you must identify a source for payment. This could be a research grant or any other appropriate source of funds. Note that we cannot use Departmental travel funds for trips such as these, because Departmental travel funds can only be used to reimburse actual expenses incurred. We cannot use these funds for vehicle upkeep.

### **Sending Packages via FedEx or UPS**

If you need to send any packages for your lab, there are two options. Regular FedEx labels are available in the P BIO mailroom in a drawer labeled “FedEx” and International labels are available from

Megan. All FedEx forms have a space for **Internal Billing Reference**. This **MUST** be filled out with your lab’s account number if the shipment is being charged to the Dept. Please double check all labels to be sure the correct information is entered and is legible. Bring FedEx shipments to Megan, so she can call in a pick-up as FedEx does not come regularly. **FedEx packages must be called in no later than 2:00pm to guarantee same day pick up**. You can take your package to a nearby FedEx drop off location if you cannot meet this deadline. UPS shipping is different than FedEx in that we have an online Campus Ship account system. If you would like to ship via UPS, please contact Gretchen to ask her to set up an account for you. She will need a default lab account number to set for your package charges. You will be e-mailed by UPS Campus Ship to verify your account and then you will login using their site to create shipping labels for your packages. **UPS is the preferred shipping company of the University**. There is a UPS drop box in the Mail Room where you can place your packages by 4:00PM every day. A UPS delivery man will come by every afternoon to check for outgoing packages, so there is no need to call in a pick-up as with FedEx.

### **Keys**

See Megan in Room 2502 to get the keys you need for your lab or desk. Professors will email Megan the name of the person they want to have keys and what keys that person should have. The Department will furnish your first set of keys with a \$10.00 deposit per key. Graduate student desk deposit it \$12 per key. Your deposit will be refunded when your turn in your keys. Lost keys will result in the loss of your deposit.

### **Calendars**

Conference rooms, vehicles, and laptops can be reserved by calling or emailing one of the office staff. Everyone else can view availability by using the Plant biology webmail interface (<https://dogwood.plantbio.uga.edu>). Or adding the calendar entries to their mail/calendar client of choice. The calendars use the iCal format and are easily tied into Outlook (with or without using the Kerio Connector), Thunderbird, Sunbird, and Apple Calendar program. Any of the IT team members should be able to assist you in adding it to your computer at any time.

### **Guest Parking Passes**

Visitor Parking Passes can be obtained by completing a Departmental Guest Pass Order Form: <http://www.parking.uga.edu> Choose “Permits”. Scroll down to “Departmental”. Under Department Passes there is an order form. The form can be faxed to Parking Services at 2-6301. Parking 9

Services will notify you when they are ready to be picked up. Passes can only be used in parking decks or attended lots. The Department purchases a limited number of passes to be distributed to visitors who benefit the Department (i.e. seminar speakers).

## Research and Teaching Needs

### Policy Regarding Various Office Expenses

(based on current grant indirect cost rules)

1. For faculty members who are currently generating overhead, the following expenses will be paid by the Plant Biology Department:

Office supplies, paper, printer cartridges, copying, routine postage and long-distance calls (related to work). The purpose of overhead return is to cover such routine expenses and it is against federal policy for these expenses to be charged as direct costs against any federally funded grant (e.g. NSF, NIH, DOE, and USDA). Where the primary intent of a grant includes covering such expenses, such as grants supporting workshops, then the grant will be charged for these expenses.

2. For faculty members who are not currently generating federally grant funded overhead, a limited number of these expenses will be covered by the Plant Biology Department. Additional services must be paid by the individuals. The Plant Biology Department will cover office phone lines and routine postage.

### Equipment Repairs

Approval must be obtained through the Procurement office **before** any repairs are actually performed. **Do not attempt to get repairs done without first checking with Gretchen or Shannon.**

### Off Campus Equipment

Upon completion of an "Authorization for Use of University of GA Property at Non-UGA Locations" form, *Only* Faculty, staff or employed graduate students are allowed to take UGA property off campus. The form can be found at the administrative forms website <http://www.busfin.uga.edu/forms/>. This form must be completed annually. Upon completion the form must be turned in to Gretchen Bowen. Please remember UGA Property (especially laptops) CANNOT be removed from campus until it has been tagged with an Inventory Control # decal from Property Control.

### Equipment Transfers

When transferring equipment to another department, a "Notice of change in Departmental Equipment" form must be completed. When a PI transfers to another institution and wishes to take

equipment associated with an ongoing sponsored project to the new institution a "Request for Transfer of Equipment" form must be completed. Upon completion the form must be turned in to Gretchen Bowen. Both forms are on the administrative forms website <http://www.busfin.uga.edu/forms/>.

### Equipment Surplus

Broken, unnecessary, and outdated equipment can be surplus once a "Surplus Equipment Transfer List" form is completed. The form can be found at the administrative forms website <http://www.busfin.uga.edu/forms/>. Submit completed form to Stephanie who will organize a pick-up.

### Travel

All information pertaining to University of Georgia travel policies and procedures can be found on the Department of Plant Biology's webpage: <http://www.plantbio.uga.edu/botinfo> and clicking on the links under the Travel Information section at the bottom of the page. The department has limited funds for faculty travel and all travel from departmental funds must be authorized by the department head, the Arts and Sciences dean's office, Contracts & Grants (if using a grant account) and Business Services. International travel must be approved by the Office of International Education in addition to all other approvals.

In order to meet the required deadlines, all requests for authority to travel must be completed prior to travel in a timely manner; In State travel requests must be submitted a minimum of 1 week prior to date of departure, Domestic travel requests must be submitted a minimum of 3 weeks prior to date of departure & International travel requests must be submitted a minimum of 4 weeks prior to date of departure. You must follow the set guidelines for allowable per diem rates for meals and lodging. Paper forms are still required for In State travel, but all domestic or International travel requests should be submitted electronically using the eTravel Authority System <https://webapps.ais.uga.edu/PCFA/index.jsp> Paper forms for Out of State/International travel will not be accepted except under certain situations where travel cannot be done using the eTravel system such as using other or multiple departments account #'s or when requesting Graduate School funds.

Please remember that a travel authority request should be submitted anytime you travel off campus on UGA related business, even those trips that are no cost to UGA. Failure to submit a request for authority to travel prior to travel may mean you will not be covered by the University's Health Insurance and you forfeit claims for reimbursement. All requests for authority to travel must be done

correctly and completely or they will be rejected. You CANNOT exceed the allowable GSA per diem rates for meals. (Refer to the M & IE Breakdown section of the GSA per diem rates.) If your lodging exceeds the allowable rates, you must include justification on your travel expense statement. For “means of handling classes and other business while absent” or “local contact”, you MUST list a departmental contact name & phone number of who can be reached in your absence for business matters (i.e. your faculty advisor or supervisor or the department head). For the departmental contact; please list Gretchen Bowen, email: gbowen@plantbio.uga.edu phone: 706-542-1829 (This is NOT your contact information. This is in case Business Services has questions regarding the request and accounting information.) All requests should be submitted to Gretchen Bowen only. Please contact Gretchen if you have any other questions.

**In State Travel:** The “Request for Authority to Travel on Official University Business for In-State Travel Only” can be found online at <http://www.franklin.uga.edu/faculty-staff/forms/travel.pdf> or by using the link on the BotInfo webpage. In State Travel is any travel within the state of Georgia and also includes travel within 50 miles of the Georgia border. Please note you MUST follow the set guidelines for per diem rates. Forms must be completed, printed, signed and submitted to Gretchen a minimum of 1 week prior to departure date.

**Domestic/International Travel:** To access the eTravel Authorization form, you must log on to the following website using your UGA MyID information: <https://webapps.ais.uga.edu/PCFA/index.jsp> Click on the eTravel tab, then Create a Travel Authorization. You must know the account number to charge to complete the form. Even TA’s that are “No Cost to UGA” must have an account number on the form.

