



# *the* BioGrad Handbook

Everything you need to know about the Biology Department graduate experience, compiled by current graduate students.

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# Table of Contents

<b>WELCOME TO THE DUKE BIOGRAD HANDBOOK!</b>	<b>11</b>
Dear BioGrads,	11
The Handbook is a “Living Document”	11
The Handbook Czarship	11
Feedback, Comments, Edits, and Additions	12
<b>GETTING STARTED AS A BIOGRAD/LOGISTICS</b>	<b>13</b>
Dukehub	13
Financials	13
Taxes	13
Non-Comp/Comp Pay	14
Gym Access	14
Student Health Insurance	14
Parking	15
Biking Commuter Program	15
Sakai	16
Duke Box	16
OIT, Printing, & Software	16
Have a partner?	16
FREE TABLE!	17
Where can I shower?	17
<b>AFFILIATING WITH BIOLOGY AFTER ENTERING THROUGH ANOTHER PROGRAM/DEPARTMENT</b>	<b>18</b>
Program in Cell and Molecular Biology and Program in Developmental and Stem Cell Biology	19
Paperwork	19
Committee requirements	20
Orientation	20
Coursework and Timelines	20
Integrating into the Biology Department	20
University Program in Ecology	21
Degree requirements:	21
Committee requirements	22
Orientation	22
Listservs	22
Czarships	22
<b>USEFUL INFORMATION FOR INTERNATIONAL GRADUATE STUDENTS IN BIOLOGY</b>	<b>24</b>
BioGrad/American Culture	24
International House	24
General paperwork	25
If you are here on a visa	25
General visa document information	25

Work authorization	26
F1 - OPT	26
J1 - Academic Training	26
Getting an ITIN or SSN	26
Funding	26
AAUW - International Fellowships	27
HHMI International Student Research Fellowships	27
Josephine De Karman Fellowship	29
Mental Health Resources	30
Student organizations	30
Food—Restaurants & Markets	30
Restaurants	31
Markets	33
<b>BIOLOGY GRADUATE DEGREE REQUIREMENTS</b>	<b>34</b>
General philosophy of the Biology Ph.D. Program	34
Trajectory through the program	34
Further Details about Milestones along the Trajectory to the Biology Ph.D.	38
Advisor and committee	38
Choosing an advisor and committee	38
Steps to forming a committee	39
Requirements for Program of Study meeting	39
Tips for filling out the Proposed Program of Study Form	40
Steps to an annual committee meeting	41
Preliminary Examinations	42
Prelim Checklist	42
Remote Participation	44
Retaking a Prelim	44
Dissertation, seminar, and defense	44
Defense and Graduation Process	44
Committee meetings, exams, and defenses during summer	46
Registration requirements	46
Before passing prelims	46
After passing prelims	47
Summer session	48
Permission numbers	48
Auditing courses	48
Courses	48
Responsible Conduct of Research requirements	48
Course requirements	49
Tutorials	49
Seminars	49
Grades	49

Confidentiality Agreement	50
Unforeseen circumstances	50
Leaves of Absence	50
Health insurance during a leave of absence	51
Maternity Leave	51
Terminal Masters Degree	52
Voluntary Withdrawal from the Graduate School	52
Involuntary Withdrawal from the Graduate School	52
<b>FUNDING OPPORTUNITIES: THE DEPARTMENT, GRAD SCHOOL, AND BEYOND</b>	<b>53</b>
Funding Listservs and Databases	53
The ORS Funding Listserv	53
Pivot: A searchable funding database	53
Duke Internal Fellowships	53
Alean Webb Dissertation Research Fellowship	53
Bass Instructional Fellowships	55
Conference Travel	56
Dissertation Research Travel Award - Domestic	57
Dissertation Research Travel Award - International	57
Graduate School Administrative Internships	58
Jo Rae Wright Fellowship for Outstanding Women in Science	60
Katherine Goodman Stern Fellowship	61
Myra and William Waldo Boone Fellowship for Canadian Graduate Students	63
Summer Research Fellowship for First- and Second-Year Ph.D. Students	63
Summer Research Fellowship for Third-Year Ph.D. Students and Beyond	64
External Fellowships	65
AAUW - American Dissertation Fellowships	65
AAUW - International Fellowships	67
Environmental Protection Agency STAR Graduate Fellowships	67
HHMI International Student Research Fellowships	69
Josephine De Karman Fellowship	72
National Defense Science and Engineering Graduate Fellowship Department of Defense	73
National Institutes of Health, F31 NRSA (PA 14 147)	74
NSF Graduate Research Fellowship Program	74
Small Research Grants	76
Animal Behavior Society Research Grants	76
Botanical Society of America Graduate Student Research Awards	76
Duke University Green Grant	78
The Exploration Fund Grant	78
Garden Club of America Scholarships	79
Graduate Women in Science National Fellowships Program	79
Herb Society of America	80
IDEA WILD	80

Journal of Experimental Biology Travelling Fellowship	81
Lerner-Gray Fund for Marine Research	81
The Lewis and Clark Fund for Exploration and Field Research	83
Libbie H. Hyman Memorial Scholarship	83
National Geographic Young Explorer's Grant	83
North Carolina Native Plant Society Shinn Grant	84
Phipps Conservatory Botany in Action	84
The Rosemary Grant Graduate Student Research Awards	85
SICB Grant-in-aid-of-Research	85
Sigma Xi Grants-in-Aid of Research Program	87
Torrey Botanical Society Graduate Student Research Fellowship	87
Women Divers Hall of Fame Scholarships and Training Grants	88
<b>ADMINISTRATIVE STUFF THAT BIOGRADS SHOULD KNOW: BOOKING ROOMS, PRINTING, AND MORE</b>	<b>89</b>
Booking a Room	89
Janitorial Staff Contacts	89
Minor Building Repairs	89
Departmental Vehicles	89
Keys	89
Mail	90
Printing and Copying	90
Purchasing and Reimbursements	91
Purchasing on a lab P-card:	91
Purchasing on the department P-card:	91
Setting up fund codes for department sponsored events:	91
Large-scale Reimbursements:	91
Small-scale Reimbursements:	91
The DGS Handbook	92
<b>JOURNAL CLUBS AND DISCUSSION GROUPS</b>	<b>93</b>
BEAM - Behavioral Ecology and Morphology	93
Biology Departmental Seminar	93
BLeRG	94
Phylophiles	94
PopBio Seminar	94
Organisms and Evolution	95
UPE Seminar	95
<b>BIOLOGY STUDENT GOVERNMENT (A.K.A CZARSHIPS)</b>	<b>97</b>
Steering Committee Czars	97
IDEA Czars	97
Recruitment Czars	98
SciREN Czars	98

BEAM Czar	98
PopBio Czars	98
O&E Czar	99
GPSC Representative / Czar	100
Superspeaker Czar	101
Faculty Liaison Czar	101
Happy Hour Czar	102
Holiday Party Czar	102
Spring Non-formal Czar	102
Fall Fest Czar	102
Campout Czar	102
Office Czar	103
Sustainability Czar	103
Dance Czar	103
Grill Tools/Party Supplies Czar	104
TA Czar	104
DGSU Czar	104
PhyloPhiles Czar	104
AVENGERS Czar	104
<b>DOING YOUR RESEARCH: RESOURCES ON CAMPUS AND IN THE TRIANGLE</b>	<b>106</b>
Shipping	106
Domestic (FedEx)	106
Duke Office of Export Control (International Shipping)	106
Permits	106
Field Work	106
Requirements for Animal Research	107
Institutional Care & Use Committee (IACUC)	108
Human Research	108
Resources for Research	108
Herbaria	109
Greenhouse	109
Phytotron	109
Shared Microscopy Facility	109
Genome Sequencing Shared Resource	110
Skill Training Courses	110
Duke Libraries	111
Duke Center for Genomics of Microbial Systems	111
Duke Center for Genomics and Computational Biology	111
Statistical Consulting Center	111
Network Analysis Center	111
Computing Cluster	112
Supply sources	112

VWR Store	112
Cell Culture Facility	112
<b>MENTORING UNDERGRADUATES</b>	<b>112</b>
How Undergrads and Labs Find Each Other	113
Muser	113
Senior Thesis Projects	113
Advice for Mentoring	114
Set Clear Expectations	114
Set a Schedule	114
Set Clear Checkpoints	114
Be Organized	114
Share the Background	115
Build Good Communication	115
<b>DISSERTATION TIMELINE AND CHECKLIST</b>	<b>116</b>
One Year Prior to Defense	116
Six Months to Go	116
Three Months to Go	118
One Month to Go	118
Two Weeks to Go	120
One Week to Go	120
One Day to Go	120
Defense Day!	120
One Week Out	121
Two Weeks-One Month Out	122
Commencement and Hooding Ceremony Links	122
<b>RESOURCES FOR PERSONAL AND PROFESSIONAL ISSUES ON CAMPUS</b>	<b>123</b>
Reporting Harassment, Discrimination, and Other Concerns: An Interactive Guide for Graduate School Students	123
DGS and DGSA	123
Sexual Misconduct Prevention and Response	123
Duke Student Affairs	123
DukeReach	123
Duke Counseling and Psychological Services (CAPS)	124
Gender Violence Prevention and Intervention	124
Student Disability Access Office	124
Office of Graduate Student Affairs	125
Rapid response plan for harassment by a visitor (e.g., seminar speaker, prospective student, etc.)	125
For seminar organizers	126
If someone reports a problem with a visiting speaker	126
Possible responses to harassment by a visiting speaker	126
Resources for information, counseling, and reporting relating to harassment	127

<b>PROFESSIONAL DEVELOPMENT OPPORTUNITIES</b>	<b>129</b>
Preparing Future Faculty (PFF)	129
Certificate for College Teaching (CCT)	129
Bass Instructional Fellowships	129
Instructor of Record	129
Online Apprentice	129
Traditional teaching assistant	129
Informal workshops and seminars	130
Professional Development Series	130
Teaching IDEAS	130
<b>LIFE IN DURHAM (&amp; THE TRIANGLE)</b>	<b>130</b>
Eat and Drink	131
Coffee	132
On Campus	132
Off Campus	132
Food	133
BBQ	133
Mexican	133
Asian	133
Indian	134
Fine Dining	134
Other	135
Food Trucks!	136
Bars & Nightclubs	136
Ninth Street/Broad Street	137
Off the Beaten (Durham) Path...	137
“Hopping” Districts	138
Durham	138
Outside Durham	138
Shopping	138
Books	138
Music	139
Farmer’s Markets	139
Grocery Stores	139
Thrift Stores/Cheap Things for Your Home	140
Entertainment	140
Festivals and Special Events	140
Live Music Venues	141
Durham	141
Chapel Hill	141
Raleigh	141
Carrboro	142



Other	142
Cinemas	142
Museums and Art	142
Dance	143
Get Outside and Active!	143
On Campus	143
Close to Durham/Triangle Area	143
Day Trips	144
Weekend Trips in North Carolina	144
Weekend Beach Trips	145
Weekend Trips Outside of North Carolina	145
<b>WORDS OF WISDOM FROM PAST BIOGRADS ABOUT BEING A BIOGRAD, YEAR BY YEAR</b>	<b>148</b>
First Year	148
Make friends and meet people...	148
Form a support network; be prepared for emotional ups and downs...	149
Learn new things by attending seminars, taking classes, and taking chances...	149
Read, read, read, read, read, read...	149
Try writing some small grant applications (or maybe even a GRFP)...	150
Enjoy having free time, and learn about work/life balance...	150
Second Year	150
Focus in on a dissertation topic and collect preliminary data...	151
Learn new techniques, make connections in the department...	151
Form your committee...	151
Think about taking your prelim exam early if you can...	152
...but don't rush it if you're not ready!	152
And keep up your support group and good work habits...	153
Third Year	153
Start to collect and analyze data that isn't just preliminary...	153
Write grants...	154
Start writing...	154
Pace yourself and plan ahead...	154
Motivate yourself during times of slump and BE KIND to yourself (you're halfway through!)...	154
Fourth Year	154
Keep on top of your own research and timeline...	155
Collect data, collect data, collect data, and work, work, work...	155
Start to publish...	156
STOP doing too many things outside of your dissertation research...	156
Start to think about the future...	156
Fifth Year	156
Start tying up research projects...	157
Draw connections between projects...	157

Publish, go to conferences, and practice talking about your research...	157
Focus, engage in some professional development, and think about the future...	158
Sixth Year	158
Hunker down, focus, and WRITE, WRITE, WRITE...	158
<b>GENERAL WORDS OF WISDOM FROM BIOGRADS</b>	<b>159</b>

# WELCOME TO THE DUKE BIOGRAD HANDBOOK!

## Dear BioGrads,

Hello! Welcome to the Biology Graduate Student Handbook. Some of us have worked very hard to make this handbook a thorough, complete, and accurate source for information regarding all things BioGrad. In it, you'll find everything from on-campus resources for your research to dissertation requirements, from restaurant suggestions from current and past BioGrads to advice on what to do during each year of your PhD.

## The Handbook is a “Living Document”

It's pretty much a certainty that some useful tidbit of information got left out of this book, and it's also very possible that we got something wrong. Lucky for you, the Handbook is not a static document. It is designed to be updated and redistributed every semester, through the work of (1) the Handbook Czars and (2) a public forum for leaving comments and feedback for the Handbook.

## The Handbook Czarship

To keep the Handbook updated, the BioGrads will nominate a Handbook Czar each year. The Czar's job will be to ensure that the information in the handbook is accurate and up-to-date, as well as to incorporate feedback from BioGrads. The duties of the Handbook Czar will include:

- At the beginning of each semester, solicit feedback, additions, and corrections from the Biology community (in particular the BioGrads, but also the Chair, DGS, and DGSA) by sending a department-wide email. Make sure to do things like update the rooms and meeting times for seminars and clubs, ensure that the departmental requirements are up to date, and add in new favorite BioGrad restaurants and bars, though this is by no means an exhaustive list.

- Once new feedback for each semester has been incorporated, circulate a PDF of the new document to the entire department, entitled “BioGradHandbook\_Semester\_Year.”

At the beginning of the academic year, provide editing access for the Handbook Google Doc to the new Handbook Czar. The Google Doc can be found here:

<https://docs.google.com/document/d/1iGzzvtbcBxVc8MIFjzZGEJBhKXTgTGzoEzYTGrVShL4/edit?usp=sharing>. For editing access, contact last year's Handbook Czars. The Handbook Czars for 2020-21 were Jason Dinh ([jason.dinh@duke.edu](mailto:jason.dinh@duke.edu)) and Shannon Dougherty ([shannon.dougherty@duke.edu](mailto:shannon.dougherty@duke.edu)).

## Feedback, Comments, Edits, and Additions

We welcome any and all feedback and suggestions regarding the Handbook. If you'd like to make a suggestion, if you find a typo or an error, or if you'd like to write a new section to be added to the handbook, please contact the current Handbook Czars. **The Handbook Czars for the 2020-21 Academic Year are:**

Jason Dinh ([jason.dinh@duke.edu](mailto:jason.dinh@duke.edu))

Shannon Dougherty ([shannon.dougherty@duke.edu](mailto:shannon.dougherty@duke.edu))

On behalf of the entire Handbook Committee, we hope you find this handbook useful! Take good care of it, and it will continue to be useful and relevant, long into the future.

-Eleanor Caves  
(Handbook Editor Spring 2016)

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Jason Dinh  
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# GETTING STARTED AS A BIOGRAD/LOGISTICS

## Dukehub

Dukehub is the self-service site for students to access their academic, financial, and personal data. Students can search for classes in the “Class Information” tab and enroll using the “Enrollment” tab. Financial information can be found under the “Financials” tab, and identifying information such as the Duke Unique ID and Student ID can be found under the “My Profile” tab.

## Financials

Under the “Financials” tab, students can find information on billing, payment, and taxes. At the beginning of the semester, graduate students will be billed the full amount of attending graduate school including tuition, student health insurance, and various fees. Additionally, a separate bill might appear for student health insurance. **DO NOT PAY THESE BILLS.** Either the graduate school or the Biology Department (this varies on a case by case basis) will pay them by the next billing cycle. However, contact the DGSA if a bill appears odd.

## Taxes

When available, students will be able to access their 1098t tax form under the “Bursars Info” tab. As a first year on fellowship, you will receive a 1099 in your mailbox when the form is available. In subsequent years as a TA, you will receive both a 1099 and W-2. You may receive a courtesy letter from Duke, which indicates taxable income that Duke has not reported to the IRS; you must still report this as taxable income.

As a first year student you have to pay income taxes on your stipend money. You are only able to deduct purchases/expenses directly relating to graduate school that you would not experience if you were not a student. For example, you can deduct the price of textbooks, but you cannot deduct the price of rent/board. You might be able to deduct travel-related expenses for grad school activities (for example, international travel). If you are not sure whether something is deductible, it is wise to consult a tax expert.

## Non-Comp/Comp Pay

Non-Compensatory pay is pay that you receive without being required to perform specific duties. All first year biograts receive non-comp pay from their first year fellowship. Taxes are not automatically withheld from Non-Comp pay, so one must either specifically request that some income be withheld from the stipend or be careful to save enough (~15-20%) of one's stipend in order to cover taxes.

If you wish to have income withheld from the stipend, you will need to file out a W-4 and an NC-4. The link to access these forms is:

<https://hr.duke.edu/forms/tax-withholding-forms>. For assistance, contact the DGSA.

## Gym Access

Gym access is available to all graduate students. Note that gym access might not begin until the beginning of the semester according to the Duke Academic Calendar. The Wilson Recreation Center, Card Gym, and Taishoff Aquatic Pavilion are located on West Campus. Brodie Recreation Center and Aquatic Center is located on East Campus. The gym provides a variety of services such as group fitness classes and personalized training, and intramural sports teams. Visit <http://recreation.duke.edu/> for more information and hours. Please note that as of Spring 2016, recreation fees are no longer covered by the Graduate School for students beyond their third year; however, the Biology Department is still covering these fees for students who request it.

Contact the DGSA if you have questions, and keep an eye out for updates.

\*Due to COVID-19, in-person facilities are limited to undergraduate students currently living on campus. Graduate students are eligible to receive a virtual gym membership that includes virtual fitness classes. Students must front the \$60 registration fee but are reimbursed at the end of the semester. To find out more about virtual gym memberships, follow this link: <https://recreation.duke.edu/my-rec>

## Student Health Insurance

Duke University currently offers graduate students health insurance through Blue Cross and Blue Shield of North Carolina. Insurance cards are mailed, which provide the Subscriber ID. The ID can be used to create an online account to view benefits and other details. This insurance can be used at the Student Health Center located on Flowers Dr. To visit other doctors, check online for service providers in-network to pay the least out of pocket for medical expenses.

<http://www.bcbsnc.com/>

Dental insurance is not provided by the grad school, but can be purchased at a reduced rate. See <https://studentaffairs.duke.edu/studenthealth/health-insurance/dental-insurance> for more information.

If you have your own health insurance and waive the Duke Grad Student insurance, you will receive an additional \$500 in your October paycheck. **Note:** If you decide to sign up for Duke Grad Student insurance in a subsequent semesters after you have received the \$500 advance, you will need to pay half of the advance back to the Bursar (e.g., You had your own health insurance fall semester and were paid \$500, and then you signed up for Duke's insurance spring semester). You will then need to pay the Bursar \$250 because your health insurance is now covered through the graduate school.

Want to know what happens to your student health insurance after you graduate? Check out this link:

[https://gradschool.duke.edu/sites/default/files/documents/policy\\_phd\\_health\\_insurance.pdf](https://gradschool.duke.edu/sites/default/files/documents/policy_phd_health_insurance.pdf)

## Parking

Graduate students are eligible to purchase parking permits in the Science Drive garage. To do so, visit the parking website:

<https://parking.duke.edu/parking/permits/student-permits/graduate-professional-students> .

Alternatively, you may apply for a carpool permit. Carpool permits can be designated for parking lots closer to BioSci and FFSC than the Science Drive garage. Pricing for the permit varies depending on how many people are in your carpool. If you get four people in a carpool, the permit is FREE! Additionally, each member of a carpool receives two free daily passes per month. To qualify for a carpool pass, carpool members must live within a specified distance from each other. More information can be found here: <https://parking.duke.edu/alternative/carpool>

Students committed to finding free parking can find several daily options near West Campus. All on-campus parking is free after 5 PM and on weekends, although you need to get a night parking permit in order to park in many of the gated lots after hours. Night permits are free if you register as a carpooler, biker, or walking commuter. Additionally, watch out for on-campus events (such as basketball and football games) which can make parking unavailable in certain areas.

## Biking Commuter Program

You can register as a full-time bike commuter and receive 2 free daily parking passes per month. Note that you cannot obtain a parking/carpool permit at the same time that you are registered as a full-time bike commuter:

<https://parking.duke.edu/alternative/bicycling>

## Sakai

Sakai is the online classroom resource at Duke University. It provides a space to upload/download class resources, a gradebook function, a section to upload assignments, and forum space.

<https://sakai.duke.edu/>

## Duke Box

Duke Box allows students to store up to 50 GB of files and data on the cloud (quite a bit more than Drop Box free option). You log in to Duke Box with your NetID and password.

<https://box.duke.edu/>

## OIT, Printing, & Software

Both the Duke Office of Information Technology (OIT) and departmental OIT provides service through an online ticket system. To gain access to the resources and services such as the Duke Compute Cluster (DSRC) and printing, the PI must submit a ticket for the graduate student to gain access.

Printing is done through an ePrint system. Students are initially allocated \$32 (1600 pages) for printing per semester, but when that balance drops below \$8, it is automatically reset to \$75. To print, download the ePrint software at

<https://oit.duke.edu/what-we-do/applications/eprint>. The location of printers controlled by Duke University is available at <https://eprint.oit.duke.edu/index.php/printers>.

Free and discounted software through Duke University is available at

<https://software.oit.duke.edu/comp-print/software/license/index.php> with your NetID. Duke University has contracts with multiple companies to provide students with software such as the Adobe Creative Cloud, EndNote, and Microsoft Office for free. Contracts with companies may change from year to year and thus software availability may vary.



## Have a partner?

In most cases, spouses/partners are treated as equivalent to graduate students by the grad school. Spouses/partners can register as such at the Duke Card office and receive a Spouse/Partner card: <https://dukecard.duke.edu/get-your-dukecard>, listed under sponsored guests. This card will get them into pretty much any event that requires a grad student ID (including all GPSC events, Campout, Sporting Events, etc.)

[https://studentaffairs.duke.edu/sites/default/files/u110/SpouseInfo\\_0.pdf](https://studentaffairs.duke.edu/sites/default/files/u110/SpouseInfo_0.pdf)

## FREE TABLE!

The free table is located in the basement of BioSci in the southeast side of the building. Feel free to add and take from the table.

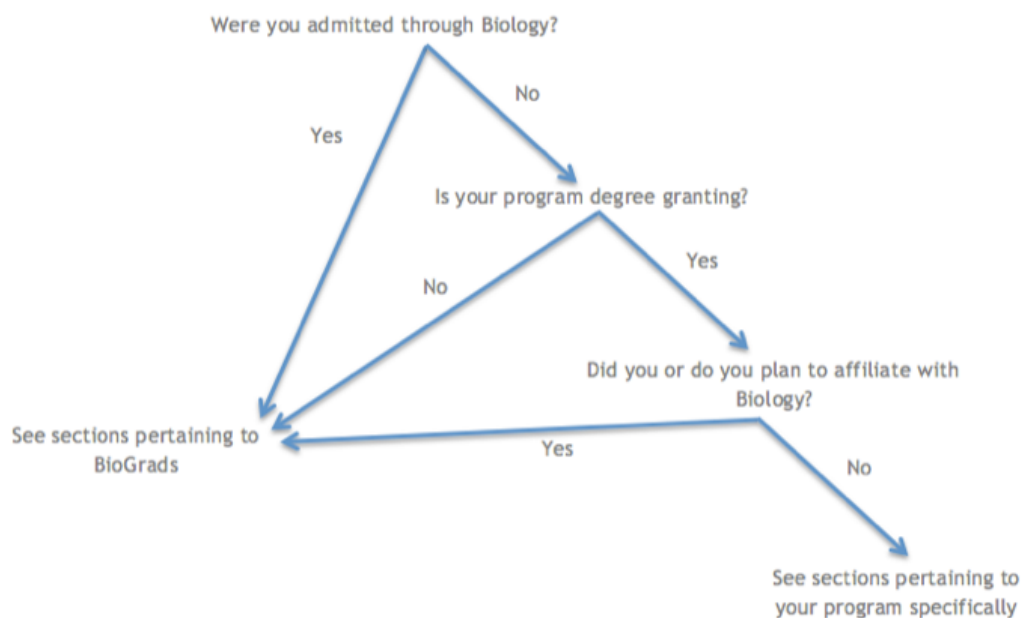
## Where can I shower?

Are you dripping with sweat after biking into work in the summer? Showers are located in the basement and third floor bathrooms of BioSci.

# AFFILIATING WITH BIOLOGY AFTER ENTERING THROUGH ANOTHER PROGRAM/DEPARTMENT

This section is designed to help students who did not enter the Duke Graduate School through the Biology Department but rather have affiliated with Biology or joined a Biology Lab through a different program such as UPE, DSCB, UPGG, or CMB.

Below is a chart to help you determine if you should consult the Biology handbook or your Program/Department handbook guidelines in regards to rules governing teaching, committee formation, prelim, and dissertation among others.



If you have come in through a non-degree granting program such as DSCB or CMB, joined the lab of a PI who is affiliated with Biology, and chosen to affiliate with Biology, you should consult the relevant sections of the Biograd Handbook. If you are a UPGG or UPE student who has chosen to affiliate with Biology, please consult the Biograd Handbook; if you have chosen to remain unaffiliated please consult the resources from your program.

Now that you know which set of rules apply to you, here is a timeline showing the general progression of students through the graduate program based on the program they matriculated through. The color of the arrows indicates the program you affiliated through. The arrows indicate the general timeframe in which you should complete the requirements listed on the column on the right. Note that these are general guidelines and will vary from student to student and lab to lab.

<div> <div>UPE</div> <div>Biology</div> <div>DSCB/CMB</div> <div>UPGG</div> </div>					
Tutorials	←→				
Grant writing	←→				
Prelim		←→	←→		
Rotations	←→				
Teaching	←→	←→	←→	←→	←→
Classes	←→	←→			
Years 1	2	3	4	5	6

## Program in Cell and Molecular Biology and Program in Developmental and Stem Cell Biology

For more information on the program in Cell and Molecular Biology, visit

<http://cmb.duke.edu/>

For more information on the program in Development and Stem Cell Biology, visit

<http://sites.duke.edu/dscb/>

These programs are non-degree granting programs and require affiliation with a degree granting program at the end of your first year. If you choose to affiliate with the Biology department, you will find useful information in this section. Recall that your entering program may have additional requirements that you must fulfill such as publishing a first author paper, or requirements to earn a certificate independent of the graduation requirements.

## Paperwork

In order to officially join the department from a program you must fill out two forms which can be obtained from your program's Director of Graduate Studies Assistant

(DGSA) and the Biology DGSA. The **advisor agreement form** is turned in to the Biology DGSA and requires the signature of your PI and the Biology Department Chair. The second form is **the affiliation form** and is turned in to your program's DGSA. This form requires the signature of the Biology Director of Graduate Studies (DGS), and your program's DGS. The Biology DGSA can be a great help in this transition and can help you contact the Biology DGS to get their signature.

## Committee requirements

The Graduate School requires that you have three committee members from your department, so no matter what program you entered through, your committee must have three members that are affiliated with the Biology department. In general, this procedure is the same for all Biology graduate students; see the Departmental Requirement section of the handbook.

## Orientation

The Biology department holds an orientation for incoming BioGrads in the fall. This is useful for program students to attend despite being in their second year in order to meet the DGS and DGSA, as well as receive important information and documents.

## Coursework and Timelines

Because you have now affiliated with the Biology department you now have to fulfill Biology degree requirements (see Chapter 5). There are no strict coursework requirements, however you are required to take two semesters of a seminar and to have a minor, with two courses in the minor area chosen by you and your committee. The CMB 764 seminar and/or the Dev. Colloquium count towards the seminar requirement. Your minor can be chosen by you and can be the same as the program you entered through. One of your committee members must represent your minor and will be designated on future paperwork. You will follow the same trajectory as all BioGrad students in terms of the timing for setting up your committee and completing your preliminary exam. You are also required to TA for two semesters prior to defending. More details on this can be found in the Departmental Requirements section of the handbook (Chapter 5).

## Integrating into the Biology Department

Now that you have joined the department you will want to make sure that you are aware of all that is happening and that you can take advantage of all of its resources. You can join the BioGrad listserv by talking to the Biology DGSA, and you can gain

access to the BioGrad Wiki by going to <https://wiki.duke.edu/display/BIOGRAD/Biograd+Wiki+Home>. Log in with your net ID. It won't work the first time (yes this is on purpose). Once it has failed to recognize you, contact the Wiki Czar (see Chapter 9).

## University Program in Ecology

<https://sites.duke.edu/upecology/>

### Degree requirements:

**Entering students:** Meet with the Director of Graduate Studies (DGS) and your major professor before registration.

**First semester:** Meet with your major professor before registration for spring semester classes. International students whose native language is not English must pass the English proficiency test or take Composition and Oral Communication listed as Graduate Studies 200 A & B in the first year. Web-resource:

<http://gradschool.duke.edu/academics/english-international-students>. Make sure to take the required fall semester Ecology Class (semester 1 of 2).

**Second semester:** Begin to identify potential faculty members for your PhD committee. Consult with major professor. Meet with major professor before the end of the semester for progress review and for request of continuation of financial aid.

