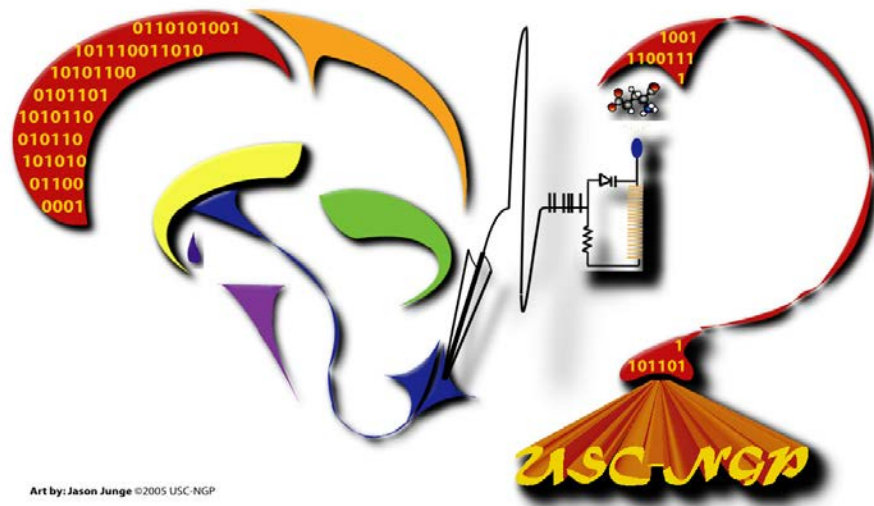


University of Southern California

Neuroscience Graduate Program



Orientation Handbook – 2018

<https://ngp.usc.edu/current-students/handbook/>

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WELCOME

Welcome to the Neuroscience Graduate Program (NGP) at USC. Neuroscience is a discipline that integrates many traditional academic fields. The Neuroscience Graduate Program (NGP) at USC was established to foster training that leads to focused research within an interdisciplinary context. USC created the NGP in 1994 as a university-wide doctoral program to bring together researchers from diverse experimental and academic backgrounds with the goal of coordinating neuroscience research and graduate training. The NGP is the largest university-wide interdisciplinary PhD program, and holds a special administrative place at USC, being overseen by the Office of the Provost rather than a department or school.

The NGP, and neuroscience in general, continues to grow at USC. At any time, there are 90-100 graduate students pursuing their Ph.D. degrees in the NGP, and currently 114 NGP training faculty members. The faculty hold primary appointments in more than 20 departments in the Dornsife College of Letters, Arts & Sciences, Viterbi School of Engineering, Keck School of Medicine, the Schools of Pharmacy, Dentistry or Gerontology, or at affiliates of USC, such as Children's Hospital of Los Angeles.

Laboratories associated with the NGP are located on four separate USC campuses. Administration of the NGP is located in the Hedco Neuroscience Building (HNB) on the University Park Campus (UPC), with a satellite office in the Center for Health Professionals Building (CHP) on the Health Science Campus (HSC). Currently, UPC is home to just under half of the laboratories run by NGP training faculty, including buildings housing the Sections of Neurobiology, Human and Evolutionary Biology and Molecular Biology of the Department of Biological Sciences, and the Departments of Psychology, Economics, Computer Science, Biomedical Engineering, Electrical Engineering, Dornsife Center for Brain and Creativity, and the School of Gerontology. The largest number of training faculty are located on the Health Sciences Campus (HSC). This campus has training faculty in the Zilkha Neurogenetic Institute, the Mark and Mary Stevens Neuroimaging and Informatics Institute, the Broad Center for Regenerative Medicine and Stem Cell Research, in the Departments of Integrative Anatomical Sciences, Neurology, Ophthalmology, Physiology and Biophysics, Psychiatry, and in the Schools of Pharmacy and Dentistry (Occupational Sciences, Biokinesiology, and Physical Therapy). The University operates frequent shuttles that travel between UPC and HSC. NGP also includes training faculty at USC affiliate, Children's Hospital of Los Angeles (CHLA), which has programs that emphasize developmental neuroscience and translational developmental neurogenetics. CHLA is located approximately 15- 20 minutes from the University Park (UPC) and Health Science (HSC) campuses. There are NGP faculty and students located at the USC Imaging Genetics Center (IGC), which is approximately 30 minutes west of UPC in Marina Del Rey. Finally, a few training faculty have research programs at USC-Rancho Los Amigos in Downey and a satellite facility in Alhambra.

Thus, you will have many opportunities to perform exciting, high impact neuroscience research at USC. You will become an expert in your chosen area research, which will be the subject of your dissertation. Further, you will obtain professional training that will arm you with the additional tools and knowledge that will facilitate your successful future in science-related

occupations. In the past 10 years, 98% of our graduates hold positions related to their neuroscience training.

To take maximal advantage of the NGP, you will need to know the way the program operates administratively. This orientation handbook provides you with this information. Over the years, many faculty, staff and students have contributed to the evolution of this handbook. It will assist you in adjusting to life as a graduate student in Los Angeles and at USC. Most importantly, it will serve as a source to which you will refer during your graduate studies to provide you with guidance in meeting your milestones and following NGP and USC Graduate School rules. **Thorough reading and understanding of the content in the Orientation Handbook is a requirement for all students. In addition, rules established by the USC Graduate School apply to NGP students. It is YOUR RESPONSIBILITY to know and comply with all guidelines of the Program. A claim by any NGP student, such as “I did not know the rules”, is an unacceptable excuse for not meeting a program milestone or specific requirements and rules.** We have included descriptions of as many specific rules as possible, but it is your responsibility to learn about the general university rules governing PhD programs that may supersede those of the NGP; these can be found at the Graduate School’s website. Our students typically experience few problems, and the Directors and Administrative Staff are available and very helpful in answering any questions that you may have. Please note that some USC Graduate School and NGP requirements, rules, and options might change from time to time to improve the quality of the Program. We will inform you of any such changes promptly and clearly. Major rule changes regarding NGP guidelines may be ‘grandfathered’ at the discretion of the NGP Director and Executive Committee. Changes will not add further obstacles to your success in obtaining your PhD in Neuroscience at USC.

If you have any questions about the program, do not hesitate to ask. We think you will find that all of the faculty, students, and staff that make up NGP are here to help you achieve your goals of becoming an outstanding neuroscientist.

Good luck, and thanks again for choosing USC and our program for your graduate studies!

Pat Levitt, PhD
Director, Neuroscience Graduate Program

Judith Hirsch, PhD
Associate Director, Neuroscience Graduate Program

Congratulations on your entrance to the Neuroscience Graduate Program at USC!

Welcome to the Trojan Family class of 2018 - 2019! My name is Alicia Quihuis, and I am the elected executive student representative, “Czar” or “Czarina”, of the Neuroscience Graduate Forum (NGF). NGF’s role in the Neuroscience Graduate Program (NGP) is to foster a supportive community among the students, as well as any students in other departments at USC conducting neuroscience research. We organize various meetings and events that are intended to help students explore the many aspects of careers in neuroscience, to address any general concerns that the students may have, and to provide opportunities for interactions between students and NGP faculty members. And the great news – as you are now inducted in NGP, you are automatically a member of NGF as well!

As your Czar/ina, I act as the primary liaison between the graduate students and faculty of NGP. I attend all faculty meetings along with the NGP Executive Committee meetings to represent the students and their interests. If you ever find you have an issue in the program that you would like to be addressed, please let me know and I will bring it to the faculty’s attention. Having a strong working relationship between NGP students and faculty members is essential for us creating a collaborative environment as well as supporting our aspirations of striving to be the most successful program we can be! My goals for this upcoming academic year, are to hold multiple career development events. Annually we hold alternative and academic career panels to allow students to explore future career options. We will also be holding some fun workshops that will help you work on science communication skills – last year’s event was an improv science course that received high praise. Along with career development, we will have a number of social events throughout the year to meet with other NGP students - a great opportunity to mix and mingle. Something we hope to add to this year’s events is more networking opportunities; we are currently in the process of reaching out to nearby universities’ Neuroscience graduate programs to set-up events that would allow us to make connections with other graduate students that share our passion of Neuroscience. It will also be a great opportunity to create collaborations and/or inquire about future postdoc positions in the greater Los Angeles area. We hope to create and participate for the first time at USC in Brain Awareness week held in March of 2019; this is a wonderful volunteering opportunity to inspire the next generation to get excited about science, education, and attending college. As you can see the NGF committee already has quite a lot planned for you and with the rest of the students of NGP for the 2018 – 2019 academic year. If you have any other ideas or suggestions that we could host, please feel free to reach out to me (quihuis@usc.edu). Along with my Czarina role, the NGF has several other officers (listed below) who each has their own unique role within the forum. As with myself, feel free to contact them directly with any relevant questions or concerns you may have. As officers of NGF, our collective goal is to make sure everyone develops a successful and fulfilling graduate career here at USC. We hope you enjoy your time here and are aware of the many opportunities in USC’s graduate school, NGP and beyond. Please do not hesitate to reach out to any of us if you need help with anything at all!

Let me take this opportunity to introduce the other officers:

Adam Lundquist (alundqui@usc.edu) is this year’s Vice-Czar. Adam is the organizational backbone of NGF, maintaining records of all NGF meetings and events. Adam will also work to

promote interaction between our program and the community beyond. He will organize an “Alternative Careers in Neuroscience” workshop in the fall that will provide students with an opportunity to meet scientists currently working in a range of non-academic settings. Adam is the Czar’s right-hand-person, he and I will be working together to ensure everyone’s voice in NGP is heard. If for any reason, you do not feel comfortable reaching out to me for any concerns, please know Adam is here for you as well and would be happy to hear from you in my stead.

Our Treasurer, Alexis Gorin (agorin@usc.edu) keeps track of our expenses, ensuring that NGF and its committees have enough money to spend on our events. Students are encouraged to be proactive in setting up professional workshops, panels, etc. that would help enrich the program. Contact Alexis with any questions you may have for funding such events. On top of holding the position of Treasurer, Alexis helps to run the USC NGP alumni LinkedIn page, please become a member here - Search LinkedIn ‘groups’ with: USC Neuroscience Graduate Student & Alumni Network or by putting this address into the url: <https://www.linkedin.com/groups/8505844>.

Yuni Kay (ykay@usc.edu) is our Historian. She will be keeping photo and video records of all of our events. Feel free to send any photos of your own from NGP and NGF events to her as well – they’re a great way to show off our program! We currently have an Instagram that can find at@usc.ngf. Look for possibly an NGF twitter page in the near future too.

Our Programming Officers are Nora Benavidez (nlbenavi@usc.edu) and Zach Murdock (zmurdock@usc.edu). You can think of Nora and Eric as the social chairs of NGF. They will arrange several events throughout the year to give you a chance to mingle with other graduate students in the program, oftentimes while exploring the many sights and activities that LA has to offer. If you have any ideas for a fun adventure, don’t hesitate to let them know!

Our newest position, External Student Affairs Liaison (ESAL), is held by Sadhna Rao (sadhna@usc.edu). The ESAL officer connects our Neuroscience graduate program with the Graduate School Government (GSG). Sadhna will keep us up-to-date with the latest in the GSG; this includes alternative funding opportunities that we can utilize in the NGF for career or skill developing workshops, networking, or social events. She will also be in communication with USC Forward. USC Forward is a coalition of students, faculty, and alumni working to form a graduate student union at USC (<http://uscforward.org/>). Please feel free to reach out to Sadhna if you have any questions about USC Forward or would like to learn more about what a graduate student union can do for you.

A.J. Cooper (cooperaj@usc.edu) will serve as our Health Sciences Campus (HSC) Liaison. With NGP student laboratories evenly distributed between both UPC and HSC, communication can become difficult. A.J. will help maintain cohesion within the program across both campuses, keeping students at HSC updated with UPC events and vice versa. He will also facilitate teleconferencing for students who cannot make it to the main campus for NGF or NGP Director’s meetings.