Please remember to check your per diem allowable rates by using the link at the BotInfo webpage. After completing the form, including a detailed justification, click the Save and Continue button. If you have completed the form correctly, it will give you a section at the bottom to Approve and Forward the request. Please choose Gretchen Bowen to be your next approver, and then approve the request. Do not send these to Shannon. Domestic travel must be submitted a minimum of 3 weeks prior to departure and International travel must be submitted a minimum of 4 weeks prior to departure.

**Group Travel:** The additional paperwork required for “group travel” can be rather complicated, so the department requests that you refrain from using “group travel”. Before you opt to pay for anyone’s expenses other than your own, please discuss this in advance with Gretchen. In the

event that an employee covers the cost of lodging/meals for another employee or non-employee, the request for reimbursement must be treated as “group travel”. The information for “group travel” can be found on the Accounts Payable website:  
[http://www.busfin.uga.edu/accounts\\_payable/group\\_travel.html](http://www.busfin.uga.edu/accounts_payable/group_travel.html)

**Travel Expense Statement:** You CANNOT exceed allowable per diem rates for meals and lodging. Please remember to check your allowable per diem rates for meals and lodging. If your lodging exceeds the allowable rate, you MUST include justification on the form or it will be rejected. Your receipt for lodging and any conference registration fees must show proof of payment with a zero balance. You are NOT allowed to exceed per diem rates for meals, cannot include incidentals listed on the per diem rates and are not required to include receipts for meals with your travel expense statement. Please remember you cannot exceed the GSA allowable rates for breakfast, lunch & dinner. Per the Accounts Payable Department’s request DO NOT use highlighters or staples on receipts as they make items illegible when scanned. If using your personal vehicle, you can request reimbursement for mileage... Links for domestic and international per diem rates can be found through the BotInfo webpage by clicking on the appropriate Travel Information link. You must prepare your travel expense statement by using your UGAMyID and going to:

[https://busfin1.busfin.uga.edu/accounts\\_payable/travel\\_expense\\_login.cfm](https://busfin1.busfin.uga.edu/accounts_payable/travel_expense_login.cfm) the electronic form will perform all calculations and must then be printed, signed and submitted along with your receipts. Travel expense statements must be submitted within 30 days of completing travel. Please note that Susan Watkins processes travel reimbursements for graduate students and Gretchen Bowen processes all other employees.

**Travel Using UGA Foundation Funds:** If you will be using a UGA Foundation account for travel, you must follow normal UGA policies for travel. A paper Travel Authority is required. The paper form can be found by going to the UGA Accounts Payable website:  
[http://www.busfin.uga.edu/accounts\\_payable/travel\\_encumb.html](http://www.busfin.uga.edu/accounts_payable/travel_encumb.html)

Under the Travel Encumbrance/Authority section, go to the 4<sup>th</sup> paragraph where it has “click here” to link to the form. All other UGA Foundation travel information can be found on their website:  
[http://www.externalaffairs.uga.edu/policies\\_ugaf/nodes/view/300/Travel](http://www.externalaffairs.uga.edu/policies_ugaf/nodes/view/300/Travel)

## On Campus Teaching and Research Facilities

### 1. The Bioscience Learning Center (BLC) -

The Bioscience Learning Center (BLC), located in room 406 of the Biosciences Building is a computing lab open to all students. The Center has 26 computers (11 Macs and 15 PCs) for students to use to access email, eLearning Commons, or the Internet. Each machine also has full versions of Microsoft Office that students may use to type lab reports or other papers. The BLC has 2 high capacity laser printers (5 cents/page), 2 photocopiers (10 cents/page) and 1 color laser printer (30 cents/page from PCs only). The BLC does not accept cash, only Bulldog Bucks. The BLC also serves as an instructional resource for faculty teaching classes in the Division. Faculty may put articles on reserve for students to read in the BLC or photocopy. Any faculty member who wishes to drop off reserve items must bring 2 copies to the Program Coordinator's office at least 3 days before the items need to be made available. Reserve items should be labeled with the instructor's name, course prefix/number, and the session. The BLC also has video tapes on reserve that faculty may check out for use in their classes. A complete list of the reserve videos may be obtained from the front counter of the BLC.

Some instructional equipment is also available for checkout within the Biosciences building. The BLC maintains 3 TV/VCR carts, 2 slide projectors, and 2 overhead projectors. Equipment cannot be guaranteed unless you call and reserve it 24 hours ahead of time. If you need any other equipment, or need the equipment for a different building, contact Instructional Support and Development.

If you have any questions, please call the Program Coordinator's office at 542-8741 or the front counter of the BLC at 542-6351. During fall and spring, the BLC is generally open from 8:30 a.m. to 9:00 p.m. Mon-Thurs and 8:30 a.m. to 5:00 p.m. on Friday. The BLC is closed whenever there are no classes in session with the exception of Reading Day during exams.

### 2. The Center for Teaching and Learning (CTL) - <http://www.ctl.uga.edu/>

Located in the Instructional Plaza between the Journalism and Psychology buildings on campus. By coordinating a wide variety of programs and activities, CTL serves faculty, administrators, and graduate teaching assistants (TAs) in each of the University's schools and colleges. Teaching is promoted as a fundamental enterprise at UGA through numerous campus-wide activities. These include instructional grants, consultation services, faculty and TA development programs, publications, activities planning, and teaching resources and media services. In addition, seminars, workshops, and conferences that address a wide range of topics

are offered throughout the year. Since its inception, CTL has sought to promote vitality among faculty and administration and to foster an institutional climate that reinforces excellence in teaching and learning.

3. **The Computer Center** - located on the 1st floor of the Boyd Graduate Studies Building. Non-grant use by Plant Biology faculty and students should be cleared with Jonathan Hardy and the department head.

4. **The Library Photographic Service** - located in the subbasement of the Main Library.

5. **Electron Microscopy Lab** - located in Room 152, Barrow Hall, is a University-wide facility designed to provide a variety of equipment. Equipment available includes two transmission electron microscopes (one with full tilting goniometer, STEM and x-ray detection capabilities), one scanning electron microscope (equipped to examine conventional or frozen specimens using either secondary or backscatter electrons and x-ray micro analysis), a laser scanning confocal microscope, a freeze-fracture device, microtomes, and other support equipment. Interested users should contact Dr. Mark Farmer at 542-4080.

6. **Fermentation Plant** - Biochemistry Department in the Boyd Graduate Studies Building.

7. **Instrument Shop** - located at the intersection of Whitehall and Milledge.

8. **Glass Shop** - located in the Chemistry Building.

9. Cartographic Services Lab- located in Room 315, Geography/Geology/Speech (GGS) Building.

10. **Monoclonal Antibody Facility** - located in the Vet Medicine Bldg. Ruth Davis, Lab Coordinator.

We do not have standing accounts with all of these units. Each service unit has forms which must be brought to the Department for a signature. Before going to any of these units, you must get authorization from Gretchen for any charges against a departmental account. Computer Center accounts are scheduled by Jonathan Hardy.

## Plant Biology Microscopy Facility

Contact [beth@plantbio.uga.edu](mailto:beth@plantbio.uga.edu)

The Department has a transmission electron microscope (TEM) available in Room 1518 for faculty, staff and student research. The facility is under the supervision of Dr. Zheng-Hua Ye and is available to all qualified EM users. Beth Richardson is employed by the Department to maintain the EM facility and associated photographic equipment. Beth's time is available to help faculty, Post-Docs, staff and students in their use of the EM facility. New users are asked to meet with Dr. Ye and Beth to discuss their research needs.



## Transmission Electron Microscopy

The Zeiss EM902A is a versatile TEM that is equipped with an electron spectrometer for improved resolution and contrast. The scope usage fee is \$30/hour plus \$2.50 per negative to cover the cost of the film and photographic chemicals.

## Light Microscopy

A Zeiss Axioskop2 fluorescence microscope with a digital camera is available for use in room 1514.

## Microscopy Lab Supplies and Equipment

**1. Supplies.** Some fixatives, buffers, dehydrating agents, embedding materials and heavy metal stains are available for use.

**2. Balzers High Pressure Freezer.** The high pressure freezer, located in room 1502, is available for specimen preparation. This instrument is useful for cryopreservation of samples that are not well preserved by propane plunge freezing. Users will be charged for liquid nitrogen and other supplies consumed during their sessions. Also, equipment for ultra-rapid freezing of specimens for cryofixation, including freeze-substitution is available.