**Third semester:** Take required fall semester Ecology Class (semester 2 of 2). By now you will have identified your Ph.D. Committee, with at least 3 members from the Duke Ecology Program. Hold a certification meeting for a proposed program of study with your committee before registration for spring term. The report of the certification meeting to your committee should include a plan for your major and minor courses and a proposed dissertation topic. As a program requirement, you have to fill out [this form](#), have your committee sign it, and then turn it in to the Director of Graduate Studies Assistant (DGSA), Danielle Wiggins.

To officially form your committee, [fill out this form](#). To fill out this form, enter the date, your name, the department name (Ecology) and the list of committee members. You must put one of the committee member names on the last line directly above "minor area representative." E-mail this document as an attachment to the Ecology DGSA.

**Fourth semester:** Meet with your PhD committee before the end of the semester for progress review (and for request of continuation of financial aid, if appropriate). Email written progress report to the DGSA (see Form at the end of this document), major professor, and committee members.

**Fifth semester:** Take oral preliminary exam (normal time). Formal notice in writing must be sent to the DGSA two weeks prior to the exam. This list should include a list of your committee members who will be in attendance, their email addresses, and the time and location of your exam.

**Sixth semester:** Oral preliminary exam must be completed. If it is not, a request for extension must be sent to the Graduate School by the DGS and student advisor. Normally, this is the last semester of coursework. Be sure that minor area proficiency and departmental (or committee) course requirements have been met. Email your progress report to DGSA, major professor, and committee members.

**Seventh semester:** Ensure that all TA requirements are fulfilled. TA requirements include conducting teaching services for one semester as a TA assigned to a course.

**Eighth semester:** Email progress report to DGSA, major professor, and committee members.

**Tenth semester:** Normally all PhD students should be finished by the end of the semester.

## Committee requirements

University Program in Ecology requires a total of four committee members, and three must be affiliated with UPE. The list of faculty can be found [here](https://ecology.duke.edu/people/faculty/):

<https://ecology.duke.edu/people/faculty/>. You must have your committee approved by the DGS and the graduate school.

## Orientation

The Nicholas School of the Environment will hold an orientation for all of the PhD programs in before the first week of school. It is recommended that you attend this orientation as well as Biology's orientation if possible. The Nicholas School Orientation will be useful for understanding how UPE is set up, although your home department will be in Biology.

## Listservs

In addition to joining the biology listservs (to do so email the Biology DGSA), make sure to join the following:

Ecology faculty and students: [ecologysocial@duke.edu](mailto:ecologysocial@duke.edu)

Ecology Phd students: \_\_\_\_\_  
[grad-eco@duke.edu](mailto:grad-eco@duke.edu)

Graduate students in the Nicholas School: \_\_\_\_\_

[grad-lsrc@nicholas.duke.edu](mailto:grad-lsrc@nicholas.duke.edu) PhD students in the Nicholas School:  
[nic-phds@duke.edu](mailto:nic-phds@duke.edu)

## Czarships

Having access to the resources in the Biology department and University Program in Ecology also comes with responsibilities. In addition to holding czarships in the Biology department (see Chapter 9), it is strongly recommended that you participate in UPE's form of czarships by helping to organize UPE breakfast, UPE weekly seminar series, or other offices.

# USEFUL INFORMATION FOR INTERNATIONAL GRADUATE STUDENTS IN BIOLOGY

## BioGrad/American Culture

Durham is a quaint little city in North Carolina. If you are moving here from a big city, it will feel very different. The pace of life is slower, and people will stop and chat and generally be very friendly. In terms of American and BioGrad culture, don't freak out if you feel like an outsider in the beginning. The first year in a new country will likely feel weird and it is normal to experience a culture shock. Even if you know American culture well, there will be things that you don't expect that will shock you. You will feel homesick, but know that it gets better as you make new friends and build a social life in Durham.

It is understandable to have an accent or to not speak perfect English, and there might be people who make fun of you. Don't be offended; people usually think the accent is cute and charming. Even if you think you sound funny, you don't! Don't let the language barrier prevent you from socializing within and outside the department and making new friends. Speaking English in a social setting is very different from speaking in an academic setting, and it will take you some time to get used to it. But you won't master it if you don't practice! So just go ahead and engage.

Another thing to note is that BioGrad parties and many other social activities will involve drinking (maybe more than you're used to). Don't feel the need to keep up with others if this is new to you. You won't be judged or thought less of if you don't drink as much as others or at all.

## International House

International House is a Duke organization aimed at providing resources and support for international students. Being able to spend time with other international students can be helpful as you adjust to a new culture, as you might be going through similar difficulties and they can provide support.

International House hosts a variety of workshops, ranging from topics like American traditions (e.g. the Super Bowl) to organizational skills (e.g. how to better manage your time) to how to file your taxes. They organize trips to the DMV so you can get your driver's license, and to the Social Security office. They have conversation hours, which are a great way to meet other international students. They even have an English conversation hour so you can practice your English in social situations. They also host events showcasing different cultures and traditions.



Note that they are not associated with Visa Services! Visa Services only handles paperwork. Visit International House's website to see the whole range of activities and resources they offer. Through their website you can also sign up for their listserv, so you can be up to date on the events they are hosting.

<https://studentaffairs.duke.edu/ihouse>

## General paperwork

### If you are here on a visa

Biology does not have a required class list; it is on each student and their committee to decide the list of courses they should take in the first few years. As an international student, there is a minimum amount of credits you need to take to maintain full time student status. This can be easily adjusted by changing the amount of credits that Tutorials are worth, or by taking a research class with your advisor. You can talk to the DGSA about this at the beginning of the semester. Once you pass your prelim, you will be a student doing full time research and you will not need to worry about course credits.

Some important details related to visa documents and maintaining status are highlighted below. A more detailed summary of rights and requirements can be found on the Duke Visa Services website:

<https://visaservices.duke.edu/process/maintaining-status/student-responsibilities>

### General visa document information

The visa documents I20 (for F1) and DS2019 (for J1) need to have valid ending dates into the future at all times. Even if your visa stamp (on your passport) expires, you can legally stay in the US as long as you have valid visa documents. However, you cannot re-enter the US unless you have a valid, non-expired visa stamp. If your visa stamp has expired, you need to renew it in your country of residency using your I20 or DS2019. Visa documents need to be signed by your Duke Visa Services contact before traveling. The signature must be less than 12 months old when you re-enter the US.

More details can be found at the Duke Visa Services website:

J1: <https://visaservices.duke.edu/categories/j1>

F1: <https://visaservices.duke.edu/categories/f1>

Travel: <https://visaservices.duke.edu/travel>

## Work authorization

For both the F1 and J1 visa status, you can work during your studies. If you are working on campus, you can work for 20h/week when classes are in session, and 40h/week during summer and holiday breaks. Remember that even though this is on campus, it does require some paperwork from Visa Services. If you plan to work off campus, you need to get an authorization letter from Duke Visa Services and then get your work authorization certified by the USCIS. Plan ahead and get in touch with Visa Services early to get all the necessary paperwork done. Off campus work will be counted towards the total time allowed for you to work, whether you use it while still in school or after graduation (OPT or Academic Training).

### F1 - OPT

This is a very long subject matter so we will refer you to the Visa Services website. In short, you can get a work authorization for up to 12 months. If you want to work off-campus before you graduate, you will have to use up some of these months. Any remaining months (or all 12 of them if you did not work off-campus while still being a student), you can use after you graduate.

<https://visaservices.duke.edu/categories/f1/opt>

### J1 - Academic Training

Similar to OPT, J1 students can work in the US for 18 to 36 months in the case of 'post-doctoral' training. Details can be found in the Visa Services website.

<https://visaservices.duke.edu/categories/j1/academic-training>

## Getting an ITIN or SSN

Depending on your visa and employment status you will need to get an ITIN or SSN. F1 and J1 students that are not employed will get an ITIN. Once you start TA'ing or get an on-campus job you will need to apply for an SSN.

Here are resources describing the process step by step (through International House):  
SSN:

<https://undergraduateresearch.duke.edu/sites/undergraduateresearch.duke.edu/files/file-attachments/ssn-application-instructions.original.pdf>

ITIN:

<https://undergraduateresearch.duke.edu/sites/undergraduateresearch.duke.edu/files/file-attachments/itin-application-instructions.original.pdf>

## Funding

All internal fellowships and grants are available to international students (see the Funding section, Chapter 6, for details). There are some fellowships that are specific to international students and fellowships that don't require citizenship or permanent residency; they are listed below.

## AAUW - International Fellowships

International Fellowships are awarded for full-time study or research in the United States to women who are not U.S. citizens or permanent residents. Both graduate and postgraduate studies at accredited U.S. institutions are supported.

**Due Date:** December 1

**Amount:** \$20,000

**Eligibility:**

- Have citizenship in a country other than the United States or possession of a nonimmigrant visa if residing in the United States. Women holding dual citizenship in the United States and another country are not eligible.
- Intend to return to her home country to pursue a professional career

**Required Materials:**

- Provide three recommenders from professors or professional colleagues. When possible, recommenders should be professors or professional colleagues in the applicant's home country who can speak about the applicant's qualifications and about the country's need for the specialized skill or knowledge she plans to acquire with her proposed research.
- Official Transcript
- Proof of bachelor's degree
- Official report of TOEFL test scores or waiver request
- CV
- Narratives
- Budget

**Website:**

<http://www.aauw.org/what-we-do/educational-funding-and-awards/international-fellowships/>

## HHMI International Student Research Fellowships

HHMI is committed to the development of the most talented researchers studying in the US graduate institutions regardless of their country of origin. The HHMI International Student Research Fellowships support outstanding international graduate students who have the potential to be research pioneers and scientific innovators. The fellowships will support the research training of international pre-doctoral students who are ineligible for fellowship training grant support through federal agencies in the biomedical and related sciences, including physical and mathematical sciences.

**INSTITUTIONAL LIMITATION:** HHMI is inviting 57 research universities that either host an HHMI Investigator, or are the recipients of a current HHMI Graduate Training Grant, to submit nominations. Duke University will be allowed to nominate seven (7) students.

HHMI policy states that students cannot be supported by another fellowship or scholarship concurrently with the International Pre-doc Fellowship and may not defer the HHMI award to increase the number of funded years.

**Due Date:**

- Duke Internal: Early October
- Nominations due to Sponsor: Mid November
- Applications due to Sponsor: Early February

**Amount:**

- Up to Three years
- Supports years three, four, and five of a PhD program
- 2016-2017 fellowship year: \$43,000

**Eligibility:**

- Students eligible for nomination are international graduate students in the biomedical or related sciences (including physical and mathematical sciences) who have demonstrated exceptional talent for research, are currently in the second (or third) year of graduate study, have entered a laboratory in which they will conduct their dissertation research, and are not U.S. citizens, non-citizen nationals, or permanent residents of the U.S.

**Materials required:**

- Internal nomination:
  - A letter of support from thesis advisor listing applicant's proposed graduate degree, and date of entry into graduate program. This letter should specifically address the applicant's potential to be a scientific leader and innovator.
  - A summary of proposed dissertation research including discussion of significance and innovation. (Two pages)
  - CV that includes all sources of your existing external funding, either from the home country, or an external award. Also list funding from the institution if competitively awarded.
- External application:
  - Unofficial graduate transcripts
  - Description of intended dissertation research, including a brief discussion of the significance and innovation of the intended research project, a limited bibliography of key references.

- Personal statement reflecting career goals in relation to the applicant's thesis work and how the fellowship will affect attainment of the goals.
- Letters of reference (three are required, four are permitted). One letter must be from the applicant's dissertation advisor

**Websites:**

<http://www.hhmi.org/programs/international-student-research-fellowships>

<https://researchfunding.duke.edu/international-student-research-fellowships-doctoral-students>

## Josephine De Karman Fellowship

The Josephine de Karman Fellowship Trust was established in 1954 by the late Dr. Theodore von Karman, world-renowned aeronautics expert and teacher, and first director of the Guggenheim Aeronautical Laboratory at the California Institute of Technology, in memory of his sister, Josephine, who died in 1951. The purpose of this fellowship program is to recognize and assist students whose scholastic achievements reflect Professor von Karman's high standards.

**Due Date:** Late January

**Amount:** \$22,000

**Eligibility:**

- Open to students in any discipline, including international students, who are currently enrolled in a university or college located within the United States.
- Planning to defend the following year of the application year

**Required Materials:**

- Official transcript (Get this in an envelope from the registrar; you can order through ACES website)
- Two reference letters. Each letter of recommendation must be in a sealed envelope with the signature of the letter writer across the outside flap.
- Application form
- CV (optional) (2 pages)
- Statement of intellectual interest (500 words). Please comment on your motivation for selecting this project. Graduate applicants should emphasize their current and proposed research.

**Website:** <http://www.dekarman.org/>

## Mental Health Resources

CAPS is the Counseling and Psychological Services center at Duke servicing students. They provide training programs, workshops and discussions, as well as individual therapy. Adjusting to a new culture can be very difficult, so take advantage of this resource. That being said, sometimes the counselors at CAPS might not be well qualified to help you adjust to your new life because they are not as well aware of what it is like to be an international student. If you feel like your counselor is not addressing your problems, you can ask for a referral from CAPS so that you can visit a full time therapist outside of CAPS, who will see patients besides Duke students and might have more exposure to different issues international students might face. CAPS has a list of therapists whom they work closely with, and your referral will be to one of these trusted therapists.

For more information on CAPS and the services they offer, visit:

<https://studentaffairs.duke.edu/caps>

Furthermore, the Graduate Students' committee for Inclusion, Diversity, Equity, and Anti-racism has compiled a page for mental health here:

[https://sites.duke.edu/biodiversity\\_mindhealth/](https://sites.duke.edu/biodiversity_mindhealth/)

## Student organizations

The following are some of the international student organizations at Duke:

[Asian Students Association](#)

[Association for India's Development](#)

[Buddhist Community at Duke](#)

[Chinese Folk Dance Club](#)

[Diya](#)

[DukeAFRICA](#)

[Hillel](#)

[Hindu Students Alliance](#)

[International Association](#)

[Mi Gente: Asociacion de Estudiantes Latinos](#)

[Muslim Student Association](#)

[NAACP](#)

[Taiwanese Student Association](#)

## Food—Restaurants & Markets

There are several international markets and restaurants in the Durham area. Ask other students if there's something you can't find! Here is a list of a few of them (for a more extensive list see Chapter 16).

## Restaurants

### Latin American

**Alpaca Peruvian Chicken** (Peruvian): 302 Davidson Ave, Durham, NC 27704

**Mi Peru Peruvian Chicken** (Peruvian): 4015 University Dr Suite A1, Durham, NC 27707

**Guanajuato Restaurant** (Mexican): 2103 N Roxboro St Durham, NC 27704

**La Vaquita** (Mexican): 3409 Hillsborough Rd # G, Durham, NC 27705

**Mi Calvillo** (Mexican): 748 9th St, Durham, NC 27705

**La Superior** (Mexican): 3325 N Roxboro St, Durham, NC 27704

**Guanajuato** (Mexican): 2103 N Roxboro St, Durham, NC 27704

**El Chapin** (Guatemalan): 4600 Durham-Chapel Hill Blvd Suite #38, Durham, NC 27707

**Spanglish** (Puerto Rican): 104 City Hall Plaza Suite 101, Durham, NC 27701

### African

**Palace International Restaurant** (African): 1104 Broad St, Durham, NC 27705

**Goorsha** (Ethiopian): 910 W Main St, Durham, NC 27701

**Zweli's** (Zimbabwean): 4600 Durham-Chapel Hill Blvd Suite 26, Durham, NC 27707

**Awaze** (Ethiopian & Eritrean): 904 NE Maynard Rd, Cary, NC 27513

### Mediterranean

**Tallula's** (Turkish): 456 W Franklin St, Chapel Hill, NC 27516

**Bosphorus** (Turkish): 329 N Harrison Ave #A, Cary, NC 27513

**Mediterranean Deli** (Greek): 410 W Franklin St, Chapel Hill, NC 27516

**Sassool** (Mediterranean): 1347 Kildaire Farm Rd, Cary, NC 27511

### Asian

**Taste Vietnamese Cuisine** (Vietnamese): 152 Morrisville Square Way, Morrisville, NC 27560

**Secrets Pho and Noodle Bar** (Vietnamese): 810 9th St #130, Durham, NC 27705

**Chicken Bee** (Korean): 810 9th St #129, Durham, NC 27705

**Banh's Cuisine** (Chinese with Vietnamese Specials on Wednesdays and Saturdays): 750 9th St, Durham, NC 27705

**Sister Liu's Kitchen** (Chinese): 5504 Durham-Chapel Hill Blvd, Durham, NC 27707

**Szechuan Taste** (Chinese): 6404 Tryon Rd, Cary, NC 27518

**G.58 Cuisine** (Chinese): 10958 Chapel Hill Rd, Morrisville, NC 27560

**East Coast Asian Bistro** (Dim Sum): 5410 NC-55 Y, Durham, NC 27713

**So Hot** (Hot Pot): 1937 High House Rd, Cary, NC 27519

**Pad Thai** (Thai): 2425 Guess Rd, Durham, NC 27705

**Cham Thai Cuisine** (Thai): 370 E Main St STE 190, Carrboro, NC 27510



**Naan Stop** (Indian): 2812 Erwin Rd #103, Durham, NC 27705  
**Lime & Lemon** (Indian): 811 9th St, Durham, NC 27705  
**Himalayan Nepali Restaurant** (Indian): 746 E Chatham St, Cary, NC 27511  
**Bida Manda** (Laotian): 222 S Blount St, Raleigh, NC 27601

## Markets

**H Mart:** Asian grocery store specializing in Korean food, but lots of authentic ingredients for other kinds of Asian cuisine. Also has food court with good cheap Korean food options.

1961 High House Rd, Cary, NC 27519

<https://www.hmart.com/storelocator/index/index/id/55/>

**La Superior Carniceria:** supermercado with a delicious food court inside

3325 N Roxboro St, Durham, NC 27704

<https://www.yelp.com/biz/la-superior-carniceria-durham-2>

**Li Ming's Global Mart:** grocery store specializing in Asian food, but they also carry some Latin American ingredients, especially Mexican. Take out meals are also good and cheap.

3400 Westgate Dr Durham, NC 27707

[http://lm-globalmart.com/en/?portfolio\\_category=durham-store](http://lm-globalmart.com/en/?portfolio_category=durham-store)

**Taiba Market:** Grocery shop specializing in middle-eastern food. Also has halal meat shop section.

1008 W Chapel Hill Street, Durham, NC 27701

<http://www.yelp.com/biz/taiba-market-durham>

# BIOLOGY GRADUATE DEGREE REQUIREMENTS

## General philosophy of the Biology Ph.D. Program

Biology is the most diverse of all the disciplines in the natural sciences. Consequently, the allied fields to which the various sub-disciplines in Biology share natural affinities differ. For example, molecular biology makes connections with physical chemistry, biomechanics with engineering and physics, and ecology and evolutionary biology with statistics, mathematics, geology and atmospheric sciences. The goal of the Biology Doctoral Program is to train young scientists who:

Excel at research and teaching in their own sub-disciplines;

Demonstrate competence in fields allied to their sub-disciplines; and

Display a breadth of knowledge in Biology as a whole.

## Trajectory through the program<sup>1</sup>

The DGS will assign to each beginning graduate student a temporary advisor (typically the sponsor of that student's admission). Before registering for the first semester, new students should discuss with their temporary advisors the courses they need to take. First-year students are encouraged to interact with other faculty in their research area to ask them about courses they should take before the preliminary exam—these faculty may very well become members of their Ph.D. committee.

However, the philosophy of the department is that new students need not spend a great deal of time in coursework. They should take only the courses that would fill gaps in areas that will be needed in their research, and spend most of their time starting their research.

During the first three semesters, students will also be required to take up to three tutorials with different faculty members in the department. The tutorial requirement is waived as soon as the student declares an advisor. Tutorials may involve laboratory work, directed reading in the primary literature, greenhouse or field studies, mathematical or computer modeling, or any other activity that would assist the student in identifying a suitable dissertation topic. Other goals of the tutorials are to expose students to the diversity of faculty research interests in their specialty and to help them to identify an appropriate advisor and dissertation committee.

By the end of the third semester, the student must choose an advisor and the advisor must convene an initial meeting of the dissertation committee. Dissertation

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<sup>1</sup> This section is copied verbatim from the document Biology PhD Requirements, which can be downloaded at the bottom of the page [here](#).

committees will consist of a minimum of four faculty members, one of which will represent the student's minor (see below). The goals of the initial meeting are to assess the novelty and feasibility of the proposed dissertation topic, to ascertain whether the student needs to take any additional courses to demonstrate preparedness for the preliminary exam, and to decide the format of the written dissertation proposal (see below). If a student fails to meet with his or her committee before the end of the third semester, the DGS will notify the student of this fact in writing, and will discuss with the student and their advisor ways to resolve any difficulties.

Preferably by the end of the fourth semester, but certainly by the end of the sixth semester, students must pass an oral preliminary examination to establish candidacy for the Ph.D. One week prior to the exam, students must present to their committee members a written essay describing their proposed dissertation research. The exam itself will be both specific and wide-ranging. That is, it will cover the specific research areas addressed in the student's proposal, but it will also test both the student's depth of knowledge in their area of specialty and the student's breadth of knowledge in Biology as a whole.

When the dissertation research is completed, the student will present the written dissertation to the committee two weeks prior to the dissertation defense (the dissertation also has to be submitted to the Grad School two weeks before the defense). Students are also required to present their results in a seminar. Students will be expected to complete the degree requirements as soon as possible, ideally by the end of the tenth semester, but students making progress toward their degree will be considered to be in good standing through the twelfth semester.

### *The Minor*

All graduate students will be required at the time of the initial meeting of the dissertation committee to declare a minor. At least one member of the dissertation committee must represent the minor field, and will be charged with assessing the student's knowledge in the minor during the preliminary exam. The goal of the minor is to ensure that each student acquires a breadth of knowledge beyond their immediate specialty, either in a different area of Biology or in an allied field. Given the wide range of research areas represented in the Biology Graduate Program, dissertation committees will have the freedom to determine the specific nature of the minor, so as to tailor it to the needs of the individual student. However, to ensure that the chosen minor truly lies outside of the student's specialty, minors are subject to approval by the DGS and the Graduate Affairs Committee.

The minor may: 1) lie entirely outside Biology (e.g., Statistics, Mathematics, Computer Science, Chemistry, Engineering, Atmospheric Sciences, Geology); 2) require the student to acquire knowledge about a group of organisms that differs from those on which the student's dissertation research focuses; or 3) represent a

biological subdiscipline that is distinct from the student's own subdiscipline. For example, a student whose advisor is in the Evolution, Ecology, and Organismal Biology sub-department might choose Developmental, Cellular, and Molecular Biology (DCMB) as a minor, with appropriate representation by a DCMB faculty member on the preliminary exam and dissertation committees. A student in ecology might choose evolutionary biology as a minor.

### *Scholarly productivity*

To become recognized as independent scientists and to have an impact on their fields, graduate students must communicate their findings to their colleagues. Therefore, all students are strongly encouraged to begin submitting the results of their research to refereed journals as soon as possible (ideally well before the dissertation is completed). It is expected that, in order to give their committee members an opportunity to comment on them, manuscripts that are intended to be included in the dissertation will be given to all committee members at least two weeks prior to submission. Each student should submit copies of papers accepted for publication to the DGS, to be included in the student's file.

### *Teaching*

All graduate students will be required to serve as a teaching assistant for two semesters. Teaching is not simply a mechanism to provide financial support to graduate students. Rather, it is an integral part of each graduate student's professional development as both an educator and a researcher.

### *Annual evaluation of student progress*

All students beyond the first year will meet with their committee annually. For students in the second year of study, the first committee meeting serves as the annual committee meeting, and for students in the third year, the preliminary exam, if taken in the Fall semester, serves this purpose. In addition, all students<sup>2</sup>:

- in their third year who either passed their prelims in their second year or will not take their prelims until their sixth semester (i.e., Spring of their third year)
- in their fourth year of study
- in their fifth or later years who are not planning to complete the dissertation in the current academic year

are expected, prior to November 15, to present to their committees a written report

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<sup>2</sup> In short, you **MUST** have an annual progress meeting with your committee each Fall, **UNLESS**: 1) you are in your first or second year; 2) you are in your third year and are taking your prelim this Fall (not Spring, and not in your second year); or 3) you are defending your dissertation this year. Otherwise, you must have one each fall.

on the progress made over the previous year, and on any difficulties encountered, as well as a plan for completing the dissertation. Before the end of the final exam period in December, the advisor will then convene a meeting of the committee to discuss the progress report with the student. By January 1, the advisor must send a letter to the DGS summarizing the discussion in the meeting, providing the committee's evaluation of the student's progress, and recommending whether the student should receive continued financial support from the department. The progress report submitted to the committee by the student should be attached to this letter. All faculty members not on the student's committee will also be able to submit to the DGS any written commentary on the student's performance (e.g., as a student or teaching assistant in a course taught by that faculty member). After January 1, the DGS, in consultation with the Graduate Affairs Committee as needed, will review the written materials to determine whether the student shall be granted departmental support for the following academic year. Students will receive letters from the DGS if any remedial measures need to be taken. The student's written progress report, the advisor's letter to the DGS, any letters from faculty not on the student's committee, and any letters from the DGS will be placed in the student's folder as a record of the student's annual progress and evaluation.

#### *Committee Meetings, Exams, and Defenses during Summer*

Scheduling committee meetings, preliminary exams, and dissertation defenses during the summer is strongly discouraged, because faculty members typically have research or other travel plans that must take precedence during this time. Summer meetings, exams, and defenses can only be scheduled by agreement of all members of the committee. In accordance with Graduate School regulations, such meetings can only be held while the summer semester is actually in session, and the student must be registered for the summer semester.

## Further Details about Milestones along the Trajectory to the Biology Ph.D.

### Advisor and committee

#### *Choosing an advisor and committee*

By the end of the third semester, the student must choose an advisor, and the advisor must convene an initial meeting of the dissertation committee. Dissertation

committees will consist of at least four faculty members, at least one of which will represent the student's minor, and at least three of which must be from the Duke Biology Department.

### ***Steps to forming a committee***

- 1) You formally select your advisor by sending the DGSA an email and copying the chosen advisor on that email.
- 2) You and your advisor discuss which faculty would be appropriate for your committee.
- 3) You speak with these faculty and they agree to serve on your committee.
- 4) You choose a minor and have at least one committee member representative of that minor.
- 5) You officially form your committee by filling out the **"Forming a Committee" form<sup>3</sup>**, and emailing it to the DGSA.
- 6) You give this information to the DGSA in writing, and indicate what your minor is and which faculty represents that area.
- 7) The DGSA puts that information into a grad school form, the DGS signs it, and it gets signed by the dean. When this is finished you will see your committee members listed on ACES.

### **Requirements for Program of Study meeting**

- 1) Form your committee (see above) and work with your advisor to schedule a **1-hour meeting** with your committee before the end of your third semester. Schedule your meeting well ahead of time as faculty are extremely busy and it can be hard to find an hour when your full committee is available even months ahead.

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<sup>3</sup> All forms needed by graduate students are available [here](#).

- 2) Fill out the **Proposed Program of Study Form** (see details below) and send it to all your committee members **at least 1 week** prior to the meeting.
- 3) Many advisors/committees expect you to write a **Progress Report** and send it to all your committee members **at least 1 week** prior to the meeting. These vary widely, so consult with your advisor and committee about what they expect.
- 4) Present your progress to your committee at the meeting. Your advisor will continue filling out the **Proposed Program of Study Form** and get signatures from your committee members at the meeting.
- 5) Turn in the signed Program of Study Form (and the Progress Report if your advisor requests this) to the DGS office.

## Tips for filling out the Proposed Program of Study Form

You will fill out the **Program of Study Form**<sup>4</sup> and distribute it to each member of your committee one week prior to your first meeting (also called Program of Study Meeting, for obvious reasons).

Here are instructions on how to properly fill out this requisite form for your first committee meeting:

- 1) Fill out the first page of this form completely. You can either write in your courses or attach a transcript if you prefer.
- 2) Fill out the top portion of the second page, ignoring the "proposed" section at the bottom. Again you can either write in or attach a transcript if you prefer.
- 3) One week before your committee meeting, disseminate the partially complete form to each member of your committee.
- 4) Bring a printed copy of your partially completed form to your committee meeting. As your meeting progresses, you and your committee will review the information you filled in and subsequently decide (a) any proposed graduate courses you will need to take; (b) an approximate date when you will take your Preliminary Examination (prelim); (c) the format of your major essay (i.e., research proposal for your prelim); (d) an approximate date for your Final Examination (defense); and (e) a proposed title for your dissertation.
- 5) As your committee makes these decisions with you, fill in the rest of the form until it is complete.
- 6) Once completed, the committee members must all sign the form.
- 7) You can make a copy of this completed form for your own records, but the original must be given to the DGS for your file.

You are allowed to **change your committee members**, but any changes for any reason must be put in writing, submitted to the DGSA, who will then get the approval of the DGS and of the dean.

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<sup>4</sup> All forms needed by graduate students are available [here](#).



## Steps to an annual committee meeting

- 1) Work with your advisor to schedule a 1-hour committee meeting **before November 15** each fall. You must have at least 3 of your committee members present (in person or virtually) for the meeting.
- 2) Prepare an **Annual Progress Report** and send it to all your committee members (even if they will not be at the meeting) **at least 1 week** prior to the meeting. Progress reports vary widely, so talk to your advisor and committee about what they expect, and get examples from other lab members if you are unsure of what to include.
- 3) Present your progress to your committee at the meeting. Your advisor will fill out the **Dissertation Committee Meeting Report** and get signatures from your committee members at the meeting.