And you are already familiar with our New Student Liaisons (NSL), Linda Tsan (ltsan@usc.edu) and Dakarai McCoy (dakaraim@usc.edu). Additionally, we have recently added two more NSL to spread the workload for Linda and Dakarai. Our two other NSL’s are Brendan Miller

(brendajm@usc.edu) and Lei (Betty) Peng (leipeng@usc.edu). Linda and Dakarai, along with Brendan and Lei, have been hard at work all summer preparing you all for your transition to USC. They are in charge of setting up first year students with graduate student mentors and will help facilitate the new student recruitment weekends for next year's class. Feel free to reach out to them with any questions that may come up during your transition into the program.

Beyond this core group, many other graduate students are very involved in making the NGF a wonderful organization. From organizing and participating in our annual program-wide events, to acting as student representatives on several faculty committees, to facilitating collaborations within and beyond USC and originating ideas for special workshops, the level of involvement of our students is truly, what makes our program unique. I hope you will carry on the tradition and choose to be an active member of the NGF.

Our first NGF meeting will take place soon after classes begin, so keep an eye out for an email announcement. For starters, we will host a "Welcome Back" social event to start out the new school year and a professional development event in the coming months. If you have any questions about NGF, NGP, or USC/LA in general, please feel free to contact me (quihuis@usc.edu) or drop by my lab on the HSC campus (ZNI321). First year can be stressful and things will get challenging, but remember there are plenty of students that have been where you are starting out, and all of us at NGF & NGP are always ready to lend a hand or ear whenever you need it!

Best of luck in the coming year, and welcome to our NGF Trojan family! Fight on!

Alicia Quihuis
Neuroscience Graduate Program
Neuroscience Graduate Forum Czar
quihuis@usc.edu

PROGRAM LIFE

The NGP is an interdisciplinary, university-wide training program is administered with an independent budget from the Office of the Provost, with each school, and affiliate contributing to the NGP based on training faculty and student distribution. Most NGP-relevant information, including the roster of training faculty, courses, events and seminars, can be found at the program website: ngp.usc.edu.

Key program leadership includes:

Contact	Title	Responsibility
Dawn Burke dawnburk@usc.edu UPC - HNB 120-H (213) 740-4551 HSC - CHP 201 (323) 442-3005	Director of Student Services	NGP Program Support (See detailed list below)
Deanna Solórzano dsolorza@usc.edu UPC - HNB 120-H (213) 740-2245 HSC - CHP 201 (323) 442-3005	Graduate Program Manager	NGP Student Support (See detailed list below)
Morgan Nagatani mnagatan@usc.edu UPC - HNB 120-J (213) 740-8796 HSC - CHP 201 (323) 442-3005	Graduate Program Assistant	NGP Administrative Support (See detailed list below)
Pat Levitt (323) 361-7868 plevitt@med.usc.edu CHLA- Saban Research Institute, 309 HNB 117	Director of NGP	Program oversight Advisement
Judith Hirsch (213) 821-2210 jhirsch@usc.edu HNB 503	Associate Director of NGP	Program oversight Advisement

NGP Administrative Responsibilities

Administrative Tasks	Main Contact
Admissions/Recruitment	Deanna Solórzano / Morgan Nagatani
Annual Performance Review (APR)	Deanna Solórzano
Budget	Dawn Burke
Commencement/Hooding Ceremony	Dawn Burke
Departmental Clearance (NSCI)	Morgan Nagatani
Directors-Student meetings	Morgan Nagatani
Distinguished Speaker Seminars	Morgan Nagatani
Grades	Dawn Burke
Grant Writing Workshops	Morgan Nagatani
Internal Requisitions	Morgan Nagatani
NGF Committee Liaison	Morgan Nagatani
NGF Sponsored Events (Budget Oversight)	Dawn Burke
NGF Symposium Day	Morgan Nagatani
NGP-NEURAL Summer Research Program	Dawn Burke
Orientation	Deanna Solórzano
Quantitative Methods Boot Camp	Deanna Solórzano / Morgan Nagatani
Retreat	Morgan Nagatani
Rotation Tracking, and Mentor Matching	Deanna Solórzano
Schedule of Classes	Dawn Burke
Semester evaluations	Deanna Solórzano
Student Candidacy and Graduation: Degree checks, petitions, and graduation verification	Dawn Burke
Student Milestones: Committee Forms, Competency Exam and Qualifying Exam, APR, and IDP	Deanna Solórzano
Student Stipend's	Dawn Burke / Deanna Solórzano
T32 Training Grant	Dawn Burke
USC Fellowships and Nominations	Dawn Burke
Website management and information updates	Morgan Nagatani

New Student Orientation Checklist

* Requirement before you can register for classes.

** Registration required

Information for All Students

Immunization Requirements*

- Measles (domestic & international)
- Tuberculosis (international)

Immunization requirements must be satisfied prior to registering for classes. For more information on required documentation or on immunization clinics available on campus, go to <https://engemannshc.usc.edu/medical/immunization-clinic/required/> or call the Student Health Center to make an appointment, 213-740-9355.

Degree Verification

Required if USC has not received final transcripts (undergraduate or graduate) from the last institution attended. There are 3 ways to submit an official copy of your final transcript(s) to the Office of Academic Records and Registrar:

IN PERSON:

Trojan Residence Hall - TRO 100

ELECTRONIC:

Sent directly from previous institution to rtimmins@usc.edu

MAIL:

University of Southern California
3601 South Flower Street, Room 112
Los Angeles CA, 90089-0915

Requirement must be fulfilled by end of your 1st year.

Conditional Admission

If you received a welcome letter from the Graduate School indicating that you have “conditions on your admission” these must be cleared by the end of the first semester. If you have an ALI hold, you must go to the Royal Street Parking Structure (Suite 106, 213-740-0079) to clear this hold.

Rotation Advisement and D-Clearance*

The NGP Director and Associate Director serve as members of the Advisement Committee. They will advise all new students on the courses they need to take before each semester of their first year.

For D-Clearance for any NSCI course, complete the Departmental Clearance Request form found at: <https://dnburke.wufoo.com/forms/m1qq1yco0qfpq1p/>. For any other D-Clearance requests, please see the schedule of classes.

Registration

On-line registration: Go to <https://webreg.usc.edu/Login>.

You will be asked to enter the following information:

Students ID: 10-digit ID #

PIN: 6-digit Birth date (mm/dd/yy)

If you have not yet received your student ID#, contact Deanna Solórzano (HNB 120-H, 213-740-2245, dsolorza@usc.edu).

USC Student ID card (USCard)**

You must complete the following before you are able to obtain your USCard.

- Passport Verification with Office of International Services (OIS) - *International students only*
- Registration for classes - *Domestic students only*

Go to USCard Customer Service office located in McCarthy Way Parking Structure at the University Park campus or in the Seaver's Lobby at the Health Sciences Campus.

USC Computer Account Activation **

Once you obtain your USCard and register for classes, you need to activate your USC computer account. For instructions, call 213.740.5555 or visit www.usc.edu/firstlogin.

Update OASIS with local address and USC email information

Go to www.usc.edu/oasis. Your email address and both your local and permanent mailing addresses must be current at ALL times to ensure that you receive important documents such as the health benefits card and paychecks.

Stipend Payment Information

Go to page 20 for a detailed description of required documentation for stipend payments.

Payment of Fees

The following are fees to be paid by all students online through the MyUSC portal. The NGP does not provide fee support for the following:

- Topping Student Center Fee
- New Student Fee (first semester only)
- Graduate Programs Fee
- All “access” or “laboratory” fees appearing on fee bill

Do not pay for tuition, health insurance, the health center fee, or tuition refund insurance. If any of these fees appear on your fee bill contact Dawn Burke (HNB 120H, 213.740.4551, dawnburk@usc.edu).

❑ General Lab and Radiation Safety Trainings

The General Lab and Radiation Safety Trainings are required for all students prior to working in a lab. If you plan to work in a lab with animals, biohazard reagents, or radioactive materials, you will need to take additional safety training courses during the semester. If you missed the scheduled training for some reason, you may also register for the course through the USC Administrative Operations, Environmental Health & Safety at: <http://adminopsnet.usc.edu/departments/environmental-health-safety>. Please note that if you do laboratory work at sites other than UPC or HSC, there may be additional local training module requirements. The laboratory PI will inform you of these.

Additional Requirements for International Students ONLY**❑ ISE Exam ***

If #6 on your SEVIS I-20 states, "The student does not have the required English proficiency" you are required to take the International Student English Exam. You can register for the ISE Exam at the American Language Institute, in person at Royal Street Parking Structure, Suite 106, or online at <http://ali.usc.edu/>.

❑ Passport Verification(PPV) *

All new international students must register for a PPV session before fall 2018 begins. Visit the New Students website for more information at <https://ois.usc.edu/new-students/firstweeks/passport-verification-ppv/>.

Please be prepared to bring the following materials with you:

- Photocopy of your I-20
- I-94 card
- Photocopy of passport
- Completed "New International Student/Scholar Information" form
- Photocopy of visa

Contact OIS for further information. The OIS office is located in Royal Street Parking Structure, Suite 101 (Phone 213.740.2666, email: ois@usc.edu).

OIS recommends that you photocopy and safeguard your important immigration documents because it is much easier to replace lost or stolen items if there is a record.

Registration Process

Action

1. First Year Students:
During the NGP New Student Orientation students receive instructions on registration for fall and spring.
2. Obtaining departmental clearance or d-clearance allows students to register for different courses offered in different schools throughout the university. For NGP courses (NSCI), use the link below to request d-clearance. You must include your full name, student ID number, USC email, the requested course and five-digit course number. Your d-clearance will be entered into the system within 3-5 days.
<https://dnburke.wufoo.com/forms/mlqq1yco0qfpq1p/>

You may then register for classes via web-registration, <https://webreg.usc.edu/Login>

Note: Student with ALI and academic holds will need to either register in person at Royal Street Parking Structure Suite 106, or email askali@usc.edu with your USC ID number and name.

3. Petitions for late or retroactive registration must be submitted through the Office of Academic Records and Registrar.
http://arr.usc.edu/services/onestop/petition_services.html

Contact

Deanna Solórzano, HNB
120H, 213.740.2245,
dsolorza@usc.edu

Morgan Nagatani, HNB 120J
213.740.8796
D-Clearance link can also be found on the NGP website: ngp.usc.edu and select “Current Students - Forms”

See USC’s Office of Academic Records and Registrar website for detailed instructions of how to register.

<http://arr.usc.edu/>

Click on “Registration” under the services heading.

Office of Academic Review
Petition fees are \$150 and are the student’s responsibility to pay if the student fails to register on time.

Student Health and Insurance

For all NGP students, the student health center, student health insurance, and dental insurance fees are paid by their fellowship or mentor as long as students are enrolled in classes and considered full-time (6 units or more). These benefits begin the first day of classes. You are automatically enrolled in the USC Health Insurance Plan if registered for 6 or more units.

The Student Health Insurance Office will mail the insurance card and information packet about a month after the start of classes to your “local” address listed on the MyUSC portal.

The current link for student health center services is: <http://engemannshc.usc.edu>.

Student Counseling Services

USC Student Counseling Services provides a broad range of programs to assist you should concerns or challenges arise. Counseling Services are staffed with a diverse group of psychologists, psychiatrists, social workers, and marriage and family therapists. The centers provide individual counseling, group counseling, crisis services, psychiatric services, and outreach programs, including relationship and sexual violence prevention and services and the Office for Wellness and Health Promotion. Information regarding both health centers, and specific programs are listed below.

All NGP training faculty, program leadership and administrators are informed of counseling programs and will support your engagement of these services. Do not hesitate to contact any of us for more information.