**3. General Equipment and Microtomes.** Microtomes available for use include two Reichert Ultracut Es, a Reichert 2800 Cryostat and a Vibratome. A large fume hood for specimen preparation and ovens for plastic curing are located in Room 1502. Light and dissecting microscopes are available for use.

## Photographic Equipment

Contact [beth@plantbio.uga.edu](mailto:beth@plantbio.uga.edu)

Three Nikon Coolpix digital cameras (the 990, 8700 and the P4) and a Sony Handycam video camera are available for research purposes. Tripods are also available for use.

## Molecular Cytology Facility (Room 1611C)

Contact [beth@plantbio.uga.edu](mailto:beth@plantbio.uga.edu)

The molecular cytology facility equipment includes the **Zeiss PALM laser micro-dissection system** and a Reichert 2800 Cryostat. Please schedule a training session with Beth before you attempt to use either piece of equipment. There is no charge to use the Cryostat but a log book is kept to document usage. There is a fee of \$35/hour to use the PALM system.

## Culture Collection

The Department holds a collection of live algal and fungal cultures. While the collection is primarily to provide material for teaching purposes, instructional support is available. When requesting material for teaching purposes, please submit your

request with adequate advance notice. Some cultures may require as much as two months' notice. Direct questions and requests to Brigitte Bruns (2-1783 or [bruns@plantbio.uga.edu](mailto:bruns@plantbio.uga.edu)).

## Herbarium

The entrance to the Herbarium (Rm. 2501) is across from the Plant Biology Office. The Herbarium is open from 8:00 AM to 12:00 PM and 1:00 PM to 4:00 PM, Monday through Thursday, except for holidays and when staff commitments do not permit these hours. Our current holdings are 262,000 vascular plant specimens and a taxonomic library. Specimens are from all over the world with the emphasis on Georgia and the southeastern United States. We encourage departmental staff, faculty, and students to use these facilities as a reference source, to borrow plant presses, and to deposit voucher specimens. Visitors needing to use the collection must first consult with the herbarium staff for permission and instructions. Herbarium policies and forms are posted at: <http://plantbio.uga.edu/herbarium/index.html>. The main herbarium collection may not be used by students for identification exam preparation; a teaching (synoptic) collection for this purpose is available in the teaching laboratory (Rm. 2604). Dr. Wendy Zomlefer, Curator, supervises this facility with the assistance of Collections Manager, Steven Hughes.

## Core Facility

Contact [lfleisher@plantbio.uga.edu](mailto:lfleisher@plantbio.uga.edu)

Our Core Facility laboratory is located in room 3602. This facility is meant to serve as backup for all departmental labs. A scintillation counter, two -80 freezers, a thermo cycler, a fume hood, and a refrigerator are available for emergency use. See your PI to reserve space/time to use this equipment. PI's have access to the outlook "Core Facility" calendar and can reserve time there. Also, each Professor should have a key to the door of this facility. Le'Ann Fleisher oversees the Core Facility operation.

## Plant Biology Plant Growth Facilities

Contact [mboyd@plantbio.uga.edu](mailto:mboyd@plantbio.uga.edu)

The Department of Plant Biology maintains seven greenhouses with a floor area of approximately 24,000 square feet, along with a transplant garden area and lath house, and 18 growth chambers. All greenhouses are connected on the north side to a common headhouse or service building that includes a small laboratory, work areas for potting, cold storage, offices and supply rooms.

The greenhouses support research and teaching activities in Plant Biology, as well as Biology, 13

Genetics and Ecology. While most of the greenhouse space is reserved for research, an extensive collection of plants is maintained for teaching.

### Greenhouse Staff

The Plant Growth Facilities are under the supervision of Michael Boyd. Kevin Turner is responsible for teaching and research materials in greenhouses five and six and the teaching room in greenhouse 2. Gregory Cousins maintains greenhouses 0, 1, and 2 and the production and delivery of all classroom material. Michael Boyd takes care of the plant collections in greenhouse three.

### Use of Greenhouse Teaching Materials

The Plant Growth Facilities and staff are available to grow plants for courses taught within the Biological Sciences Division. Requests should be presented in writing to Gregory Cousins, who will insure that plants are at the proper stage when needed. Please make sure that requests are made sufficiently ahead of time so that materials can be purchased, work can be planned in advance, and plants have time to grow.

The greenhouse facility maintains diverse collections of tropical plants, cacti and succulents, seedless vascular plants, cycads, carnivorous plants, and orchids. Our staff will deliver requested plants from the collection rooms to the classroom, and will also return the plants to the greenhouses. Personnel in the teaching labs are responsible for watering demonstration plants while in use. Please make requests at least one week in advance to Greg. We welcome additions to the teaching collections, but unfortunately are unable to handle requests for field-collected material.

Instructors are welcome to bring their classes to the facility to set up short-term projects or to visit the teaching collections, but please contact Michael at least two weeks in advance. Tour groups from local schools and organizations are welcome.

### Research Projects Space

Faculty and students should submit requests for research space to Michael Boyd on the forms provided. Project size and duration, current space availability, past performance, request lead-time and project importance are all considered when allocating space. Every effort will be made to provide space to all those who need it. Priority will be given to faculty, students, and staff in the Plant Biology Department. **See also:** *Research Space Request at Plant Growth Facilities (.pdf format)*

First time users of the greenhouse facility should schedule an orientation session with the greenhouse manager before starting their projects. Keys will be

issued by Megan Connell, and should be returned promptly at the end of the project. Any delays in the completion date should be discussed as soon as possible. The greenhouse manager has final authority with regard to space allocation.

### Supplies

Commonly used containers, soil mixes, tools, fertilizers, and labels are available at no charge to personnel in the Department of Plant Biology. Requests for unusually large quantities of supplies or unusual supply needs require advanced planning and budgeting. Please consult with greenhouse staff concerning the location and use of available supplies.

### Responsibilities

The greenhouse staff is responsible for: 1) watering and fertilization, including weekends and holidays, if these are not part of the experimental treatments, 2) disease and insect control practices, 3) providing horticultural supplies and soil mixes, 4) assisting with the acquisition of seed and plant material, 5) assisting with design, configuration of environmental conditions, planting and maintenance of projects, 6) steam sterilization.

Greenhouse users will be expected to: 1) take charge in starting projects, 2) carry out all experimental treatments and measurements, 3) harvest plant material needed for experimental purposes, 4) maintain an active role in the progress of the project, 5) promptly notify the staff at the end of the project and assist with the disposal of unneeded plants, 6) autoclave transgenic plant waste.

### Growth Chambers

The department currently has 18 reach-in and step-in growth chambers. Twelve chambers are located in the headhouse building and six in B023 of the Life Sciences Building. In addition, the department shares space in three large growth rooms in B023 of Life Sciences. Since growth chamber space is limited, allocation of space will be based on the user's documented need for environmentally controlled or isolated conditions.

### Marine Facilities Available to Department Personnel

The University system has two marine stations: Skidaway Institute of Oceanography and the University of Georgia Marine Institute on Sapelo Island. Skidaway is the larger facility with marine research in diverse areas including biology, chemistry and geology. Limited marine research in the Plant Biology Department is centered on Sapelo Island. The Marine Institute has six staff members, a

number of graduate students working on their degrees, technicians and visiting scientists from a variety of institutions. Most of the research concerns the ecology of the adjacent salt marshes.

Since Sapelo Island can only be reached by a daily ferry service, access to the island is restricted to people with business there. To visit the island you must obtain permission for the visit as well as permission to ride the boat several days in advance. As space, time and Institute regulations allow, we also try and provide for non-scientific visits by family and friends of people working there as well as students who just want to see the place. People who do not have research projects at Sapelo must arrange their visit to coincide with someone who is known at the Institute and can act as host for your visit. Please check with Gracie Townsend (912-485-2221) at least two weeks before a trip to Sapelo Island. Personnel using the Marine Institute facilities are expected to acquaint themselves with and obey the rules and regulations of the Institute and the Department of Natural Resources. We need them more than they need us and Plant Biology personnel are expected to follow their rules.