- 4) Your advisor will turn in the **Committee Meeting Report** and the **Annual Progress Report** to the DGS office (by Jan. 1 of the following year). This will fulfill your meeting requirement for the year.

## Preliminary Examinations

Preferably by the end of the second year (4th semester) and by no later than the end of the third year (6th semester), students must pass an oral preliminary examination to establish candidacy for the Ph.D. One week prior to the exam, students must present to their committee members a written essay (“major essay”) describing their proposed dissertation research. The exam itself will be both specific and wide-ranging. That is, it will cover the specific research areas addressed in the student’s proposal, but it will also test both the student’s depth of knowledge in his or her area of specialty and the student’s breadth of knowledge in Biology as a whole.

The graduate school will not recognize as valid a prelim that is held less than **one month (30 days)** after the committee request is approved by the dean. The “date” a committee is formed is the date on which the dean signs the form, **not** the date you turned in your committee forms to DGSA. Give well over a month from the time you form your committee to the time you take your prelim to make sure the paperwork goes through. If you are curious about whether the dean has approved your committee or who your committee is, you can look at it online in your ACES profile, and refer any questions to the DGSA.

## Prelim Checklist

Make sure your course requirements are complete.

Make sure your committee is formally formed and approved **no later than 1 month** prior to your prelim exam date or you will not be allowed to take your exam.

By the end of your third year, schedule a **3-hour preliminary exam meeting** with your full committee present. Your prelim can be scheduled for any day within a fall or spring semester.

Turn in a **Pre-Preliminary Examination Information Form**<sup>5</sup> to the DGSA **no later than one week** before the prelim. The DGSA will use this form to create your **Preliminary Exam Form** and give it to you before your exam date.

Write your dissertation research proposal and send a final copy to your committee **no later than 1 week** before your preliminary exam.

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<sup>5</sup> All forms needed by graduate students are available [here](#).

Bring your **Preliminary Exam Form** to your prelim and take your preliminary exam. At the end, your committee will ask you to leave the room and will

discuss your performance and determine whether you advanced to candidacy. Whether or not you advanced to candidacy, they will give you back your completed **Preliminary Exam Form** to turn in immediately to the DGSA.

### ***Remote Participation***

The student and the advisor must be physically present for the preliminary exam. If another committee member cannot physically be present, your DGS must request prior permission from the associate dean to have the missing member participate via videoconference or teleconference. Discuss this with your DGSA as soon as possible in the scheduling process.

### ***Retaking a Prelim***

Should the student fail a preliminary exam, he/she may apply, with the consent of the examining committee and the Associate Dean, for the privilege of a second examination to be taken **no sooner than 3 months and no later than 6 months** after the date of the first. The original examining committee **must** conduct the second examination. Successful passage of the examination must still occur by the end of the third year; students are encouraged to schedule their initial attempt to allow time for a retake if necessary. The standards of the second examination must be no lower than the first. For the student to pass this second examination, the committee's vote must be unanimous. A second failure will render the student ineligible to continue in the doctoral program.

### **Dissertation, seminar, and defense**

(See Chapter 13 for a detailed Dissertation Defense Checklist) When the dissertation research is completed, the student must present the written dissertation to the committee **no later than two weeks** prior to the dissertation defense. Students are also required to present their results in a public seminar. Students will be expected to complete the degree requirements as soon as possible, ideally by the end of the 5th year (10th semester).

### ***Defense and Graduation Process***

- 1) Applying for graduation is completed on ACES the semester you plan to graduate. The Graduate School has strict deadlines for applying to graduate, so

check the Graduate School website for up-to-date information (<https://gradschool.duke.edu/academics/preparing-graduate>).

- 2) When the student is close to finishing the PhD work, a dissertation seminar and dissertation defense date can be set by the committee and student at any time during any semester.
- 3) The initial submission of electronic dissertation must be done **at least two weeks** before your defense and must be submitted **by 5:00pm** on the deadline date. The submitted document must be complete. The Graduate School will check the formatting of this version of the document and send you an email about fixing any issues with the document. The email will provide a link for scheduling a meeting with a Graduate School staff member to help resolve formatting issues.
- 4) Your advisor must also submit a **letter to the Graduate School** to confirm that your dissertation is complete and ready for defense.
- 5) The department must formally **announce your dissertation defense** to the Graduate School. To do this, send an email with the time, place, and date of your defense, the names of your committee members, and the title of your dissertation to the DGSA. The DGSA will draft an email for you to approve announcing your defense and then send it to the Graduate School. Note that this is the information for your defense, not your public seminar.
- 6) Once the Graduate School has received the **letter from your advisor** (step 4) and the **defense announcement** (step 5) from the DGSA, you can schedule an appointment to pick up your **Final Exam Certificate**. You will be responsible for picking up the certificate from the Graduate School before you defend.
- 7) Make sure to tell Caroline Usher the date, time, place, and title of your public seminar at least the week before your talk so she can send it out with the seminar list.
- 8) Give your 1-hour public dissertation seminar and 3-hour private dissertation defense.
- 9) You must finalize your dissertation and submit the final version to the Graduate School by the appropriate deadline.
- 10) Congrats Doctor!

Please see Graduate School webpage for up-to-date graduation deadlines the year you plan to defend and graduate:

<https://gradschool.duke.edu/academics/preparing-graduate/graduation-deadlines>

Deadline month (check Grad School for date each year)	September Graduation	December Graduation	May Graduation
Apply for graduation	June	October	January
Electronic submission of dissertation	July	November	March
Dissertation defense	late July	late November	early April
Electronic submission of final dissertation	early August	early December	mid April
Electronic submission of final dissertation	early August		mid April

## Committee meetings, exams, and defenses during summer

From the DGS Handbook: “With the consent of the student’s committee, exams CAN be conducted during breaks, between terms, but only if the student is registered for the term on either side of the break.”

## Registration requirements

### *Before passing prelims*

Before you pass your preliminary exam, you are required to register for course credits and register for continuation (CTN) each semester. A normal course load is anything from 9 to 12 units, including Continuation, which carries one unit. Credits may be filled by courses or by research credits with your advisor or tutorial mentor. You are also required to discuss your course plans with your advisor prior to registration each semester and obtain his/her approval, then send your final course list to the DGSA prior to registering. This involves:

- 1) By email, list the courses you will take, the section numbers, and the number of credits for each course. The section numbers are on ACES.
- 2) Send that email to your advisor and ask that they read/approve it, and then
- 3) Your advisor must forward the list to the DGSA with a note saying that they approve the courses. The DGSA and the DGS will look over the courses and respond about whether your list is approved.
- 4) After your courses are approved, go online and register for your courses on ACES.

### ***After passing prelims***

After you pass your preliminary examination, you are only required to take one credit of continuation (CTN) each semester until you graduate. You are certainly

allowed to take courses if you want to, but you are no longer required to take graded research or courses unless your committee has told you to do so.

## Summer session

**During summer sessions**, you must be enrolled for continuation (CTN) during Summer Term 1 if you are being paid as a Research Assistant or are on a Fellowship (external or internal). If you do not, you will not be paid.

## Permission numbers

**Permission numbers** are required for some courses during registration. You get permission numbers from the faculty member teaching the course. If your faculty member has forgotten where the permission numbers live, they are on ACES where the faculty can access them.

## Auditing courses

Graduate students are permitted to **audit courses** and to take **undergraduate courses**. With the approval of their DGS, graduate students may enroll in undergraduate courses to round out their programs of study. Students pursuing a master's degree are limited to two undergraduate courses; doctoral students may take as many as required. In either case, students must receive a grade of B or better to have such courses counted as part of their earned graduate credit. In order to audit a course, a student must have the approval of the instructor of the course. There is a form for auditing on the Grad School website under documents, then policies and forms, and this must be turned into the Registrar to complete registration for an audit course. Any student registered full-time in a degree program may audit courses without charge during the fall and spring semesters; otherwise an audit fee is charged.

## Courses

### ***Responsible Conduct of Research requirements***

RCR stands for "Responsible Conduct of Research." At Duke, RCR training embodies the full range of ethical responsibilities of those engaged in research and teaching. It encompasses not only the obligation to conduct research and teach with integrity, but also to ensure that the rights and interests of original sources, human subjects,



and/or animal subjects are protected. All PhD students in Biology are required to attend 12 contact hours of RCR training.<sup>3</sup>

### ***Course requirements***

The Biology program does not have specific courses that are required; rather, each student discusses their course history with their committee during their first meeting (the Program of Study meeting) and determines which courses are needed for that particular student.

Each student will be required to take the following courses before becoming eligible to take the preliminary exam:

Any prescribed courses specified by the initial advisory committee; and

One to three tutorials;

### ***Tutorials***

During the first three semesters, students will be required to take **up to three** tutorials with different faculty members in the department. The tutorial requirement is waived as soon as the student declares an advisor. Tutorials may involve laboratory work, directed reading in the primary literature, greenhouse or field studies, mathematical or computer modeling, or any other activity that would assist the student in identifying a suitable dissertation topic. Other goals of the tutorials are to expose students to the diversity of faculty research interests in their specialty and to help them to identify an appropriate advisor and dissertation committee.<sup>1</sup> Note that tutorials replace what are sometimes called “rotations” in other departments, but last for a full semester.

### ***Seminars***

Students are encouraged to take advantage of the wide diversity of seminars in the Biology department and beyond. This is your opportunity to learn about an area of biology (or allied disciplines) outside of your immediate research area.

### ***Grades***

The Graduate School policy is that a grade of F in a major course normally occasions withdrawal from a degree program no later than the end of the ensuing semester or term; a grade of F in any other course occasions at least academic probation. In order to be certified as making satisfactory progress towards the degree, graduate students must maintain **at least a 3.0 (B)** cumulative grade point average.

## Confidentiality Agreement

Every Biology student and program student must print and sign the **Duke Confidentiality Agreement** and turn it in to the DGSA. To access the form, go to:  
[https://www.hr.duke.edu/managers/forms/Confidentiality\\_Agreement.pdf](https://www.hr.duke.edu/managers/forms/Confidentiality_Agreement.pdf)

## Unforeseen circumstances

### *Leaves of Absence*

A leave of absence for a total period of time no longer than two semesters may be granted because of medical necessity, family obligations, receipt of an external award, employment related to the student's research project, or other acceptable reasons. A request for a leave of absence in a given semester should originate with the student, be endorsed by the student's faculty advisor and director of graduate studies, and be submitted to the associate dean of the Graduate School for consideration prior to the beginning of the semester for which the leave is requested.

Leaves are normally granted for only one semester, but a second semester's leave may be requested. A student is eligible to request a leave of absence only if in good academic standing and only after having completed at least one semester at Duke. Time limitations which pertain to the various degrees and the completion of courses that have received a grade of I (incomplete) are not waived.

Students contemplating leaves of absence for reasons other than medical necessity (as indicated in a letter from the treating physician) should be aware that, for financial purposes, all guarantees of financial support are calculated from the date of initial matriculation. For example, if a graduate program has stated that a student will be supported through the fifth year of graduate study and the student takes a leave of absence for one of those years for reasons other than medical emergency, the student would forfeit a year of institutional support.

### ***Health insurance during a leave of absence***

Students who terminate their Ph.D. studies or take a personal leave of absence will have the option to continue their health insurance coverage for the remainder of the plan year at their own pro-rated expense. Graduate School payment of the premium will continue through the last day of the month during which the termination or leave became effective. If a student chooses to maintain his/her Duke medical insurance coverage, the student will be charged for, and expected to pay, the balance of the plan term premium through his/her Bursar's account. If the student wishes to terminate his/her Duke insurance plan, he/she must complete the Petition to Terminate Coverage form and submit it to the Student Health Insurance Manager in the Student Health Center. Ph.D. students who transition to a terminal Master's degree, and students on medical leave of absence, will continue to be covered under the Duke SMIP through the remainder of the plan year at the Graduate School's expense. The Graduate School will not cover premiums beyond the sixth consecutive year of study if a student takes a personal leave of absence during years 1-6.

### ***Maternity Leave***

The Graduate School parental accommodation policy can be found here:

[https://gradschool.duke.edu/sites/default/files/documents/policy\\_parental\\_accommodation.pdf](https://gradschool.duke.edu/sites/default/files/documents/policy_parental_accommodation.pdf). It is

recommended that new parents remain enrolled while on maternity leave to ensure the continuation of all benefits. Additionally, the Biology Department offers one-semester fellowships to several students each year, and this is a good option for new parents to be relieved of teaching duties. The fellowship application is emailed out by the DGS at the end of spring semester each year, and if awarded can be used in the

fall or spring semester of the following academic year. You must have passed your prelim in order to apply for the fellowship.

### ***Terminal Masters Degree***

Applicants who express a desire to obtain a Masters degree only will not be admitted to the program. However, students who decide to leave the program with a Masters will be permitted to do so. Biology Masters degrees will follow the standard regulations as described in the Bulletin of the Graduate School. Please consult the DGS manual (Chapter 8) for information about how to pursue a Master's Degree.

([https://gradschool.duke.edu/sites/default/files/documents/dgs\\_manual\\_ch08.pdf](https://gradschool.duke.edu/sites/default/files/documents/dgs_manual_ch08.pdf))

### ***Voluntary Withdrawal from the Graduate School***

If a student wishes to withdraw from the Graduate School for any reason, he or she must send written notice to both the Director of Graduate Studies in his or her department and to the Associate Dean for Academic Affairs in the Graduate School prior to the date of anticipated withdrawal. Students may request subsequent reinstatement to the Graduate School, but such reinstatement requires the approval of the graduate faculty of the degree program and the Associate Dean. If reinstated, the student must pay tuition for all the terms she or he was not registered plus a \$200 reinstatement fee. A student who has successfully completed a minimum of one semester of graduate study before the completion of a graduate program may, with the approval of the major department, be issued a Certificate of Graduate Study.

### ***Involuntary Withdrawal from the Graduate School***

You may be withdrawn from the Graduate School for:

Failure to make satisfactory progress toward the degree or to maintain the minimum GPA of 3.0, or receipt of a grade of "F" in a major course. (A student who earns two grades of "F" is ineligible for probation and will be administratively withdrawn from the degree program.)

Failure to pay debts to the University.

Failure to comply with the State of North Carolina immunization laws.

For students who have placed into English language proficiency courses: Failure to make satisfactory progress in English proficiency requirements during the initial year of residence may not be allowed to register for a second year.

# FUNDING OPPORTUNITIES: THE DEPARTMENT, GRAD SCHOOL, AND BEYOND

Grants are listed in alphabetical order under each category.

Please note that this was compiled in 2016 and it is important to make sure deadlines have not changed when applying for grants.

## Funding Listservs and Databases

### The ORS Funding Listserv

Duke Funding Alert is an online newsletter produced by the Office of Research Support Funding Opportunities Team to bring you the latest funding news and information. Duke Funding Alert is published on the Duke Funding Opportunities website.

You can sign up for the funding alert listserv here: <https://researchfunding.duke.edu>

### Pivot: A searchable funding database

COS Pivot is an excellent, searchable database. It is user friendly and has features that allow you to search for funding, save or share your searches, see who on Duke University's campus might also share the same research interests. Pivot's tutorials are very short and user friendly. You can choose to use the Quick Start Guide PDF or YouTube tutorials that can be found at the ORS website. You will need to use your Duke email address when creating your Pivot account.

ORS: <https://ors.duke.edu/cos-tutorial>

COS Pivot: <http://pivot.cos.com/home/index>

## Duke Internal Fellowships

You should check the funding page maintained by The Graduate School (<https://gradschool.duke.edu/financial-support/find-funding>) which has both a list of internal fellowships (with up-to-date information about each) and a link to search for external fellowships. Here is a description of the most important internal fellowships for Biograds:

### Aleane Webb Dissertation Research Fellowship

Through the generosity of the Aleane Webb Endowment, The Graduate School provides small grants for dissertation research projects. This award was created to help graduate students fund miscellaneous projects associated with their research. The Graduate School will award up to \$500 per project.

**Due date:** late November (early internal deadline late October)

**Amount:** \$500 maximum

**Eligibility:**

- Applicants must have completed the preliminary exam by the end of the spring semester before the period covered by the award (e.g., if you are applying for

the award for the 2016-2017 academic year, you must complete the preliminary exam by the end of the spring 2016 semester).

- Eligible projects include the purchase of microfilm, photographic development of slides, and graphic reproduction. Travel and typing costs will not be considered for this award.

**Required materials:**

- Department approval from your DGS
- CV + transcript
- Information about the amount you are requesting, proposed use of funds, and sources and amount of other funding for your project
- A brief statement (in PDF format) that includes: the dissertation title, a description of the dissertation research project, the amount of funds requested, the specific way in which the funds will be used, and an explanation of the importance of the proposed project to the dissertation research. This should be no more than 3 pages, using 1-inch margins, 1.5 line spacing, and Arial 12-point font. OPTIONAL: You may also include an additional 1-page bibliography.

**Website:**

<https://gradschool.duke.edu/financial-support/find-funding/aleane-webb-dissertation-research-fellowship>

## Bass Instructional Fellowships

Created through an endowment gift from the family of Anne T. and Robert M. Bass, the Bass Instructional Fellowship Program supports high-quality teaching experiences for Ph.D. students where normal means of funding are unavailable. It also helps students become more knowledgeable in online college teaching. Bass Instructional Fellows will receive compensatory payment at the level of Arts and Sciences teaching assistants and a scholarship covering full or partial tuition and fees for their semester of participation.

The program offers fellowships for [instructors of record](#) (Bass IORs), [instructional teaching assistants](#) (Bass TAs), and [online apprentices](#) (Bass OAs).

**Due Date:** late November

**Eligibility:**

- You must be in good academic standing.
- You must have completed the preliminary exam by the end of the spring 2016 semester.
- You must have completed any teaching or TA duties/assignments required by your home department.
- (For IORs) There must be undergraduate interest/demand for the course you are proposing.
- Participation as a Bass IOR, TA, or OA must not be at the cost of your home department's teaching or TA needs.

**Required Materials:**

- Your CV (PDF)
- A copy of your current Duke transcript or ACES report (PDF)

- (For IORs) A syllabus (PDF) for the class you propose to teach
- A one-page statement (PDF) describing:
- Your professional development activities, particularly related to pedagogical training. This might include
- Your status in the Certificate for College Teaching or Preparing Future Faculty
- Coursework you have completed in college teaching/pedagogy
- Departmental instructional training you have had
- Any leadership activities you have undertaken in your department around pedagogical training (organizing workshops, being a lead TA., etc.)
- Your professional and career goals, and how you would benefit professionally from this fellowship
- (For IORs and TAs) your teaching interests:
- For IORs: Discuss the class you propose to teach.
- For TAs: Describe the specific disciplinary fields in which you could be a teaching assistant. If possible, let us know if there are specific classes or faculty you might like to work with or have been in communication.
- (For OAs) what you would be able to contribute to students, faculty, and staff you would work with; please include any experience you have had with online or hybrid education, which is desirable but not a fellowship requirement
- Two letters of recommendation, one from your DGS that states 1) you are making satisfactory dissertation progress, 2) you have completed any required teaching in your department, and 3) serving as a Bass Instructional Fellow would not interfere with your department's teaching/TAing needs. The other letter should be from your primary faculty adviser OR another faculty member with knowledge of your proposed instructional activities if you prefer not to ask your adviser. You can make this request from within the fellowship application system, and the request will be emailed to the recommenders.

**Website:** <https://gradschool.duke.edu/financial-support/find-funding/bass-instructional-fellowships>

## Conference Travel

The Graduate School provides up to \$525 for domestic and \$700 for international travel for advanced students who have passed all parts of the preliminary examination and are presenting a paper or poster at a national conference.

**Due Date:** Rolling

**Amount:** \$525 and \$700

**Eligibility:** All years

**Required materials:**

- Application form
- Letter of intent
- Abstract

**Website:** <https://gradschool.duke.edu/financial-support/find-funding/conference-travel>



## Dissertation Research Travel Award - Domestic

The Domestic Dissertation Research Travel Award from The Graduate School provides funding for Ph.D. students to travel within the United States in order to conduct pre-dissertation or dissertation research. Actual award amounts will vary from \$500 to \$2,000 depending on the research project and the number of proposals funded. Funding generally includes travel costs, some living expenses, and direct research expenses.

**Due Date:** late November (early internal deadline late October)

**Amount:** \$500 to \$000

**Eligibility:** All years

**Required materials:**

- Approval from your department
- Your CV (PDF)
- A copy of your current Duke transcript or ACES report (PDF)
- Information about your trip (sites, departure and return dates, amount and sources of other funds for the trip)
- A PDF that includes, in the following order,
  - A detailed budget for your dissertation research travel
  - A brief statement
    - the dissertation title or proposed subject,
    - a description of the research project,
    - the specific research location or resource to be visited,
    - research plans while abroad, and
    - the significance of the trip to the proposed research.

**Website:**

<https://gradschool.duke.edu/financial-support/find-funding/dissertation-research-travel-award-domestic>

## Dissertation Research Travel Award - International

The international Dissertation Research Travel Award from the Graduate School provides funding for Ph.D. students to travel outside the US in order to conduct pre-dissertation or dissertation research. Actual award amounts will vary from \$500 to \$3000 depending on the research project and the number of proposals funded. Funding generally includes travel costs, some living expenses, and direct research expenses.

**Due Date:** late November but department approval is required before applying

**Amount:** \$500 to \$3000

**Eligibility:** All years

**Required materials:**

- Approval from your department
- Your CV (PDF)
- A copy of your current Duke transcript or ACES report (PDF)
- Information about your trip (sites, departure and return dates, amount and sources of other funds for the trip)
- A PDF that includes, in the following order,

- A detailed budget for your dissertation research travel
- A brief statement
  - the dissertation title or proposed subject,
  - a description of the research project,
  - the specific research location or resource to be visited,
  - research plans while abroad, and
  - the significance of the trip to the proposed research.

**Website:**

<https://gradschool.duke.edu/financial-support/find-funding/dissertation-research-travel-award-international>

## Graduate School Administrative Internships

The Graduate School offers three administrative internships. These are nine-month internships, running from September 1 to May 31. Each internship provides an annual stipend (equivalent to the Graduate School-recommended Arts and Sciences nine-month stipend established each year), as well as tuition and mandatory fees. In addition, The Graduate School will pay the health insurance premium for recipients who enroll in the Duke Student Medical Insurance Plan.

Each intern will work an average of approximately 19 hours per week, conducting research on topics related to graduate education and administration. The topics will change each year but may be related to:

- gathering and analyzing benchmarking data on stipends, graduate student benefits, tuition, or other administrative costs related to graduate education;
- investigating degree requirements for new or existing programs; or
- analyzing the impact of legislation on graduate education.

Two interns will work through the Dean's Office on projects related to academic programs, finance, or graduate admissions and enrollment, and one intern will work directly with Graduate Student Affairs on research and programmatic initiatives related to assessing students' needs and developing support services for graduate students.

**Due Date:** late November (no internal deadline)

**Eligibility:**

Applicants must be in good academic standing.

Applicants must have completed the preliminary exam by the end of the spring semester before the period covered by the award (e.g., if you are applying for the award for the 2016-2017 academic year, you must complete the preliminary exam by the end of the spring 2016 semester).

Applicant must expect to spend the majority of their time during the academic year funded by this award writing their dissertation.

All positions require ability to work independently and efficiently, reliability, excellent research and communication skills, and the ability to work well with other staff members.

No other award (whether fellowship or service-related) may be held concurrently with this internship without special permission from the dean.

As part of the application process, top-ranked candidates will be invited for an interview with Graduate School administrative staff.

**Required materials:**

Approval from your department (see step 1 below)

Your CV (PDF)

A copy of your current Duke transcript or ACES report (PDF)

A PDF that includes, in the following order,

- An application letter that includes a statement of why you are interested in the internship and a description of your research skills and experience. This should be no more than 3 pages, using 1-inch margins, 1.5 line spacing, and Arial 12-point font.
- A list of three references

**Website:**

<https://gradschool.duke.edu/financial-support/find-funding/graduate-school-administrative-internships>

## **Jo Rae Wright Fellowship for Outstanding Women in Science**

The Jo Rae Wright Fellowship for Outstanding Women in Science was created in memory of our dear friend and colleague who served as dean of The Graduate School from 2006 until

2011. This fellowship is funded through an endowment given in her name to recognize two Ph.D. students—one in the biomedical sciences and one in the natural sciences—whose research shows particular creativity and promise.

**Due Date:** late November (early internal deadline late October)

**Amount:** \$5000

**Eligibility:** Applicants must be in good academic standing.

**Required materials:**

Department approval from your DGS

CV + transcript

A brief statement of research (in PDF format). This should be no more than 3 pages, using 1-inch margins, 1.5 line spacing, and Arial 12-point font.

OPTIONAL: You may also include an additional 1-page bibliography.

**Website:**

<https://gradschool.duke.edu/financial-support/find-funding/jo-rae-wright-fellowship-outstanding-women-science>

## Katherine Goodman Stern Fellowship

The Graduate School is offering several competitive fellowships for advanced graduate students in the write-up stage of their dissertation. These fellowships are funded in part from a generous endowment established by Katherine Stern. The fellowship provides an annual stipend (equivalent to the Graduate School-recommended Arts and Sciences nine-month stipend established each year), as well as tuition and mandatory fees. In addition, The Graduate School will pay the health-insurance premium for recipients who enroll in the Duke Student Medical Insurance Plan.

**Due Date:** late November (early internal deadline late October)

**Eligibility:**

Students are not eligible for this award if they have already received one of the following: Evan Frankel Fellowship, Anne Firor Scott Fellowship, Rubenstein Library Internship.

Applicants are expected to be in their final year at Duke University.

Applicants must have completed the preliminary exam by the end of the spring semester before the period covered by the award (e.g., if you are applying for the award for the 2016-2017 academic year, you must complete the preliminary exam by the end of the spring 2016 semester).

No other award (whether fellowship or service-related) may be held concurrently with this fellowship without special permission from the dean of The Graduate School.

**Required materials:**

Department approval from your DGS

CV + transcript

Research Statement: A brief description (PDF) of your dissertation project and a timetable for completion. This should be no more than 3 pages, using 1-inch margins, 1.5 line spacing, and Arial 12-point font. OPTIONAL: You may also

include an additional 1-page bibliography.

**Website:**

<https://gradschool.duke.edu/financial-support/find-funding/katherine-goodman-stern-fellowship>

## Myra and William Waldo Boone Fellowship for Canadian Graduate Students

Through the generosity of the Myra and William Waldo Boone Endowment, The Graduate School is offering two or three competitive fellowships for Canadian students in the departments within The Graduate School. This support provides an annual stipend (equivalent to The Graduate School-recommended Arts and Sciences nine-month stipend established each year), as well as tuition and mandatory fees. In addition, The Graduate School will pay the health insurance premium for recipients who enroll in the Duke Student Medical Insurance Plan.

**Due date:** late November (no internal deadline)

**Eligibility:**

Applicants must be in good academic standing.

Applicants must be Canadian citizens.

No other award (whether fellowship or service-related) may be held concurrently with this fellowship without special permission from the dean.

**Required material:**

Approval from your department (see step 1 below)

Your CV (PDF)

A copy of your current Duke transcript or ACES report (PDF)

A brief statement of research and interests (in PDF format) that explains how the award will be used and the need to be free of service obligations. This should be no more than 3 pages, using 1-inch margins, 1.5 line spacing, and Arial 12-point font. OPTIONAL: You may also include an additional 1-page bibliography.

**Website:**

<https://gradschool.duke.edu/financial-support/find-funding/myra-and-william-waldo-boone-fellowship-canadian-graduate-students>

## Summer Research Fellowship for First- and Second-Year Ph.D. Students

In addition to summer tuition and fees, the fellowship awards a summer stipend. Applicants must also be currently enrolled in a PhD program that does not already guarantee 12-months of financial support. Students may receive up to \$1,850 for the summer from other funding sources. Students must submit to their directors of graduate studies a brief proposal outlining how the summer funding will be used to advance their educational pursuits.

**Due Date:** Unknown, email DGS

**Amount:** \$5500 for summer stipend

**Eligibility:** At this time, Ph.D. students in classical studies and in the Nicholas School of the Environment are not eligible for guaranteed summer research fellowships from The Graduate School. Ph.D. students in ecology and environmental policy, which are partially funded by the Nicholas School of the Environment, are eligible.

**Required materials:** Students must submit to their directors of graduate studies a brief proposal outlining how the summer funding will be used to advance their educational pursuits.

**Website:**

<https://gradschool.duke.edu/financial-support/find-funding/summer-research-fellowship-first-and-second-year-phd-students>

## Summer Research Fellowship for Third-Year Ph.D. Students and Beyond

The Summer Research Fellowship will pay a stipend of \$5,500 for the period from June 1 to August 31, plus summer tuition and health fee. Preference will be given to students who have not previously received a Summer Research Fellowship.

**Due Date:** late November with departmental approval required before applying

**Amount:** \$5500 summer stipend

**Eligibility:**

Applicants must be currently enrolled in a Ph.D. program that does not already guarantee 12 months of financial support.

Students may receive up to \$1,850 for the summer from other funding sources.

Dean's Graduate Fellows, NSF GRFP fellows on tenure, and students who will be working as research or teaching assistants during the summer are not eligible.

**Required materials:**

Department approval from your DGS (only need to let them know)

CV + transcript

A brief description (in PDF format) of research, interests, and why it would be particularly important to be free of service obligations. This should be no more than 3 pages, using 1-inch margins, 1.5 line spacing, and Arial 12-point font.

OPTIONAL: You may also include an additional 1-page bibliography.