You can make an appointment by phone or online. The central number for both centers is 213-740-9355 and online appointments for both centers can be scheduled here <http://usc.edu/myshr>.

Engemann Student Health Center - University Park Campus

1031 West 34th Street
Los Angeles, CA 90089
213-740-7711

Eric Cohen Student Health Center of USC - Health Science Campus

San Pablo St. Suite 104
Los Angeles, CA 90033.
323-442-5631

Crisis and Consultation Services

Crisis services are focused on providing immediate emotional support and resources. If you have concerns about yourself or someone you know, please do not hesitate to call. Crisis therapists are available to help 24/7 at (213) 740-7711. For more information on crisis and consultation services, visit <https://engemannshc.usc.edu/counseling/crisis-services/>.

Office for Wellness and Health Promotion (OWHP)

The OWHP supports the University of Southern California with health promotion that advances public health, student learning and the unique USC experience. They assess student health behaviors, collaborate with campus partners, and deliver best practice initiatives. For more information on their many programs to promote strategies for leading a healthy and balanced life as a graduate student, visit <https://engemannshc.usc.edu/wellness/>.

Relationship and Sexual Violence Prevention and Services (RSVP)

RSVP among other services, “provides immediate therapy services for situations related to gender and power-based harm (e.g., sexual assault, domestic violence, stalking). For more information, visit <https://engemannshc.usc.edu/rsvp/>. In case of an emergency or if you need immediate assistance, please call (213) 740-4900. Note that these services are confidential. For immediate treatment for assault you may also contact the **Santa Monica Rape Treatment Center** 24/7 (424) 259-7208.

After Hours Contacts**Medical Assistance:**

Please call (213) 740-WELL (9355) and follow the recorded instructions. You will be connected to an on-call physician or nurse.

Counseling Assistance:

Please call (213) 740-7711 and follow the recorded instructions. You will be connected to an on-call counselor.

Relationship and Sexual Violence Prevention and Services (RSVP):

Please call (213) 740-4900 for sexual assault or gender based harm.

Emergency On or Near Campus:

Call USC DPS at (213) 740-4321

For life-threatening emergencies DPS can assist with student transport to the nearest emergency facility.

Emergency Off Campus: Dial 911

Dental Care

For detailed information regarding student dental insurance, please see <http://engemannshc.usc.edu/insurance/insurance-plan/>.

To obtain instructions for downloading your Delta Dental card go to <https://engemannshc.usc.edu/files/2012/12/How-to-print-an-ID-card.pdf>

NGP Program Events

1. Seminars and Journal Clubs

An important part of your training is the opportunity to attend and participate in **research seminars and colloquia**. These are hour-long public lectures given by visiting scientists. The events page of the NGP web site (<http://ngp.usc.edu/events/>) keeps an up-to-date calendar of all neuroscience-related seminars across the University and at CHLA. There are a number of major Neuroscience seminar series, as well as seminars in Computer Science, Engineering, Psychology, Gerontology, Education, Social Work, Economics and other disciplines that students may attend. **Attendance is required at two seminars of your choosing each month during the fall and spring semesters and is based on the honor system.** The NGP Distinguished Speaker series has 4 student-hosted neuroscientists who visit the program during both fall and spring. **These are scheduled well ahead of time during the academic year. Thus, irrespective of the campus location, all NGP students are expected to attend the NGP Distinguished Speaker seminars.** A partial listing of neuroscience-themed seminar series is provided below:

- NGP Distinguished Speaker Series – UPC and HSC
- Section of Neurobiology Seminars – UPC
- Zilkha Neurogenetics Institute (ZNI) Seminars– HSC
- The Broad Center for Regenerative Medicine and Stem Cell Research Seminars – HSC
- The Hearing and Communications Sciences NIH Training Program – Various Locations
- The Saban Research Institute Seminars– CHLA
- Engineering, Neuroscience and Health Seminars- HSC

Seminars provide an opportunity to broaden your scope of interests and knowledge in the many diverse subfields of the neurosciences. These seminar series typically provide NGP students with an opportunity to meet visiting scientists at lunch or receptions. You will develop skills in articulating your research interests and research progress, and make important contacts for future training and advancement. You may receive emails regarding participation in lunches or dinners with speakers. These are coordinated by the sponsoring units, and for the NGP Distinguished Speaker series, by the NGP Special Events Committee.

Journal clubs and similar gatherings will be an important part of your academic and professional development. Fair and scholarly critiquing of research reports is an activity that will persist throughout any science-related career. Journal clubs provide an opportunity to develop these skill sets. While not required, you should plan to attend a journal club regularly throughout your time as an NGP student. Journal clubs are informal meetings of students, postdocs, and faculty that share interests in a particular field. The usual format is to discuss a recent research paper. The styles of the journal clubs vary; one participant may be asked to present the paper and lead the discussion, or the group in attendance participates collectively in discussions. **Active participation in a journal club is a reflection of your own commitment and interest in performing world-class neuroscience research in a chosen area.** Your motivation for attending a journal club speaks to your commitment to pursue rigorous, highly competitive research for your dissertation. Reading current literature helps to place your own research in a context of current advances in your chosen area of

neuroscience. These extremely important skills and experiences are essential in your transformation from graduate student to professional.

Active journal clubs, meeting logistics, and contact persons can be found at:
<http://ngp.usc.edu/events/>.

If current journal clubs do not represent your scientific interests, you are encouraged to gather a group of your student colleagues and contact appropriate NGP faculty members about starting a new Journal Club.

Other administrative units sponsor seminars and journal clubs that you may wish to attend. Notices for these events can be found on the following websites or posted on bulletin boards.

- USC Events Calendar (<http://calendar.usc.edu/>)
- Viterbi School of Engineering Calendar (<https://viterbi.usc.edu/calendar/>)
- PIBBS Seminars (<http://keck.usc.edu/pibbs/>)
- USC BISC Grad Programs Blog: (<http://uscbiscgrad.blogspot.com/>)
- Zilkha Neurogenetics Institute: (<http://keck.usc.edu/zilkha/>)
- Eli and Edythe Broad Center for Regenerative Medicine and Stem Cells: (<http://keck.usc.edu/broadcenter/>)

2. Annual NGF Symposium

Every January the Neuroscience Graduate Forum (NGF) sponsors a graduate-student symposium that **all NGP students are required to attend**. Students performing neuroscience-relevant research in other PhD programs may also attend. The students organize this event, in which they present talks and posters. These presentations are an opportunity to show the NGP community the research that students are presenting and provide a forum for students to learn to deliver scientific presentations. **NGP students, in all years of study, are required to give a talk or present a poster at the Annual NGF Symposium.** First-year students may present materials from their rotations, from their undergraduate, or other prior, research, or from a peer-reviewed paper that they wish to introduce to the NGP community. Awards are given for outstanding student posters in a variety of categories. Awards for NGP Student of the Year and the Bosco Tjan Faculty Mentor Award also are given at Symposium Day.

During the 2018 – 2019 academic year, the Annual NGF Symposium will take place on **January 25, 2019** at the Radisson Hotel on Figueroa Street. Please look for announcements regarding the details of the event.

3. Annual NGP Retreat

At the beginning of the fall semester, the NGP sponsors a weekend scientific retreat at an informal offsite location in the Los Angeles area. The retreat is free for all NGP students. **All students are required to attend.** Through informal social gatherings, meals and discussions, the retreat is an opportunity for all new students and their senior peers to exchange experiences as NGP students, and learn about the diversity of neuroscience research at USC. A required science ethics workshop is held for all students on Friday evening. Students

organize team-building activities, and can take advantage of the many activities on site (Alpine and wall climbs, swimming, horseback riding, archery, sports activities). Talks are given by a few NGP training faculty, graduate students, and one or two outside guests. In addition, a NGP faculty luminary is honored with a Keynote address each year. For first year students, the retreat can assist in making decisions about potential laboratories in which to rotate. **All students must register online for the annual retreat at the beginning of the fall semester.**

This fall, the retreat will take place on September 21st – 23rd at the American Jewish University, Brandeis-Bardin Campus (<http://confbbc.aju.edu/>), an ~1 hr drive from central Los Angeles.

General Program Information

1. Building Access

Buildings at USC and affiliated campuses have security measures in place that require keys, keypad codes or ID card coding. **You must obtain access to buildings for evening and weekend work through your rotation laboratory.** Your faculty mentor for each research rotation will direct you to an administrative office to obtain the appropriate coding or keys. Note that access is provided for the duration of your rotation. All inhabitants of USC buildings take matters of security very seriously. Please do your part to maintain the safety of the people, property, and animals upon which we depend. Flagrant breaches of security, such as propping open locked doors or giving out your key code to anyone are dealt with severely by the University.

2. Library Facilities

The Science and Engineering Library (SSL), located in the Seaver Science Center, is the principal science library at UPC. The Norris Medical Library (NML) is the primary resource on the Health Sciences campus. Both sites have an excellent collection of current and past journals, and books. You have electronic access to libraries across the USC campus and to the scientific journals for which USC has a subscription and may also request materials via interlibrary loan. The collection of neuroscience-relevant journals is substantial, and this allows you to access PDF format articles for use in your academic and research endeavors. You must follow U.S. copyright policies regarding the use of all journal articles. There are computer terminals and printers available that provide you with access to multiple databases, including PubMed. Most of the important journals in our field are indexed in this database. You also will be able to access scientific journals remotely by using your USC login and password to explore databases. The reference librarians at Science and Engineering or Norris Medical Libraries are available to assist you with learning how to use different databases. The libraries also hold bioinformatics sessions that provide an opportunity to develop skills in accessing the databases available for meta-analyses of novel datasets.

To check books and other materials out of any USC library, present your USC ID card, which serves as a library card. When checking out materials please be sure to verify return dates, as due dates vary.

The NGP is fortunate to have access to skilled librarians who can help research any neuroscience related topic, <https://libraries.usc.edu/locations/science-engineering-library/science-engineering-library-faculty-and-staff>

All USC Library locations, hours, online resources, room reservations, and general information can be found at <https://libraries.usc.edu/>.

3. **Mail**

All 1st year students can receive incoming mail in their assigned box in the Hedco Building mailroom, which is next to the elevator in the main lobby. The mailing address is listed below:

University of Southern California
Neuroscience Graduate Program
3641 Watt Way
Los Angeles, CA 90089-2520

The digits 2520 serve as the mail code for campus mail to reach the Hedco Building. You can also place outgoing campus mail and stamped U.S. mail in the corresponding bins in the mailroom for pickup by Mailing Services. There are also mail boxes on campus and a FedEx location in the University Village.

4. **Neuroscience Teas**

The Neuroscience Tea at the Hedco Building is held every weekday except Friday, from 3:00 to 4:00 P.M., in the large conference room. Coffee, tea, cookies, and other treats are provided. The Teas are meant to foster collegiality and interdisciplinary communication among neuroscientists. The atmosphere is very informal, with people free to come and go as they wish.

5. **Summer Support**

Your decision to be a Ph.D. student is a **12-month commitment** until you complete your dissertation and graduate. Thus, there is an expectation that you will work intensively in the laboratory, engaged in full-time research, and perhaps take a course to fulfill program requirements, or participate in a national course to learn a new discipline or skill set. During the summer, you must be supported by your mentor or a position on a training grant (if available), as there are no summer TA-ships available.

Depending on your financial support each summer, you will register for GRSC-802 or NSCI 790. GRSC-802 is a 0 unit course that allows students to maintain access the Student Health Center during the summer.

6. **USC Network Access**

For students living in USCHousing, who need access to USC's Wired Network for Students (ResNet), refer to the website below for detailed instructions: <http://itservices.usc.edu/resnet/>.

If already using another Internet service provider, students may utilize USC's virtual private network (VPN) client to access restricted USC resources. Students will need VPN software to access USC's wireless network. For more information, go to <http://itservices.usc.edu/vpn/>.