## The Graduate Program

### The Graduate Studies Committee

Administration of the Graduate Program in the Department is the responsibility of the Graduate Studies Committee (GSC). This Committee is chaired by the Graduate Coordinator (GC), and contains four other faculty members appointed by the Department Head. The Committee's main responsibilities are to screen applicants for graduate studies in Plant Biology and recommend admissions, to assign laboratory assistantships, to recommend students for awards, such as graduate school assistantships or teaching awards, to recommend changes in Departmental graduate policies and to coordinate recruitment activities.

For the 2014-2015 academic year the Graduate Studies Committee has the following members:

**Dr. Chris Peterson**, Graduate Coordinator  
**Dr. John Burke**  
**Dr. Shu-Mei Chang**  
**Dr. Wolfgang Lukowitz**  
**Dr. Xiaoyu Zhang**

Susan Watkins is the Plant Biology Department Staff member responsible for graduate student matters. She can be consulted for most routine questions and for obtaining the proper forms.

### Student Responsibilities

Each student has the responsibility to ensure that:

- Understands and follows Graduate School and Department guidelines.
- Graduate School deadlines are met.
- Forms are completed on time and that copies are on file with the Graduate School and in the student's departmental file.

Students should realize that deadlines are subject to change. Every semester, the Graduate School provides the Graduate Coordinator with a list of deadline dates; this list is posted on the Plant Biology Graduate Student bulletin board, and can be found on the Graduate School web page ([www.grad.uga.edu/](http://www.grad.uga.edu/)). Details of all degree requirements are better described in the Graduate School On-line Bulletin.

Plant Biology graduate students are expected to actively contribute to and participate in the overall graduate program of the Plant Biology Department. Such participation includes attending departmental seminars and other departmental functions.

### Degree Requirements

Plant Biology graduate students are, of course, bound by the formal degree requirements of the Graduate School. Students are strongly advised to consult a current edition of the Graduate School

Bulletin for details and deadlines. In addition to the Graduate School requirements, there are certain Plant Biology Department requirements: The Graduate School degree requirements (Program of Study) can be found under the section titled Summary of Graduate Degree Requirements.”

### PBIO 8020 Course Requirement (M.S. & Ph.D.)

Plant Biology graduate students are required to sign up for 1-2 credit hours of PBIO 8020 their first fall semester. The first half of PBIO 8020 gives the faculty an opportunity to introduce themselves and tell you about their ongoing research. The second half teaches a set of skills that are key to being successful.

### PBIO 8830 Departmental Seminar Course Requirement (M.S. & Ph.D.)

Plant Biology graduate students are required to sign up for the PBIO 8830 Departmental seminar course every Fall and Spring semester, except when they are away from campus on field research, or have a conflict with either a teaching assignment or a scheduled class. Please e-mail Susan if you have a conflict and she will excuse you for the semester. The requirements for this course consist of attending at least 2/3 of the scheduled departmental seminars, which are normally held Mondays at 4:00 PM. The graduate studies secretary will take attendance at each Monday seminar, and will inform the Graduate Coordinator if registered students do not attend the required number of times in a semester. We periodically have special seminars on other days and if you don't have a conflict you are required to attend.

### Seminar Course Requirements (Ph.D. only)

Each Ph.D. student must complete 3 seminar courses which require participants to organize and present material other than their own dissertation research. Two of these seminars must be completed in the first 2 years of attendance. The Plant Biology Dept. has experts in many different areas of plant biology and students are strongly encouraged to attend seminars throughout their graduate training as part of their overall intellectual development. Seminar courses offered in other departments can be used to fulfill this requirement if necessary with permission from the Graduate Coordinator.

Seminar courses offered by the department include:

PBIO 8010 Seminar in Teaching Biology  
PBIO/ECOL 8130 Macroecology Seminar  
PBIO 8700 Plant Population and Biology Seminar  
PBIO 8800 Plant Systematics and Evolution Seminar  
PBIO 8810 Mycology Seminar  
PBIO 8820 Plant Genetics and Molecular Biol. Seminar  
PBIO 8840 Plant Ecology Seminar  
PBIO 8860 Plant Cellular & Developmental Biol. Seminar

Each semester's listing will appear on-line in the Schedule of Classes, and instructors frequently advertise the topic for an upcoming seminar offering.

### Teaching Requirement

It is the policy of the Plant Biology Department that teaching experience is a vital part of a graduate student's training. M.S. students are required to teach at least one semester, and Ph.D. students at least two semesters during their graduate training. Students supported on grants or from other sources will normally be supported by the Department during the semester they teach. **Serving in a lab prep, lecture TA, or grading TA does not fulfill these requirements. The acceptance of a TA assignment means acceptance of the entire teaching schedule, including pre-class preparation. Field work, conferences, and oral exams should be scheduled around teaching commitments. Please contact the instructor in advance for the class schedule and TA policies.**

### Departmental Exit Seminar (Ph.D. only)

Every finishing Ph.D. student is required to present his/her research to the Department at a regular departmental seminar. The final dissertation defense will not be scheduled until the exit seminar has been scheduled." That way we know they have scheduled the exit seminar, whether it occurs before or after defense. Since regular departmental seminars are not given during the summer, students must plan to present their seminars during the academic year (Fall or Spring).

### Laboratory Rotations

Our department strongly encourages all graduate students in our Ph.D. program to do three "rotations" (two are required) during their first year. You can choose to rotate with Plant Biology or adjunct faculty. The first rotation should begin in the second week of fall semester, and each rotation should be at least seven weeks long. A third rotation can be done in Spring Semester, but

students should commit to a lab between Christmas break and Spring break. Rotation activities can include (but are not limited to): learning a new lab technique, helping with a field experiment, analyzing data, or directed reading with discussion. We feel rotations are very important in increasing a graduate student's intellectual and technical breadth of knowledge, in making graduate students aware (on a first-hand basis) of the expertise available in the department and in helping students select a major professor and advisory committee. The Graduate Coordinator will conduct advising before the beginning of fall semester and discuss lab rotations.

### Registration Requirements

You are required to register for 2 semesters each academic year. (An academic year is defined as Fall, Spring, Summer.)

If you are supported by an assistantship, you are **required** to register **BEFORE** the first day of class for a minimum of 18 credit hours Fall and Spring semesters and a minimum of 9 credit hours summer semester.

If you are self-supported your minimum requirements are: registration of 3 graduate credit hours for 2 semesters each academic year.

To maintain visa status, international students **must** register every semester.

All students **must** be registered the semester degree requirements are completed.

Under certain extreme circumstances (i.e. illness, pregnancy, or unexpected financial hardship) you can request leave of absence from the enrollment requirement for a maximum of three semesters total. A leave of absence does not stop the clock on time limits, i.e., course expirations and admission to candidacy.

### Time Guidelines for Degrees

The Department has established general time guidelines designed to help students progress toward their degree objective and to assist the faculty in assessing the student's accomplishments. The normal period of time for completing M.S. degree requirements is 3 years; for a Ph.D. degree 5 years. These are also the periods of time during which the student will normally be eligible to receive a departmental Laboratory Assistantship (LA) or Graduate School Assistantship (GSA). In unusual circumstances, the GSC will consider requests for additional support for up to one year. In such cases, an appeal to the Graduate Studies Committee must be made in writing with a letter of support from the major professor. (Faculty members supporting students on grants also must follow these guidelines.)

## Plant Biology Department Comprehensive Exam Policy (Ph.D. students only)

Graduate School requirements for the Ph.D. degree require a written exam and an oral exam for all candidates. Implementation of these exams is left to the Departments. The Plant Biology Department uses the following guidelines.

### Written Exam

Students are required to take the written exam no later than Fall Semester of their third year in graduate school, but may elect to take it during Spring or Summer Semester of their second year. The exam may be scheduled over a two-week period, Monday through Friday. Susan must be given the days of your exam prior to your first exam. Typically the student answers the questions of one committee member each day. Students may use a Departmental computer or personal laptop to compose answers, but we have a limited number of computers available in locations suitable for the exam. Therefore, it will be necessary to coordinate exam schedules so that we do not have more students wanting to take an exam during any given week than we have suitable places to accommodate them. The necessary coordination can be accomplished if students or major professors notify Susan Watkins of an intention to take the exam, and give her a preference for the weeks during Fall Semester that they plan to take the exam. Susan will then set up an exam schedule for the semester.