**Website:**

<https://gradschool.duke.edu/financial-support/find-funding/summer-research-fellowship-third-year-phd-students-and-beyond>



## External Fellowships

### AAUW - American Dissertation Fellowships

Dissertation Fellowships offset a scholar's living expenses while she completes her dissertation. The fellowship must be used for the final year of writing the dissertation. Applicants must have completed all course work, passed all preliminary examinations, and received approval for their research proposals or plans by the preceding November. Students holding fellowships for writing a dissertation in the year prior to the AAUW fellowships year are not eligible. Open to applicants in all fields of study. Scholars engaged in science, technology, engineering, and math fields or researching gender issues are especially encouraged to apply.

**Due Date:** Mid-November

**Amount:** \$20,000

**Eligibility:**

American Fellowship candidates must be U.S. citizens or permanent residents of the United States as of application due date.

American Fellowships are open to women scholars in all fields of study.

The American Dissertation Fellowship must be used for the final year of writing the dissertation. Applicants must have completed all coursework, passed all preliminary exams, and had the dissertation research proposal or plan approved by application due date. The doctoral degree/dissertation must be completed between April 1 and June 30 of the following year of the application. Degree conferral must be between April 1 and September 15 of the following year of application.

Students already holding a fellowship or grant for the purpose of supporting their final year of writing or completing the dissertation the year before the fellowship year are not eligible to apply.

Applicants may apply up to two times for a fellowship for the same dissertation project.

The fellowship is intended for applicants who are completing their first doctoral degree.

**Required Materials:**

Provide three recommenders who are the applicant's advisers, colleagues, or others well acquainted with her project or work. One of the three recommendations must be from the applicant's dissertation director. Standardized or form letter recommendations are discouraged.

Submit official transcripts for all graduate work and courses listed in the application.

Submit a form verifying the completion of all required coursework and qualifying examinations for the doctorate and approval of your dissertation research proposal (plan of research) signed by the department chair, graduate dean, or dissertation director. No substitutions for this form will be accepted.

If you will conduct your project at an institution other than your own during any part of

the fellowship year, submit a letter indicating permission from, invitation by, or

arrangements with the institution or other location where study will be carried out and the authority with whom the work will be done, as well as verification that you will receive laboratory or office space, library privileges, and institutional affiliation during the fellowship year.

CV

Budget

Narratives

**Website:** <https://www.aauw.org/resources/programs/fellowships-grants/current-opportunities/american/>

## AAUW - International Fellowships

International Fellowships are awarded for full-time study or research in the United States to women who are not U.S. citizens or permanent residents. Both graduate and postgraduate studies at accredited U.S. institutions are supported.

**Due Date:** December 1

**Amount:** \$20,000

**Eligibility:**

Have citizenship in a country other than the United States or possession of a nonimmigrant visa if residing in the United States. Women holding dual citizenship in the United States and another country are not eligible.

Intend to return to her home country to pursue a professional career

**Required Materials:**

Provide three recommenders who are professors or professional colleagues. When possible, recommenders should be professors or professional colleagues in the applicant's home country who can speak about the applicant's qualifications and about the country's need for the specialized skill or knowledge she plans to acquire with her proposed study or research.

Official Transcript

Proof of bachelor's degree

Official report of TOEFL test scores or waiver request

CV

Narratives

Budget

**Website:**

<http://www.aauw.org/what-we-do/educational-funding-and-awards/international-fellowships/>

## Environmental Protection Agency STAR Graduate Fellowships

EPA's Science To Achieve Results (STAR) graduate fellowship program supports masters and

doctoral candidates in environmental studies. Each year, students in the United States compete for STAR fellowships through a rigorous review process. Students can pursue degrees in traditionally recognized environmental disciplines as well as other fields such as social

anthropology, urban and regional planning, and decision sciences. Since the program began in 1995, EPA has awarded approximately 1,884 STAR fellowships to students in every state and most territories. Fellowships have helped educate new academic researchers, government scientists, science teachers and environmental engineers.

STAR fellowships are intended to help defray the ever-increasing costs associated with studies leading to advanced degrees in environmental sciences. The actual amount awarded per year will vary depending on the amount of tuition and fees and the number of months the stipend is needed.

**Due date:** end of May

**Eligibility:** Dissertation research must meet qualifying areas of research, which change yearly

**Amount:** \$44,000 per year, which includes \$12,000 per year for tuition and fees, \$27,000 per year in a monthly stipend, and an annual expense allowance of \$5,000.

**Required materials:**

Application for Federal Assistance, Standard Form (SF) 424

EPA Key Contacts Form (5700-54)

Front Page

Personal Statement

Proposal Description

Background Information:

Education & Relevant Experiences

Publications & Presentations

Course Work

EPA Human Subjects Research Statement (HSRS)

Letters of Recommendation (sent by reference letter writers)

**Website:** <http://www.epa.gov/research-fellowships/star-graduate-fellowships>

## HHMI International Student Research Fellowships

HHMI is committed to the development of the most talented researchers studying in the US graduate institutions regardless of their country of origin. The HHMI International Student Research Fellowships support outstanding international graduate students who have the potential to be research pioneers and scientific innovators. The fellowships will support the research training of international predoctoral students are ineligible for fellowship training grant support through federal agencies in the biomedical and related sciences including physical and mathematical sciences.

**INSTITUTIONAL LIMITATION:** HHMI is inviting 57 research universities that either host an HHMI Investigator, or are the recipients of a current HHMI Graduate Training Grant, to submit nominations. Duke University will be allowed to nominate seven (7) students. HHMI policy states that students cannot be supported by another fellowship or scholarship concurrently with the International Predoc Fellowship and may not defer the HHMI award to increase the number of funded years.

**Due Date:**

Duke Internal: Early October

Nominations due to Sponsor: Mid November

Applications due to Sponsor: Early February

**Amount:**

Up to Three years

- Supports years three, four, and five of a PhD program
- 2016-2017 fellowship year: \$43,000

**Eligibility:**

Students eligible for nomination are international graduate students in the biomedical or related sciences (including physical and mathematical sciences) who

- have demonstrated exceptional talent for research,
- are currently in the second (or third) year of graduate study,
- have entered a laboratory in which they will conduct their dissertation research, and
- are not U.S. citizens, non-citizen nationals, or permanent residents of the U.S.

**Materials required:**

Internal nomination:

- A letter of support from thesis advisor listing applicant's proposed graduate degree, and date of entry into graduate program. This letter should specifically address the applicant's potential to be a scientific leader and innovator.
- A summary of proposed dissertation research including discussion of significance and innovation. (Two pages)
- CV that includes all sources of your existing external funding, either from the home country, or an external award. Also list funding from the institution if competitively awarded.

External application:

- Unofficial graduate transcripts
- Description of intended dissertation research, including a brief discussion of the significance and innovation of the intended research project, a limited bibliography of key references.
- Personal statement reflecting career goals in relation to the applicant's thesis work and how the fellowship will affect attainment of the goals.
- Letters of reference (three are required, four are permitted). One letter must be from the applicant's dissertation advisor

**Websites:** <http://www.hhmi.org/programs/international-student-research-fellowships>  
<https://researchfunding.duke.edu/international-student-research-fellowships-doctoral-students>

## Josephine De Karman Fellowship

The Josephine de Karman Fellowship Trust was established in 1954 by the late Dr. Theodore von Karman, world renowned aeronautics expert and teacher and first director of the Guggenheim Aeronautical Laboratory at the California Institute of Technology, in memory of his sister, Josephine, who died in 1951. The purpose of this fellowship program is to recognize



and assist students whose scholastic achievements reflect Professor von Karman's high standards.

**Due Date:** Late January

**Amount:** \$22,000

**Eligibility:**

Open to students in any discipline, including international students, who are currently enrolled in a university or college located within the United States.

Planning to defend the following year of the application year

**Required Materials:**

Official transcript (Get this in an envelope from the registrar, can order from aces)

Two reference letters. Each letter of recommendation must be in a sealed envelope with the signature of the letter writer across the outside flap.

Application form

CV (optional) (2 pages)

Statement of intellectual interest (500 words). Please comment on your motivation for selecting this project. Graduate applicants should emphasize their current and proposed research.

**Website:** <http://www.dekarman.org/>

## National Defense Science and Engineering Graduate Fellowship Department of Defense

As a means of increasing the number of U.S. citizens and nationals trained in science and engineering disciplines of military importance, the Department of Defense (DoD) plans to award approximately 200 new three-year graduate fellowships in April 2015, subject to the availability of funds. The DoD will offer these fellowships to individuals who have demonstrated the ability and special aptitude for advanced training in science and engineering. National Defense Science and Engineering Graduate (NDSEG) Fellowships are awarded to applicants who will pursue a doctoral degree in, or closely related to, an area of DoD interest within one of the fifteen following disciplines:

**Due date:** Typically in December

**Eligibility:** Must apply in your first two years of graduate school.

**Amount:** \$102,000 over 36 months (~\$2,833/month)

**Additional Funds:** Covers tuition, fees, and \$1000 towards health insurance.

**Length:** Three years (36 months)

**Required materials:**

- Proposed Area of Study
- Summary of Goals (3,000 characters)
- GRE scores
- Three References
- CV information including research, leadership, and mentoring experiences
- Graduate and Undergraduate Transcripts

**Website:** <https://ndseg.asee.org/>

## National Institutes of Health, F31 NRSA (PA 14 147)

The purpose of the Kirschstein-NRSA predoctoral fellowship (F31) award is to enable promising predoctoral students to obtain individualized, mentored research training from outstanding faculty sponsors while conducting dissertation research in scientific health-related fields relevant to the missions of the participating NIH Institutes and Centers. The proposed mentored research training must reflect the applicant's dissertation research project and is expected to clearly enhance the individual's potential to develop into a productive, independent research scientist.

**Due date:** Three deadlines a year, typically the 8<sup>th</sup> of December, April, and August **Eligibility:** NRSA Applicants must have completed their preliminary exam by the award date. Although not a requirement, it is important to have a significant amount of preliminary data on your research. This award is typically applied for in the second or third year of study.

**Stipend:** \$23,376/year

**Additional Funds:** \$21,000 for tuition and fees, \$4,200 for training related expenses, and \$4,200 in institutional allowances.

**Length:** 2-3 years of support

**Required Materials:**

- Specific aims
- Research strategy
- Respective contributions
- Selection of sponsor and institution
- Responsible conduct of research
- Applications for concurrent support
- Goals for fellowship training and career
- Activities planned under this award
- Doctoral dissertation and other research experience
- Sponsor and Co-sponsor letter of support
- Biographical sketch
- Additional education information
- Three letters of recommendation

**Website:** <http://grants.nih.gov/grants/guide/pa-files/PA-14-147.html> - Section II, Award

## NSF Graduate Research Fellowship Program

The NSF Graduate Research Fellowship Program recognizes and supports outstanding graduate students in NSF-supported science, technology, engineering, and mathematics disciplines who are pursuing research-based Master's and doctoral degrees at accredited United States institutions.

**Due Date:** Typically in October or November

**Eligibility:** Must apply before you have completed 12 full months of graduate study, this means by the fall of your second year of graduate school. This 12 month limit includes previous graduate studies such as a masters program, but there is an exception if it has been two years since completion of those graduate studies, see linked page for details.

**Stipend:** \$34,000/year

**Additional Funds:** \$12,000 for tuition and fees paid to Duke.

**Length:** Three years of support.

**Required materials:**

- Statement of Personal, Relevant Background, Future Goals (3 pages) - This should include past personal, educational, and professional experiences as well as future goals and how graduate school will help you toward those goals
- Graduate Research Plan Statement (2 pages) - lay out relevant background to your project, research idea and approach, and expected/potential outcomes.
- Three Letters of Reference
- Graduate and Undergraduate Transcripts

**Website:** <https://www.nsfgrfp.org/>

## Small Research Grants

### Animal Behavior Society Research Grants

The Animal Behavior Society offers the following grants to support graduate student research: ABS Student Research Grants, George W. Barlow Award, E.O. Wilson Conservation Award, Amy R. Samuels Cetacean Behavior and Conservation Grant, David S. Tuber Award, and Developing Nations Research Grant (for students and other researchers)

**Eligibility:** Applicants for student grants must be enrolled in a graduate program and must be active members of the Animal Behavior Society. Members of the Association for the Study of Animal Behavior are eligible for the Cetacean Behavior Conservation grant. The ABS also offers the Developing Nations Grant to support students and other researchers from developing nations.

**Amount:** \$2000 to \$5000

**Due Date:** November 15

**Required materials:**

Research Proposal (Pages 1-4 | 4 pages max)

- Summary of Proposed Work
- Introduction
- Hypothesis(es) to be tested
- Proposed Research
- Predicted Outcomes
- Importance of Proposed Research
- Bibliography

Budget and Justification (Pages 5 | 1 page max)

Curriculum Vitae (Pages 6-7 | 2 pages max)

Animal Care Questionnaire (Page 8 | 1 page max)

**Website:** <http://www.animalbehaviorsociety.org/web/awards-student-grants.php>

### Botanical Society of America Graduate Student Research Awards

The purpose of these awards is to support and promote graduate student research in the botanical sciences. The award was originally made possible in 1997 by a gift from the late Dr. John Sidney Karling. Dr. Karling started his career at Columbia and moved to Purdue as a full professor where he was head of Biological Science for more than a decade. His research interests were in cytology, marine fungi, and tropical biology. He was an active member of both the Torrey Botanical Club and the BSA

**Eligibility:** Faculty advisor must be a member

**Due Date:** March 15

**Amount: \$500**

**Required materials:**

Title page

Abstract

Narrative (must include: a description of the research, including appropriate conceptual background, purpose or objective, brief outline of methodology, and potential contribution or significance to an area of the botanical sciences)

Budget

Bibliography

Biographical sketch

A letter of support

**Website:**

[http://cms.botany.org/home/awards/awards-for\\_students/bsagraduatestudentresearchawards.html](http://cms.botany.org/home/awards/awards-for_students/bsagraduatestudentresearchawards.html)

## Duke University Green Grant

Executive Vice President Tallman Trask has committed \$50,000 each year to fund student, staff and faculty sustainability projects. The fund has been used to put on conferences, conduct research, provide education and training, and seed new programs. Grants are for projects or activities that will reduce the environmental impact of Duke's campus or health system.

**Due Date:** Rolling

**Amount:** Variable

**Required materials:**

- Complete application form

**Website:** [http://sustainability.duke.edu/campus\\_initiatives/greengrant/](http://sustainability.duke.edu/campus_initiatives/greengrant/)

## The Exploration Fund Grant

This grant provides grants in support of exploration and field research for those who are just beginning their research careers.

**Due Date:** Around Oct 15

**Amount:** \$500 to \$5000

**Required materials:**

One page description of your project with attention to scientific objectives.

Description of qualifications of your project associates and the specific sites of your proposed research.

One paragraph description of your career objectives and aspirations and how this project fits into that plan.

Letter of recommendation from your supervisor

Copy of a current student ID.

Budget outline.

**Website:** [https://explorers.org/expeditions/funding/expedition\\_grants](https://explorers.org/expeditions/funding/expedition_grants)

## Garden Club of America Scholarships

The GCA now offers 27 merit-based scholarships, fellowships and awards in the areas of horticulture and its related disciplines, botany, including medicinal and tropical, native bird habitat, conservation and ecological restoration, desert studies, landscape architecture, urban forestry, garden history and design, coastal wetlands, and pollinator re

**Due Date:** January to March depending on scholarship

**Amount:** Maximum of \$5000

**Website:** <https://www.gcamerica.org/scholarships>

## Graduate Women in Science National Fellowships Program

GWIS fellowships include the Sigma Delta Epsilon, Eloise Gerry, Ethel K. Allen, Vessa Notchev, Jean Langenheim, Monique Braude, Nell I. Mondy, and Adele Lewis Fellowships. Funds can be used for expendable supplies, small equipment, publication of findings, travel and subsistence in the field or during collaboration.

**Due Date:** January 15

**Eligibility:**

Must be a woman, holding a degree from a recognized institution of higher learning

Outstanding ability and promise in research

Performing research at any institution in the U.S. or abroad

Career level (e.g. grad student vs. assistant professor) IS considered when reviewing proposals

Active SDE/GWIS Membership is encouraged at the time of and throughout the duration of funding (including both chapter and national dues)

**Amount:** \$10,000

**Required materials:**

If animals are to be used, an animal subjects committee at GWIS must evaluate the work

Application form

Abstract (max 200 words)

Project Description (no more than four typed pages)

Proposed budget and justification up to \$10,000 ONLY

Recommendation letters (two, one from advisor or department head plus one other)

Copies of Animal/Human Subjects Approval OR Collecting Permits

Contact Information for Institutional Official

Application Fees

**Website:** [http://www.gwis.org/?page=fellowship\\_program](http://www.gwis.org/?page=fellowship_program)

## Herb Society of America

The Herb Society of America, Inc. (HSA) offers annual research grants to students, professionals, and individuals engaged in research on the horticultural, scientific, and/or social applications or use of herbs throughout history, based upon the HSA definition of an herb. The defining characteristic for herbs is their usefulness, past or present, including their value for flavoring, medicine, ornament, economic, industrial, or cosmetic purposes.

**Due Date:** January 31

**Amount:** Maximum of \$5000

**Required materials:**

Application form

Professional vita, listing qualifications for this project, academic degrees and honors. Not to exceed two pages.

Methodology: an explanation of how you plan to complete the project, where the work will be done, what facilities and equipment are available. Not to exceed 500 words.

Budget: a detailed listing of all anticipated costs.

Schedule: a specific timeline for the project.

**Website:** <http://www.herbsociety.org/resources/research-grants.html>

## IDEA WILD

Each year, IDEA WILD distributes over \$300,000 worth of equipment - including digital cameras, spotting scopes, mist nets, tents, binoculars, and GPS units - to over 400 conservation projects worldwide. IDEA WILD receives equipment requests daily and prioritizes these requests based on conservation impact, recipient need, and project location. Additional consideration is given to projects in areas identified as **critical biodiversity hotspots**. IDEA WILD focuses its support on professionals working in developing countries where other sources of support are limited or nonexistent, and where a \$750 equipment grant is often equivalent to several months' salary.

**Due Date:** Rolling

**Amount:** \$1500 Maximum

**Required materials:**

IDEA WILD application form

Project proposal in your native language (please also include an English version if available)

One page summary of your project proposal in English

Your resume or curriculum vitae

A letter of recommendation from your advisor

Photo of the target species or habitat

**Website:** <http://www.ideawild.org/history.html>



## Journal of Experimental Biology Travelling Fellowship

The Company of Biologists' journals -Development, Journal of Cell Science, Journal of Experimental Biology and Disease Models & Mechanisms - offer Travelling Fellowships of up to £2,500 or currency equivalent to graduate students and post-doctoral researchers wishing to make collaborative visits to other laboratories. These are designed to offset the cost of travel and other expenses. There is no restriction on nationality.

**Due Date:** Annually on April 30, August 31, and December 31

**Description of Eligibility:**

Applicants should be intending to visit another laboratory.

Applicants must be graduate students or post-docs.

**Description of Award Offered:** Up to £2500 GBP **Required materials:**

Application Form (including budget proposal, etc.)

Letters of support from your Head of department and Supervisor

Letter of Support from Host Laboratory

Curriculum Vitae

Publication List

**Website:** <http://www.biologists.com/travelling-fellowships/>

## Lerner-Gray Fund for Marine Research

The AMNH Grants Program offers modest short term awards to advanced students, postdoctoral trainees, and scientific researchers who are commencing their careers in the fields covered by AMNH.

**Due Date:** March 15

**Eligibility:**

Provides support for projects dealing with systematics, evolution, ecology, and field-oriented behavioral studies of marine animals

Projects can be conducted at AMNH or in the field

Grant must be spent between July 1 of the application year and June 30 of the year following

**Amount:** Between \$500 and \$2000

**Required materials:**

Online application form (must be submitted BEFORE you begin to upload other documents)

Project Description (Title, Location, Narrative Description Max 2 Pages, Lit Cited 1 page)

Itemized Budget and Justification

Curriculum Vitae

Letters of Recommendation (2)

**Website:**

<http://www.amnh.org/our-research/richard-gilder-graduate-school/academics-and-research/fellowship-and-grant-opportunities/research-grants-and-student-exchange-fellowships#grants>

## The Lewis and Clark Fund for Exploration and Field Research

The Lewis and Clark Fund (initially supported by the Stanford Ascherman/Baruch Blumberg Fund for Basic Science, established by a benefaction from the late Stanford Ascherman, MD, of San Francisco) encourages exploratory field studies for the collection of specimens and data and to provide the imaginative stimulus that accompanies direct observation.

Applications are invited from disciplines with a large dependence on field studies, such as archeology, anthropology, biology, ecology, geography, geology, linguistics, paleontology, and population genetics, but grants will not be restricted to these fields.

**Due Date:** February 1

**Amount:** \$5000 Maximum

**Required materials:**

Application form including budget and project proposal

Letters of support

**Website:** <https://www.amphilsoc.org/grants/lewisandclark>

## Libbie H. Hyman Memorial Scholarship

This grant provides assistance to students to take courses OR carry on research on INVERTEBRATES at a marine, freshwater, or terrestrial field station.

**Due Date:** February 15

**Eligibility:**

Must be a first or second year graduate student currently enrolled in a degree program OR an advanced undergraduate

Do NOT have to be a member of SICB to apply

**Amount:** \$1500-\$3000

**Required materials:**

Application form

Proposal

Two reference letters from faculty members

Copies of undergraduate and graduate transcripts

**Website:** <http://sicb.org/grants/hyman/>

## National Geographic Young Explorer's Grant

Young Explorers Grants (YEG) offer opportunities to individuals ages 18 to 25 to pursue research, conservation, and exploration-related projects consistent with National Geographic's existing grant programs, including: the Committee for Research and Exploration (CRE), the Expeditions Council (EC), and the Conservation Trust (CT).

**Eligibility:** Must be between the ages of 18-25

**Due Date:** Eight months before fieldwork

**Amount:** \$2500-\$5000

**Required materials:**

- Pre-application online before submitting final application  
**Website:** <http://www.nationalgeographic.com/explorers/grants-programs/yeg-application/>

## North Carolina Native Plant Society Shinn Grant

The Native Plant Society sponsors two Tom & Bruce Shinn Grants for the purpose of supporting basic or applied research on native plants in botanical or horticultural areas that fulfill the mission and/or objectives of the North Carolina Native Plant Society.

**Due Date:** Last day of February

**Amount:** \$100-\$1000

**Required materials:**

Name, address, phone number and e-mail address and date submitted.

A short statement explaining your specific interest in native plants.

A concise project description (no more than two pages). Include a summary, then describe why this project is needed, location, objectives, hypotheses where appropriate, data collection and analysis methodology, who benefits and how and names of other organizations involved. Highlight aspects of the work that you believe are important and creative and how the project will advance the knowledge of North Carolina's native plants and vegetation. It is acceptable to include brief but relevant references to published literature within the two page description. Successful grants have made the relevancy of the project understandable to the reviewers. Academic status with a letter of recommendation from a sponsor, such as an academic supervisor or major professor. (one page limit)

Project schedule must be submitted (normally one-year)

Budget

**Website:** <http://www.ncwildflower.org/about/shinn/>

## Phipps Conservatory Botany in Action

The Botany in Action Fellowship program at Phipps Conservatory and Botanical Gardens fosters the development of the next generation of plant-based scientists who are committed, first, to excellent research, and second, to educational outreach. Open to PhD students enrolled at US graduate institutions and conducting plant-based scientific research, the program provides each fellow with: 1) \$5,000 for use towards research-related expenses at sites in the US or abroad\*, 2) an all-expenses paid trip to Phipps, to engage in science outreach training and opportunities to translate and communicate his or her research to non- scientific, public audiences through written, visual and/or oral means, and 3) subsequent opportunities to connect his or her research with the public through programs, exhibits, and other outreach venues.

**Due Date:** January 31

**Amount:** \$5000

**Required materials:**

Proposal (information found online for proposal)

CV

Two letters of recommendation

**Website:** <https://phipps.conservatory.org/green-innovation/for-the-world/botany-in-action>

## The Rosemary Grant Graduate Student Research Awards

The Society is pleased to announce the annual Rosemary Grant Graduate Student Research Award competition. These awards are to assist students in the early stages of their Ph.D (first two years) programs by enabling them to collect preliminary data (to pursue additional sources of support) or to enhance the scope of their research beyond current funding limits (e.g. by visiting additional field sites, or working at other labs). Students will need to demonstrate how the proposed work is outside any related funding for the project already held by the student or advisor.

**Due Date:** February 1

**Eligibility:** Only Ph.D. students in their FIRST TWO YEARS are eligible. Funding is not limited to any particular aspect of research.

**Amount:** \$1500-\$2500

**Required materials:**

A curriculum vitae (one page)

A brief research proposal, with (a) title page (must include: title of proposal, name of student, student's email address, mentor's name and mentor's email address, student's institutional and departmental affiliation, year of student's study, and statement of student and mentor's affiliation in SSE) and (b) objectives, methods, significance, and schedule, as well as an explanation that this work is independent from the mentor or the student's funding (max. two single-spaced pages including literature cited and any figures and tables)

Budget (1 page; no justification necessary, just a clear budget). (Please note, the requirement for a letter of reference has been removed)

**Website:**

<http://cms.gogrid.evolutionsociety.org/content/society-awards-and-prizes/the-rosemary-grant-awards.html>

## SICB Grant-in-aid-of-Research

The Grants-in-Aid of Research (GIAR) program was established in 1996 to provide supplemental awards to graduate students in support of their research in the fields of integrative and comparative biology. Students may apply to ONLY ONE program, either the Fellowship for Graduate Student Travel or Grants-in-Aid of Research.

**Due Date:** October 16

**Eligibility:**

Previous recipients of any SICB award are not eligible

Must be a graduate student currently enrolled in a degree program

Must be a member of SICB; non-members must become members of the current

year to be eligible

**Description of Award Offered:** \$1000 in support of research in the fields of integrative and comparative biology

**Required materials:**

Proposed investigation proposal (3000 characters maximum). Suggestions for writing this can be found on the website

Literature cited

Brief description of the location of proposed research (500 characters max)

Dollar amount of funding request

Budget justification (500 characters max)

Pending applications and previous grants

Brief description of the facilities, supplies, and financial support provided to you by your institution and major advisor

**Website:** <http://www.sicb.org/grants/researchgrant.php3>

## Sigma Xi Grants-in-Aid of Research Program

The Sigma Xi Grants-in-Aid of Research (GIAR) program has provided undergraduate and graduate students with valuable educational experiences since 1922. By encouraging close working relationships between students and mentors, the program promotes scientific excellence and achievement through hands-on learning. The program awards grants of up to \$1,000 to students from all areas of the sciences and engineering. Designated funds from the [National Academy of Sciences](#) allow for grants of up to \$5,000 for astronomy research and \$2,500 for vision related research. Students use the funding to pay for travel expenses to and from a research site, or for purchase of non-standard laboratory equipment necessary to complete a specific research project.

**Due Date:** October 15 and March 15

**Eligibility:** All graduate students but Sigma Xi membership of advisor helps

**Amount:** \$400 to \$1000

**Required materials:**

Application form

Letters of recommendation

**Website:** <https://www.sigmaxi.org/programs/grants-in-aid/apply>

## Torrey Botanical Society Graduate Student Research Fellowship

The Torrey Botanical Society supports student research with three annual awards. These amounts will be awarded to the first, second, and third-place applicants, respectively, as judged by members of the selection committee. Graduate students of plant science who are members of the Society are eligible to apply for an award. This award must be used to help pay the costs of field work. Applications will be judged by a committee of the Council of the Society, and

recipients will be announced before 1 April each year.



**Due Date:** January 15

**Eligibility:** Torrey Botanical Society Members

**Amount:** \$1000, \$1500, \$2500

**Required materials:**

Title page with proposal title, applicant's name, address, and e-mail address

Body of the proposal of no more than two pages

Literature cited page

Budget, including brief justification for each item

A current C.V

A letter from the major professor detailing the current status of the applicant and his/her qualifications.

**Website:** <https://www.sigmaxi.org/programs/grants-in-aid/apply>

## Women Divers Hall of Fame Scholarships and Training Grants

**Due Date:** Annually around November 23

**Eligibility:** Eligibility varies between the individual scholarships and grants; see website

**Amount:** Varies; see website

**Required Materials:**

Online application form

Letters of recommendation (for most of the awards)

Some grants require a proposal

**Website:** <http://www.wdhof.org/scholarships/scholarships.shtml>

# ADMINISTRATIVE STUFF THAT BIOGRADS SHOULD KNOW: BOOKING ROOMS, PRINTING, AND MORE

## Booking a Room

In order to book a room, contact Pam Blankenship ([pamela.blankenship@duke.edu](mailto:pamela.blankenship@duke.edu)). Make sure to include in your message the room number, date and time of the reservation. If the room is available she will make the reservation for you. Some rooms do not fall under the biology department (i.e. the French atrium and basement). If this is the case Pam will put you in contact with the appropriate person. Reservations in French Family Science Center must go through the Chemistry department and information can be found here:

<https://chem.duke.edu/about/facilities/room-reservations>. Class reservations get priority and are made prior to the start of a semester. In the case that you are reserving a lecture hall you must wait until the class reservations have been made. If Pam is unavailable Jill Foster is a great resource and can also make reservations ([jill.foster@duke.edu](mailto:jill.foster@duke.edu)). For large scale reservations (i.e. for a happy hour) there is paperwork that needs to be filled out including a p-card number, date and duration of the event. You are responsible for the cost of the janitorial staff required to clean up after your event. If you need a large space, particularly in a different building on campus, you can also use the website <https://25live.collegenet.com/duke/>. It is not the most user friendly website, but it lists available rooms in many buildings on campus, and you can submit requests to reserve a room.