USC students, faculty and staff can access USC's high-speed wireless network at most sites on campus and eateries. For information about how to get on USC's wireless network visit <http://itservices.usc.edu/wireless/>.

For additional support, contact Information Technology Services at 213-740-5555.

Financial Support

First-year students will receive one of the following financial awards during the 2018 – 2019 academic year.

- NGP Fellowship Award
- USC Provost or DIA Fellowship Award
- Dornsife Fellowship Award
- Direct Admit Funding from a laboratory

These awards include an annual stipend that will cover your first year of research and rotations. For 2018 – 2019 academic year, the stipend award is \$33,000. Please speak with Dawn Burke for a specific payment breakdown for the academic year. The fellowship is described as "50% time appointment," with all students guaranteed \$33,000. According to University rules, the remaining 50% of time is for you to engage in academic activities, including laboratory research and coursework. Please note that your annual stipend may be disbursed to you in 10 or 12 monthly installments, depending upon the school in which your mentor holds her/his primary appointment. First year students receive their annual stipend over a 10-month period. Disbursement for those 1st year students arriving July 1 to begin a rotation will occur over 12 months, but does not change the amount of the annual stipend. **It is your responsibility to implement your own personal budget, which takes into account the schedule of stipend payments** that will total \$33,000.

For 1st year students transitioning to a dissertation laboratory, support from the faculty mentor begins August 16, 2019. Keep in mind that while you will receive \$33,000 as a 1st year student, there may be a gap between your last stipend check and the first payment as a year 02 student. You must budget accordingly. NGP students often apply for and obtain prestigious extramural fellowships, such as from NIH, NSF or private foundations. The stipends provided by these extramural awards are often less than \$33,000. For those students who receive nationally competitive extramural fellowships, or are selected for a position on a training grant, the USC Graduate School provides a stipend ‘top-off’ of either \$10,000 or up to a total stipend of \$35,000, whichever is less. Please see the *Extramural Individual Fellowships and Grants* section below for more information.

The basic stipend level throughout your PhD studies is set by the NGP. Thus, all NGP students will receive the set level of stipend, health insurance and full tuition support. The only exception to this is if a student receives a USC Provost or DIA fellowship, or external fellowship, as above. Please speak with Dawn Burke or Deanna Solórzano for more details or if you have any questions.

The USC Graduate School requires that PhD students must maintain a GPA of 3.0 or higher to be considered a student in good standing, and thus eligible for financial support.

Upon completion of the first year in NGP, students join a dissertation laboratory. Please note that students are not USC research staff, who work regular hours. Thus, as in top neuroscience graduate programs at other universities, NGP students typically work long, and sometimes

irregular hours. This effort is determined in large part by the research project and the demands of completing experiments successfully. As part of their research, students are expected to become experts in their chosen area of investigation. This goal requires additional time and effort outside of laboratory experiments for reading peer-reviewed journal articles and reviews, for online technical training to master analytical or technical methods, for attending seminars and journal clubs, and other activities. These activities are done in consultation with your dissertation mentor and members of your Guidance and Dissertation Committees, as well as the NGP Directors. Thus, irrespective of the funding source of your stipend, NGP students are expected to put in the time and energy to complete an outstanding dissertation in a timely fashion. There are five main sources of support for graduate students.

- Research Assistantships
- Teaching Assistantships
- University Fellowships
- Training Grants
- Extramural Individual Fellowships and Grants

1. **Research Assistantships**

Research Assistantships (RA) are the main mechanism by which students will receive their stipend while in the NGP. RA's are funded by research grants or other institutional funds awarded to a faculty member or group. There is no citizenship requirement for student support on federal research grants awarded to NGP training faculty. Please note that an RAship is not equivalent to a university staff position.

2. **Teaching Assistantships**

While most NGP students are supported through RAships or individual fellowships, TAships provide an additional opportunity for stipend support during graduate training. Students may not accept a TAship until they have passed the Competency Examination in year 02 of study. Only rarely will the Director consider a petition for special permission to TA during year 02.

The NGP has a limited number of TA opportunities that are assigned by Dawn Burke, in consultation with the course directors. Other TAships are offered by various departments; the NGP does not assign these TA positions, but does work in consultation with the various departments to assist students in securing a TAship. The workload associated with TAships is variable, depending on the course and the familiarity of the TA with the subject matter. **You may not spend more than 20 hours per week in fulfilling your TA duties.** Whatever course you are assigned, you must take your responsibilities seriously. By accepting a TA position, you are under obligation to meet the requirements set by the course director and to do your best for students in the course.

While not required by the NGP, teaching experience is valuable for your future as a scientist and educator. The NGP encourages all Ph.D. students to serve as a TA for at least one semester. Some students, with their mentor's input, may TA a second semester. NGP places a restriction of 3 semesters on the number of times a student may TA. Please keep in mind that your performance will be assessed through an evaluation process, and that, as with any

other job, your TA position can be terminated for poor performance in the classroom. Participation has several requirements that are noted below.

- **TA Training:** Is required for all NGP students who will serve as a teaching assistant for any course offered by Dornsife College of Letters, Arts and Sciences. All students who plan to be a TA will be informed by a Dornsife administrator regarding registration for the required coursework.
- **ITA Oral Exam:** All International TA's must take the ITA Oral Exam offered through the American Language Institute, with potential exceptions as noted at <https://ali.usc.edu/ita/>.

3. **University Fellowships**

There are a limited number of USC Fellowships available to Ph.D. students during their course of study. Students compete for fellowships through an application process overseen by the USC Graduate School. Internal or University fellowship announcements sent to the NGP will be forwarded to students and training faculty in the program. You also can check the USC Graduate School web site to become familiar with the different institutional fellowships.

4. **Training Grants**

The National Institute of Health (NIH) and the National Science Foundation (NSF) sponsor pre-and postdoctoral training grants. Federal training grants require US citizenship or permanent resident status to be eligible for appointment. These grants may support general neuroscience training, or focused on an area of neuroscience (e.g. aging, audition). Typically, only a subset of NGP training faculty may be appointed to a particular training grant. This means that only NGP students performing research in those faculty laboratories will be eligible for an appointment on a particular training grant. Each training grant has a specific set of guidelines for the nomination and selection process. Currently, there are two training grants at USC that focus on neuroscience: 1) the NIH Neuroscience Training Grant [Pat Levitt, Principle Investigator (PI), Judith Hirsch, Co-Principle Investigator (Co-PI)]; and 2) the NIH Hearing and Communication Neuroscience (HCN) Training Grant (Sarah Bottjer and Neil Segil, Co-PIs). You may obtain more information regarding each training grant by contacting the training grant PIs, or from the NGP administrative office. There are other NIH training grants in which NGP faculty may participate (e.g. Developmental and Stem Cell Biology; Aging). Speak to your laboratory mentor about your eligibility to be nominated for a position on these or other training grants.

Please note that federally sponsored training grants require U.S. citizenship or permanent resident status.

As noted above, the NIH-mandated annual stipend for pre-doctoral trainees is less than the NGP stipend. For those NGP students on training grants, the USC Graduate School will provide a 'top-off' of your extramural award. Please contact Dawn Burke for specific details on the top-off amount for your award.

5. **Individual Fellowships and Grants**

There are many sources of grants, fellowships and other forms of financial aid available to students, and the NGP encourages all students to submit at least one application during their training. Particularly appropriate are individual fellowships from NIH and NSF, but private foundations may also be available, depending upon your area of study. **The NGP offers a grant-writing workshop twice annually to assist students in developing skills needed to prepare a competitive proposal. These workshops are open to both domestic and international students. The optimal time to take the workshop is in the spring of year 02 or fall of year 03.** USC also offers grant-writing workshops during the academic year and summer that are open to all domestic PhD students. Detailed information about fellowships can be obtained from the following sources.

- NGP website
<http://ngp.usc.edu/current-students/fellowship-opportunities/>
- The USC Graduate School
<http://awardsdatabase.usc.edu/>
- Doheny Library reference section has a database that contains hundreds of grants to choose from. Fill out an application at the reference desk. A customized printout will be returned to you. There is no charge for students.

You may be notified each semester of other fellowship opportunities. NGP strongly encourages applications for such fellowships, for stipend support, for the honor of receiving a competitive fellowship, and for professional development-- acquiring skills to communicate research ideas in a grant proposal format. Your mentor can work with you on producing a competitive application; fellowships often require a mentor statement of a training plan as well. The NGP provides generic descriptions of program activities that can be used in part to describe the training environment. Finally, Drs. Levitt and Hirsch can work with 1st year students who wish to apply for an NSF grant, prior to joining a laboratory. In addition, current NGP students with NSF fellowships are available for advice.

Payroll and Tax Information

International Fellowships:

International fellowship holders should have received a preliminary email notice from the Glacier system. You must claim or qualify for your country's tax treaty. This will enable you to print the correct Glacier system tax forms. In Glacier, enter "applying for ITIN." If you have any questions regarding the Glacier paperwork please contact Dawn Burke.

Domestic Fellowships:

Domestic fellowship holders need to be certain that their local addresses are correct in the MyUSC portal.

Domestic Direct Admit:

Domestic direct admits are Teaching Assistants and/or Research Assistants. In order to be set up in Workday (USC payroll system) you will need to provide the Business Office (see the Directory section) with your Award Offer Letter, driver's license, and original social security

card, OR U.S. Passport with adult photograph **DO NOT** bring expired passports, as University Payroll will not accept them.

Paying taxes on Fellowships

U.S. federal law prevents us from providing tax information or advice. We suggest that you consult with a tax professional such as a tax lawyer or a tax accountant if you have questions. While receiving your fellowship, domestic students will not receive a W-2.

The IRS provides information regarding taxation of fellowship awards:

<https://www.irs.gov/forms-pubs/form-1098-t-tuition-statement>. In addition, the USC Student Financial Services website provides information regarding the IRS 1098-t form <https://sfs.usc.edu/tax/>. These links are not meant to be a comprehensive list of tax resources or forms and may become outdated over time.

International Students may want to consult the Office of International Services (OIS) at: <http://ois.usc.edu/>.

PROGRAM HANDBOOK

Academic Procedures

1. Program of study for the Ph.D.

Graduate study in the NGP is designed to provide each student with a broad, fundamental background in neuroscience coupled with detailed knowledge and expertise in his or her chosen area of concentration. The coursework in Neuroscience centers on two core courses, two concentration courses, a communications course, quantitative methods training, and an ethics in research course. Because neuroscience involves multiple disciplines, selection of courses to fulfill concentration area requirements are flexible. In addition, various faculty members give advanced courses and seminars on specialized research topics each semester. Each student's curriculum can therefore be tailored to the particular area of interest of that individual. Irrespective of your research area, NGP expects all of its students to achieve core competency in the discipline of neuroscience and expertise in specialty areas.

Please see the *Time to Degree* section for a detailed guide of all required coursework and program milestones. Course options are listed under the *Neuroscience Related Courses* on the NGP website (<http://ngp.usc.edu/graduate/curriculum/>). This list is updated each semester, and is a resource for students to review regularly when considering course selections.

2. Academic Requirements

Quantitative Methods Boot Camp

The NIH has instituted robust requirements for graduate students to receive advanced training in quantitative methods and research reproducibility. The NGP requires all entering 1st year students to take a one-week boot camp to learn basic methods to manage, analyze, simulate and visualize research data. The training is designed to have broad application. The boot camp occurs during USC Orientation week, prior to the beginning of the fall semester. The current focus is on training in using MATLAB. Brief overview lectures are followed by daily projects to acquire a basic skill set. This training provides NGP students the requisite background to take graduate-level courses offered at USC, and thus fulfills the quantitative training requirement of the Program. Students may be exempt from the boot camp requirement if they can demonstrate substantive experience in quantitative methods, including programming with computer languages typically used for data analyses. All entering NGP students however, are required to take a graduate-level course in quantitative methods (see below).