The written exam will be prepared by the major professor and will contain questions from each advisory committee member. The prepared exam should be turned over to Susan one week prior to the exam. Susan will administer the exam. As a general rule, each committee member will submit several questions covering the area encompassed by the student's program of study. The total time required to answer each committee members questions should be one working day, and the student should plan to answer 1 committee member's questions each day. A review paper may be substituted for written questions, at the discretion of the advisor.

Completed exam questions should be returned to Susan, who will pass them on to the appropriate faculty member for grading. Each professor must assign an overall grade of pass or fail and provide feedback in the form of letter grades (A-F), numerical scores, or oral feedback.

**The graded copy of the completed preliminary exam must be returned to Susan within 30 days after the exam is taken.** The Advisory Committee can meet, if necessary, to discuss the student's performance, decide whether the student passed or failed the exam, and discuss

remedial action in case of unsatisfactory performance. Completed exams are not made available to other students, but the questions are added to the PBGSA file of previously asked questions.

### Oral Exam

The final doctoral program of study must be on file at the graduate school BEFORE the oral exam can be scheduled.

The oral exam is announced by the Graduate School, and Susan must notify the Graduate School by letter of the time and place at least two weeks (three weeks is preferable) prior to the date. Any faculty member may attend. At least two weeks prior to the exam, the student must distribute to the committee a research proposal which covers the student's dissertation research. The advisor and committee members do not have the authority to grant an exception to this 2 week deadline. If there are extenuating circumstances, then the student and advisor must request a waiver and receive approval from the graduate studies committee BEFORE the 2 week deadline. Without an approved waiver, the oral exam must be postponed. The purpose of the oral exam is to provide an in-depth evaluation of the student's knowledge in the areas covered by the research proposal as well as closely related areas.

The oral exam will normally be given within 6 months of the completion of the written exam. The oral exam may be repeated once.

## Financial Support Available to Graduate Students

### Assistantships

Graduate students are usually paid through some type of assistantship. Assistantships may be awarded for the 9 month academic year, in which case summer support must be separately obtained, or for 12 months. The standard assistantship stipend (25,000) for graduate students in Plant Biology is considered to be 4/9th time for 12 months and the Department makes every effort to assure that students are supported at this level, assuming satisfactory progress.

Continuing students should request assistantship support on the questionnaire which they receive from the Graduate Coordinator in January. The following types of assistantships are available:

## Laboratory Assistantship (LA)

These awards are given to students who serve as laboratory assistants in courses taught by Plant Biology or Biology faculty. Nineteen hours of service is required per week, usually involving nine contact hours. The department currently has 17 of these assistantships (also called TA's or Teaching Assistantships), seven of which are assigned by the Division of Biology to help with the Biology core courses.

LA appointments are made for the academic year (Fall and Spring semesters); summer support is arranged separately.

Highest priority for awarding departmental LA support is given to students enrolled in Plant Biology (PBIO); secondary priority goes to non-Plant Biology students working with PBIO faculty; lowest priority goes to non-Plant Biology students working with adjunct PBIO faculty.

## Graduate School Assistantship (GSA)

These assistantships are awarded yearly by the Graduate School. There are three categories for this award; New Student Competition, Continuing Student Competition and Finishing Doctoral Students. The Continuing Student Award is for those who received a New Student Award the previous year and meet certain criteria as set by the Graduate School. The New Student Competition is for first year students to either the Masters Degree program or the Doctoral degree program. These awards are made on the basis of achievement and promise of scholarly success, and are awarded to those students deemed most promising in each department's applicant pool. The Finishing Doctoral Award is for doctoral students who will be in their final year of graduate work. Students who have not already received three (3) years of Graduate School support are eligible to be nominated. Students who have been enrolled full-time for six years or less will receive higher priority.

GSA's are normally awarded for the student's first five semesters (F, Sp, Su, F, Sp).

The Graduate School requires that GSA recipients do 16-18 hours service per week, but leaves the specific duties up to the department. Typically the Plant Biology Department considers progress in the thesis/dissertation program to meet this requirement.

## Research Assistantship (RA)

Graduate students may receive support on a research assistantship, which is paid from a faculty member's research grant. Duties for an RA are arranged between the student and the faculty member, but will often involve research toward the student's thesis or dissertation.

## Summer Support

A limited number of LA positions are available from the Plant Biology and Biology Departments during the Summer semester, and these will be awarded to as many graduate students as possible who have received departmental or GSA support during the previous academic year, are making satisfactory progress, and who request such support on the January questionnaire. Requests from students who are beyond the time guidelines will receive low priority. Requests for summer support from students who have been supported on grant funds will be considered on an individual basis.

Because there are a limited number of LA positions available during the summer, faculty are encouraged to support as many students as possible on grants during the summer.

## Research Supplies

Graduate student research funds in most cases will come from research grants to the major professor or the student. Other sources for graduate student research funds include:

## Palfrey Research Grants

The Plant Biology Department funds small grants from research overhead funds to support certain aspects of Plant Biology graduate student research. The following general guidelines are in effect:

- a. Funds may be requested to support travel for research, supplies and expenses, participation in special courses, special items of equipment, and users' fees for special equipment or analyses. Requests for salaries will NOT be considered through this program.
- b. Grant awards will normally be for a maximum of \$1250 and you may only receive one per year, two total.
- c. Awards are made from the current fiscal year budget and must be spent before the end of 18 months from the award date. If additional funds are needed for a subsequent year, a new proposal must be submitted. The usual application deadlines are early November and early April. Application guidelines are provided prior to each deadline.
- d. Grant proposals will be judged on a competitive basis by the Plant Biology Graduate Studies Committee. Preference will be given to students who have attempted to obtain funding elsewhere and/or do not have access to other funds. Proposals should conform to guidelines that will be distributed with the request for proposals.

## Palfrey Fund Special Requests

The Palfrey fund is a Departmental endowment from the estate of Mr. Frank Palfrey. Proceeds from the endowment are used for the enrichment of departmental programs, and students may request funds through their major professor. The Palfrey fund does not normally fund routine research expenses, but special training or a special piece of equipment might be funded.

## Travel Funds

The Graduate School has limited funds to assist graduate student travel to present papers at professional conferences within the continental United States. The Office of the Vice President for Research has limited funds for international travel to meetings (see deadline dates for applications for international travel support in section I). Students seeking travel assistance must be properly registered during the semester in which the request is submitted and for the semester for which the trip is scheduled. Some general guidelines for Graduate School funds:

- a. First preference will be given to doctoral students.
- b. The meeting or conference to be attended must be regional or national in character.
- c. Approval of travel requests for individual students will be limited to one trip during a fiscal year (July 1-June 30).
- d. Students submitting a request must possess a minimum cumulative graduate grade point average of 3.50 based on at least two (2) years of full-time graduate study (5 semesters) at The University of Georgia with no grades of "Incomplete" or "No Report".
- e. Funding will not be provided to students employed as instructors or classified employees.
- f. The applicant must be registered during the semester of his/her travel. If travelling between semesters, he/she must also register for the semester following the travel.
- g. Each travel request must be approved prior to the date of travel. Reimbursement for expenses will not be made in those instances where travel was undertaken prior to receiving written approval from the Graduate School.
- h. All requests must be reviewed by the Graduate Coordinator before submission to the Graduate School. Each request must be accompanied by evidence that the student's research has been accepted for presentation, an

abstract of the research to be presented, and Authority to Travel form. **Requests must be submitted to Susan according to the following schedule:**

Travel Dates	*Requested Deadline
10/1-12/31	9/8
1/1-3/31	12/8
4/1-6/30	3/8
7/1-9/30	5/25

**\*Due to budget cuts, these deadlines may vary; if so, you will be notified by e-mail.**

- i. Graduate school reimbursement requests **must** be submitted within 20 days of returning from your trip.
- j. Students may also request funds for travel to meetings from the Departmental research grants program or from the Palfrey Fund.