## Janitorial Staff Contacts

Our Housekeeping Supervisor is [Spencer Harris](mailto:spencer.a.harris@duke.edu) ([spencer.a.harris@duke.edu](mailto:spencer.a.harris@duke.edu)). The area Housekeeping Supervisor's office is located on the first floor of French near the stairs behind the loading dock. To contract for Housekeeping services for events an IR needs to be obtained from Jim Tunney ([jtunney@duke.edu](mailto:jtunney@duke.edu)), completed, and sent to Randy Smith. There is a cost.

## Minor Building Repairs

Report any issues like dead light bulbs, leaky faucets, etc. to Randy Smith ([rrsmith@duke.edu](mailto:rrsmith@duke.edu)) or Eric Fulk ([eric.fulk@duke.edu](mailto:eric.fulk@duke.edu)).

## Departmental Vehicles

Some labs have a Duke Owned vehicle. Duke University requires drivers to have a

valid driver's license, to pass the Duke Fleet Safety Training, to pass an online Defensive Driver Training course (\$35 fee), and pass a DMV background check (The lawyers got involved). Talk to Randy Smith (rrsmith@duke.edu, 139A BioSci).

## Keys

In order to get keys for the Biology and French buildings you must contact Randy Smith (rrsmith@duke.edu, 139A BioSci). You will need email authorization from your supervisor or lab manager. Once you have received authorization the keys can be picked up in Randy's office in room 139A in the Biology building. Each key requires a \$10 deposit, which will be returned when you turn in your keys. If you are rotating in a lab, the keys should be returned promptly at the end of the rotation. If you have undergraduate students in the lab the same procedure applies.

## Mail

The mailroom is located in room 137 in the Biology building. You will be given a mailbox upon joining the department. Mail is also picked up daily. There is a metal cart for Fed-ex packages in front of the door as you walk in. On the far wall, under the mailboxes are trays for mail going through USPS. There are two trays for mail: one is for stamped mail and one is for mail whose postage will be paid via a fund code. If you wish to pay via fund code, there is a department code stamp in the mailroom that may be used only for departmental business mail; otherwise, write your own fund code on the mail. This room also has some stationary supplies and a fax machine should you need one. In the cabinets below all the mailboxes, you can find different FedEx shipping materials including packing peanuts and paperboard / bubble wrap envelopes.

Your lab should have access to the departmental FedEx shipping account; if not, Pam Blankenship (pamela.blankenship@duke.edu in room 146 BioSci) can give your lab access to that information. By inputting all the relevant shipping information at <http://www.fedex.com/us/> you can generate FedEx shipping labels. Print out two copies, one goes on the package that you leave on the aforementioned cart. The other copy goes to Pam, there is a manila folder explaining the extra information that she needs to be able to bill your lab for the shipping costs. If you need stamps or other shipping materials not found in the mailroom, or would like to send larger packages through USPS, there is a USPS station in the basement below the gift shop in the Bryan Center. They have miscellaneous paper, pens, folder, tape, envelopes, boxes, etc. available for purchase.

## Printing and Copying

Copy cards are issued by Pam Blankenship (pamela.blankenship@duke.edu in room 146 BioSci). You can use your lab's copy card for making photocopies. If you are

TA-ing a class you can request a copy card; a reminder email will be sent prior to the start of the semester regarding this. Biology uses the campus-wide E-print stations, there is one in the BioSci Lobby and one on the 1<sup>st</sup> Floor of French.

Across from the mailroom is a general room that has a departmental printer as well as a photocopying machine, special staplers, paper cutters, etc. There is also a scanner and computer workstations in the IT Help Desk (room 150, Biology). Paper for lab printers can be picked up from Pam in her office, room 146 Biology. Simply provide your lab, fund code and number of reams that you take.

## **Purchasing and Reimbursements**

### **Purchasing on a lab P-card:**

If you are given your lab's P-card to make a purchase, save all receipts. Lab managers will likely have specific procedures to deal with this, but generally they are handled by Margaret Wilbur ([mrwilbur@duke.edu](mailto:mrwilbur@duke.edu)) in room 143 Biology.

### **Purchasing on the department P-card:**

Each BioGrad receives \$500 upon joining the department and \$500 more upon passing your prelim (your GSR account). This money is for research supplies (excluding a computer), travel, conferences etc. To access this money you can use Jim Tunney's departmental P-card ([jtunney@duke.edu](mailto:jtunney@duke.edu), room 141 Biology). Tell him what the money is for and where it will be coming from and he will give you his P-card number and billing address in order to complete your transaction.

### **Setting up fund codes for department sponsored events:**

If you are hosting a large event (i.e. Symposia) money from the department and outside vendors can be set aside and designated a separate fund code. This is done via Jim Tunney ([jtunney@duke.edu](mailto:jtunney@duke.edu), room 141 Biology). Money and checks can be given to him to be deposited. Likewise, purchases made can then be refunded from this account or charged to it with the designated fund code.

### **Large-scale Reimbursements:**

If you need to be reimbursed for a large purchase, the receipts must be turned in to Jim Tunney ([jtunney@duke.edu](mailto:jtunney@duke.edu), room 141 Biology) and will be reimbursed to your paycheck. If the reimbursement is for travel, the trip must be complete prior to being reimbursed. Jim will enter the receipts into Duke@Work and send you an email requiring you to approve the cost and the reimbursement will be added to your next paycheck.

### **Small-scale Reimbursements:**

Small-scale reimbursements will come out of petty cash and will be handled by Pam Blankenship (pamela.blankenship@duke.edu in room 146 BioSci). The receipts will be given to her and you receive cash.

## The DGS Handbook

The Graduate School publishes a handbook for all DGS' in various departments. Various helpful pieces of information may be found in this handbook, the link to which is [here](#).

# JOURNAL CLUBS AND DISCUSSION GROUPS

There is a plethora of journal clubs, seminar series and discussion groups in Biology and throughout Duke! Below is a list of the ones that exist in Biology. If there's something you're interested in and it's not here, try looking at other departments or schools (e.g. the Nicholas School) who might have what you're looking for. If you think there's a need for a new journal club based out of Biology and you have a few students interested in it, you can start your very own group; Biology loves to sponsor these types of academic activities, so talk with the department chair if you'd like to start your own.

The meeting times listed below are subject to change from semester to semester, so ask around to get the most up to date information.

## BEAM - Behavioral Ecology and Morphology

What it is: Review club

General area of interest: Behavioral ecology and morphology, but anything that falls under that gist (e.g. biomechanics)

Listserv: [beam\\_regulars@duke.edu](mailto:beam_regulars@duke.edu)

Other info: BEAM is a group for graduate students, postdocs, and faculty to review unfinished work (i.e. grant proposals, manuscripts) or to observe and give feedback on practice talks. At each meeting, we break into groups that discuss whatever else is being presented, and then re-convene to discuss our ideas with the presenter. We have requisite snacks, and try to celebrate all our successes - BEAM-presented items have been accepted for publication, awarded grant money, and people giving practice job talks have even gotten faculty jobs! BEAM is a great venue for meeting and interacting with faculty, getting practice giving constructive feedback and reviewing manuscripts, and getting your own work critiqued (and ultimately improved!)

## Biology Departmental Seminar

What it is: Seminar series

General area of interest: General biology

Listserv: emails will be sent out to [biology@duke.edu](mailto:biology@duke.edu)

Meeting schedule: Roughly biweekly on Mondays from 3:30 - 4:30 PM

Other info: This seminar series is hosted by the Biology Department. It brings in post-doc and faculty speakers to present on their research in subjects over a wide range of

research in biology. The schedule can be somewhat sporadic, so check for weekly emails announcing when it is actually happening.

## BLeRG

What it is: Review group for graduate students and postdocs (just no faculty!)

General area of interest: All postdocs and grad students, all fields of biology

Listserv: [blerg@duke.edu](mailto:blerg@duke.edu)

Other info: BLeRG is a way for graduate students and post-docs to get experience reviewing and editing grants, see what makes a good job or conference talk, and get your own work improved by feedback from biologists with a wide array of interests. We're a review group composed of grad students and post-docs for graduate students/post doc work- no faculty! We meet to review posters, talks, papers, grants, figures- anything! BLeRGers are encouraged to both attend meetings to give feedback, as well as submit their own work for feedback. We also provide free breakfast (sometimes Monuts!) at every meeting.

## Phylophiles

What it is: Journal Club

General area of interest: Systematics and phylogenetic methods

Listserv: [phylophiles@duke.edu](mailto:phylophiles@duke.edu)

Meeting schedule: Subject to change each semester depending on member availability

Other info: Phylophiles is a journal club focusing on systematics and phylogenetic methods. Discussion leaders change each week, and the leader is in charge of picking a paper for the group to read each week. It is also possible to discuss specific methods, so we might read a chapter from a textbook and meet to go over any issues and questions we had. We focus on methods more so than systems, so anybody interested in systematics is welcome (we won't go into the nitty gritty of how the newest phylogeny finally resolves a polytomy in a small group of Amazonian vines).

## PopBio Seminar

What it is: Seminar Series

General area of interest: Population Biology

Listserv: [popbio@duke.edu](mailto:popbio@duke.edu)

Meeting schedule: Weekly, with timing varying by semester depending on people's schedules

Other info: The PopBio group meets to listen to talks in the general areas of population ecology, population genetics, reproductive ecology, molecular evolution,

experimental evolution and evolutionary genetics, among others.

## Organisms and Evolution

What it is: seminar series

General area of interest: systematics and organismal evolution

Listserv: [dukesdg@duke.edu](mailto:dukesdg@duke.edu)

Meeting schedule: Thursdays 12:00 - 1:00 PM

Other info: Organisms and Evolution is a weekly seminar that hosts talks in the general areas of systematics and organismal evolution, among others. It is the current version of the former Systematics Discussion Group (SDG).



## UPE Seminar

What it is: Seminar series

General area of interest: Ecology

Listserv: emails will be sent out to [biology@duke.edu](mailto:biology@duke.edu) and [ecologysocial@duke.edu](mailto:ecologysocial@duke.edu)

Meeting schedule: Weekly on Tuesdays from 3:30pm-4:30pm

Other info: This seminar series is hosted by the University Program in Ecology and brings in post-doc and faculty speakers to present on their research in subjects related to ecology.

# BIOLOGY STUDENT GOVERNMENT (A.K.A CZARSHIPS)

Many aspects of the Duke Biology Department are student-lead and organized. The following Czarships are positions that biograds can volunteer for. You can volunteer to be the sole or co-czar of one or more of these committees, events, or discussion groups, etc. Every year at the beginning of the fall semester the Steering committee czars organize a short meeting (usually with pizza and drinks) where the biograds meet to volunteer for czarship positions for the upcoming academic year.

Participation in biology czarships is expected of all BioGrads!

Below are descriptions of each Czarship, written by the 2015-2016 czars themselves!

## Steering Committee Czars

The primary responsibilities of the steering committee czars are to assign czarships, plan orientation week events, and serve as intermediaries between the graduate students in biology and the chair, DGS, and administrators of Biology. To assign czarships, we run a meeting at the beginning of the academic year, usually early to mid-September, and help fill czarships. The czarship meeting has food, so we are also responsible for getting bagels or pizza, depending on the meeting time. For orientation/welcome week, we pick up food for the department's welcome breakfast (usually on Monday); pick a day for and get head counts for the Bulls game and communicate that information to Jim Tunney, who usually picks up the tickets himself; and plan the Saturday night welcome back party, which includes finding someone to host the party as well as getting the entree for the party.

There is no set procedure for meeting with the chair/DGS/administrators; instead, we reach out to them on behalf of the biograds when needed or are in some cases contacted by them to reach out to the biograds for feedback. New Steering committee czars are nominated directly by the previous committee and then can choose to accept or turn down the nomination, because the position needs to be filled at least a month before new students arrive for orientation in August.

In 2015-'16 the majority of the things we have discussed are ways that we can improve the department through things like new czarships and events (e.g. donuts for diversity), more venues for student/faculty interactions, seminar series timing, etc. Also, anyone can suggest a new czarship at any time but I think to make it "official" it goes through the steering committee. So any ideas about new leadership positions, whether from students or the chair, can get routed through steerers to officially get on the list of czarships for future years.

## IDEA Czars

The IDEA committee is a graduate student-led organization that works to address issues related to Inclusion, Diversity, Equity, and Anti-racism that affect graduate students in particular. More information about IDEA and the wonderful work they do can be found at their website: <https://sites.duke.edu/biodiversity/>

## Recruitment Czars

The Recruitment Committee is self-nominated and voted on by the graduate student body. The committee consists of 6 students - 2 first years and 4 non-first years. As of 2020-21, Recruitment Czars are compensated for their work. Czars are in charge of organizing the group activities that happen during recruitment weekends, as well as keeping other BioGrads informed about them. The recruitment committees of years past have collected and archived helpful resources to make this process as painless as possible.

## SciREN Czars

SciREN Triangle (<http://www.thesciren.org>) is a non-profit outreach organization that involves partnerships between graduate students at Duke (historically two BioGrads, also the SciREN czars), UNC, and NC State, as well as the North Carolina Museum of Natural Sciences in Raleigh (<http://www.thesciren.org/networking-events/sciren-triangle/>). SciREN recruits local researchers and helps them to write lesson plans based on their own research that meet North Carolina curriculum standards. We then hold a networking fair each September, at the museum in Raleigh, at which educators can talk to scientists about the lesson plans and how to implement them in their classrooms. After the networking fair, all of the lesson plans are available online to any educator through the SciREN website. The time commitment for SciREN varies a lot throughout the year. We work in partnership with grad students from UNC and NC State, and each winter, the team gets together to assign specific jobs. In the spring semester, the time commitment is fairly light, maybe one hour every couple of weeks. Late spring and early summer, the time commitment ramps up to a couple of hours a week, and by the late summer and early fall, just before the networking event, it can take several hours of time per week. Any BioGrad interested in participating in SciREN should send an email to [sciren.outreach@gmail.com](mailto:sciren.outreach@gmail.com) for more information.

## BEAM Czar

BEAM - Behavioral Ecology and Morphology. What is it? A review club. Basically, someone will send out a manuscript draft, grant proposal draft, or give a practice talk. The group gives feedback. Being a BEAM Czar mostly entails emailing and bugging people - it's pretty hard to get the schedule to fill up. We do have a BEAM Super-speaker come every year, so you're able to get nominees for and choose that visitor. Overall, it's relatively low input for a good experience interacting with

faculty both at Duke and beyond. BEAM is attended by grad students, postdocs, and faculty. At each meeting, we break into groups that discuss the manuscript, etc. with each other, and then we re-convene to discuss our ideas with the presenter.

## PopBio Czars

The PopBio group meets every Thursday during the academic year to listen to talks by graduate students and faculty (mostly from Duke, with a guest speaker / super-speaker or two from elsewhere, depending on the budget) in the general areas of population ecology, population genetics, reproductive ecology, molecular evolution, experimental evolution and evolutionary genetics, among others. We meet at 4:30pm in Duke's French Family Science Center room 4233. Weekly jobs: Make sure the speaker's name and talk title and picture all get to Caroline Usher ([cpu@duke.edu](mailto:cpu@duke.edu)) for next week's talk. Send out an email or three to [popbio@duke.edu](mailto:popbio@duke.edu) advertising this week's talk. Day of - chill the beer, arrive in time to help the speaker set up the AV, get the speaker's CV so you can introduce them, make sure the talk runs smoothly. Periodic tasks: Every semester, harass people until the schedule's full. Schedule a room and a time. Buy beer. If there's a regular guest speaker (not a super-speaker), make sure meetings with grad students / faculty and dinner get arranged. To get a super-speaker, conduct a poll, contact possible super speakers, set date, arrange travel, arrange hotel, arrange meetings, advertise extensively, arrange reception including catering. Common pitfalls: do things early! Otherwise there are no talks for the first month of the semester and/or no super-speakers.

## O&E Czar

Oragnisms and Evolution is a seminar / discussion forum that focuses on study of the diversification of living forms, both past and present, and the relationships among living things through time. Relationships are visualized as evolutionary trees (cladograms, phylogenetic trees, phylogenies) Responsibilities include inviting speakers, preparing coffee/food occasionally, contacting speakers for title/introduction information, sending out reminder to Caroline Usher ([cpu@duke.edu](mailto:cpu@duke.edu)) and to listserv ([dukesdg@duke.edu](mailto:dukesdg@duke.edu)), helping the speaker setup the laptop/projector. Usually the time commitment is low, About 1.5-2 hrs a week (1hr the seminar time + help set up and sending out email etc.). Inviting external speakers: We don't have a specific system for inviting external speakers right now, since there have not been a lot of requests. Usually people just tell you they want to invite a person, and ask if SDG can help to pay the flights/accommodations. It's important to note the PI/student who invited the speaker should be the ones (or at least they should designate someone in their lab) to deal with airfare, etc. and organize meetings for the speakers. Of course we can help, but it shouldn't be completely on us.

Other notes: For the past few semesters, the most difficult part was to get enough speakers before the fall semester started since we didn't even remember to invite people until returning from summer vacation. The empty schedule right at the beginning of the semester was scary when we saw other seminars already had full schedules. It would be great to meet and come up with a plan before the summer. The SDG seminar now is jointed with the Evo-devo group. It has been a great success in general. People have been thinking about a new name for the joint seminar (e.g. "SEDG" (pronounced as "sedge") - aka Systematics and Evolutionary Developmental Group).

## GPSC Representative / Czar

As GPSC Rep you serve in the Graduate & Professional Council General Assembly. This is essentially the student government of graduate students here at Duke, which meets roughly monthly (Tuesday nights, 6:30-8:30, dinner is provided) or slightly more frequently. Along with this seat comes membership on one caucus, the small group of grad students that I work alongside to try and tackle issues that we decide are important, and one committee, a University-wide group that meets and decides things about the school. My caucus is University Services and my committee is Transportation, and I've largely spent time on both of these working towards making

parking and commuting better (or trying). There aren't too many requirements; you more or less have a 2 hour meeting to attend once every 2-3 weeks and it is a great place to interact with other grad students. You can enjoy this a lot if you really like student government and you can devote multiple hours per week to a cause, alternatively I don't think anyone will fault you if you just show up at meetings and keep the biograds updated on big happenings as you hear about them (health care, student fees, etc.).

## Superspeaker Czar

Every year, the BioGrads (any graduate student in a Biology Department lab) nominate and vote for the speakers they would like to invite to give a talk at our Biology Seminar Series. As Superspeaker czars, we double check with Randy Smith ([rrsmith@duke.edu](mailto:rrsmith@duke.edu)) and Jim Tunney ([jtunney@duke.edu](mailto:jtunney@duke.edu)) early April to see if we have enough money to invite a speaker per semester (for a total of two speakers each academic year). After that confirmation, we send out a call for nominations and send out a poll for a vote. Hopefully, this gets done by early May so that we can invite the speaker with the most votes as soon as possible. We send e-mail invitations to the speakers, arrange their travel and accommodations, set up the interview schedule during their visit (which usually lasts 2 days), and organize the reception. Prior to the visit, most of the time is spent emailing the speakers. When the visit is approaching, the work becomes a bit more intense, but it is only for a short moment. Some common pitfalls include getting the room setup for the talk, but otherwise, it's helpful to get many graduate students to help out as much as possible.

New Superspeaker Czars should contact past Superspeaker Czars to get access to a google doc with relevant information (travel agent contact, draft e-mail invitation, etc)

## Faculty Liaison Czar

Faculty Liaison Czar has the responsibility of attending faculty meetings (approximately 1 per month, usually 1-1.5 hours) and taking meeting notes, particularly points relevant to the graduate community. A lot of the faculty meetings are spent discussing 'Big Duke' issues (i.e. IT security comes up a lot) and undergraduate concerns (curriculum and cheating have come up a lot). Very occasionally, you must speak on behalf of the graduate community, and this may require polling grad students or holding a meeting to discuss an issue (i.e. degree requirements for grad students). Overall, the job is not very much work, but the meetings are usually given at very short notice (sometimes the day of), and because they so rarely relate to graduate student issues, they can be a bit tedious to sit through. On the rare occasions that you must present a cohesive graduate student opinion, be prepared to field a lot of questions and points of clarification. People interested in this czarship should consider themselves patient, should be able to

represent a cohesive graduate student opinion (even when it is NOT YOUR OWN!), and should have the ability to stay calm and level-headed in the rare situation that you may have to answer a ton of questions/defend the cohesive graduate student.

## Happy Hour Czar

This czarship has a minimal time commitment outside of attending happy hour. At the first happy hour of the year, the czars should send around a sign-up sheet for graduate students to host future happy hours. Each week, only one czar is responsible for organizing happy hour with the graduate student host. On Monday or Tuesday of that week, the happy hour czar sends an email to the graduate student host reminding them about Friday and letting them know how many drinks we already have from left-over happy hours. On Friday afternoon, the czar is responsible for helping the graduate student host chill the drinks, set-up, and cleanup. Aside from helping the graduate student host with happy hour, czars are responsible for the free happy hour sponsored by the Biology Department each semester.

## Holiday Party Czar

The commitment is a few meetings in the month or so before the party (usually held the Monday after finals end) and setting up/cleaning up on the day of. Randy leads a team of staff, faculty, and grad student czars to put this together. Grad student duties may include: decorating before the party, helping Jenny in the greenhouse make centerpieces, putting out trays of food, organizing the silent auction, picking up beverages (beer keg) before the party, helping plan entertainment, setting up kids activities, and cleaning up everything when the party ends.

## Spring Non-formal Czar

The time commitment is very concentrated but not huge. The primary responsibilities are securing a bar for graduate students to go to, opening a tab with a set maximum price, and organizing logistics among graduate students.

## Fall Fest Czar

Fall Fest is a wonderful fall gathering of grad students and faculty at the Carolina Friends School to partake in some delicious NC BBQ. In past years we have rented a giant gas grill and roasted an entire pig. In 2015 we opted to have the BBQ catered in by The Pit. The jobs of the czars are to schedule the festivities, rent the tables and chairs, reserve the space, order the food, cook the pig, and gather the people. There are documents on the Biograd wiki that detail when things need to be done (basically, right away after you volunteer to be czar), and where to get everything. The time commitment is not huge, and is mostly concentrated in the ~ few weeks

beforehand, as all the planning and reservations need to be done well ahead of the actual date. If you or a wonderful volunteer plan to cook the pig, you must get up quite early the morning before the shindig and get the grill fired up and get roasting. The pig can be over 100lbs, and requires a lot of time over a slow flame to get cooked through. After the marathon roast (with help from loads of volunteers) you serve the chopped pork topped with Clint's Famous Sauce. At this point you get to enjoy the BBQ and any potluck foods folks have shared, and bask in the glory of being done with your czarship duties for the year. It is a lot of fun to see all the folks who come out to enjoy the beautiful NC fall weather with their families and significant others.

## Campout Czar

This is a front-loaded czarship which constitutes lots of work around one weekend in September or October and then far less afterwards. This entails 1) convincing BioGrads to attend campout, 2) organizing said campout event, 3) divvying up tickets to all those who campout. Without going into too much detail here's what it includes: First you gather those interested in camping out and attending basketball games and determine how big the group is. If the group is on the larger side of things we try to rent a truck (UHaul) to drive to campout. Regardless of group size we try to get everyone there and have enough beer and snacks to last the weekend. Also, you need to keep everyone on top of registering on time and the various rules of campout. Oftentimes we send out emails and solicit visitors to campout to drink and hangout while we wait for the time to pass.

## Office Czar

It's totally easy. Every year, usually right after the czarship meeting (because it's on mine and everyone else's brain), I send an email to the biograds to get updated office information 1.) If they've moved from the previous year, and 2.) Get the new first year's office locations. Then I just update the excel spreadsheet in the biograd wiki, removing the students who have since left us (\*sniff sniff\*), and adding the new information. Boom. Easy as that. In previous years, I would go down to Jo's office and write all the new office location on her giant map of the building, but the past 2 years she's already had that done (it probably gets updated when the new students get their keys). But, it's always nice to check in with her and see if she needs it done. The only pitfall is having to hound people to respond. Usually, the first years are really good, since they're all bright-eyed and bushy-tailed and still read all their emails, but I just keep a running tally to make sure that they all respond.

## Sustainability Czar

The sustainability czarship requires an extremely low time commitment. The main



requirement is disposing of used batteries. Czars also serve as a sounding board for additional sustainability proposals, maintain the reusable plates/cups/cutlery (i.e. are in charge of making such items available at desired departmental events, and ensuring items are cleaned and returned to the appropriate storage area), and ensuring recycling is available at happy hour. As a novel position, this czarship is open to expansion.

## Dance Czar

Dance Czar's primary responsibility is to begin dancing at biograd parties so that other, more inhibited biograds will also begin dancing. The usual time commitment is about 5 hours per month, mostly on Saturday nights. Common pitfalls include not drinking enough to dance enthusiastically and dancing so well that other biograds become too intimidated to go out on the dance floor. A good Dance Czar becomes drunk early and dances poorly but with great gusto, raising the energy in the room and making it easier to appear to be a good dancer by comparison.

## Grill Tools/Party Supplies Czar

As the czar you keep a bag of grill tools for the department. It takes 0 units of time, and usually the bag is taken by the pig pickin' group and not returned within the first few months of school, anyway. It is easier than even the bike pump czar.

## TA Czar

The TA Czar is charged with ensuring a positive TAing experience for BioGrads. The czar interfaces with the faculty and staff to award students with awards for Excellence in TAing.

## DGSU Czar

The Duke Graduate Student Union advocates for graduate student needs such as better healthcare, pay, and workplace environments. The Czar attends DGSU meetings, advocates for BioGrad needs, and relays DGSU-related information back to the BioGrads.

## PhyloPhiles Czar

Phylophiles is a journal club focusing on systematics and phylogenetic methods. Discussion leaders change each week, and the leader is in charge of picking a paper for the group to read each week. Czars are responsible for organizing Phylophiles.

## AVENGERS Czar

AVENGERS (Association of Visionary ENGINEERs and Scientists) is a seminar group that integrates engineering and natural sciences from Duke and UNC. Seminars alternate each semester from being located at UNC and Duke. Czars are in charge of organizing speakers, securing rooms, and notifying the department of relevant seminars.

# DOING YOUR RESEARCH: RESOURCES ON CAMPUS AND IN THE TRIANGLE

Below you can find links and brief outlines for a variety of research resources both within the biology department and across Duke. The majority of these resources have well-developed websites that can provide more information. The vast majority also have very helpful staff that will work with you to answer your questions and provide further resources.

## Shipping

### Domestic (FedEx)

Duke has an account with FedEx which Biograde can use to get discounted rates. Instructions for logging in with this account can be found from Pam Blankenship. Also check with Jim Tunney since shipping is a cost that may not be covered by a grant unless specifically stated in the original budget!

### Duke Office of Export Control (International Shipping)

(<https://export.duke.edu/>)

Although it's counterintuitive, this office also deals with importing specimens, samples, etc. into the country, so contact them for any and all research-related import/export needs. If you are planning on exporting either goods or technical data out of the country, it is worth contacting the Duke Office of Export Control to determine how to proceed. Typically, you are exempt from export regulations if your work qualifies as "fundamental research." As per the university website: fundamental research is when "basic or applied research in science or engineering is conducted in the United States. The resulting information is ordinarily published and shared broadly in the scientific community. There are no restrictions on the publication of research results, including no approval processes for publication. There are no restrictions on the access and dissemination of information resulting from the research, including restrictions or approvals on the use of foreign nationals." When in doubt at all, you should always err on the side of contacting the Office of Export Control.

# Permits

## Field Work

If you want to collect biological specimens from somewhere other than your literal backyard, you probably need to ask someone for official permission. Allow plenty of time before your planned collection date to find out what organization owns the field sites you're interested in and to work your way through the bureaucratic chain of command until you find the person who can actually get you the permit you need. Probably the best starting point is to ask other faculty or students who do similar research to find out how they obtain permits.

Duke Forest is usually pretty quick in approving requests for minor collections, but you still are supposed to ask permission. They want records of all research activity in the forest, no matter what it is. You can find information about research use of Duke forest and a link to the registration instructions here:

<http://dukeforest.duke.edu/research/information-for-researchers/>.

To collect from private land, contact the landowner for permission. Especially in more rural areas this can be well worth your time, as there are plenty of stories of graduate students being chased off by landowners they hadn't contacted.

Most public lands (such as state and federal parks, national forests, etc.) are clearly managed by a government agency. It is typically illegal to collect or perform field work without the appropriate permits. Find out who manages the land you're interested in, and contact the branch of that agency local to your site for information on how to proceed legally. More than just providing permits, local managers can often have useful information and resources such as keys to unlock access roads and other resources. Some agencies will want you to follow up with a report for their records on your collections and how you used them.

## Requirements for Animal Research

(<https://dacup.duke.edu/getting-started>)

The above website provides a good overview of how to get started working with animals and the kind of considerations you need to make. Working with animals is no small commitment, so to get started make sure you're aware of what animals have what requirements (e.g. fruit flies vs cephalopods vs lemurs), and to allot ample time to researching and meeting animal use requirements. When in doubt, you can email [IACUC@DUKE.EDU](mailto:IACUC@DUKE.EDU) for more information.

## Institutional Care & Use Committee (IACUC)

(<https://dacup.duke.edu/iacucoawa>)

If you are planning on doing just about any research with vertebrate (and even some invertebrate) animals, be sure you are well acquainted with the Institutional Animal Care & Use Committee before you begin. If your lab currently works with animals, they will likely be able to help you get started with IACUC, otherwise you can contact IACUC for guidance at [IACUC@duke.edu](mailto:IACUC@duke.edu). Please be aware that protocol approval can be a lengthy, intensive process, so budget plenty of time for any new protocols or protocol adjustments.