Grades

The rules of both the Graduate School and NGP require that all students maintain a grade point average (GPA) of 3.0. In addition, a minimum grade of "C" (2.0) is required for a course to count for graduate credit. Here is a listing of letter grades and the corresponding grade points:

A (4.0)	B- (2.7)	D+ (1.3)
A- (3.7)	C+ (2.3)	D (1.0)
B+ (3.3)	C (2.0)	D- (0.7)
B (3.0)	C- (1.7)	F (0.0)

If your GPA falls below 3.0, you will not qualify for a Teaching or Research Assistantship or a fellowship, and you will be at risk for being dismissed from the NGP as a graduate student in good standing. It is possible to receive a one-semester exception, to provide the student with an opportunity to raise her/his GPA to 3.0 or greater. **It is your responsibility to work with the NGP Administration to petition the Director and Graduate School to obtain the one-semester exception.**

Note that in addition to the University requirement, the NGP requires that you achieve a cumulative 3.0 or better for the core courses NSCI 524 and NSCI 525. Failing to achieve this GPA in the two courses will trigger a review by the NGP Advisement and Executive Committees to determine whether dismissal from the program is warranted.

These rules have important consequences for interpreting your grades in graduate courses. The custom in Neuroscience graduate courses is to use the range from “A” to “B-”, though on rare occasion, very poor performance warrants a “C”. As usual, an “A” denotes excellent performance. However, during graduate training, a grade of “B-” denotes unsatisfactory performance, equivalent to the “C”-“D” range during undergraduate training. In a similar way, a “B” can be thought of as signaling performance that is adequate but not outstanding. Students who receive a “C” or below are failing in their efforts to demonstrate core competency.

Unit Requirements

Overall course requirements for earning a Ph.D. from USC include the completion of 60 course units. In the NGP, at least 25 of these 60 units must be in the form of formal course work; the remainder may be in the form of research/dissertation units.

Specific Course Requirements (25 units)

1. Advanced Neurosciences (NSCI 524/525), (8-units)
These required neuroscience core courses, taken during the first year, offer an advanced overview of brain research, from molecular biology to cognitive neuroscience. The courses are purposefully broad, intending to provide students from different disciplines the basic language to approach all of brain research. The goal is to provide students with the tools to be able to read and critique any article published in the *Journal of Neuroscience*, the official journal of the North American Society for Neuroscience.
2. Quantitative and Computational Track
One 4-unit course (or two 2-unit courses)
3. Additional Track Requirement
One 4-unit course from one of the following additional tracks:
 - a. Cell, Molecular, and Developmental Track
 - b. Systems and Behavior Track
 - c. Cognitive Track

Only one of the two 4-unit track courses may be 400 level (advanced undergraduate/graduate). If 400 level 2-unit classes are used to fulfill one track requirement, the other track must be satisfied with one 4-unit 500 level class. If 500 level 2-unit classes are used to fulfill one track requirement, the other track can be satisfied with either a 400 or 500 level 4-unit class. The Graduate School allows a total of 8 units of 400 level classes to fulfill the 25-unit requirement.

4. Neuroscience Communication (NSCI 539), (4-units total)
The Neuroscience Communications course provides each student with an opportunity to organize and give presentations to peers, receive constructive feedback to improve presentation skills, and to provide constructive feedback to their NGP student peers. Skills in science communication to non-scientists also are developed. Four semesters of NSCI 539 are required for a total of 4-units.
5. Responsible Conduct of Research (INTD 500), (1-unit)
The purpose of this course is to engage current research trainees in discussions about the responsible conduct of science.
6. Statistics (PM 510, PSYC 501, or equivalent), (4-units). Students with a strong background in statistics may submit a petition to Dawn Burke to take a 500 level computer science, informatics or another relevant course that addresses probabilistic approaches to quantitative research. The course syllabus for the substitute course must be provided, as well as evidence of previous formal, advanced statistics training to obtain approval from the Director.

Registration and Enrollment

With a full TA or RA appointment, you are entitled to 12 units of tuition remission each fall and spring semester, although you need only enroll for 6 units/semester to be considered a full time graduate student. Do not use research credits (NSCI 790) to fill your course schedule beyond the number of units required, as there are financial consequences for you.

Depending on your financial support each summer, you will register for GRSC-802 or NSCI 790. GRSC-802 is a 0 unit course that allows students to maintain access to the Student Health Center during the summer.

Note that the tuition remission is intended only for courses directly relevant to the Neuroscience Ph.D. Program. As noted above, the NGP recognizes that the discipline of neuroscience is strongly interdisciplinary, so that relevance is broadly defined for maximal flexibility in designing a course of study. In addition, in order to take advantage of the many relevant courses offered by USC and the graduate program, students may take more than 25 units of coursework. Each student is urged to discuss her or his course plans with their dissertation mentor. The student also can consult the Advisement Committee or members of their Guidance Committee about coursework that will enhance progress towards completion of the degree.

Course Waivers and Substitutions

Petitions to waive required coursework will be deferred until the student has established their dissertation mentor and set a course of study. Course unit credit for advanced courses that

you may have taken as an undergraduate at other institutions are not considered. Advanced graduate courses that have been taken in a Masters or another PhD program may be considered, by petition only to the Director. The form can be found on the NGP website. While a specific required course may be waived because of a strong background in a particular area (e.g. statistics), another relevant course must be taken in order to meet the 25-unit requirement.

If a student would like to fulfill a track course requirement with a course that is not on a preapproved list, they must write to the Director or Associate Director (and attach the course syllabus) to request the substitution of the alternative course. In no case will a student be allowed to complete less than one track course. Approval of the petition is not guaranteed. The substitution will only be considered if the argument for an alternative third course clearly meets the value of "breadth with depth" embedded in the NGP curriculum. The request may be strengthened by demonstrating either (i) adequate prior background in a third track different from the two separate tracks in which the student fulfills curricular requirements or (ii) that the replacement course provides a different kind of breadth appropriate to the student's training and development. A petition to waive the statistics course requirement may be filed with Dawn Burke; the waiver must be approved by the Director, and requires evidence of graduate level expertise. If a waiver is granted, a related course (e.g. computer science, mathematics, informatics, as above) is taken as a substitute.

Additional Enrollment Policies

All students must receive academic advisement before they can enroll in classes each semester. Year 01 students will meet with the Advisement Committee (Pat Levitt, Judith Hirsch) for advice on rotations and course enrollment. Students in year 02 and beyond should consult their NGP faculty mentor for advice on course enrollment, and obtain authorization from one member of the Advisement Committee. Your advisor must approve all courses, including the ones offered by other departments, before registering each semester. **Please be aware of registration deadlines. Note that students should not exceed registering for 12 units in any semester, as students will be financially responsible for any additional units.** Announcements and reminders will be sent to all students regarding semester registration procedures and deadlines. The student is responsible for following all deadlines and instructions outlined within the correspondence.

Dual Program Enrollment Policies

The USC Graduate School rarely permits students to enroll concurrently in NGP and in another graduate or certificate program. NPG students must first obtain approval from the NGP director and provide evidence of the research mentor's approval to petition enrollment in another program. Failure to follow these procedures is considered a basis for dismissal from NGP. Please note that the NGP has no financial obligations with regard to the secondary program. Thus, students will be solely responsible for tuition fees. **The final decision is made by the Vice Provost for Graduate Studies.**

3. Advising

In addition to assisting students in deciding laboratory rotations, the NGP Director and Associate Director can help you with other matters. Problems may arise and in rare instances,

a student and faculty mentor feel that it would be best for the student to find a new laboratory. The Director and Associate Director of NGP, as well as members of a student's Guidance Committee will work closely with the student and mentor in these matters. If a student perceives serious problems, we encourage you to contact either the NGP Director or Associate Director early, prior to problems escalating, to discuss specific resolutions. If a laboratory change is to occur, it is the student's responsibility to secure a new faculty mentor, with funding, in order to remain in the NGP. Failure to secure a new laboratory and mentor prior to the start of the next semester will result in termination from the program.

If you would like assistance with professional or personal challenges, please make an appointment to meet with either the Director or Associate Director. They are here to offer advice, provide referrals, and inform you of your rights in disputes with training faculty or peers. Oftentimes, they can help resolve problems.

The Advisement Committee can be quite helpful in selecting students' rotation laboratories, and maximizing opportunities for joining a dissertation laboratory that matches student interest in the neurosciences. Throughout the first year, students are encouraged to consult with the Advisement Committee on grades, course selection, rotation selection, and program milestones and expectations.

Academic Warning Dismissal

NGP takes factors other than the minimum GPA into consideration in determining a student's qualifications for an advanced degree. A student's overall satisfactory academic progress is defined by academic GPA, demonstration of specific research skills and aptitudes, regular research progress, ethical conduct in research, and the mentor's semester and Guidance and Dissertation committees' annual evaluations. Continuation in the NGP is determined by the above standards. Please keep in mind that the Program is very heavily research-focused, with expectations of substantive accomplishments through a significant time and effort commitment. All progress in performing dissertation research is monitored closely by the laboratory mentor and Guidance/Dissertation committees. During the first year of study, the program evaluation of research progress occurs through laboratory rotations by faculty. A student must hold a graduate trainee position in good standing in a laboratory of a NGP training faculty member as their mentor, or their appointment in the program will be terminated. When a decision during a semester is made by either the student to move to a new laboratory, or by the faculty member to terminate their role as mentor, a new laboratory must be identified and agreed upon by the student and new mentor; a plan of dissertation research must be in place at or before the start of the following semester.

It is the responsibility of the NGP administrative leadership to provide each student with warnings regarding their academic and research performances. Therefore, students who fail to meet the above standard will receive an academic warning letter from the NGP Director. Any time after the written warning, the NGP Director, has the right to recommend dismissal from the NGP and to deny future readmission. Procedures on disputed academic warnings or dismissals are described in **SCampus**.

Any violations of the rules stated in this guide, e.g., maintaining a GPA under 3.0, lack of research progress and effort, not passing either the Competency or Qualifying Examinations twice, or violation of University rules as described by the USC Graduate School, is grounds for dismissal. It is the responsibility of the student to understand these expectations, and to familiarize themselves with USC Graduate School rules with regard to dismissal. It also is the responsibility of the student, once a warning is received, to correct the violations within one semester.

4. **Lab Rotations**

Choosing a Laboratory Rotation

The process of selecting a laboratory for a research rotation involves taking the time to set up a meeting and discuss potential research projects with a NGP training faculty member. All first year students are encouraged to meet with several faculty in order to establish a dialogue regarding research projects, and lab availability. Simply contact the faculty member to arrange a visit. We strongly recommend scheduling all meetings with faculty in advance. The conversation with faculty should include the following:

- Is the faculty member accepting rotation students?
- Does the faculty member have funding to support a student from year 02 forward?
- Do the lab research projects align with personal research interests and goals?

If during the conversation, any answer to the above questions from the faculty member is no, you should not select that laboratory for a rotation.

The process of contacting potential rotation laboratories for a first rotation can begin prior to the start of the fall semester. There is no need to commit to the 2nd and 3rd rotations until a student has had discussions with NGP faculty. It is important to emphasize that the conversations with prospective faculty commit neither the student nor the faculty member to agree to the rotation. You likely will meet with multiple faculty members about a possible rotation. Once you decide to rotate with one specific laboratory, and the head of the laboratory agrees, you must notify the other faculty with whom you met that you will not be joining their lab for that rotation. This can be done by email, or an in-person meeting.

Laboratory Rotation Protocol

During the fall and spring semesters, students are to rotate through three labs, with rotations lasting, on average, 9 weeks. However, students may petition the Director if they wish to do two rotations in the same lab, which generally means the student will join that laboratory in year 02. This process requires petitioning the Director for permission, and a written letter from the laboratory mentor stating that she/he will commit to financially support a student in year 02.