## Research Travel Abroad

Many graduate students study or conduct research abroad while pursuing their degree. UGA's Office of International Education asks that ALL graduate students contact Dr. Kasee Laster by email at [klaster@uga.edu](mailto:klaster@uga.edu) or by phone at 706-542-5544 at least three weeks prior to departure. Dr. Laster will provide you with an information sheet/list of websites and resources, an insurance enrollment form (mandatory if you're getting credit, otherwise optional), and a waiver to sign. Travel to countries under State Department Travel Warning requires special permission and the filing of a safety plan. Travel to Cuba requires special permission per U.S. federal law and you should contact Dr. Laster at least six weeks prior to departure. This information is important for you and UGA.

## Alan Jaworski Student Travel Award

This departmental fund was established by colleagues and family of our late department head. It is intended to provide graduate (and undergraduate) students with travel expenses for field research, scientific conferences and other educational purposes. First or second year graduate students are eligible. Applications due April 1. Maximum of 1 award per person during degree. Application details will be e-mailed to you in March.



### **Haines Family Field Botany Award**

This departmental fund was established by our late colleague, Dr. Bruce Haines. It is intended to provide graduate (and undergraduate) students with travel costs and subsistence costs of field based investigations of plants and plant ecology. Research location must be more than 60 miles from UGA Athens campus and research must be primarily out-of-doors. Applications due April 1. Maximum of one award per person during degree. Application details will be e-mailed to you in March.

## **Graduate Student Awards**

### **Outstanding Teaching Assistant Award**

This award carries recognition, but no cash award, and is given to approximately 35 graduate teaching/laboratory assistants in the University each year. Our department may nominate two graduate students each year at the beginning of Spring semester. Nominees must have taught during the previous calendar year. The GSC selects nominees on the basis of recommendations by instructors and student evaluations.

### **Excellence in Teaching Award**

This award carries recognition, a cash award of \$1000 and is given to five graduate teaching/laboratory assistants (University-wide) each year. We may nominate one of our outstanding LAs for this award if they previously received or are currently nominated for the Outstanding TA Award. The nomination dossier, prepared by the Awards Director and the nominee, includes a nomination letter from the Awards Director, a letter of support from a "faculty member qualified to assess the TA's teaching effectiveness", a one page synopsis of teaching evaluations, and a one page CV, "including descriptions of any creative teaching materials developed or innovative instructional techniques used." Potential nominees for this award are urged to ask faculty to evaluate their teaching effectiveness in person and to request that students include written comments on the teaching evaluation forms.

### **Regents' Out-of-State Tuition Waivers**

This award is for non-resident domestic and international graduate students who do not have an assistantship. Scores on the GRE verbal test should rank above the 60<sup>th</sup> percentile. Scores on the GRE quantitative test should rank above the 50<sup>th</sup> percentile. A minimum graduate GPA of 3.5 and/or a 3.3 undergraduate GPA are required. It is awarded for one semester and continued for the remainder of the year provided the student maintains a minimum 3.0 graduate course GPA.

### **Sigma Xi, The Scientific Research Society**

These awards are for submitted theses, dissertations and papers. Nominations are made by a member of Sigma Xi. The award is a plaque presented at a dinner meeting. Small (approximately \$800) research grants are also available from Sigma Xi.

### **National Council of State Garden Clubs, Inc.**

These scholarships are for Georgia residents (5 year residence requirement) and require full family financial disclosure. The amount varies from \$250 to \$5,000 for one calendar year; application deadlines have usually been in mid-June. Application is made through The Garden Club of Georgia, State Headquarters, 2450 Milledge Avenue, Athens, GA 30602-5817. The awards are based on "financial need, academic achievement, character, initiative and general attitude".

### **Graduate School Awards**

Numerous awards are offered through the Graduate School each year. Announcements of these awards will be sent out by the Graduate Coordinator. If you wish to be considered for nomination of a Graduate School Award, please e-mail the Graduate Coordinator AND Graduate Secretary by the deadline given.

## **Financial Support and Awards Guidelines**

Financial support is awarded on an annual basis. Students should generally expect continued financial support as long as satisfactory progress toward the degree objective is maintained. "Satisfactory progress" will be assessed in consultation with the major professor through the Annual Statement of Accomplishments and Goals. In general "satisfactory progress" means meeting the time guidelines, maintenance of a GPA of at least 3.0, holding at least one advisory committee meeting each academic year, steady progress on the research project and satisfactory performance as a laboratory assistant.

### **Departmental Office Services**

Pens, paper and other office supplies must be provided by the student. Postage will be paid by the Department for business letters.

Departmental funds are budgeted to the darkroom and administered by Le'Ann Fleisher to purchase outline supplies for teaching. Research costs are covered by faculty or students.

## Training for teaching

### Graduate School Programs

The UGA Office of Instructional Development has developed a Handbook for Graduate Teaching Assistants which is highly recommended. A Plant Biology graduate student-led teaching discussion group meets monthly. Students and faculty are encouraged to participate.

It is University policy, supported and enforced by the Plant Biology Department, that graduate laboratory assistants (LAs) receive training before they are given responsibility for a course. All new LAs must attend the university-wide workshop for Graduate Assistants held before the beginning of fall semester classes. LAs who have no prior teaching experience at the college level must enroll in GRSC 7770, Level 3 during their first year in our program. GRSC 7770, Level 3 is a two credit course, but students are allowed to register for one credit hour if necessary to stay within the 18 hour maximum. (However, students registering for one credit are expected to participate fully.) During fall semester 2014, GRSC 7770 will be taught in the Plant Biology Department by Michelle Momany and Alan Bowsher. All Plant Biology students are encouraged to take it instead of the University GRSC 7770 course.

New LAs whose native language is not English are required to register for LLED 7768, Level 1 during their first semester in our program. Their English skills will be evaluated on the second day of class and they will be moved to Level 2 (LLED 7769) or Level 1 (LLED 7768) as appropriate. Such students will be required to take an official TOEFL test at departmental expense once, and enroll in Level 3 (GRSC 7770) once their English skills have improved. A TOEFL score of 26 or a TOEFL score of 23 or 24 and the approval of the LLED instructor, is required before an international student can be assigned a LA (test cost is approximately \$150).

### Plant Biology Department Teaching Internship

This program provides opportunities for senior Plant Biology graduate students to obtain supervised, documented experience in preparing and delivering lectures and/or leading discussions; few such opportunities exist in most graduate lab assistant (GLA) assignments. Under the mentorship of a faculty member, you may enroll in P BIO 7360 for 1-2 credit hours and give up to 10% of the lectures in one of that faculty member's classes.

### Student advising New Students

All new students should attend the departmental group advising before the start of Fall semester. A three member temporary advising committee can be

setup if needed. This committee will serve for additional advisory needs until such time as a major professor has been selected and agreed to serve. It is the student's responsibility to arrange the meeting of this committee.

After a major professor has accepted a student, it is their joint responsibility to notify the GC and to select an Advisory Committee.

### Advisory Committees

**M.S. student committees:** The major professor (who must be a member or provisional member of the graduate faculty) plus two additional faculty members, at least one of whom must be a member or provisional member of the graduate faculty, form the Advisory Committee and are appointed officially on a Graduate School form. Only faculty members of Assistant Professor rank or above may serve on an advisory committee. The Advisory Committee plans and approves the program of study, reads and approves the thesis and administers the final examination.

**Ph.D. student committees:** The major professor serves as chairman of the five-member Advisory Committee. Normally, three of the five must be Plant Biology faculty, one must be from another department, and three must be members of the graduate faculty and no more than one non-UGA committee member may be appointed as a voting member. If you wish to nominate a non-UGA committee member, your major professor must write a letter explaining why their services are requested (nominee must have distinguished credentials in the field of study). The letter along with a copy of the nominee's CV should be given to the Graduate Coordinator. Every effort should be made to insure that committee members represent as much breadth of biological knowledge as is compatible with the student's program of study. The committee must be approved by the GC and the Dean of the Graduate School who will notify the parties involved of the appointments. The advisory committee, in consultation with the student, is charged with planning the student's program of study, administering the comprehensive written and oral examinations, and approving a subject for the dissertation.