## Human Research

(<https://campusirb.duke.edu/>)

Much like animal research, beginning research with human subjects can mean plenty of time and energy spent on making sure your protocols are approved by the appropriate groups. If you plan on interacting directly with live humans, or observing private behavior, you will need to work with the Institutional Review Board for Non-Medical Research. You can schedule an appointment to meet with the IRB by contacting an IRB Staff member. More information can be found on the following website:

<https://campusirb.duke.edu/meeting-irb-staff>.

## Resources for Research

### Herbaria

(<http://herbarium.duke.edu>)

“The Herbarium contains over 800,000 specimens of vascular plants, bryophytes, algae, lichens, and basidiomycete fungi, including more than 1900 types. The collection is especially rich in specimens from the southeastern United States, but has synoptic representation worldwide.” ([herbarium.duke.edu](http://herbarium.duke.edu)) If you are interested in using or perusing any of the herbarium’s resources, contact the appropriate member of the herbarium, listed at <http://herbarium.duke.edu/about/contact-us>. The herbarium also houses part of Duke’s Library collection and these books can be checked out directly from the herbarium.

### Greenhouse

(<https://biology.duke.edu/facilities/research-greenhouses>)

To get started working in the greenhouse you first need to contact Jorge Gonzales ([jorge.fidhel.gonzalez@duke.edu](mailto:jorge.fidhel.gonzalez@duke.edu)), the greenhouse manager, to gain key card access and set up a time to receive pesticide safety training. After watching a short video and taking a quiz you’ll have easy access to the greenhouse. Jorge and other greenhouse staff are useful resources for organizing greenhouse space if your lab doesn’t already have space rented. The greenhouse support staff are extremely helpful, especially in terms of day-to-day plant care and fertilization / pesticide application. Let them know directly if you plan on using any transgenic materials and how to handle / dispose of them properly.

### Phytotron

(<https://biology.duke.edu/facilities/phytotron>)

The phytotron provides various controlled growth chambers and seed storage spaces. These spaces provide a number of different types of environmental control. Typically, routine plant care is provided by the phytotron staff. The phytotron can fill up quickly, so be sure to reserve space ahead of time and get in touch with the phytotron manager, Norm Hill, if you have any questions.

### Shared Microscopy Facility

(<http://microscopy.duke.edu/>)

Lisa Cameron is a very helpful contact person to get more information about scopes and get training and even experimental planning. The core facility has a number of different microscopes for different purposes ranging from scopes with climate controlled chambers to do time-lapse movies to imaging slides. The scopes are also distributed around the campus (mainly in French and LSRC). The popular microscopes

are booked very quickly and you can only book 1- week in advance. They have reasonable hourly rates but still cost a lot of money, it is important to talk to them in advance to decide what instrument to use and how to plan your experiments. You need to get training before you get access to the microscope rooms and the booking system.

## Genome Sequencing Shared Resource

(<https://www.genome.duke.edu/cores-and-services/sequencing-and-genomic-technologies>)

The Duke Center for Genomic and Computational Biology offers whole genome sequencing, RNAseq, NGS among other services. They do provide consultation in case you are not sure what sequencing platform to use or how to prep samples. Their library prep costs are a little higher than what an in-house prep with a commercial kit would cost but they do have the necessary equipment for quality control and it will be included in the library prep cost most of the time. They have several sequencing platforms and machines available.

# Skill Training Courses

## Duke Libraries

(<https://library.duke.edu/course-support/training-workshops>)

The library has a wealth of resources on how to find things in the library, how to properly cite resources and avoid plagiarism, and other topics. The librarians and other research assistants are very helpful and easy to contact by visiting the Perkins Library or e-mail through the library website. General information can be found at the library website: <https://library.duke.edu>.

## Duke Center for Genomics of Microbial Systems

(<http://microbialgenomics.mgm.duke.edu>)

From their website:

“The Duke Microbiome Center (DMC) was established to address the rapidly expanding interest among the public and scientific community in the pervasive roles of microbial communities in human health, the environment, and biotechnology. The mission of the DMC is to cultivate and support microbiome science at Duke University. We do so by providing an intellectual and educational environment that fosters collaboration and discovery, and by creating and supporting necessary resources at Duke University for research in the microbiome sciences.”

## Duke Center for Genomics and Computational Biology

(<https://www.genome.duke.edu>)

One of the most useful resources of the Center for Genomics and Computational Biology is the GCB academy. There are trainings available through GCB every semester that are very helpful to learn details about sequencing technologies, library preparation and data analysis. They are free to graduate students but a \$100 fee is charged for no-shows. More information, including current class offerings, at

(<https://www.genome.duke.edu/gcb-academy>).

## Statistical Consulting Center

(<https://stat.duke.edu/about/statistical-consulting-center>)

The Duke Department of Statistical Science offers consultation on how to properly apply statistical methods to analyze your research data. To schedule an appointment, send an email to [stat-scc@duke.edu](mailto:stat-scc@duke.edu) with a brief description of your problem and they will get back to you with their availability.

## Network Analysis Center

(<https://dnac.ssri.duke.edu/>)

From their website:

“The purpose of the Duke Network Analysis Center is to build a world-class network



science & analysis program at Duke to: (a) help make visible the cutting-edge network scholarship currently ongoing on campus, (b) promote new collaborations in network science, (c) introduce new researchers to network science and train them in its methods and applications, (d) provide a research service in network analysis methods to the wider Duke community, and (e) enhance Duke's position as a leader in the research triangle and throughout the nation in this exciting interdisciplinary field."

To this end the Network Analysis Center offers a number of training sessions and puts together a seminar series to display network-related research. Schedules for both can be found at their website.

## Computing Cluster

(<https://rc.duke.edu/dcc/>)

From their website:

"The Duke Compute Cluster consists of machines that the University has provided for community use and that researchers have purchased to conduct their research. At present, the cluster consists of over 30,000 vCPU-cores and 730 GPUs, with underlying hardware from Cisco Systems UCS blades in Cisco chassis.

GPU-accelerated computers are Silicon Mechanics with a range of Nvidia GPUs, including high end "computational" GPUs (V100, P100) and "graphics" GPUs (TitanXP, RTX2080TI). Interconnects are 10 Gbs."

The cluster is an amazing shared resource, but it can take a little bit of know-how to use to its full potential. To learn more you can book a virtual meeting with the research computing team at:

<https://outlook.office365.com/owa/calendar/ResearchComputing@ProdDuke.onmicrosoft.com/bookings/>

## Supply sources

### VWR Store

(<https://finance.duke.edu/news/vwr-managed-research-storeroom>)

The storeroom is hidden in the basement of LSRC. You can call ahead to ask if they have the item you need in stock. This is the only place where graduate students can directly buy basic lab supplies with their fund codes. Otherwise, you need to get a non-graduate student (post-doc, lab manager, etc.) to order supplies for you since students do not have access to Buy@Duke.

### Cell Culture Facility

(<http://ccis-ccf3.duhs.duke.edu>)

The Cell Culture Facility can provide cell lines and laboratory reagents at significant discount, with no additional shipping charges to any Duke researcher. Before ordering from the CCF you will need to set up an online account through their website.

# MENTORING UNDERGRADUATES

Undergraduates working in the lab can be a great resource, and mentoring them can provide research management experience that we grad students would not otherwise get. Undergraduates may do work from basic dishwashing and maintenance to self-designed independent research projects. Many biograds serve as primary mentors of undergraduates working in their labs and sometimes oversee those students in senior thesis projects. Research can be directly related to the biograd's dissertation or offshoot projects driven by student interests. Whether you mentor undergraduates and in what capacity will likely vary quite a bit based on your PI and how he or she manages the lab.

## How Undergrads and Labs Find Each Other

Some professors will independently recruit students for the lab. Sometimes they will find them in classes they teach. Sometimes students will initiate the exchange and approach the professor about the possibility of working in the lab. Some labs have success posting job advertisements on Duke List: <http://dukelist.duke.edu/>. There are also summer research programs that graduate students can participate in that will pair them with undergraduates for a project. One venue for this is the Biological Science Undergraduate Research Fellowship (B-SURF) program:

<https://undergraduateresearch.duke.edu/urs-programs/biological-sciences-undergraduate-research-fellowship-b-surf>

## Muser

(<https://muser.duke.edu/>)

This website is a Duke-wide project that was started by Prof. Sheila Patek to centralize the process of undergraduates and labs finding each other using clear and equitable guidelines. This system allows graduate students (as well as professors, postdocs, and techs) to write advertisements for undergraduate research positions and receive applications from interested students. There are rounds of applications around the bookbagging period for each semester and one last minute one at the beginning of fall semester. If you would like to post an advertisement, you have to sign up with the system and get your project request approved by your advisor. Volunteer, independent study, and paid positions are all accepted on this site.

## Senior Thesis Projects

If an undergraduate is doing a senior thesis project in your lab, you may want to familiarize yourself with the guidelines and timeline for these projects:

<https://biology.duke.edu/undergraduate/graduation-with-distinction>.

## Advice for Mentoring

Mentoring an undergraduate can be a very informative, helpful, and rewarding experience, but it also is a significant time commitment. From your fellow biograds, here are some things to be aware of when mentoring.

### Set Clear Expectations

It is important when you first start working with an undergrad to be clear about what you expect from them and to find out what they expect to get out of the experience. You should both know what you signed up for!

### Set a Schedule

When you start work with your undergrad, set a regular schedule so you both know when you will be meeting. Be respectful of their time but also make sure they are respectful of yours. Be aware of any particular time requirements of their position, for example, independent study students need to have at least 8 hours per week in the lab to get their credit. Always make sure you have tasks planned for your undergraduate to work on before they arrive.

### Set Clear Checkpoints

Many undergraduates will be happy to work independently once you have trained them, but that does not mean you should set them loose with absolutely no structure. You will likely have a much more productive relationship with the student if you give them some deadlines to motivate them and mark their learning progress.

### Be Organized

Make sure that your undergrad(s) know how to contact you, who to ask for help if they cannot find you, and where to find important information. It is useful to type up protocols and put them in a designated binder so everything the undergrad needs is in one place. Make sure to set up a way for the student to log his or her work and work with them to make sure their records are clear. If you need to collect notes or data from the undergrad, set up a system for exchanging information. DukeBox

(<https://duke.app.box.com/login>) can be a very useful tool for keeping track of and transferring data files and information.

## **Share the Background**

The best undergrads want to understand what they're doing. Take the time to explain your project and why they do each experiment. This will help them succeed and develop as scientists; just telling them to pipet things or do dishes with no clear reason will not. If your professor is ok with it, you can invite your undergrad to attend lab meeting or reading group so they can learn more about the field they are working in. Giving the students opportunities to present about the project they worked on to the rest of the lab can be great too- the other members of the lab like to find out what they have been doing and the student gets to intellectually engage more with their work. size 12, font Trebuchet.

## **Build Good Communication**

This should go without saying and is covered in the other advice topics here, but it is very important! Also, don't be afraid to be honest if a student is not meeting expectations.

# DISSERTATION TIMELINE AND CHECKLIST

## One Year Prior to Defense

Check Graduate School Requirements

- <https://gradschool.duke.edu/academics/academic-policies-and-forms/phd-degree-requirements>

Check Departmental Requirements

- Biology: <https://biology.duke.edu/graduate/phd-requirements>
- Check with your DGSA if you're in other programs

Let your advisor know you're planning on graduating

- Seriously, talk about it even though you don't feel like you're ready. Put it in your advisor's head that you're even considering it. Just say "What would I need to do to graduate in a year."

Decide whether a one-year graduation is feasible and reassess

Consider your TA schedule for the next year and adjust accordingly

Write down the FOUR important deadlines for graduating: applying through ACES, initial submission to ProQuest, Defense, and final submission to ProQuest

- <https://gradschool.duke.edu/academics/preparing-graduate/graduation-deadlines>
- Note, the deadlines are actually much sooner than you might expect.

Start thinking of your research as chapters and begin writing.

Print out a copy of the dissertation guide (or keep the digital copy handy)

- <https://gradschool.duke.edu/sites/default/files/documents/ElectronicThesisDissGuide.pdf>

Try out the Graduate School's dissertation template

- <https://gradschool.duke.edu/academics/theses-and-dissertations/etd-technical-help>

START WRITING or converting papers to chapters.

## Six Months to Go

Check that all defense committee members are listed on ACES

### **SCHEDULE COMMITTEE FOR DEFENSE**

- Ideally, do this before the semester begins. Professors tend to fill up their schedules once the semester starts.

Announce your plans to friends and family.

- Sometimes public statements are better motivators than deadlines

Double check that you satisfy graduate and departmental requirements

- This could be the last semester you have to fix any issues with TA, RCR, minor credits, etc.

Write.

Write.

Revise.

Write.

Ask people for copies of their dissertations or find them online at ProQuest.

- It's good to have a few references for things like what sections you need, what does an intro/conclusion chapter look like, where do figures/tables go, and other general questions.

## Three Months to Go

Double check committee is correct, and fix if necessary

### APPLY FOR GRADUATION THROUGH ACES

- No harm in applying early, no penalty for applying and not graduating in anticipated term. If you don't graduate in anticipated term, you must apply for graduation through ACES again.

Notify friends and family to begin planning their trips to see you

Get feedback from your committee on chapters if they're willing to look at it

- The more you can anticipate their thoughts, the smoother the defense will go
- At the very least, get feedback from your advisor

Remind yourself of your dissertation submission deadline (less than 3 months from now)

- Important to always keep these deadlines in sight

Schedule room for defense

Schedule room for public seminar

- Note: no committee members are required to be at your seminar (helps with scheduling) and seminar **MUST** happen before defense. This can be the day of, or days before.

## One Month to Go

Check dissertation for formatting. Need to make sure everything conforms to the guideline's standards

Send your completed dissertation to your advisor **TWO WEEKS** before the deadline of initial submission to ProQuest

- Advisor must approve of dissertation before submission to ProQuest. 2

weeks gives you enough time to make any change as necessary

Ask DGSA for a departmental defense announcement

- See dissertation guideline doc

Ask advisor for a letter to the graduate school



- See dissertation guideline doc

## Two Weeks to Go

### **SUBMIT DISSERTATION TO PROQUEST**

- <http://www.etdadmin.com/cgi-bin/school?siteId=17>

Wait for the graduate school to email you with formatting revisions

Schedule an Exam Card appointment with the person who checked your submission

- <https://examcard.gradschool.duke.edu/grad.html>
- You'll meet with a staff member and receive all the forms you need to have signed. They'll walk you through what things you need to do and when you need to have them done by. Do this ASAP. Don't lose the things they give you.

### **PRINT OUT A COPY OF DISSERTATION TITLE PAGE**

### **PRINT OUT A COPY OF THE DISSERTATION ABSTRACT TITLE PAGE**

Work on seminar talk and get as much feedback as possible

Email your committee and remind them when and where your defense is

## One Week to Go

Email your committee and remind them when and where your defense is

Read through dissertation to keep things fresh

Work on talk

## One Day to Go

Email your committee and remind them when and where your defense is

### **SLEEP WELL**

## Defense Day!

Defend

### **GET EXAM CARD SIGNED BY COMMITTEE**

### **GET DISSERTATION TITLE PAGE SIGNED BY COMMITTEE**

- They may opt to sign this page only after seeing revisions of manuscript

**GET DISSERTATION ABSTRACT TITLE PAGE SIGNED BY COMMITTEE**

- They may opt to sign this page only after seeing revisions of manuscript

**SLEEP**

## One Week Out

GIVE EXAM CARD TO DGSA for DGS signature

Get advisor to sign Duke Licensing Agreement

Do the online SED survey and print out certificate of completion

Return all required signed documents to the graduate school ASAP

- Exam card, licensing agreement, signed title page, signed abstract page, SED completion certificate

## Two Weeks-One Month Out

Submit final version of dissertation to ProQuest

Email graduate staff member to confirm submission is final

You did it, Doctor.

## Commencement and Hooding Ceremony Links

<https://gradschool.duke.edu/student-life/calendar-events/commencement/phd-hooding-ceremony>

<https://commencement.duke.edu/commencement-ceremony>

[http://www.jostens.com/apps/store/packageBrowse/1052074/Duke-University/Graduation-Announcements/colpga\\_1052074\\_16/CATALOG\\_COLLEGE/](http://www.jostens.com/apps/store/packageBrowse/1052074/Duke-University/Graduation-Announcements/colpga_1052074_16/CATALOG_COLLEGE/)

# RESOURCES FOR PERSONAL AND PROFESSIONAL ISSUES ON CAMPUS

## Reporting Harassment, Discrimination, and Other Concerns: An Interactive Guide for Graduate School Students

The Graduate School developed an interactive guide to help students navigate where they can report harassment, discrimination, and other concerns. If you are experiencing personal or professional issues and are not sure where to go, this is a good first step: <https://projects.gradschool.duke.edu/reporting/>

## DGS and DGSA

You are encouraged to contact the Department's Director of Graduate Studies (DGS) and Assistant to the Director of Graduate Studies (DGSA) in the event of any personal or professional issues. A list with the current DGS and DGSA by department is available here: <https://gradschool.duke.edu/academics/director-graduate-studies-manual>.

## Sexual Misconduct Prevention and Response

In addition to the *Sexual Assault Prevention for Graduate Students (SAPG)* required for all incoming graduate students ([https://admin.fifoundry.net/duke\\_university/sign\\_in](https://admin.fifoundry.net/duke_university/sign_in)), further training programs are offered by the Office of Gender violence Prevention and Intervention in the Women's center. More information on the available programs and schedule can be found on the following page: <https://studentaffairs.duke.edu/sexual-misconduct-prevention-and-response/make-a-difference/available-training>

## Duke Student Affairs

(<https://studentaffairs.duke.edu/>)

Student Affairs provides programs and services that support the optimal growth of Duke students, enhance their intellectual, social, cultural and physical development, and complement Duke's academic excellence by providing opportunities for students to experience education and explore interests beyond the classroom. Student Affairs houses several departments including DukeReach, Counseling and Psychological Services (CAPS), and Gender Violence Prevention and Intervention, which are outlined below.

## DukeReach

(<https://studentaffairs.duke.edu/dukereach1>)

DukeReach provides outreach services to students in need. DukeReach works with departments and groups across campus to direct students to resources available for managing all aspects of wellbeing, such as Housing, CAPS, Student Health, community health providers, and the Academic Resource Center. In addition, they provide case management services including coordination, advocacy, referrals, and follow-up services for students who are experiencing significant difficulties related to mental health, physical health, and/or psycho-social adjustment.

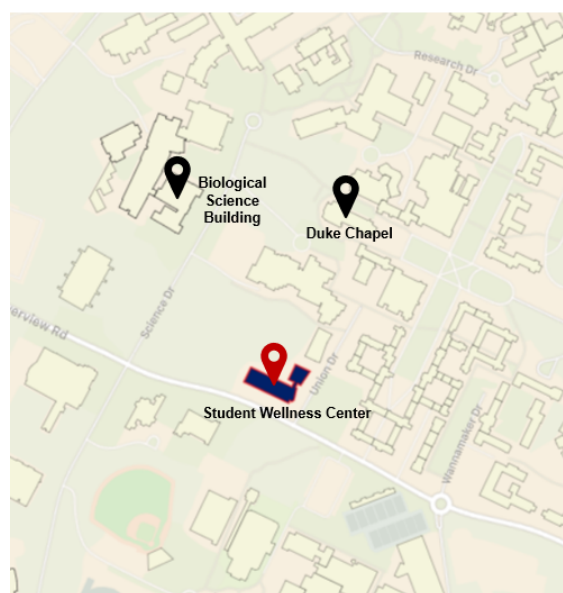
## Duke Counseling and Psychological Services (CAPS)

(<https://studentaffairs.duke.edu/caps>)

Counseling and Psychological Services is a short-term care clinic for Duke undergraduate, graduate, and professional students. They offer services such as brief individuals counseling/psychotherapy, consultation, and couples and groups counseling. Staff include psychologists experienced in working with college-age adults. CAPS may also assist with referral to a longer term or more specialized type of care offered by community providers.

CAPS offers a variety of programs and workshops geared towards students' everyday lives such as "Putting off Procrastination" and "The Stress of Pursuing Success" on campus. The CAPS website also provides several self-help resources for students to gain a better understanding of their mental health.

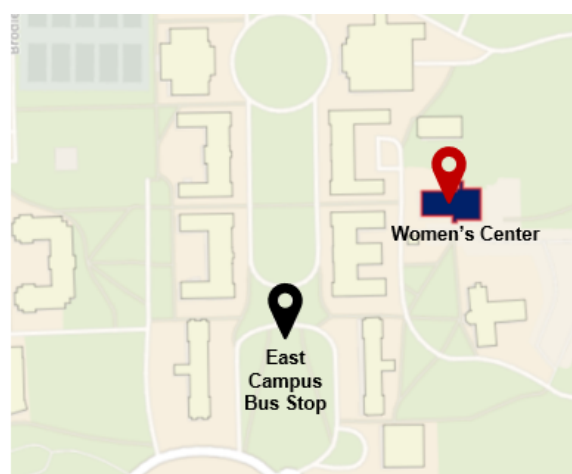
To schedule an appointment, students can call (919) 660-1000 and inform the receptionist that they would like to schedule an "initial assessment" appointment.



## Gender Violence Prevention and Intervention

(<https://studentaffairs.duke.edu/wc/gender-violence>)

Support for victims of gender violence can be found through the Duke University Women's Center. Gender violence includes sexual violence, intimate partner violence, stalking, cyber sexual harassment and sexual harassment. The Women's Center provides confidential assistance and support for gender violence victims.



through counseling, medical care accompaniment, and legal accompaniment. Appointments are not necessary. The Women's Center is located at 001 Crowell Building, on Duke's East Campus or can be reached by phone at 919-970-2108.

## **Student Disability Access Office**

(<https://access.duke.edu/students>)

The Student Disability Access Office (SDAO) strives to create an inclusive community and ensure that all students with disabilities are provided the tools they need to fully access all aspects of student life inside and outside of the classroom including individual services, implementing and evaluating service programs, and providing educational and resource support to the campus community.

## **Office of Graduate Student Affairs**

(<https://gradschool.duke.edu/student-life/tell-us-what-you-need>)

The Office of Graduate Student Affairs (GSA) works with students, faculty, and other campus offices to develop programs, resources, and services to meet our graduate students' needs in areas such as health, safety, childcare, mentoring, and professional development. We also work to address the needs of students from various ethnic backgrounds, international students, women, LGBTQ, students with disabilities, and other groups.

## **Rapid response plan for harassment by a visitor (e.g., seminar speaker, prospective student, etc.)**

Visiting speakers are usually professional and courteous, although there have been situations in the past in which speakers have harassed graduate students during meetings. If you have been criminally assaulted or harassed you may choose to submit a report to the Duke or Durham Police Departments. You may also choose to report harassment to a number of agencies on campus (listed below), to the departmental chair, DGS, and/or to the departmental administrator. Understandably, students may feel overwhelmed at the prospect of reporting inappropriate behavior and may fear reprisal because threat of reprisal is implicit in the nature of harassment. (According to the Duke University Sexual Harassment Policy, harassment occurs when unwelcome verbal or physical conduct, because of its severity and/or persistence, interferes significantly with an individual's work or education, or adversely affects an individual's living conditions. Harassment also occurs when a person uses a position of authority to engage in unwelcome sexual advances, requests for sexual favors, or other verbal

or physical conduct of a sexual nature. See:

<http://studentaffairs.duke.edu/conduct/z-policies/harassment>)

This document provides a list of suggestions to guide students and seminar organizers in the event of visiting speaker misconduct. It is important that new and current students are aware of the resources available to them in these situations.

## For seminar organizers

Prior to arranging a visit for an outside speaker, contact faculty in the visitor's research area and ask if the potential visitor is a good choice for giving a seminar and interacting with faculty and graduate students.

*As the student host, make it clear that you are the primary contact for students who have meetings with the speaker. Provide your contact information on the final schedule and/or in an email to all those involved in the speaker's visit.*

## If someone reports a problem with a visiting speaker

1. Ensure that the student has the information in this document and ask what they would like to do (some options are outlined below). The first priority is making them safe and preserving their options.
2. Contact the seminar coordinators and/or departmental administrators as soon as possible. **Please be aware that faculty are not confidential sources, and are obligated to report the incident to the Office for Institutional Equity (OIE). Please view the resources below for more information on confidential and non-confidential sources.** An informal conflict resolution, such as changing the speaker's schedule, neither requires nor precludes a formal action or investigation.
3. Evaluate options for protecting other students on the speaker's schedule. The best course of action may be to modify the speaker's schedule.

## Possible responses to harassment by a visiting speaker

Depending on the situation, different modifications to the speaker's schedule may be appropriate. Some interventions might identify the complainant either within the department or to the visitor, so proceed in accordance with the complainant's wishes while also minimizing risk to other students. Some interventions would best be accomplished with the cooperation of the department chair or DGS. Some options include:

- Combine meetings so no graduate student is left alone with the speaker. In addition, make sure that there is more than one person in the car when driving the speaker to/from hotels, meals, and the airport. (Please note: it is not appropriate to respond in a discriminatory manner. If it is potentially unsafe for

some students to meet with the speaker, then treat all students as equally at risk.)

- Inform all students on the speaker's schedule that there has been an allegation of harassment; ask if they would still like to meet with the speaker and, if so, what conditions would make them feel comfortable (e.g. keep the meeting, arrange/join a group meeting, choose a meeting location that makes them feel safe).
- Cancel the speaker's remaining appointments with students.
- Terminate the speaker's visit. Return them to their hotel room and arrange taxi service to the airport for their return flight. The Department of Biology faculty have committed to protecting students in this way. In this case, the executive committee of the department will ask the speaker to leave or take other steps to meet the complainant's wishes and protect other students as necessary.
- OIE has offered that they are willing and able to lodge a complaint with the speaker's home institution if the complainant wishes.

For more information about informal conflict resolution, refer to page 7 of Duke University's Harassment Policies and Procedures.

## Resources for information, counseling, and reporting relating to harassment

**Duke Harassment Policies are available here:**

<https://oie.duke.edu/harassment>

This site explains what is considered to be harassment, , policies and procedures for registering a grievance at Duke, and instructions on how to file a complaint. They outline several options for reporting and mediation.

### *Confidential Resources:*

**Duke Counseling and Psychological Services (CAPS):**

<http://studentaffairs.duke.edu/caps>

This is a confidential resource, but see exceptions here:

<https://studentaffairs.duke.edu/caps/about-us>

**Duke Women's Center:**

<https://studentaffairs.duke.edu/wc/gender-violence/sexual-assault-and-rape>

If you are a student at Duke University (of any gender) and are a victim of gender violence, you can utilize resources at the Women's Center: Monday-Friday, 9am-5pm: call 919-684-3897, email WCHelp@duke.edu, or walk in - no appointment necessary.



**Women's Health Services:**

After-hours, weekends, holidays: call 919-970-2108 or email  
WCHelp@duke.edu.

**Duke Student Health:**

<http://studentaffairs.duke.edu/studenthealth>

***Non-confidential resources:***

*While you may go to any faculty member to report or discuss a situation, please note that all faculty are mandatory reporters of harassment.*

**Departmental Administrator:**

Randy Smith (919) 998-9411 rrsmith@duke.edu

**Departmental Chair:**

Emily S. Bernhardt (919) 660-7318 [emilybernhardt@duke.edu](mailto:emilybernhardt@duke.edu)

**Ombudsperson:**

Ada Gregory in the Office of Interdisciplinary Programs (email: [ada.gregory@duke.edu](mailto:ada.gregory@duke.edu) phone: 919-660-2444) is the ombudsperson serving students at Duke, providing private or confidential discussion, referral to resources, mediation, and other help for conflict resolution.

*\*Please note that ombudsperson confidentiality does not extend to criminal acts, including sexual harassment or assault. However, there are options for private reporting, including anonymous "shuttle diplomacy."*

**• Office for Institutional Equity:**

<https://oie.duke.edu/>

This office handles all issues of diversity with respect to gender, race, nationality, sexual orientation, etc., including harassment, discrimination, and title IX complaints. Anyone can consult directly with the Office for Institutional Equity for guidance at (919) 684-8222. OIE says they will not escalate a report further than the complainant wants.

**• Duke Office of Student Affairs:**

<https://studentaffairs.duke.edu/>

This office provides information about campus resources available to you and how to best contact these resources. For general information on the services they provide, visit the site online:

For specific issues such as emergencies, student welfare, gender violence, and biases, see a list of contacts and resources at:

<https://studentaffairs.duke.edu/get-help-student-affairs>

# PROFESSIONAL DEVELOPMENT OPPORTUNITIES

Duke's Graduate School has several professional development programs that focus specifically on teaching. [Here](#) is a link to the website.

## Preparing Future Faculty (PFF)

<https://gradschool.duke.edu/professional-development/programs/preparing-future-faculty>

PFF Fellows visit non-R1 teaching institutions at several locations in Raleigh, Durham, Greensboro, and Elon. At each visit Fellows tour the facilities and interact with faculty and administrators to get a feel for the culture and expectations unique to each institution. Each Fellow is also assigned a Mentor at one of the institutions. Fellows and Mentors meet several times throughout the year to get additional personalized career guidance and professional development opportunities. For example, past fellows have attended education conferences, audited two classes, and have been invited to teach guest lectures or even semester-long courses. Mentors often stay in touch with Fellows after PFF, and can be a great connection for adjunct faculty positions.

## Certificate for College Teaching (CCT)

<https://gradschool.duke.edu/professional-development/programs/certificate-college-teaching>

The CCT requires that you take at least two courses and participate in a Teaching Triangles peer review of classroom teaching techniques. The Graduate School (GS) offers a whole list of eligible classes. Occasionally you can cross-list a department-specific offering, such as "Teaching College Biology," but there are also regularly-offered GS courses that help you design a syllabus, an online course, etc., etc.