If necessary, a fourth rotation is an option from the end of May through July of the first year. This occurs only when a student has difficulty in identifying a dissertation lab before the end of the spring semester of year 01. The student must consult an Advisement Committee member as soon as possible; the Director must approve the additional rotation. Please see Deanna Solórzano for further information.

At the end of each rotation, students should have a discussion with the laboratory PI to establish whether the laboratory is a good fit for the student's dissertation research, as well as their rotation performance. Students cannot make their final selection of a dissertation laboratory until the end of the third rotation.

Laboratory Performance Expectations

Pursuing a PhD as a student in the NGP is a wonderful opportunity to grow and mature as a first-class researcher, but it is challenging. Our training faculty are high performance scientists and expect graduate students to put in the necessary time and energy to be successful, while at the same time doing well in coursework. Rotations will be flexible with respect to the lab work. In your first year, there typically will be 5 hours of scheduled class time/week. Along with attending a journal club, seminars, and the required and ancillary course readings and study time, the majority of your time will be spent in the laboratory doing rotation research. The laboratory in which you perform your rotations often will have ongoing, small projects. To make sure that you have hands-on laboratory experiences, student's usually work on one of these projects as part of the rotation. While rotation students often are trained by senior graduate students, postdoctoral fellows or research faculty in the laboratory, you should expect to meet regularly (individual and laboratory/group meetings) with the laboratory PI during the rotation. If a PI is rarely available to meet, this an indicator of limited future access during the important years of dissertation research. Keep in mind that the rotation should provide you with insight regarding the research focus of the laboratory, the style of the laboratory PI with regard to mentoring, and other members (graduate students, postdoctoral fellows, research staff) of the laboratory with whom you will interact daily. This information will help you make an informed decision regarding your final selection.

The PI in whose laboratory you rotated will provide a written evaluation of your performance. This evaluation is part of the criteria used for evaluating students to receive appointments on training grants and for monitoring student progress in their first year in the NGP. Please note that the evaluation is not tied to getting a specific experiment to work. Rather, demonstrating a serious commitment to spending time in the laboratory, proficiency in reading original literature in the area of research, the ability to learn new methodologies and analytical skills, and participation in laboratory-specific activities contribute to the evaluation. Poor performance in a laboratory rotation is taken as seriously as poor performance in a core course. Multiple poor performances in rotations may be grounds for dismissal from the NGP.

The specific time periods for each rotation are indicated in the Rotation Documents that must be completed and signed by the lab PI and student. **The rotation contract form must be submitted before the start of each rotation.** This is the only mechanism through which the program can track your research progress in year 01. **You cannot start a rotation early or end late.** The laboratory PI provides a written evaluation of your performance. In addition, upon completion of each rotation, the student has one week to submit a written summary of

their work to Deanna Solórzano. These forms are located on the NGP website in the Current Students section, under forms.

The laboratory rotation schedule for 2018 – 2019 is as follows:

Lab Rotation #1: September 10 – November 16

Rotation Contract # 1 due: September 4

Rotation Summary #1 due: November 26

Lab Rotation #2: November 26 – February 15

Rotation Contract #2 due: November 19

Rotation Summary #2 due: February 22

Lab Rotation #3: February 25 – May 3

Rotation Contract #3 due: February 19

Rotation Summary #3 due: May 10

Students should consult the training faculty member regarding lab schedules and expectations during holidays that fall within a rotation. If you have a pre-planned personal activity that will take you away from the laboratory, you must inform the laboratory PI prior to the beginning of the rotation. In addition, be sure to contact the laboratory PI if you encounter an unexpected health or other personal issue that may interfere with your time in the laboratory. Training faculty look for red flags, and not showing up to the laboratory regularly, or being unengaged while there, is a major concern that can be addressed by open communication.

Laboratory Final Selection - Mentor Matching

Students are responsible for securing their preferred dissertation research laboratory during May of the spring semester. Like rotations, consent by both student and laboratory PI are required. In order to complete the final selection process, ensure that all 3 sets of the Rotation Documents (Rotation Contract and Rotation Summary) are complete and submitted to the NGP office. Once the selection has been made, email the Advisement Committee and Deanna Solórzano, noting your proposed faculty mentor. Deanna will contact the identified faculty member to request written approval and letter of financial support. Unless there is an approved petition for a fourth rotation, mentor selections must be finalized by the end of May. This is critical, as students who have not been accepted into a dissertation laboratory by this time will not be considered for appointment to the Neuroscience training grant. While the Advisement Committee and other training faculty are here to be as helpful as possible, ultimately it is each student's responsibility to secure a dissertation laboratory. Failure to do so is grounds for dismissal from the NGP.

Laboratory mentors (PIs) are responsible for your stipend and health insurance support after you complete year 01 of study (beginning August 16th of year 02). See the list of business officers, arranged by department, under the Directory section. Contact the appropriate

department officer for information regarding stipend payment and health insurance, beginning in year 02.

5. **Progress to Degree**

Student Evaluations

The Advisement Committee meets twice a year to review the performance of each student in the Program. Grades, participation in classes, research rotation performance or dissertation research progress (evaluated by the laboratory PI, Advisement/Guidance/Dissertation Committee), TA performance (if applicable), progress in satisfying degree requirements, meeting NGP milestones, the extent to which the student followed previous recommendations, and other matters relevant to professional advancement are considered during the review process. The result of this evaluation will be a letter from the Advisement Committee to each student, and a copy sent to the student's mentor. The letter will contain one of four ratings:

- (1) Acceptable performance
- (2) Acceptable performance, assuming you take certain actions
- (3) Unacceptable performance
- (4) No evaluation

Students are required to meet with their mentor at the end of each semester to discuss their overall progress and review the evaluation. A rating of '2' or '3' triggers a meeting with either the Director or Associate Director to discuss remedies. Students receiving a (4) should have their advisor contact the Director AS SOON AS POSSIBLE to avoid a hold on registration. Keep in mind that these evaluations serve to monitor student progress and are used solely for internal tracking and making decisions about status in the program. They are not placed in the student's official records or transcripts that are shared outside of the University. Two successive ratings of a (3), or over the course of being an NGP student, more than two semesters in which ratings of (3) were given, are grounds for dismissal from the NGP.

Annual Progress Report (APR)

Starting in year 2, all students must meet in person with their guidance or dissertation committee at least once every academic year (August - July). Be sure to schedule a meeting time well in advance (4-6 months) and make sure that all of the committee members can attend. This must be made in advance because faculty travel and may have many responsibilities outside of their laboratory. If your mentor or another member of your Guidance or Dissertation Committee will be on sabbatical, you still must schedule an annual APR meeting. For this situation, the faculty member may join by video or audio conferencing. Keep in mind that the committee chair and the mentor must be present for the APR. Should there be difficulty scheduling the meeting, please contact Deanna Solórzano, who can help with this issue. Please note that the Qualifying Examination serves as the required APR meeting for that academic year.

The meeting is organized for the student to provide an update to her/his committee, including details of research and academic progress, to receive constructive feedback, to raise any concerns, to hear about future experimental plans, and for the committee to help solve problems that may have arisen since the last meeting. Note that students are encouraged to seek out research, academic or personal advice by meeting individually with members of their Guidance or Dissertation Committees at any time.

The student is responsible for obtaining each committee members signature on a form at the annual meeting. The form must include the committee chair's written summary. The completed/signed form must be submitted to Deanna Solórzano within 2 weeks of the meeting. The form can be found on the NGP website under Current Students.

Individual Development Plan (IDP)

An Individual Development Plan (IDP) is a planning tool designed to help USC NGP students identify annual progress, professional development needs, and career objectives. The IDP also serves as a valuable communication tool between PhD students, their research mentor, and their Guidance/Dissertation Committees. Students have the option of using a NGP form (modified from Vanderbilt University with permission), accessed from the NGP web site, or a generic form from the American Association for the Advancement of Science (AAAS), which may be downloaded at <http://myidp.sciencecareers.org/>.

The annual IDP is required and must be submitted to Deanna Solórzano by August 15th every year. First year students have until September 14, 2018 to meet this milestone.

The IDP is part of the USC NGP mentoring and professional development activities for each student. The IDP is meant to:

- Self-identify progress in training and accomplishments and goals from the previous year
- Identify short-term solutions for improving performance
- Set goals for the upcoming year, which may include learning new methods, defining specific research, academic and professional development activities, and the time commitment needed to reach these goals
- Define ways to develop specific skills and experience needed to complete research training and prepare for individualized long-term career goals

The IDP is not used to evaluate students. Rather, self-identification of short-term goals will provide trainees a clearer sense of expectations and help identify milestones for achieving objectives. The IDP also provides a framework for long-term career planning, serving to initiate ongoing conversations between mentor and NGP student, as well as with Guidance/Dissertation Committee members.

After the trainee has filled out the IDP, the contents of the document should be discussed with the research mentor. After discussion, a copy of the IDP should be submitted electronically to Deanna Solórzano in the NGP office, adhering to the deadlines noted above.

6. Appointment of Guidance Committee

Prior to the end of the third semester, students must establish a guidance committee consisting of five members. Students who enter the program in 2018 must establish a guidance committee by **October 18, 2019**.

Choosing a committee is important. Ideally, you will develop a close professional relationship with these faculty members, which will be of mutual benefit throughout your academic and professional career. Consult with your mentor about the committee composition. Keep in mind that it is most important to communicate with committee members regarding their expectations of both academic and research progress.

The Guidance Committee consists of 5 faculty members. At least 3 of the 5 members of the Guidance Committee must be training faculty members of the NGP. The Chair of the Committee is not the student's mentor, but must be a NGP faculty member. NGP training faculty who are associate members may serve on the Guidance Committee, but may not serve as the Chair. At least one of the NGP members of the Guidance Committee must be tenured, and one member of the Guidance Committee must be defined as the 'outside' member. The outside member may be a member of the NGP, but must have their primary academic appointment in a different school from the mentor. If the outside faculty member is not a member of the NGP, their primary appointment may be in the same school as the student's mentor.

While unusual, a faculty member from another university may serve on the Guidance Committee as an additional 6th member. The student and mentor must submit the proposed committee to the NGP Director, who together with the Vice Provost for Graduate Studies, has final approval.

7. Competency and Qualifying Examinations

Successful completion of the Competency Examination and the Qualifying Examination will admit a student to official candidacy for the Ph.D. degree at USC. Historically, almost all students have passed. The exams are meant to test student core competencies in neuroscience and abilities to develop and conduct a dissertation research project. The exams are challenging, but are not designed to trick students.

Scheduling both the Competency Examination and Qualifying Examination:

To begin the examination process, first contact Deanna Solórzano. **There are specific semester deadlines for completing each exam.** This information can be found in the Time to Degree section. Should there be any issues about meeting these requirements, you must make an appointment to speak to the Director or Associate Director as soon as possible. Keep in mind that the USC Graduate School requires at least two semesters of dissertation coursework before the dissertation defense. Please see Dawn Burke with additional questions.

Competency Examination:

The Competency Examination provides an opportunity for a student to express a deeper understanding of the area of neuroscience that is relevant to their chosen research focus. The

Competency Examination serves as a way for the student to become familiar with relevant research literature and eventually, to become able to place the experiments described in the dissertation proposal (written component of the Qualifying Examination) in the context of the larger field. This ability speaks to the background and significance of the research, an important component of any grant application.