### Advising Requirements

Each student is required to meet with his/her Advisory Committee at least once each academic year to discuss progress toward the degree objective (please notify Susan of meeting date). These meetings are important! From the student's point of view, the meeting provides an opportunity for additional insights and advice on the research

project. From the committee's point of view, the meeting allows them to have input at the early stages of the research project, rather than being faced with problems in the completed project. To meet these objectives, the student is required to present a summary of research accomplished and have appropriate data on hand for examination by committee members. It is departmental policy that assistantship support will be withheld from graduate students who fail to meet with their Advisory Committees at least once during each academic year. It is important that the meeting occur during the academic year because most faculty are on 9 month appointments and may not be available during the summer.

## Review of continuing students

### Annual Statement of Accomplishments and Goals

Each spring every graduate student shall submit to Susan a statement of activities during the previous year including: academic activities, progress relative to departmental time guidelines, teaching experience, progress on his/her research project and goals for the coming year. An email will be sent out with specific instructions. This material, along with other information, will be used by the GSC to determine if the student is making satisfactory progress toward his/her degree objective and is therefore entitled to continued support.

### Annual Evaluation by Major Professor

This evaluation (see Sample Forms in Section III) is filled out and signed each spring and given to the student with a copy to Susan for the student's file.

### Evaluation of LAs

Approximately two weeks before the end of each semester, Susan will remind each instructor using Plant Biology Laboratory Assistants in Plant Biology courses to have the LAs evaluated by the students in their lab sections. A copy of the results will be reviewed by the GC and placed in the student's file. Additional copies will be given to the student and the instructor of the class. An effort will be made to return this information to those involved as soon as possible after the end of the semester. If the GC notes any serious problems with LA performance in these evaluations, he/she will meet with the student in an effort to solve them.

Evaluation of Plant Biology graduate students teaching in Biology courses is handled by the Biology staff.

## Approval of theses and dissertations, oral defense

Theses and dissertations must be given to reading committee members at least 2 weeks before the final oral defense to allow time for corrections or revisions. Theses/dissertations given to committee for defense MUST have all sections required by the Graduate School completed, except for the acknowledgement page. The advisor and committee members do not have the authority to grant an exception to this 2 week deadline. If there are extenuating circumstances, then the student and advisor must request a waiver and receive approval from the graduate studies committee BEFORE the 2 week deadline. Without an approved waiver, the defense must be postponed. Such documents must be complete before submission to a reading committee (i.e. Must have summary, table of contents, all chapters, figures and tables, etc.) Faculty members should refuse to consider theses and dissertations which are not complete. Faculty members will normally complete their examination of the thesis or dissertation in time to alert the student of needed changes before the final examination. The thesis or dissertation must be approved at the final defense administered by the student's advisory committee.

**M.S. students:** Two of the three advisory committee members must approve the thesis. The final defense must cover the program of study and the thesis.

**Ph.D. students:** Four of the five advisory committee members must approve the dissertation. The exam is open to any faculty member. The Graduate School must be notified by letter of time and place, major professor and title of dissertation at least two weeks prior so that it may be announced (see Susan).

## Summary of Graduate Degree Requirements

### M.S. Students

Students should meet with their Advisory Committee to agree on a program of study. The Program of Study form is typed by Susan then submitted to the GC with a short (1-3 page) summary of the student's research project. After approving the Program of Study, the GC sends it to the Dean of the Graduate School for approval.

The Program of Study must include a minimum of 30 semester hours consisting of at least 24 hours of course work and 6 hours of thesis and related

research. Of the 24 hours of course work, at least one-half of this credit must be in courses open only to graduate students. A maximum of 6 semester hours of PBIO 7000 is allowed to count toward the 30 hour requirement but PBIO 7000 or 7300 cannot be included as part of the 12 hours of courses open only to graduate students. It is possible to make a request to the Graduate School that certain 6000 level courses in the program of study be counted toward the 12 hours of "graduate student only" courses if there were no undergraduate students enrolled in those 6000 level courses during the semester taken and/or if the instructor certifies that students enrolled in the 6000 level course did graduate level work beyond that required of students enrolled in the 4000 level course. The instructor of the course should write a letter to the Dean of the Graduate School (to be included with the Program of Study) stating the circumstances and requesting that the course be counted towards the 12 hours of "graduate student only" courses. At least 3 semester hours of Master's Thesis (PBIO 7300) must be included in the 30 semester hours. **GRSC 7770, LLED 7768 and LLED 7769 are departmental requirements and cannot be included in the body of the Program of Study.**

#### Ph.D. Students:

In a meeting of the student with the Advisory Committee, a Preliminary Program of Study is agreed upon and the form is typed by Susan and signed by the Advisory Committee. The student distributes copies of the approved Preliminary Program of Study to their major professor and the student's file. For students who hold a master's degree the program of study must contain at least 16 hours of 8000 and 9000 level courses. For students who do not hold a master's degree, the program of study must contain at least 20 hours (of which at least 16 hours must be 8000 and 9000 level courses and 4 hours can be 5000, 6000, and 7000 level courses open only to graduate students), exclusive of hours for dissertation research (9000) and dissertation writing (9300).

There is a **residence requirement** for Ph.D. students which is interpreted as 30 hours of **consecutive** graduate course work that is included on the Program of Study. A break in residence is not incurred if a student does not register for summer school. Courses listed under "Other Departmental Requirements" do not count as part of the residence requirement. Beware of "taking a semester off" and/or not registering because of research off campus (e.g. in the tropics). Not registering for any academic (Fall or Spring) semester constitutes a "break" in residence and requires that students who have not completed the 30 hour residency requirement will have to start over to accumulate it.

The **Final Program of Study** should be submitted after the 30 hour residency requirement is completed and **prior to the oral comprehensive exam** and Application for Admission to Candidacy. It must include a minimum of 30 hours of course work with 16 hours of courses open only to graduate students (20 hours open only to graduate students if you do not hold a master's degree of which at least 16 hours must be 8000 and 9000 level courses and 4 hours can be 5000, 6000, and 7000 level courses open only to graduate students exclusive of hours for dissertation research and dissertation writing.) three hours of which must be Doctoral Dissertation (PBIO 9300). **GRSC 7770, LLED 7768 and LLED 7769 are departmental requirements and cannot be included in the body of the Program of Study.** This form is submitted with a more detailed (2-4 page) summary of the research project, approved by the GC and sent to the Dean, Graduate School for approval. All 5 committee members must sign this form.

#### Which form to use--and when

The title of the form is given below in bold. The form is available on-line at [www.grad.uga.edu](http://www.grad.uga.edu). Forms can be printed and filled out in pencil, and **Susan will type them**. Students meeting deadlines at the Graduate School must allow ample time to obtain the necessary departmental approval and signatures (e.g. the major professor and GC). Copies of these forms are included in the Sample Forms Section (III) and should be consulted for details.

#### M.S. Students:

##### Advisory Committee for M.A. and M.S. Candidates

Submit to the GC within first semester of admission.

##### Program of Study

Submit, with a 1-3 page summary of the research project, to the GC within 2 semesters. It is not necessary to include all courses taken (especially 7000) on the program of study although the program of study must contain at least the required minimum number of hours (see graduate bulletin). Program of Study should be given to Susan to type.

##### Application for Graduation

Submit to the Graduate School no later than the end of the 2nd week of classes, the semester that you plan to graduate (1st week of classes for summer graduates).

## Approval Form for Master's Thesis and Final Oral Exam

You should pick up the required defense paperwork from Susan prior to the start of your exam. Once the Advisory Committee approves the thesis and the student passes the final oral exam, the original of this completed form is sent to the Graduate School by the major professor with a copy to Susan, no later than two weeks prior to graduation.

## Ph.D. students:

### Advisory Committee for Doctoral Candidates

Submit to the GC within 2 semesters.