## Bass Instructional Fellowships

<https://gradschool.duke.edu/professional-development/programs/bass-instructional-fellowships>

### Instructor of Record

Design and teach your own undergraduate course

### Online Apprentice

Coursework and experience in online teaching technologies

## Traditional teaching assistant

Not generally an option for Biology students, because the department provides TA-ships. However, this could be very useful if you are in a program that does not provide teaching experience.

## Informal workshops and seminars

Even apart from these three long-term commitments, the Graduate School also sponsors several workshop series and recurring lunch-time seminars. Graduate students are informed about these opportunities through frequent emails and newsletters sent directly from The Graduate School.

## Professional Development Series

Workshops and talks focus on a specific range of topics that rotate on a two-year cycle.

<https://gradschool.duke.edu/professional-development/programs/professional-development-series>

## Teaching IDEAS

Annual workshop series; speakers draw on their experiences relevant to classroom teaching, dealing with students, or faculty life and career paths.

Many of these offerings have synergistic overlap. For example, many skills learned in Teaching IDEAS workshops can be applied in the classroom during departmental or Bass Fellowship teaching. Teaching Triangles peer review (for CCT) can be completed while you are teaching during a TA-ship or a Bass Fellowship.

# LIFE IN DURHAM (& THE TRIANGLE)

## Eat and Drink

An expansive list of restaurants and bars can be found below. Here are a few Biograd favorites from a 2021 poll:

### Top Places BioGrads Go for a Quick, Cheap Meal (updated 2020-21)

1. Guasaca
2. Mi Calvillo
3. Chicken Bee
4. Sister Liu's Kitchen
5. Heavenly Buffaloes

### For a Sit-Down Meal, BioGrads Go To...

1. Pompieri
2. Guglhupf
3. Monuts
4. M Kokko
5. Gonza

### Favorite BioGrad Places for a Fancy Meal or Special Occasion...

1. Juju
2. Gocciolina
3. Mothers and Sons
4. M Sushi
5. Vin Rouge

### Favorite BioGrad Places for Dessert...

1. The Parlour
2. Mapleview Farm
3. Locopops
4. Guglhupf
5. Pincho Loco

### Top BioGrad Places For A...

...Casual Drink with Friends

1. Surf Club
2. Dain's
3. Ponysaurus
4. Bull City Ciderworks
5. Fullsteam

## ...Outdoor Drink When the Weather is Nice

1. Bull McCabe's
2. Motorco
3. Ponysaurus
4. Ciderworks
5. Flying Bull Brewery

## ...Fancy Cocktail

1. Alley Twenty Six
2. Durham Hotel Rooftop Bar
3. Bar Virgile

## Coffee

### On Campus

Dolce Vita (in the French Family Science Center)

Beyu Blue (<https://studentaffairs.duke.edu/dining/beyubluue> - in Bryan Center)

Nasher Museum Cafe ([http://www.nasher.duke.edu/museum\\_cafe.php](http://www.nasher.duke.edu/museum_cafe.php) - in Nasher Museum)

Saladelia @ The Perk ( Perkins Library)

Twinnie's (in the CIEMAS Engineering Building) Serves Starbuck's Coffee

Gross Hall, 2<sup>nd</sup> Floor (Espresso and coffee machine for free!)

### Off Campus

Cocoa Cinnamon (<https://littlewaves.coffee/> - 420 W Geer St. Durham) Coffee shop in the Rigsbee/Foster area - open later than most other coffee shops!

Cocoa Cinnamon II - (2627 Hillsborough Rd., Durham) The new Cocoa Cinnamon Location

Guglhupf (<http://www.guglhupf.com> - 2706 Durham-Chapel Hill Blvd.) German Bakery / Café with great Sunday brunch

Mad Hatter's (<http://www.madhatterbakeshop.com> - 1802 W Main St.)

Monuts (<http://www.monutsdonuts.com/> - 1002 9<sup>th</sup> St., Durham) Coffee, biscuit and bagel sandwiches, and DONUTS!

Triangle Coffee House (<https://www.trianglecoffeeshop.com/> - 714 9th St.) Lots of seating downstairs

Cloche Coffee (<https://www.clochecoffee.com/> - 721 Broad St.) Outdoor seating, aesthetic interiors, and plants

The Oak House (<https://oakhousedurham.com/> - 126 W Main St.)

Jeddah's Tea (<https://www.jeddahstearoom.com/> - 123 Market St. Suite A)

Fosters Market (<http://www.fostersmarket.com> - 2694 Durham-Chapel Hill Blvd.)

Loaf - (111 W. Parrish St, Durham)

Open Eye Café (<http://www.openeyecafe.com> - 101 S. Greensboro St, Carrboro)

Parker and Otis (<http://www.parkerandotis.com> - 112 S. Duke St.)

**Panera Bread** (<http://www.panerabread.com> - 9<sup>th</sup> Street)

**Café Driade** (<http://www.caffedriade.com> - 1215 E. Franklin St., Chapel Hill)

**Counter Culture** (<http://www.counterculturecoffee.com> - no coffee shop, but this nationally-renowned roaster/importer is based in Durham and has free “cuppings” for you to learn about coffee and taste their selection - like a wine tasting but for coffee!)

**Ninth Street Bakery** (<http://www.ninthstbakery.com/> - 136 E Chapel Hill St.) - bakery that also serves down-home brunch, good coffee

**Namu** (5420 Durham-Chapel Hill Blvd.) - cafe serving Korean food and craft coffee! Tons of tables and outdoor seating in the garden. Also has an attached beer hall.

## Food

### BBQ

**The Pit** (<https://thepit-durham.com/> - 321 W. Geer St. Durham) - Famous Triangle BBQ

**Chamas** (<http://www.chamas.us> - Brightleaf Square) Brazilian steak house - this is the Brazilian version of barbecue - be prepared to gorge on meat, check prices before going

**Hillsborough BBQ Company** (<https://hillsboroughbbq.com/> - 236 S. Nash St., Hillsborough)

**Hog Heaven BBQ** (<http://www.hogheavenbarbecue.com> - 2419 Guess Rd)

**Allen and Sons** (6203 Millhouse Rd, Chapel Hill) Pit-cooked BBQ

**BBQ Joint** (630 Weaver Dairy Rd, Chapel Hill) NC style BBQ

**The Original Q-Shack** (<http://www.theqshackoriginal.com/> - 2510 University Dr., Durham)

**Bullock's BBQ** (<http://www.bullocksbbq.com/> - 330 Quebec Drive, behind the Rite Aid at intersection of Lasalle St. & Hillsborough Rd. in Durham)

### Mexican

**Torero's** (<http://www.torerosmexicanrestaurants.com> - 2 locations: 800 W Main and 4125 Durham-Chapel Hill)

**Cosmic Cantina** (1920 Perry St.)

**Mi Calvillo** (748 9th St.)

**Supertaqueria** (2842 N Roxboro St)

**El Cuscatleco** (<http://www.elcuscatleco.com> - 4212 Garrett)

**Carrburritos** (<http://www.carrburritos.com> - 711 W. Rosemary St., Carrboro)

**Azteca Grill** (1929 Chapel Hill Rd)

**La Tiendita II** (1915 #B Chapel Hill Rd.) - Bodega with a small restaurant area that has pupusas!

**Taqueria La Vaquita** (<http://lavaquitanc.com> - 2700 Chapel Hill Rd., 3409 Hillsborough Rd.)

**Dos Perros** (<http://dosperrosrestaurant.com/> - 200 N. Mangum, Durham)

### Asian

**Thai Café** (<http://www.thaifenc.com> - 2501 University Dr.)

**Bahn's Cuisine** (750 9<sup>th</sup> St.) Vietnamese food - go on Wednesday or Saturday to get the specials. Closes at 8pm!

Lantern (<http://lanternrestaurant.com> - 423 West Franklin Street, Chapel Hill)

Sushi Blues (<http://www.sushibluescafe.com> - 301 Glenwood Ave, Raleigh)

Waraji Japanese Restaurant (5910 Duraleigh Rd., Raleigh)

Shiki Sushi (<http://www.shikisushionline.com> - 105 W NC Highway 54) Buy one get one free!

Neo-China (<http://www.neo-china.com> - 4015 University Dr.)

Pho & Poké (<https://www.phopokehouse.com/> - 2816 Erwin Rd.)

Twisted Noodles (<http://www.twistednoodles.com> - 4201 University Dr.)

China Palace (<http://www.mychinapalace.com> - 5210 Garrett Rd.) Authentic Chinese from the specials menu!

Hong Kong (<http://www.hongkongdimsumindurham.com/> - 3003 Guess Rd.) Great Dim Sum

Dimsum Asian Bistro (<https://www.eastcoastasianbistrotogo.com/> - 5410 NC-55 Y)

Dashi (415 E. Chapel Hill St.) Ramen in Durham; also has an upstairs section for Japanese-inspired “tapas”

Rose's Noodles, Dumplings and Sweets (121 N Gregson St.)

Juju (<http://www.jujudurham.com/> - On 9<sup>th</sup> St.) Asian-inspired small plates

Pad Thai (2425 Guess Road) Good, cheap Thai food that's great for take-out

Gourmet Kingdom (<http://www.thegourmetkingdom.com> - 301 E. Main St. Carrboro)

Szechwan Chinese, family style portions, deliciously spicy!

Thai Spoon (3808 Guess Road, Suite G. Durham) Pretty new Thai place getting rave reviews!

## Indian

Sitar (<http://www.sitarindiapalace.net> - 3630 Durham Chapel Hill Blvd) Decent bountiful lunch buffet and better à la carte dinner

Dale's Indian Cuisine (<http://www.dalesindiancuisine.net> - 811 9<sup>th</sup> St.)

Spice and Curry (2105 E NC Highway 54)

Udupi Café (590 E. Chatham St., Cary) Vegetarian

Vimala's Curryblossom Cafe (431 W Franklin St., Chapel Hill)

Kashmir (2511 Durham Chapel Hill Blvd.)

The Tower (144 Morrisville Square Way, Morrisville) The best Indian places are in Cary, where there is a huge Indian community

Biryani Maxx (<http://biryanimaxx.com/> - 590 E Chatham St., Cary NC) Yeah, it's in Cary, but

■ it's SO delicious and worth the drive

Cholanad (310 W. Franklin St., Chapel Hill) - South Indian fine-dining

Dharani (1000 Lower Shiloh Way #106) - South Indian food in Morrisville

Kathmandu Kitchen (1275 NW Maynard Rd., Cary) - Carries both Nepalese and Indian dishes. Good momos and great portion sizes!

## Fine Dining

**Vin Rouge** (<http://www.ghgrestaurants.com/vinrouge/vinrouge.html> - 737 9<sup>th</sup> St)

**Rue Cler** (<http://www.ruecler-durham.com> - 401 E Chapel Hill St.)

**Pulcinella's** (<http://www.pulcinellasdurham.com> - 4711 Hope Valley Rd., Durham)

**Nana's** (<http://www.nanasdurham.com/> - 2514 University Dr., Durham)

**Mateo bar de Tapas** (<http://mateotapas.com/> 109 W Chapel Hill St., Durham) SO GOOD!

**411 West** (<http://www.411west.com> - 411 W. Franklin St., Chapel Hill) Reasonably priced good Italian food

**Panciuto** (<http://www.panciuto.com/> - 110 S. Churton St., Hillsborough) In Hillsborough, worth the trek! Farm to fork, changing menu nightly. Extremely good. Call ahead if you are a vegetarian, they will make you a great meal too!

**Parizade** (<https://www.parizadedurham.com/> - 2200 W. Main St.)

**Mothers & Sons Trattoria** (<http://www.mothersandsonsnc.com/> - 107 W. Chapel Hill St.)

**Gocciolina** (<https://www.gocciolina.com/> - 3314 Guess Rd.)

**Cucciolo Osteria** (601 W. Main St. Suite C)

■

**Counting House** (111 Corcoran St.)

## Other

**The Parlour Ice Cream** (<https://theparlour.co/> - 117 Market St., Durham) In the Five Points district downtown. Best Ice Cream in Durham

**Pizzeria Toro** (<http://pizzeriatoro.com/> - 105 E. Chapel Hill St., Durham) Fancy pizza joint in the Five Points district downtown. Best Pizza in Durham

**Pompieri** ([http://www.pompieripizza.com/Pompieri\\_Pizza/Home.html](http://www.pompieripizza.com/Pompieri_Pizza/Home.html) - 102 City Hall Plaza, Durham) Cut your pizza with giant scissors.

**Mellow Mushroom** (<http://www.mellowmushroom.com> - 410 Blackwell St., Durham, American Tobacco District)



Randy's pizza (<http://www.randypizzartp.com> - Multiple locations in Durham) NY style pizza

International Delights (740 9<sup>th</sup> St.) Middle Eastern - no ketchup allowed! (well. maybe)

The Palace ([www.thepalaceinternational.com/](http://www.thepalaceinternational.com/) - 1104 Broad St.) Delicious African cuisine

Local Yogurt (<http://localyogurt.com> - several locations) For local, seasonal ingredients in frozen yogurt

Goodberry's (<http://goodberrys.com> - several locations in the triangle) for frozen custard

Loco Pops (<http://www.ilovelocopops.com> - several locations in the triangle) Also on campus!

Mapleview Creamery (<http://www.mapleviewfarm.com/pages/countrystore.html>) Near Chapel Hill

Elmo's Diner (<http://elmosdiner.com> - 776 9<sup>th</sup> St.)

Talullas (<http://www.talullas.com> - 456 W. Franklin St., Chapel Hill) Mediterranean

Queen of Sheba (<http://www.queenofshebachapelhill.com> - 1129 Weaver Dairy Road, Chapel Hill) Ethiopian

Dame's Chicken & Waffles (<http://www.dameschickenwaffles.com> - 317 W. Main, Durham)

Deli Edison - (630 Weaver Dairy Rd, Chapel Hill) Rumored to have the best (NY-style) bagels in the Triangle.

Bruegger's Bagels - (626 9<sup>th</sup> St., Durham) Decent bagels much closer by.

Luna (<http://lunarotisserie.com/> - 112 W. Main Street, Durham) Delicious Peruvian-Southern Fusion

Also check out this guide for Durham & Chapel Hill:

<http://spoonuniversity.com/eat-out/31-best-things-to-eat-in-chapel-hill-and-durham/>

## Food Trucks!

There are regularly "food truck rodeos" or food trucks that pop up around campus. Some of the more popular include:

- Parlez-vous Crêpe
- Kokyu (Korean BBQ)
- Only Burger
- Pie Pushers (pizza)
- Chirba Chirba (Chinese)
- Locopops (Mexican-style paletas)
- LoYo on the Go (local frozen yogurt outfit)

and lots more! see more at: <http://carpedurham.com/food-trucks/>

## Bars & Nightclubs

### Downtown Durham

- **Federal** (<http://www.thefederal.net> - 914 West Main St.) Surprisingly good food!
- **James Joyce** (<http://www.jamesjoyceirishpub.com> - 912 W Main St.) Irish Pub
- **Bull McCabe's** (427 W Main St.) Irish Pub. In the summer, has a huge amount of outdoor space in their fenced-in area. Try their Elizabeth burger.
- **West End Wine Bar & Billiards** (<http://www.westendwinebar.com> - 601 W Main St.) One side has a fancy lounge feel, the other is more of a bar with pool, shuffle-board, bocce, etc.
- **Alley 26** (320 E. Chapel Hill St.) Upscale cocktail bar, frequently has live jazz.
- **Arcana Bar and Lounge** (331 W. Main St.)
- **Bull City Burger & Brewery** (<http://bullcityburgerandbrewery.com> - 107 E. Parrish St., Durham)
- **Fullsteam Brewery** (<http://www.fullsteam.ag> 726 Rigsbee Ave., Durham)
- **Motorco Music Hall** (<http://motorcomusic.com> 723 Rigsbee Ave., Durham)
- **Geer Street Garden** - (<http://www.geerstreetgarden.com> 644 Foster St., Durham)
- **Surf Club** (703 Rigsbee Ave., Durham) Awesome outdoor patio
- **Shooters II** (827 W. Morgan St., Durham, NC) Bar complete with mechanical bull and suspended dance cage. Packed with undergrads on Wednesdays and Saturdays. Mostly grad students on Fridays.
- **Devine's Restaurant and Sports Bar** (904 W. Main St.) - Small bar and nightclub, packed with undergrads on Thursdays.
- **The Bar** (<http://thebardurham.com> 711 Rigsbee Ave., Durham) LGBTQ focused
- **Urban Axes Durham** (619 Foster St.)
- **Boxcar Bar & Arcade** (621 Foster St.)
- **Bar Virgile** (105 S Mangum St., Durham)
- **Ponysaurus Brewing** (<http://ponysaurusbrewing.com/> - 219 Hood St., Durham) Brewery with TONS of outdoor space. Affordable flights and scoops of snacks are \$1!
- **Bull City Ciderworks** (<http://www.bullcityciderworks.com/> - 113 S. Elizabeth St.)
- **The Durham Hotel Rooftop Bar** (315 E. Chapel Hill St., Durham) Classy rooftop bar

### Ninth Street/Broad Street

- **Green Room** (1108 Broad St.) Pool tables and shuffle board
- **Dain's Place** (<http://www.dainsplace.net>- 754 9<sup>th</sup> St., Durham) Great burgers and beer
- **The Tavern** (<http://www.thetaverndurham.com> - 1900 W. Markham) Darts, pool, etc...

### Off the Beaten (Durham) Path...

- **Top of the Hill** (<http://www.topofthehillrestaurant.com> - 100 E. Franklin St # 3, Chapel Hill)

■

## Top BioGrad Places For A...

...Casual Drink with Friends

6. Surf Club
7. Dain's
8. Ponysaurus
9. Bull City Ciderworks
10. Fullsteam

...Outdoor Drink When the Weather is Nice

6. Bull McCabe's
7. Motorco
8. Ponysaurus
9. Ciderworks
10. Flying Bull Brewery

...Fancy Cocktail

4. Alley Twenty Six
5. Durham Hotel Rooftop Bar
6. Bar Virgile

## “Hopping” Districts

### Durham

**American Tobacco District** (<http://www.american tobacco historic district.com> - roughly bordered by NC-147, Mangum St., Ramseur St., and Chapel Hill St.) Features stores, exhibits, the Durham Performing Arts Center and the Durham Bulls ballpark (<http://www.dbulls.com>)

**Brightleaf Square** (<http://www.historicbrightleaf.com> - Block of 900 West Main St. and surrounding area) Restored tobacco warehouses with plenty of stores, bars and restaurants

**9<sup>th</sup> Street** - (Between Duke's West and East campus) Many cafés, bars, restaurants and stores

**Five Points** - Between Brightleaf and American Tobacco District downtown (intersection of Main and Chapel Hill), near the Carolina Theater and Durham Arts Council, many new businesses and cafés have opened in the past 5-10 years, with more coming.

**Rigsbee/Foster** - Further north, a slew of brand new bars, bakeries, and breweries have sprung up in the area around Durham's popular Farmer's Market and Central Park.

### Outside Durham

**Franklin Street** - “That Street” in the college-towniest part of Chapel Hill, to which Durham doesn't quite have an answer. Many bars, restaurants, cafés, and people on the street. (15-20 minutes by car / 30 minutes from West Campus by hourly Robertson bus)

**Downtown Carrboro** - Where UNC's alternative crowd hangs: great coffee shops, music venues, thrift stores, and organic food. For some local character, hit up Open Eye café ([www.openeyecafe.com](http://www.openeyecafe.com)) and Weaver Street Market (<http://www.weaverstreetmarket.coop/>). (20-25 minutes by car)

**Downtown Hillsborough** - historic southern town with up-and-coming bars and restaurants. (20- 25 minutes)

# Shopping

## Books

- **Regulator Bookshop** (<http://www.regulatorbookshop.com> - 720 9<sup>th</sup> St., Durham)
- **Books DO Furnish A Room** (<http://www.booksdofurnisharoom.com> - 1809 W. Markham Ave.)  
Used books
- **Barnes and Noble** (<http://www.barnesandnoble.com> - 5400 New Hope Commons)
- **Durham Public Libraries** ([www.durhamcountylibrary.org/](http://www.durhamcountylibrary.org/))
- **Letters Bookshop** (<http://www.lettersbookshop.com/> 313 W. Main St., Durham) Nice used and new books in downtown Durham

## Music

- **Chaz's Bull City Records** (<http://www.bullcityrecords.com> 2600 Hillsborough Rd., Durham)
- **Schoolkids Records** (Franklin St., Chapel Hill)

## Farmer's Markets

- **Durham** (<http://www.durhamfarmersmarket.com> - 501 Foster St.) Saturdays 8am to 12pm (December through March 10am to 12pm) and Wednesdays 3:30pm to 6:30pm (May through September)
- **Duke Campus** 11:00 am - 2:00 pm, Friday afternoons through the end of July and alternate Fridays August 10 - September 24. Near the Bryan Research Center on Research Dr.
- **Chapel Hill** - Chapel Hill Farmer's Market (<http://www.thechapelhillfarmersmarket.com>) at 201 S. Estes Drive Saturdays 8am-12pm (organized by Eno River Market)
- **Southern Village Market** on Market St. Thursdays 3:30pm to 6:30pm (organized by Carrboro farmers market) and **Carrboro** (<http://www.carrborofarmersmarket.com> - 301 W. Main St) Saturdays 7am to 12pm and Wednesdays 3:30pm to 6:30pm
- **Hillsborough** (<https://www.hillsboroughfarmersmarket.org> - parking lot on NC86 and I-85) 8am to 12pm during the Spring and Summer months
- **Eno River Farmers' Market** (<http://www.enoriverfarmersmarket.com> - Downtown Hillsborough) Saturdays 8am to 12pm (April through Thanksgiving - 1<sup>st</sup> and 3<sup>rd</sup> Saturday of the month from 10am to 1pm rest of the year)
- **South Durham Farmers' Market** (<http://www.southdurhamfarmersmarket.org/> - 5410 NC-55) Saturdays 8am to 12pm
- **Raleigh** (<http://ncagr.gov/markets/facilities/markets/raleigh> - 1201 Agriculture St.) State farmers market, year round Monday through Saturday 5am to 7pm, Sunday 8am to 5pm. Website also has links to many other NC markets and to road-side pick ups, CSA, pick your own, etc.

## Grocery Stores

- **Whole Foods** (<http://www.wholefoodsmarket.com> - 621 Broad St., Durham)
- **Durham Food Co-op.** (<http://durham.coop/> - 1111 W. Chapel Hill St., Durham)
- **Trader Joe's** (<http://www.traderjoes.com> - 1800 E. Franklin St. # 29, Chapel Hill)

- Harris Teeter (<http://www.harristeeter.com> - 9<sup>th</sup> Street in Durham, and 3457 Hillsborough)
- Food Lion (<http://www.foodlion.com/> - 2 locations fairly close to campus: 2930 W. Main St. or 2000 Chapel Hill Rd., Durham) less expensive grocery chain
- Li-Ming's Global Market (3400 Westgate Drive, Durham, near Target off US15/501)
- Asian Market (<http://www.grandasiamarket.com> - 1253 Buck Jones Rd., Raleigh)
- Oriental Supermarket (3738 Durham Chapel Hill Blvd.) Much smaller, mainly imported processed foods and some produce
- La Vaquita (<https://lavaquitadurham.com> - 2700 Chapel Hill Rd.) Tienda operated by the taqueria
- Food World (401 E. Lakewood Ave.) - Mainly Korean and Mexican
- Little India (<http://www.littleindiastore.com> - 4201 University Dr.)
- Robinson's Tom Carolina Seafood (207 Roberson St., Carrboro) Place to get Sashimi Grade fish
- Produce Stand on Pickett Rd. and Chapel Hill Rd. - Right behind the La Vaquita, selling fresh produce from the area at cheaper than farmer's market prices

## Thrift Stores/Cheap Things for Your Home

- TROSA Thrift Store (3500 N. Roxboro St., Durham)
- Durham Rescue Mission (<https://www.durhamrescuemission.org/thrift-stores/>)
- Chapel Hill PTA Thrift Store (off Franklin St. next to Whole Foods; smaller, good for books, some housewares)
- Cause for Paws (off Saunders Street in Raleigh; adorable animals PLUS clothes, books, furniture)
- Habitat for Humanity REStore (off US15/501; furniture, housewares)
- Bargain Box (Raleigh, Cameron Village Shopping Center; good for women's clothes, including formal clothes)
- Salvation Army (Hillsborough Road)
- The Scrap Exchange - (<http://scrapexchange.org/> - 2050 Chapel Hill Rd.) Awesome reuse- arts center (think: craft/art/school/home improvement supplies) with a flea market, vintage sections, and small art gallery; also offers crafting classes and venue for kids' parties
- Classic Treasures (2659 Durham-Chapel Hill Blvd., Durham) Local consignment shop
- Duke List Like Craigslist for the Duke community only; use your NetID to log in
- The Free Table!! BioSci Basement Level, random assortment of free stuff
- Facebook Marketplace Groups: [Durham Community Swapping](#), [Durham County Buy Sell or Trade](#), [Durham County Yard Sale No Drama](#)

## Entertainment

### Festivals and Special Events

- Eno River Festival (<http://www.enoriver.org/Festival>) over 4th of July weekend - music, arts and crafts
- Beaver Queen Pageant (<http://beaverlodgelocal1504.org/>) Join local Durham residents for Peace, Love, and Beaver at the annual Beaver Queen Pageant in June in the Duke Park Meadow.
- Hopscotch Music Festival (<http://hopscotchmusicfest.com/>) Early September in Raleigh
- Art of Cool Fest - (<http://aocfestival.org/>) major jazz festival in Durham in Spring
- Merlefest (<http://www.merlefest.org>) Bluegrass in the spring
- Brickside Music Festival WXDU spring music festival, held on East campus
- Shakori Hills Festival (<http://www.shakorihills.org>) Music and dance festival in October
- Bull Durham Blues Festival (<http://www.bulldurhamblues.org>) September, Durham Bulls park
- Sanford Pottery Festival (<http://www.sanfordpottery.org>) First weekend in May

- World Beer Festival (<http://www.allaboutbeer.com/wbf/home.html>) Durham in October
- Centerfest (<http://centerfest.durhamarts.org>) Arts festival in downtown Durham
- Lazy Daze (<http://www.townofcary.org/depts/prdept/events/lazydaze/lazydazehome.htm>) Cary Arts and Craft fest
- American Dance Festival (<http://www.americandancefestival.org/>) At Duke and in Durham for 6 weeks each summer, mid-June to late July
- NC State Fair (<http://www.ncstatefair.org>) in Raleigh every October
- Retrofantasma (<http://www.carolinatheatre.org/onscreen/festivals.html>) Bi-weekly horror movies at the Carolina Theater (also hosts the Gay and Lesbian film fest mid-late August  
<http://www.carolinatheatre.org/ncglff/> and others)
- Full Frame Documentary Film Festival (<http://www.fullframefest.org>) In April
- Oval Park 4<sup>th</sup> of July Parade
- Durham Christmas parade
- GPSC Basketball Campout - 48 hours of camping on campus and drinking games only for gaining the right to enter a lottery for Basketball season tickets at Duke? Everybody does it
- Halloween Party on Franklin Street - Crazy party, beware! Police block entry after certain hours to reduce crowds, which number in the tens of thousands.
- NC Science Festival ([www.ncsciencefestival.org](http://www.ncsciencefestival.org) - downtown Raleigh) Every spring, science for all ages!
- Durham Arts Council - (<http://www.durhamarts.org/>) - find events or classes and workshops

## Live Music Venues

### Durham

- Duke Performances (<http://dukeperformances.duke.edu>) Several venues on campus, \$5-10 Student tickets are an awesome deal for a wide variety of shows throughout the year
- Duke Chapel - Free organ concerts throughout the year, as well as many others.
- Durham Performing Arts Center (<http://www.dpacnc.com> - 123 Vivian St., Durham) Wide variety
- Carolina Theater (<http://www.carolinatheatre.org> - 309 W Morgan St., Durham) Not just for movies, live music and shows as well.
- Music on the Lawn (<http://www.americantobaccohistoricdistrict.com>) Every Thursday evening in the summer.
- Motorco Music Hall (<http://motorcomusic.com> - 723 Rigsbeen Ave., Durham)
- Beyu Caffé (<http://beyucaffe.com/> - 335 W. Main St.) Good jazz venue with food and drinks

### Chapel Hill

- Local 506 (<http://www.local506.com> - 506 W. Franklin St.) Smallish place in Chapel Hill
- Carolina Performing Arts (<http://www.carolinaperformingarts.org>) UNC equivalent to Duke Performances, but without the student ticket benefit (for us)
- Nightlight (<http://www.nightlightclub.com> - 405 ½ W. Rosemary St.) Another small club in Chapel Hill, looks more like an underground café than a music venue
- The Cave - 452 ½ W. Franklin St. Go below street level to this tiny club that looks and feels almost like a real cave. Not for the claustrophobic.