The Competency Examination must be completed before the end of the spring semester in year 02. The chair of the Guidance Committee will obtain one question from the 4 inside committee members. The outside member of the committee does not provide a question. The Chair must approve the questions and then e-mail them to Deanna Solórzano who will then distribute to the student. **Thus, all questions, contracts and instructions will be given to the student by Deanna Solórzano.**

The student must obtain the exam from Deanna Solórzano in person, either at the NGP HSC or UPC office. At that meeting, the student will be provided with a specific deadline. Answers are due back to Deanna, via email, by 5pm PST exactly 4 weeks after the student received the exam questions. **There are no exceptions.** Turning in the answers after the established deadline will result in automatic failure, and the student will have to retake the exam. Students will dedicate significant time to completing the exam, which may reduce the time and effort available for laboratory research and coursework. This varies depending on the research project and the policies of the PI. Students should discuss time allocation with their mentor and Guidance Committee chair prior to beginning the Competency exam.

Any primary research publications, references or source material can be read by the student to facilitate answering the exam questions, but must be acknowledged (see below). Students can ask for clarification only from the guidance committee member who submitted the question, but may not discuss the questions or their answers with anyone else prior to submission. Each answer should be approximately 5 single spaced pages in length, not including references.

Plagiarism is unacceptable, and is grounds for failing the exam, as well as dismissal from the University. Students are required to read through the University Student Conduct Code found on this webpage: <https://policy.usc.edu/scampus-part-b/>. Students must sign a Plagiarism Prevention Agreement, certifying that they have reviewed the University Student Conduct Code and will not plagiarize any portion of their qualifying exam.

Competency Examination – Guidelines for Questions:

In preparation for the Competency Examination, it is recommended that the student meet with each committee member to discuss the student's general research area of interest and likely topic. This discussion will assist in each committee member formulating a question relevant to the student's interests and project. Please keep in mind that the questions will not focus on the research project. Rather, the questions will challenge the student to demonstrate a fundamental and current understanding of research that has contributed to specific neuroscience principles.

The Guidance Committee members and student must agree on one format style.

Below are the two general formats to choose from:

- write a brief review of a specific topic
- summarize, critically evaluate, and synthesize a large body of knowledge

Competency Examination – Grading:

Each committee member will grade his/her question on a scale of 1.0 – 5.0 using 0.5 increments if necessary (1.0 as poor and 5.0 as exceptional). A mean score of 3.3 or above is passing; below 3.0 is not passing. In cases in which the mean is between 3.0 and 3.3, or two or more questions are graded below 3.0, the full committee must vote pass or no pass. Two or more negative votes by the committee will result in not passing.

Failure to Pass the Competency Examination:

Should the student not pass, she/he will receive a written warning and must meet with the chair of his/her committee to review the critiques of the exam answers. The student must retake and pass the Competency Examination within 3 months of receiving written notification of failure. Following university guidelines, a second failure will result in dismissal from the NGP and the University. Note that faculty members of the Guidance Committee may not be changed between first and second attempts at passing the exam, except what a Committee member leaves the University.

The Qualifying Examination

The student is required to submit the Request to Take Qualifying Examination Form no later than 45 days prior to the start date of the examination. The form can be found on the NGP website under the Current Students section. If for any reason, a committee member cannot be physically present for the oral component of the exam the student may petition to have one to two members participate remotely. Faculty may join the presentation via teleconference or video conference. It is both Graduate School and NGP policy that no more than two members may participate remotely, and both the committee chair and the mentor **MUST** be physically present for the oral examination.

At the end of the oral part of the examination, the committee will inform you of the outcome of both the written and oral components of the qualifying exam. All committee members must sign the Report on Qualifying Examination Form, which must be returned to Deanna Solórzano by the committee Chair. **Students are not allowed to handle this form.**

The qualifying examination has two portions that must be completed; the Writing Component and the Oral Component. The purpose of the Writing Component is to ensure that the student's dissertation research proposal is sound and likely to yield substantive and original findings. Students are encouraged to utilize the written component as a basis for fellowship grant applications, which is the typical format. The Oral Component is of particular importance for students to demonstrate a sophisticated understanding of the proposed research. Students should be able to defend the written proposal, including the rationale, experimental design, data analyses, interpretation of results and potential pitfalls and solutions. Students should be able to answer questions that relate to topics tangential, but nonetheless relevant to the proposal. In addition, the oral exam is used to discern that any weaknesses identified in the written exam have been corrected.

The writing component in conjunction with the oral component must be completed before the end of the spring semester of the third year.

The Writing Component of the Examination:

The Writing Component is a research proposal, preferably in the format of a common federal funding source, e.g., an NIH NRSA pre/post doctoral fellowship, NIH R01/R21 research grant, or NSF grant. After consultation with the mentor, the student will determine the agreed upon format choice. The subject will be the student's dissertation project. The final draft must be emailed to the committee, cc'ing Deanna Solorzano, **no later than 3 weeks before the oral exam is scheduled**. There are no exceptions to this deadline, as training faculty must have adequate time to carefully evaluate the written proposal. If a student feels they cannot meet this deadline, they must immediately contact their committee chair, mentor and the NGP Director to arrange an adequate solution. Failure to meet this deadline will require rescheduling of the oral exam.

The written proposal should be viewed as a solid framework for the dissertation research project. New data often can inform a necessary change to experimental approaches, or even the introduction of new experiments. There should be preliminary data to support the proposal, but it need not be excessive, and the NGP and training faculty recognize that the dissertation project may change to varying degrees. This flexibility is a normal part of the scientific process, and should not delay submission and completion of the Qualifying Examination.

The committee may decide, upon reading the written proposal, that there are significant weaknesses that cannot be addressed during the oral presentation. In this case, the oral exam is cancelled and according to USC Graduate School rules, the student does not pass the examination. The guidance committee also may decide that either the written proposal is sound, or has modest weakness that may be addressed during the oral exam. In this case, the oral exam will proceed.

The proposal must include preliminary/pilot research results obtained by the student, as expected for any grant application. This pilot data should accomplish at least one of the following goals:

- Demonstrate some familiarity with techniques to be used
- Establish the validity of underlying hypotheses
- Justify the experimental design

Note that it may not be necessary to obtain positive results to meet these goals.

Students often underestimate the time needed to write a proposal, so ensure that there is sufficient time dedicated to writing. Speak to your mentor or committee members about typical time allotments that they use for writing grant applications. The research data in the proposal should be original and performed by the student. In addition, while you must write a complete initial draft of the document, you are encouraged to seek advice from your mentor

in revising subsequent versions. This is a learning opportunity and it is expected that such interactions will improve the final document that will be submitted to your committee for evaluation. Some students take the grant writing workshop offered during their 2nd and 3rd year, prior to taking their qualifying exam. Because the workshop format is writing a draft fellowship proposal, it can help the student with proposal organization, quality and clarity of the science writing.

The Oral Component of the Examination:

The date for the oral component of the exam is scheduled by the student through the NGP office after consultation with the Guidance Committee. In order to prepare for the oral component of the Qualifying Examination, arrange a mock oral exam. The mock exam should be presented to post-qual students or postdocs in your lab or in labs with related interests. Remember that no one, including NGP training faculty, can answer every question perfectly. Maintaining composure during the exam is important and will help you focus on the research.

There are questions addressing common topics that your Guidance Committee members may ask during oral exam. A partial list follows:

- The rationale for performing the proposed studies
- Specific details of experimental design, including statistical methods
- The scientific or technical basis of methods used
- Data interpretation, experimental pitfalls, and alternative approaches
- The global significance or health-relatedness of the project
- Relation of your project to other work in the field
- Your knowledge of literature relevant to the project
- Your ability to synthesize and summarize ideas

In preparing for the exam, remember that it is a unique opportunity to receive constructive feedback regarding your proposal from seasoned scientists, which, in fact, is exactly what successful researchers experience throughout their careers.

NOTE: Only committee members and the student taking the examination may be present during the oral component. Other students, faculty or guests may not attend. The Director or Associate Director may choose to attend any qualifying exam.

Grading Procedures for the Writing and Oral Components of the Qualifying Examination:

The status of the Qualifying Examination (pass/fail) will be determined by the student's committee after a short meeting of committee members immediately following the oral examination. The decision is determined by a majority vote of all Guidance Committee members. The committee chair must write a summary representing the opinions of those who voted 'pass' and those who voted 'no pass'. Should the majority of committee members vote to not pass the student, she/he will be informed in person and then receive a written letter of the outcome. The student must meet with the chair of his/her committee to review the critiques of the committee regarding the written proposal and oral presentation. The student must retake the Qualifying Exam within 6 months of written notification of not passing.

There are no exceptions to this deadline. NGP and USC Graduate School guidelines state that a second failure of the Qualifying Examination will result in automatic dismissal from the university. Students who are dismissed may access rules for disputing academic dismissals in **SCampus**.

8. Dissertation Committee

The Dissertation Committee is formed following successful completion of the Qualifying Examination. The committee must be formed within 6 months after passing the Qualifying Examination and may be composed of a subset of faculty of the student's Guidance Committee or different faculty members.

The dissertation committee consists of a minimum of at least three USC faculty, two of whom must be NGP training faculty, at least one of whom must be tenured, and an outside member who may be a member of the NGP, but whose primary academic appointment is in a different school from the laboratory mentor. Note that the committee chair must be tenured or tenure track, and CANNOT be your mentor. The outside member may be a member of a USC graduate program other than the NGP. If the outside faculty member is not a member of the NGP, they may be appointed in the same school as the student's mentor. Finally, as noted for the Guidance Committee, a faculty member from another university may serve as a committee member with approval of the Director and Vice Provost for Graduate Studies.

The form to file for approval of the dissertation committee members can be downloaded from the NGP website under Current Students, under forms.

9. Dissertation Composition

The following is a general discussion of the approach one should take when writing the dissertation. NGP dissertation committees typically request that the dissertation include general introductory and summary chapters. The chapters that form the bulk of the dissertation, which report original research, should be written in the form of a manuscript suitable for publication in a peer-reviewed scientific journal.

Published manuscripts for which a student is the first or co-first author may serve as chapters of the thesis. Reformatting of these chapters will be necessary to ensure a uniform format (text, references, figures, tables). In addition, students must receive approval for the content and organization of the dissertation by her/his mentor and dissertation committee members in advance of writing.

While not a program requirement, the NGP expects that all students will have at least one first author, original data publication prior to their dissertation defense. Irrespective of your professional goals, your research publications contribute greatly to postgraduate success for obtaining academic or private sector positions. Your annual IDP should set goals to achieve first author publications prior to the dissertation defense.

To begin the Graduate School Thesis/Dissertation Submission process visit this webpage: <http://graduateschool.usc.edu/current-students/thesis-dissertation-submission/>

Before you start writing

- Select a journal
Consider the format, appropriateness, prestige, and costs of journals in your field. Concentrate on refereed journals that publish full-length papers based on the chapters in your dissertation that report original experiments and data. Brief communications typically do not serve as an individual chapter of your dissertation. Your introductory chapter of your dissertation eventually may be appropriate for a book chapter or review article in a journal.
- Be cautious of very high profile journals (e.g. Science and Nature)
These are prestigious, but chances of acceptance are very low and the selection process is capricious and can take a long time. Seek impartial opinions about the significance of your work before deciding whether it's worth the effort.
- Consider authorship carefully
You should be first author or designated co-first author on papers that compose your dissertation. In the field of neuroscience, the dissertation advisor generally is the senior and corresponding author when the manuscript is submitted. For submitted manuscript on which you serve as first author, the senior author is typically the corresponding author to the journal (because students may graduate and move prior the article being accepted for publication). In addition, the senior author (laboratory PI) is responsible for ensuring that research conducted in her/his laboratory meets the expectations and standards of the funding agency (internal or external) and ensuring responsible conduct in research guidelines are followed. The senior author (typically your mentor) is responsible for making the final determination for authorship, and typically will seek your input. The NGP recommends following the International Committee of Medical Journal Editors' definition of authorship (see <http://www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html>), but many journals have their own guidelines for determining authorship. Most journals now require each author's role in the research reported in the manuscript to be specified. Students should understand these rules before discussing authorship decisions with your mentor. Keep in mind that writing a manuscript is a collaborative process that often requires discussions and negotiations so that in the end, all authors will endorse the contents, as required by the journal. Please keep in mind that ultimately, the university owns the data generated from intramurally or extramurally funded research. USC has guidelines regarding shared credit for intellectual property by those involved in conceptualizing, performing and/or managing the research studies. The laboratory PI is responsible for all aspects of research project oversight.
- Practice your writing and start early
Most students grossly underestimate how long it will take to finish writing. Start outlining your papers early; this is often the most effective way to determine what experiments still are needed. The NGP incorporates a number of writing experiences through coursework, qualifying exams, and workshops. Thus, we expect that all NGP students will improve their writing skills during their time in the Program. Manuscripts often are edited substantially. Find peers who are willing to read and comment on early

drafts. Do the same for them. Mutual editing of this sort may be among your most valuable experiences to hone your writing skills.