### Preliminary Program of Study

Submit, with one page summary of proposed research, to GC within 2 semesters. Susan will type this form. Feel free to make any changes as it is not forwarded to the Graduate School.

### Final Doctoral Program of Study

(The GC (see Susan) must notify the Graduate School of the exam date at least two weeks before the exam.) The major professor sends copies of the completed form to the GC. Submit, with 2-4 page summary of research project, to GC **prior to scheduling the oral comprehensive exam**. When the Graduate School has been notified that the oral exam has been scheduled they will send the required paperwork to Susan.

### Application for Admission to Candidacy -- Doctoral Degrees

This form is submitted to the GC with the above report on comprehensive exam results. The 30 semester hours residency requirement must have been completed before filing this application. It must be submitted at least 2 semesters before graduation, and students must be registered for at least 2 additional semesters and a total minimum of 10 hours of dissertation or other appropriate graduate credit before graduation. For example, the deadline for May, 2015 graduation is January 16, 2015.

### Application for Graduation

Submit to the Graduate School no later than the end of the second week (the first week of classes for summer) of classes the semester that you plan to graduate.

### Approval Form for Doctoral Dissertation and Final Oral Examination

You should pick up the required defense paperwork from Susan prior to the start of your

exam. Once the Advisory Committee reads, approves the dissertation and the student passes the final oral exam, the original completed form is sent to the Graduate School by the major professor at least two weeks prior to graduation and a copy to Susan. One completed formatted copy of the dissertation must be electronically submitted to the Graduate School for a format check no later than four weeks prior to graduation.

If copyright permission is needed, you must obtain permission. If permission is granted by letter, forward the letter to Enrolled Student Services at the Graduate School. If permission is sent by e-mail, forward to [gradinfo@uga.edu](mailto:gradinfo@uga.edu).

The Department requires a bound copy of your thesis/dissertation for the Palfrey Conference Room and it is highly recommended that you also bind a copy for your major professor. Print and Copy Services at the Tate Student Center will print and bind your thesis/dissertation in the traditional black hard cover with gold lettering. Please do not make copies or pay for binding before contacting the Tate Center Print Shop at 542-8493.

Completing degree requirements and graduation are not synonymous. The student must be registered for a minimum of three hours during the semester in which degree requirements are completed. The Graduate School must receive the Final Defense Approval form and electronic submission of the thesis/dissertation no later than two weeks before the graduation date.

Sometimes a student completes all degree requirements well before officially graduating and needs official documentation for an employer that he or she has actually finished the degree. The student may request that the Graduate School provide certification stating that degree requirements have been met and that the student will graduate officially on a certain date.

## Additional information

### Student Access to his/her Departmental File

If a student wishes to examine his/her departmental file, an appointment should be made with Susan. Before the appointment Susan will remove privileged letters of reference and other privileged documents and will allow the student to examine the remainder of the file in the office.

## Preregistration

Graduate students supported by an assistantship **must** be registered before their Fall/Spring personnels can be processed. Failure to register in a timely manner could result in back-pay of your monthly check. Susan will send out notices when registration opens each semester. You are urged to register as soon as possible. Registration dates can be found on the Registrar's website, <http://www.reg.uga.edu/>, by clicking on calendars. . There are several dates (see Susan) in June and July when students who do not pre-register in the Spring for Fall semester can pre-register. Also check with Susan to make sure your assistantship personnel forms have been filed so you will receive the tuition waiver and reduction when you register. **Students who fail to register during Phase I or Phase II will not be supported on assistantships and will not be eligible for reduced tuition.**

## Placement Service

The Career Center on the second floor of Clark Howell Hall is eager to help graduate students in a number of ways and also is available to student spouses for locating employment in the Athens area. Information on the services available will be maintained in a file entitled "Placement Center" with the other PBGSA files. Notices of interviews and other opportunities will be posted on the graduate student bulletin board. Although we do not usually think of the Placement Center as having services to offer graduate students, they are making an effort to be helpful and you are encouraged to be aware of the services they offer and utilize them whenever necessary.

## Plant Biology Graduate Student Association (PBGSA)

Membership in the PBGSA includes all those students working towards M.S. or Ph.D. degrees in the Plant Biology Department. The organization provides the opportunity for graduate students to have a true and meaningful representation in the administration of the Department. The President of the organization and one additional officer attend all faculty meetings and have one vote on all matters considered by the faculty except as pertains to faculty personnel. The PBGSA also sends a representative to Recruitment Committee meetings. The faculty sends a representative to the meetings of the PBGSA for the purpose of fostering communication between the graduate students and the faculty. It is hoped that these avenues of communication will aid in the progress of the Department for the mutual benefit of both the faculty and the graduate students.

The PBGSA also seeks to improve communication among the graduate students themselves. With this goal in mind the organization serves as a clearinghouse for suggestions and information on student activities in the Department and promotes social functions so that the graduate students may become better acquainted. A PBGSA bulletin board is maintained in the hallway outside the main office and students are encouraged to consult it frequently. Written comprehensive exam questions are kept in the office for graduate student use (See Susan for questions).

The PBGSA is important both to the graduate students and to the faculty of the Department. Unanimous support is essential for the success of the organization; therefore, your participation is urged and your enthusiasm is necessary.

The PBGSA lounge is located in Room 2611. Feel free to use this lounge at any time as it's equipped with a fridge, microwave, computer, and love seat.

### PBGSA officers for 2014-15 are:

President	David Higgins
Vice-President	Chelsea Cunard
Secretary	Caitlin Ishibashi
Treasurer	Jeff Cannon
Peer Teaching Evaluator	Alan Bowsher

## Plant Biology Department - Dismissal from Graduate Status

### Policies

Students may be dismissed from the program at the end of any semester or term if they have not made sufficient academic progress to warrant continuation of study, have not met their responsibilities, have not met their admittance stipulations, or have not maintained accepted standards of conduct. They may be dismissed immediately, without waiting for the end of a semester or term, if circumstances are sufficient to warrant it.

These conditions include students who:

- end two consecutive semesters with a cumulative GPA below 3.0;
- fail to pass the written or oral comprehensive examination or the final oral examination, after consideration of whatever examination repeats or remedial work the student's advisory committee has recommended;

- fail to make acceptable progress in their thesis or dissertation project; this may be determined, in part, by information from the annual written evaluation of the student by the major professor, or by recommendations from the annual advisory committee meeting;
- fail to be accepted as a student by a major professor/advisor within the specified time period;
- fail to gain approval of their thesis or dissertation;
- were admitted provisionally and then fail to meet the specified admission conditions within the specified time frame;
- commit ethical violations.

Ethical violations considered by the faculty to be sufficiently serious to warrant dismissal from the program include but are not limited to the following:

- violation of ethical principles concerning faculty-student relationships;
- falsification of data or records, or tampering with any other person's data or research;
- plagiarism;
- academic dishonesty - including incorporation of materials into papers, theses, dissertations, etc. without appropriate attribution.

### Dismissal Procedure

The major professor, the student's advisory committee, the Department Head, or any other faculty member who has relevant information may initiate the process by bringing the facts to the attention of the Graduate Coordinator. The graduate student involved will be notified in writing by the Graduate Studies Coordinator within 7 days that dismissal is being considered.

The Graduate Studies Committee will meet to decide if a student should be dismissed from the Plant Biology graduate program. The Department Head can temporarily replace a faculty member on this committee if in the Department Head's judgment this would lead to a fairer process. The Graduate Studies Committee may recommend dismissal or other disciplinary measure, such as a warning, as it deems appropriate, after it reviews the facts and circumstances.

The student involved is notified in writing when a determination of dismissal has been made. The Graduate School will be notified of the dismissal and the reason for it.

### Reconsideration Procedure

A student who is dismissed may request reconsideration of dismissal by writing a letter to the Graduate Coordinator within 30 days of the notification of dismissal. The Graduate Coordinator and the Department Head will then appoint an appropriate appeals committee to reconsider the

dismissal. A student can also appeal the dismissal to the Graduate School.

**Adoption:** 15 September 2004

### Forms

All forms can be viewed at [www.grad.uga.edu](http://www.grad.uga.edu).