## Raleigh

- **Lincoln Theater** (<http://www.lincolntheatre.com> - 126 E. Cabarrus St.) Nice concert venue in central Raleigh for not-huge national touring acts
- **The Pour House Music Hall** (<http://www.the-pour-house.com> - 224 S. Blount St.) Smaller venue with local and national acts in downtown Raleigh
- **Berkeley Café** (<http://www.berkeleycafe.net> - 217 W. Martin St.)
- **Walnut Creek amphitheater** (<http://walnutcreekamphitheatre.com/> - 3801 Rock Quarry Rd.) Nice amphitheater with large names on the bill every summer
- **The Ritz** - (<http://www.ritzraleigh.com/>) Rock venue in Raleigh
- **North Carolina Symphony** (<http://www.ncsymphony.org>)
- **Progress Energy Center for the Performing Arts** (<http://www.progressenergycenter.com> - 2 E South St.)
- **North Carolina Museum of Art** (<http://ncartmuseum.org/events/concerts.shtml> - 2110 Blue Ridge Road) Live music in an outdoor amphitheater during the summer

## Carrboro

- **Cat's Cradle** (<http://www.catscradle.com> - 300 East Main St.) Venue in a Carrboro strip mall
- **Carrboro Arts Center** (<http://www.artscenterlive.org> - 300 East Main St.) Same mall as the cat's cradle, but a sit-down venue

## Other

- **Koka Booth Amphitheater** (<http://www.boothamphitheatre.com> - 8003 Regency Pkwy., Cary) Another summer open air venue

## Cinemas

- **Duke campus, East and West** - various themed film series sponsored by Screen Society (<http://ami.duke.edu/screensociety>) or Freewater Presentations (<http://duke.org/movies/>). Most campus films are FREE! Screenings are usually in Griffith Film Theater in the Bryan Center on West Campus or White Lecture Hall on East, but may be in other locations, too.
- **Carolina Theater** (<http://www.carolinatheatre.org> - 309 W. Morgan St., Durham) 3 screens, large theater has shows and concerts as well
- **Chelsea Theater** (<http://www.thechelseatheater.com> - Timberlyne Shopping Center, 1129 Weaver Dairy Rd., Chapel Hill)
- **AMC Hanes 12** (<http://www.carmike.com/showtimes.aspx?fct=5&tid=110> - 1807 Martin Luther King Jr., Durham)
- **Rave Cinema Southpoint 17 + IMAX** (<http://www.streetsatsouthpoint.com/movies-> at Southpoint Mall, 8030 Renaissance Pkwy., Durham)
- **IMAX Theater at Marbles Kids Museum** (<http://www.imaxraleigh.org> - 201 E. Hargett St., Raleigh) 3D

## Museums and Art

- **Museum of Life & Science** (<http://www.ncmls.org> - 433 W. Murray Ave., Durham) Butterfly conservatory is awesome. Wednesday afternoons are free for Durham residents
- **Nasher Museum of Art** (<http://www.nasher.duke.edu> - 2001 Campus Dr., Durham)
- **Marbles Kids Museum** (<http://www.marbleskidsmuseum.org> - 201 E. Hargett St., Raleigh)
- **NC Museum of Art** ([ncartmuseum.org](http://ncartmuseum.org) - 2110 Blue Ridge Rd., Raleigh) good art museum with excellent travelling exhibits



- **NC Museum of Natural Science** ([naturalscience.org](http://naturalscience.org) - 121 W. Jones St., Raleigh) excellent museum that just opened a new wing
- **NC Museum of History** (<http://www.ncmuseumofhistory.org>- 5 E. Edenton St., Raleigh)
- **First Friday Gallery Walk in Raleigh** (<http://www.godowntownraleigh.com/first-friday-raleigh>) Walk around downtown Raleigh and duck into galleries and spaces open late to showcase lots of art!

## Dance

- **Montas International Lounge** (2223 E. US Hwy 54, Durham) Salsa dancing on Fridays.
- **American Dance Festival Samuel H. Scripps Studios** (721 Broad St., Durham)- newly opening venue for dance lessons for all ages.  
<http://www.americandancefestival.org/studios/ClassDescriptions.html#Adult>
- **Ninth Street Dance** (<http://www.ninthstreetdance.com/>) 920 ½ Perry St., Durham, across the hall from Cosmic Cantina

## Get Outside and Active!

### On Campus

- **Sarah P Duke Gardens** (<http://www.hr.duke.edu/dukegardens> - 426 Anderson St., Durham) Great for taking a walk, looking at the flowers and studying outside
- **Climbing Wall** -- Wilson Gym
- **On-campus gym** Weight-lifting room, cardio equipment, lots of exercise classes available to graduate students for free (BioGrads LOVE Yoga, spin, HIIT, and Muscle Pump classes!)
- **Pickup Basketball** Lots of pickup basketball around campus; an intense group plays Saturdays at East Campus, if you can handle them!
- **Al Buehler Running/Walking Trail** (<http://www.durham-nc.com/listings/Al-Buehler-Cross-Country-Trail/2131/>) About a three-mile loop around the Washington Duke Inn and Duke Golf Course; easily accessible from BioSci by jogging or walking down Science Drive

### Close to Durham/Triangle Area

- **Eno River State Park** (<http://www.ncparks.gov/Visit/parks/enri/main.php> - 6101 Cole Mill Rd., Durham) - Nice shorter hikes and the Quarry is great for swimming during the summer months (April through October)
- **Penny's Bend Nature Preserve** (<http://www.enoriver.org/what-we-protect/parks/pennys-bend/>) 84-acre nature preserve in the Durham Area
- **Little River Regional Park and Natural Area**  
([http://orangecountync.gov/departments/deapr/little\\_river\\_regional\\_park\\_and\\_natural\\_area.php](http://orangecountync.gov/departments/deapr/little_river_regional_park_and_natural_area.php)) Miles of hiking and biking trails, butterfly garden, picnic area
- **Falls Lake State Recreation Area** (<http://www.ncparks.gov/falls-lake-state-recreation-area>)
- **17-acre Wood Nature Preserve** (<http://www.ellerbecreek.org/explore/17-acre-wood.html>) 20 acres of floodplain forest near the Watts-Hillandale Neighborhood in Durham



- **Umstead State Park** (<http://www.ncparks.gov/Visit/parks/wium/main.php>) - 8801 Glenwood Ave., Raleigh)
- **Horton Grove Nature Preserve** (<https://www.triangleland.org/explore/nature-preserves/horton-grove-nature-preserve>) Hiking trails near Bahama, NC
- **Duke Forest** (<http://www.dukeforest.duke.edu>) - divided into 6 main tracks, plenty of trails for biking and hiking as well as picnic locations available for rent
- **Eno Rock Quarry** (<http://www.enotrails.com/quarry-trail.htm>) Great swimming hole on the Eno; beware though—in the summer, parking can be a nightmare
- **Occoneetchee Mountain State Natural Area** (<http://www.ncparks.gov/occoneetchee-mountain-state-natural-area>)—Not really a mountain, but nice hiking in the Hillsboro area
- **UNC Botanical Garden** (<http://www.ncbg.unc.edu>) - 100 Old Mason Farm Rd., Chapel Hill) - Nature trails plu.
- **Crabtree Park** (<http://www.wakegov.com/parks/lakecrabtree/default.htm>) - 1400 Aviation Parkway, Morrisville) - good for biking
- **American Tobacco Trail** (<http://www.triangletrails.org/ATT.HTM>) 22 miles of biking and running trails through Durham
- **Disc golf** - Two courses in Durham - Cornwallis Park and Valley Springs Park. Duke's East Campus also has a moveable course. Discs available at the Brodie Recreation Center.
- **Ultimate Frisbee** ([www.tfda.org](http://www.tfda.org)) - There are leagues throughout the year and many club teams in the area
- **Bike to Maple View Farms** (<http://mapleviewfarm.com/>) A nice, beginner-level bike ride can take you all the way from Durham to some delicious ice cream in Hillsborough
- **Pearl Mill Nature Preserve** (<http://www.ellerbecreek.org/explore/pearl-mill.html>) Part of the Ellerbee Creek Trail; a walking or jogging trail that can link Old West Durham and the Geer St. Area
- **Ellerbee Creek Trail** Walking or jogging trail that you can pick up near the Old West Durham neighborhood

## Day Trips

- **Raven Rock State Park** (<http://www.ncparks.gov/Visit/parks/raro/main.php>) - 3009 Raven Rock Rd., Lillington) - About 90 minutes South East of Durham
- **Uwharrie National Forest** (<http://www.fs.usda.gov/recarea/nfsnc/recarea/?recid=48934>); 2 hours
- **Pilot Mountain State Park** (<http://www.ncparks.gov/pilot-mountain-state-park>); 1.5 hours
- **North Carolina Zoo (Asheboro)** (<http://www.nczoo.org/>); 1.5 hours
- **Wilmington** ([http://www.wilmingtonnc.gov/quick\\_links/visitors.aspx](http://www.wilmingtonnc.gov/quick_links/visitors.aspx)) - Coastal town with great beaches and the NC Battleship, closest beaches to Durham; 2 hours
- **Hanging Rock State Park** (<http://www.ncparks.gov/hanging-rock-state-park>); 2 hours
- **Jordan Lake State Recreation Area** (<http://www.ncparks.gov/jordan-lake-state-recreation-area>); 30 minutes

## Weekend Trips in North Carolina

**Blue Ridge Parkway** (<http://www.blueridgeparkway.org>) Scenic drive connecting the Shenandoah and Great Smoky Mountain National Parks; 3-5 hours

**Smokey Mountain National Park** (<http://www.nps.gov/grsm>) In the Appalachian Mountains between North Carolina and Tennessee; 4-5 hours

**South Mountains State Park** (<http://www.ncparks.gov/south-mountains-state-park>); 3 hours

**Stone Mountain State Park** (<http://www.ncparks.gov/stone-mountain-state-park>) Hiking, camping, fly-fishing, rock-climbing; 3 hours

**Mount Mitchell State Park** (<http://www.ncparks.gov/mount-mitchell-state-park>); highest mountain east of the Mississippi; 4 hours

**Dismal Swamp State Park** (<http://www.ncparks.gov/dismal-swamp-state-park>); 3.5 hours

**Croatan National Forest**  
(<http://www.fs.usda.gov/recarea/nfsnc/recreation/natureviewing/recarea/?recid=48466&actid=63>); 3 hours

**Grandfather Mountain State Park** (<http://www.ncparks.gov/grandfather-mountain-state-park>); 3.5 hours

**Linville Gorge Wilderness** (<http://www.wilderness.net/NWPS/wildView?WID=319>); 3.5 hours

**Asheville** - Laid back, picturesque mountain town; good hiking, shopping, eating, and drinking; 4 hours

**Hot Springs, NC** The only natural hot springs in North Carolina, book a private hot spring soak for a really good price; about 20 minutes from Asheville

**Boone, NC** Smaller than Asheville, picturesque mountain town with good hiking, and an increasingly good bar and eating scene; 3 hours

**Sugar Mountain, Appalachian Ski Resort, or Beech Mountain Skiing!** 2.5 hours

**NC State Parks** ([http://www.ncparks.gov/Visit/parks/by\\_map/main.php](http://www.ncparks.gov/Visit/parks/by_map/main.php)) various locations

**National Parks in North Carolina** (<http://www.nps.gov/state/nc/index.htm?program=all>)

## Weekend Beach Trips

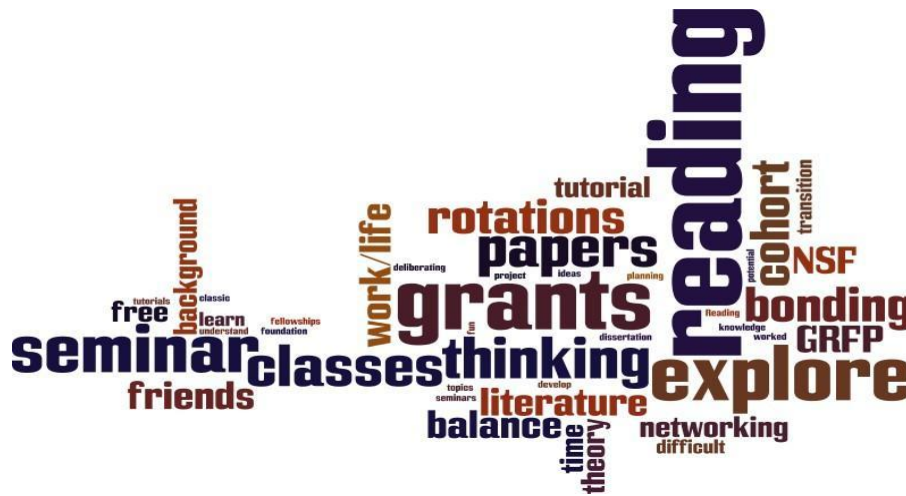
- **Hammocks Beach State Park** (<http://www.ncparks.gov/hammocks-beach-state-park>) Canoeing, swimming, camping; 3 hours away
- **Beaufort** Home of our Nicholas School Marine Lab, good beach town for lounging and swimming; 3.5 hours
- **Outer Banks** (<http://www.outerbanks.org/>) 200 mile long string of barrier islands off of the Northern NC coast; 5-7 hours depending on where you go
- **Kure Beach** (<http://www.visitkurebeachnc.com/>) Great beach to rent a house with friends; walking, swimming, lounging; 3 hours
- **Topsail Beach** (<http://www.topsailbeach.org/>) Great beach to rent a house with friends, dog friendly; 3 hours
- **Emerald Isle** (<http://www.emeraldisle-nc.org/>) Watch the sun set on the water, even on the East Coast! 3.5 hours
- **Harker's Island** Good for camping, fishing, boating, swimming; 3.5 hours
- **North Carolina Aquariums** (<http://www.ncaquariums.com/>) 3 locations on the NC coast

## Weekend Trips Outside of North Carolina

- **Roan Mountain, Tennessee** (<http://www.hikewnc.info/trailheads/pisgah-national-forest/appalachian-ranger-district/roan-mountain/>); 3-4 hours

- **Charleston, South Carolina** (<http://www.charlestoncvb.com/>) Fun town with good shopping, eating, and beaches; 4.5 hours
- **Savannah, Georgia** (<http://visitsavannah.com/>) Beautiful historic town, easy to explore on foot, and great food; 5 hours
- **Charlottesville, Virginia** (<http://www.visitcharlottesville.org/>) Mountain trails, dog friendly, fruit orchards, vineyards; 3 hours
- **Shenandoah National Park, Virginia** (<http://www.nps.gov/shen/index.htm>); 3-4 hours
- **Washington, D.C.** Museums, government, sight-seeing
- **Backpacking in North-Central Florida**; 8 hours

## First Year



*“Live with roommates your first year so you have some other folks to talk to at the end of the day. It can be lonely living alone.”*

## Form a support network; be prepared for emotional ups and downs...

*“It was definitely an emotional roller coaster”*

*“I found support in a variety of resources from friends back home and at Duke, to meeting with counselors at CAPS. By opening up to my advisor and DGS/DGSA, I was able to make executive decisions that made the remainder of the semester easier to manage. In other words, dropping a class won't be the end of your graduate career. Don't be afraid to ask for what you need. Everyone here wants to see you succeed.”*

*“I also spent a lot of time worrying about whether I had made the right decision to come to grad school, whether or not people actually liked me and wanted to be my friend, what I wanted to do with my life, and what research topics I would settle on. None of it really seemed to come together until close to the end of the first year, and by that time I felt fairly settled and supported both socially and in my lab. I think that it's really important for first-years to know that it is OK to feel like you're floundering a little bit; just keep trying and don't take things too seriously. Give yourself goals toward which you can make MEASURABLE progress.”*

## Learn new things by attending seminars, taking classes, and taking chances...

*“Academically speaking, there are a LOT of opportunities (journal clubs, seminars, tutorials)--try out anything that you think \*might\* be worth your time, especially if you are getting outside encouragement to do so (advisor, peers), but trust your gut if something doesn't feel like a worthwhile use of your time.”*

*“Talk to faculty about your ideas, and try lots of stuff. The more clearly you think, the more you read, the more stuff you try, the better it's going to be.”*

*“Don't be afraid to try things out of your comfort zone.”*

*“Explore the resources available. Go to a variety of seminars, workshops and journal clubs, and find the things that spark your interest. It'll also help you figure out what you want to work on for your dissertation.”*

## Read, read, read, read, read, read...

*“Don't freak out if you don't have a project- try to spend the year upping your knowledge of theory and relevant/classic literature for your interests”*

*“your job as a first year is to be a sponge. Soak up as much knowledge about your field and how people do science in it as possible. You don't have to be able to do it all right away! Start learning the pieces you will probably need and getting used to thinking about your field. Get familiar with the literature in your field- it is really important (if you are designing your own project from scratch) to know what has and has not been done already.”*

### **Try writing some small grant applications (or maybe even a GRFP)...**

*“Try writing grant applications, but don't worry if you don't get the grants- it's good practice at this stage.”*

*“Apply for small grants, so you have money and experience.”*

### **Enjoy having free time, and learn about work/life balance...**

*“Work hard to try to figure out a project, but there is no way this is going to take up all your time, so enjoy the free time while you have it.”*

*“work hard and do your best not to stress about starting a project. The more you understand the better your project will be.”*

*“I would advise a first year grad student to take time for themselves, establish a hobby, a routine that allows time for physical exercise and some activity with friends/fellow classmates as well as getting involved in departmental events/clubs. I think that in the first year it is very important to establish these habits so that you set yourself up well for having a happy/healthy graduate career.”*

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## Second Year



Focus in on a dissertation topic and collect preliminary data...

*“Try to focus in on a dissertation project and get some preliminary data.”*

*“Lay the foundation for your dissertation. This is the time to get preliminary data to show that what you want to do in your dissertation can actually work.”*

*“This is a good time to try things when it's not as high stakes.”*

*“Very few people have collected and/or are collecting data that will go into their final dissertation-most of it is still preliminary. Don't sweat it.”*

*“The focus of my research changed a lot between first and second year; this is normal. It means you shouldn't get too attached to anything your first year and that you should keep being open to new ideas. But you should also work on things as if they will matter down the line--no need to procrastinate the years away.”*

*“Have more than one project going: projects don't always work out.”*

Learn new techniques, make connections in the department...

*“Send emails and ask around to find out who is already using techniques you'd like to use. (Don't re-invent the wheel; get help if you can!) This can also put you in touch with faculty who would be good committee members.”*



## Form your committee...

*“I would advise students to be proactive in getting their committee set up and to have their first meeting in their spring semester so that they are poised to take their prelim at the start of their 3rd year.”*

*“Start asking prospective committee members early because popular ones will get taken and then decline yours. If your project changes substantially, you can change committee members out if necessary. Plan your first meeting early too, schedules fill up and trying to get 5 faculty members in a room at the same time is like herding cats.”*

## Think about taking your prelim exam early if you can...

*“I did my prelims in my second year, which I would recommend to others if they have enough preliminary data.”*

*“If you can, try to take your prelim at the end of this year - the earlier, the better!”*

*“I took my prelim in the second semester of my second year (partially due to advisor's sabbatical schedule) which I would recommend over third year. You are expected to have less data so it doesn't hurt you to do it sooner and it gives you more time to write a DDIG in the fall. Plus more feedback early on from your committee helps a lot.”*

*“The prelim can seem very daunting and mysterious, this is the time to try to develop good communication practices with your advisor and your committee members. getting advice early from them on your prelim ideas or document can be invaluable. Seek out other students in the department that are recently post-prelim to ask for formatting and editing advice.”*

## ...but don't rush it if you're not ready!

*“I took my prelims in my second year. Don't do that! I know I wasn't ready and my impression is most of us just aren't ready at that point. Even if research has gone pretty well up until then, I think it's hard to have enough background to think critically about putting together a cohesive thesis that makes sense given where it fits in the overall spectrum of research.”*

And keep up your support group and good work habits...

*“TALK TO YOUR FRIENDS (and older BioGrads) about your feelings and experiences. I think it is really common to feel like (even if you have made a lot of progress) you somehow are behind schedule in your second year, like you should have made more progress “by now.” Maybe that’s true and I’m actually just a huge slacker, but I get the impression that this sentiment is pretty common unless you’re steam-rolling through your dissertation. At least if you’re honest about your insecurities you will probably learn from others that you are not the only one experiencing some lapses of confidence.”*

*“Keep yourself on a schedule and communicate with your PI when you feel things need to be done.”*

*“Try to keep good habits up, because it starts becoming a little more overwhelming with preliminary exams. Also, try not to get sucked up in the stressful talk of prelim exams.”*

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## Third Year



Start to collect and analyze data that isn’t just preliminary...

*“This is when I finally started to feel a bit more settled in grad school in terms of feeling comfortable with my work load and the quality of my research.”*

*“Find your main project and really get going on it. Do not work on more than two projects, or you will be stretched thin.”*

“Start working on your project as early as you can. It will change over time, but this is not something you can rush last minute. Ask friends/lab mates/your advisor for help.”

### **Write grants...**

“Try to get a DDIG in (so in case you don't get it, you have more years to try) work on getting data for the dissertation, and don't worry if your plans change.”

### **Start writing...**

“Start writing up what you're doing even though you don't have the data yet. When I had my committee meeting at the beginning of 4th year, everyone wanted to know why I hadn't drafted up introductions and methods for manuscripts yet. Don't wait until you've finished analyzing data before drafting the chapter it will go in.”

### **Pace yourself and plan ahead...**

“Make sure to schedule committee meetings early- this is the most difficult part.”

“Have a clear road map for what you need to do to satisfy your dissertation goals. You still have time to try risky stuff and dabble in side projects, but you need to have a clear idea of what your advisor and your committee expect for you to graduate.”

“Start figuring out you want to do with your life. If you want an R1 job, start to familiarize yourself with what that kind of life looks like. If you're curious about something else, start asking people who have those jobs for advice. Find out what skills you need to secure the job you want and start developing them now.”

### **Motivate yourself during times of slump and BE KIND to yourself (you're halfway through!)**

“The post-prelim slump is a real thing. Try to be kind to yourself.”

“Do something productive everyday to get through the slump. Find motivation to keep you going through difficult periods. Research does not proceed in a straight line, and there are often twists and set-backs, focus on the wins and what you can do.”

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## Fourth Year



Keep on top of your own research and timeline...

*“My advice about the post-prelim committee meetings is to remember that most of your committee hasn't thought about your work for a year, so you have to remind them. Also, it is a chance for you to ask them questions about sticking points in your work, so prepare those questions. And if your adviser tells you that you don't need to prepare materials for the meeting, you probably shouldn't believe him or her.”*

*“This is a good time to re-evaluate where you are. Are you on track for your timeline? What needs to be done if not? It is important to do this on your own and then with your PI. Granted this is what committee meetings are for, but it's nice to do outside of the requirement too.*

*Time management has become essential.”*

Collect data, collect data, collect data, and work, work,  
work...

*“Really work on getting data for the dissertation, have solid ideas of what your chapters are, but don't be afraid to go with the flow.”*

*“Try and get as much research done so that you are not in the lab in your final years of grad school.”*

*“WORK WORK WORK. This is the year it all comes to a head. PLEASE stay sane and actually sleep.”*

*“This is the point at which I was staying in the lab until 8 or 9 most nights and coming in all weekend. The data was starting to happen, but was taking longer than I thought to come in. It was really demoralizing and I felt like I was never going to get anywhere. Don't despair--as long as you are making forward progress, the data starts to come together around now or in the next year!”*

### **Start to publish...**

*“My advice would be try to publish something by this point.”*

*“Try to be doing experiments that will go toward your dissertation, and see if you can start publishing by now.”*

### **STOP doing too many things outside of your dissertation research...**

*“Don't spread yourself too thinly with lots of side projects, or you'll always be distracted from your thesis research.”*

*“Try to sleep and take breaks.”*

### **Start to think about the future...**

*“Now is the time to focus on what your future career might be and start tailoring your skills and experiences to support that career goal. There is a lot of flexibility in what you can learn during your time in graduate school (in and out of the lab) make the most of the great resources and people here.”*

*“If you haven't already, figure out what you want to do with your life.”*

*“The world is big, with many opportunities! Look around and ask questions. Try to find the career path(s) that fit your interest(s), so you know all of your options.”*

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## Fifth Year



### Start tying up research projects...

*“Take some time to think hard about your project and what kinds of analyses make sense given what is already known about your topic. Analyze your data as quickly as possible so that you can think about it and reanalyze it as much as you need, to get at those interesting questions. If you don't have preliminary analyses done, you can't figure out what interesting questions your data can answer!”*

### Draw connections between projects...

*“Start thinking big picture, finish tying all your side projects together into a cohesive story.”*

### Publish, go to conferences, and practice talking about your research...

*“Publish and keep working on experiments! This should be kind of cruise control by now - still thinking, but also having a clear knowledge of what your experiments are and how they work.”*

*“Practice giving talks about your research in the department or at conferences. Public speaking practice is not fun, but getting feedback on your ideas and presentation will help you when you sit down to write your thesis.”*

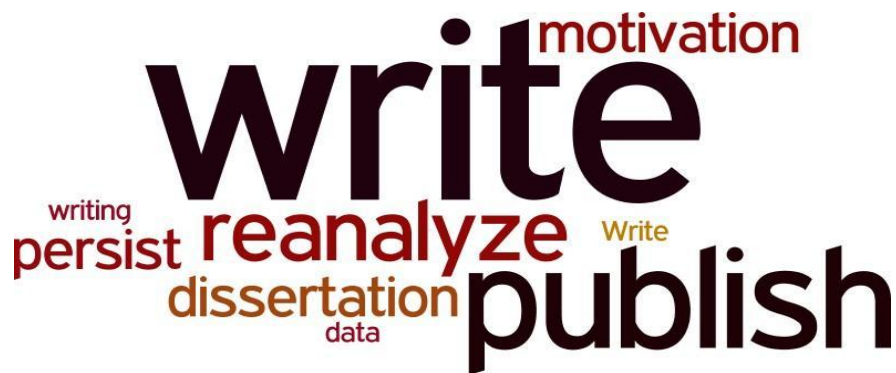
Focus, engage in some professional development, and think about the future...

*“Start thinking about postdocs!” “Don’t take classes.”*

*“This is a good year to do things like PFF (preparing future faculty) and CCT (certificate in college teaching) stuff if those are your goals.”*

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## Sixth Year



Hunker down, focus, and WRITE, WRITE, WRITE...

*“Reanalyze, reanalyze, write write write. Writing is isolating. At this point you don’t know anyone in the department, half your friends are gone, and no one invites you to any social events. Although it can make you really sad, just make sure you remember that you’ll be moving on soon too and that you’ve got to get this done! I tried to work task by task (rather than writing 200 words a day, for example) to get things done.*

*Again, try to be kind to yourself and figure out a method of writing that works for you--rather than what you see others doing around you. Find mentors and if at all possible, try to publish as you go.”*

*“Don’t give up! The lead-up to your dissertation defense may be the most stressful aspect of graduate school, and the part that comes with the least guidance. It’s not an impossible task, stay motivated and keep writing!”*

# GENERAL WORDS OF WISDOM FROM BIOGRADS

One of the major advantages of being a grad student is that you get to manage your own time. **Work hard, but don't be busy for the sake of being busy.** Enjoy the free time, travel, do new things, spend time in the field.

Science is not a 9-5 job, so don't push it to be. **There are times of heavy time investment and times where being in the lab is less important,** so go with the natural flow of your work. Making connections is one of the most important things you can do, so take the time to come to happy hour/hang out with fellow BioGrads.

This is not like undergrad. Most deadlines are off in the foggy far future and you are responsible for figuring out how to structure your time. It can be particularly difficult to feel like you've made any progress when the goals are so big and long term. **Find ways to remind yourself of how much you have learned and done** along the way.

Don't forget that **work-life balance is key.** It can be easy to forget how much more important your mental health is than your research.

Start working hard **EARLY!**

**Try not to compare yourself with others.** It's so hard but it's such a waste of time. No one is doing it exactly like you, and that's ok! But at the same time, make sure you are contributing to the lab and the department at least at a bare minimum. Nothing engenders ill will like lab members who don't care about their colleagues.

Take a least one day off on the weekend to **recharge your batteries**, even when dissertating and preparing for your prelim!

Think a lot, repeatedly, about what you're doing! This counts for your research and your life - are you on the right track? Question yourself and why you're doing what you're doing, but don't doubt yourself. There's always time to **re-assess and make sure you're on the right track!** Set daily and weekly and semester-ly goals!

**Start writing up things early and often.** Getting papers out before you are done will help one infinitely in all aspects of your life (defending, getting a postdoc, getting a job) plus it is one of the few things that is an external validation of your work.

Block off time for goals, instead of having a big blank chunk of time. Don't try to force yourself to write if you have something else you could do (i.e. analyze data).



Otherwise, you'll just stare at the page and no words will come out. That's just frustrating. **Figure out some time or activity when you can break from academia.** I run or swim - and sometimes, when my mind goes blank, that's when the pieces click.

**Talk to your potential advisor about their expectations** and work with them to explore different topics throughout the semester, in the hopes that you find one that you are really passionate about. Try outlining possible questions to explore or even projects to plan. It's all about exploring first year.

Things pile up because life happens. **Do your best not to beat yourself up about it, and be sure to take the time you need for yourself.** Grad school isn't about who can work the hardest. Find "smart" solutions that work for you and your well being.

**Guard your time and say 'no' to things** - research comes first, and the heck with everything else.

Grad school is a marathon and you will constantly have a lot of ongoing projects. It's rare that you ever "finish" anything in a day. So **set mini goals** (send one grant proposal; read X number of papers etc.) and feel good about accomplishing them.

**Tell your adviser explicitly what you need from him/her.** I feel like I spend a lot of time "managing" my PI, which maybe is frustrating in theory, but once I get over that in principle I end up getting a lot more out of our meetings because I know how to explicitly ask him for the type of advice/conversation/feedback I am looking for.

**Don't spend too much time on classwork:** research is your priority!

Just keep swimming! **Try to find balance,** it's a marathon not a sprint. Reach out to others (friends, advisor, DGS, etc.) if you need a pick-me-up; **we all deal with impostor syndrome or setbacks at some point.**

We all struggle at some time or another, and stresses outside of graduate school can compound with stresses of research, TAing, etc. **Find someone you can talk to, to decompress and who will help you find solutions or ways forward:** CAPS, other grad students, friends, anonymous blog, meditation, exercise, whatever works best for you to vent frustrations and stress.