- Great communication is the key to success, and it helps avoid misunderstandings. Discuss everything with your laboratory mentor. Come to agreement on the nature and scope of your dissertation. How many chapters will there be? Which publishable data will be included? If certain data are not included, understand your rights to co-authorship of the eventual publications. Learn your rights regarding intellectual property, which can be found on the USC web site.
- Discuss everything with your dissertation committee. Committee members, along with your advisor, are charged by the University to approve the dissertation document. They expect to be involved and committed early on to your success. In addition to the required academic year meeting for the entire committee, we encourage you to meet with members of your committee individually to seek input and advice. While conflicts between students and their mentors are uncommon, your committee members, as well as the NGP Director and Associate Director can help in such instances.
- Consider certain practical matters. Will you need technical support for graphics, digital micrographs, statistics, or special access to other equipment or supplies? What word processing, data analysis, and graphics software will you use? Who will pay publication costs, including paper reprints if desired? Each of these issues should be discussed with your mentor prior to embarking on writing.

While you are writing

Write your chapters as journal articles. From the start, write each chapter in the format of a paper in your chosen journal. Published full-length papers may serve as individual chapters, but will need to be reformatted to achieve common organization for the entire dissertation document.

Feed drafts of the papers to your advisor and committee members. Since they are separate papers, each chapter should be self-contained. However, there may be detailed experimental results, or simulation data, that would unduly lengthen the paper. Consider including these in the Appendices of your dissertation. Moreover, the journal may accept them for electronic-only publication as Supplemental Materials. Submit the articles individually to your committee members for their preliminary approval. As a courtesy, provide them with plenty of time to read and respond. This may save you much aggravation later.

Do not offend anyone. Think about your dissertation dedication and acknowledgements section well in advance and include all who have made important contributions. Be tactful. While being constructively critical is perfectly acceptable, a vitriolic or personal attack on the published work of others is never a good idea.

Publishing early is OK. Sometimes, competition from others or the need to show progress for continued grant funding will require you to publish papers well before the dissertation. This is a good idea.

Your dissertation should be coherent. A bundle of re-formatted papers or, even worse, a stack of published reprints, is not acceptable for the dissertation. Your chapters should be thematically related. Most dissertations of NGP students include general introductory and summary chapters. The Dissertation Committee may make this recommendation to the student. The introductory chapter may be in a different format. This may be a literature review, a summary of background work done by others, etc. In some instances, the questions that you answered in the Competency Examination, or the introduction to your thesis proposal, can help to start the process of writing this section. A concluding chapter summarizes and discusses the significance of your work. Students often include a discussion of their ideas regarding future directions research.

Steps before your defense

At least one semester before a student is planning on defending it is imperative to make sure that they are on track to graduate. On the NGP website students can find the Dissertation and Defense Checklist that will serve as a guide for all necessary steps to defend. The checklist includes, links to all documents that must be submitted, as well as links to the Graduate School Thesis and Dissertation Center. In addition, there is a list of information needed for NGP to generate and distribute the dissertation announcement to the Neuroscience community.

<https://ngp.usc.edu/files/2018/07/Dissertation-and-Defense-Information.pdf>

When scheduling the defense date with the Dissertation Committee it is advised to begin this process early, as faculty calendars get booked well in advance. If for any reason, a committee member cannot be physically present for the dissertation defense the student may petition to have ONE member participate remotely. Faculty may join the defense via teleconference or video conference. It is both Graduate School and NGP policy that no more than one member may participate remotely, and both the committee chair and the mentor MUST be physically present.

After you finish writing and defending

Ask members of your committee if they would like a hard copy of your dissertation. Make a hard copy of your approved dissertation for your advisor. Consider final copies for spouse, parents, significant others, etc.

Publish as soon as possible. As noted above, the NGP expects that all PhD students have at least one peer-reviewed manuscript accepted for publication prior to graduating. In the past 10 years, greater than 90% of NGP graduates have achieved this milestone. As a warning, the more time that elapses from the primary research being completed, the more difficult it is to generate publications (bearing in mind it may take more than a year to finally see your work in print from first submission). In your new position as a postdoc, faculty member, or industrial researcher, you may not have the time to complete manuscripts from your

dissertation work. Publishing your thesis research will reflect well on your future, regardless of which professional path you choose to follow.

10. Terminal Masters Degree

The USC Neuroscience Graduate Program (NGP) is a Ph.D.-granting advanced program in the interdisciplinary study of the neurosciences. On very rare occasion and for a variety of reasons, a graduate student in the NGP will be unable to complete the full course of study for a Ph.D., but nonetheless will have done a significant amount of work in the Program. The student may petition the NGP Director to obtain a terminal Masters degree. The student also must inform the administrative staff of the NGP to file the necessary paperwork and petition with the university. The Director may bring the petition to the Executive Committee for deliberation. The student will be notified of acceptance or rejection of the petition. In order to receive the Masters degree, a student must fulfill the following requirements:

- Students must complete the course work required of Ph.D. students for a minimum of 25 units. The units must include the NGP core course and additional course requirements when the student entered the NGP.
- Students must successfully complete the required NGP Competency and Qualifying Examinations that demonstrate discipline and research competencies.
- Students can opt for a thesis or non-thesis Masters (see below for full description).

A Masters thesis may be composed of an accepted or published manuscript (review or original research report) for which the student serves as first author (organized in thesis format) OR a thesis document that typically is a draft of a data manuscript in preparation:

- 1) An introduction to the particular area of research in which the student was engaged;
- 2) An overview of the specific research project;
- 3) A description of the methods and results (negative or positive) obtained by the student in their thesis laboratory
- 4) A discussion of experimental interpretation and pitfalls.

While there is not a page requirement for the thesis document, a range from 25-50 double-spaced pages, including figures, is typical. A reference list and figures that depict research findings should be included in the thesis. A Masters thesis requires review and approval by a thesis committee (mentor and 3 other NGP training faculty). The thesis is presented to the USC Graduate School for final approval and publication.

A non-thesis Masters will include a research paper that ranges in length from 30-40 pages. The paper will detail:

- 1) A historical introduction to a specific area of neuroscience research related to the research activity in which the student has engaged
- 2) A critical review of the current state of research findings and functional mechanisms
- 3) A detailed proposal of future research opportunities, articulating a few examples of specific experiments

A reference list should be included in the thesis. The research paper must be approved by the student's mentor and two other NGP training faculty members, serving as the review committee. The research paper is not presented to the USC Graduate School for approval.

Other Considerations

A student opting for a terminal Masters degree may not receive University support (RA or TA) once the petition is granted. A student receiving a Masters in Neuroscience may not remain enrolled in the Neuroscience PhD program. The student is fully responsible for scheduling meetings and obtaining approval of the Masters thesis document or Masters research paper in sufficient time for the processing of the requisite forms to be submitted by the NGP administration to the USC Graduate School for final approval.

ETHICS AND YOUR RIGHTS AS A STUDENT

Many well-defined rights, responsibilities, and expectations govern the close relationship between a graduate student and faculty advisor. Ideally, this code of ethics helps insure that your time in graduate school will be productive and rewarding in preparing for your future professional work. In less than ideal situations, it may be necessary to invoke these standards to insure that your rights as a student are not violated. **IT IS THE RESPONSIBILITY OF EACH STUDENT TO BE AWARE OF THEIR RIGHTS AND RESPONSIBILITIES AS A TRAINEE IN THE NGP AND A STUDENT AT THE UNIVERSITY OF SOUTHERN CALIFORNIA.** The course “Ethics and Accountability in Biomedical Research” – INTD 500 – or equivalent, covers these rights, responsibilities, and expectations in the context of case studies and group discussion. In addition, a mandatory session on ‘Ethics and Professional Conduct’ is held at every NGP retreat. Finally, these matters are discussed in two excellent booklets. These are:

1. **SCampus and USC Student Affairs**

The SCampus, a USC publication, is a good source of information about sexual or other types of personal harassment, basic rights and responsibilities of students, academic integrity, review and appeals procedures, procedures for disputing grades, sexual harassment, and other issues. You can view this guidebook online, <https://policy.usc.edu/student/scampus/>.

The USC Student Affairs Office has a Student Support and Advocacy unit that students can contact regarding bias incidents, crisis management, and misconduct of faculty with regard to responsible conduct in research, informal and formal grievances, grade disputes, and any harassment incidents. You can visit the Student Support and Advocacy website for more information; <https://studentaffairs.usc.edu/ssa/>. The student is responsible for official filing appeals or charges, and the university is responsible for the process. NGP can provide information to facilitate the student in identifying the most appropriate university office. See also reference to Relationship and Sexual Violence Prevention and Services (RSVP) under Student Counseling services.

2. **On Being a Scientist**

This outstanding brochure from the National Academy of Sciences covers three major topics: the nature of scientific research, social mechanisms in science, and the role of scientists in society. Of particular interest in the present context is the second topic, which deals with the peer review process, replication of observations, the nature of scientific progress, human error, fraud, plagiarism, allocation of credit for research results, and special problems associated with collaborative research. There is also a brief but excellent annotated bibliography. You can read it on-line for free or order copies at the following URL: <http://www.nap.edu/catalog/4917.html>.

The important topics not covered in these booklets are rules governing the use of human subjects in biomedical research and ethical considerations regarding these of animals in research.

Serious violations of ethical standards have been extremely rare in our program. If you have the slightest concern about any issues governing student and faculty responsibilities, and

your role to conduct research that meets high ethical standards, do not hesitate to contact the Directors of NGP, Pat Levitt (plevitt@med.usc.edu) or Judith Hirsch (jhirsch@usc.edu). Your discussions will be held in confidence. Of course, feel free to consult other faculty or peers that you trust. Ultimately, it is the student's responsibility to determine whether they will file grievances through the procedures described in SCampus. USC has many support services to advise students on concerns they may have related to research and academic integrity. The Director and Associate Director cannot be responsible for overseeing and resolving research and academic ethics concerns that a student may have, but will assist in identifying the appropriate University resources.

TIMELINE TO DEGREE

	FALL	SPRING	SUMMER
	1st Semester	2nd Semester	
1st Year Milestones:	-Attend the NGP retreat. -Lab rotations -Submission of contracts and summary forms due after each rotation.	-Lab rotations cont. -Present at NGF symposium -Email Advisement Committee with preferred mentor match due the 1st week in May. By end of Spring semester, thesis mentors must be confirmed.	-Begin research project -IDP
Courses:	-NSCI 524- 4 Units -NSCI 539- 1 Unit -NSCI 790- 7 Units *Registration	-NSCI 525 – 4 Units -NSCI 539 – 1 Unit -NSCI 790 – 7 Units *Registration	-INTD 500 – 1 Unit -Statistics – 4 units -GRSC 802 or NSCI 790 depending on source of support
	3rd Semester	4th Semester	
2nd Year Milestones:	-Attend the NGP retreat. -Establish Guidance Committee. Must be established by October 19, 2018.	-Present at NGF symposium **Competency Examination	-Continue Research -APR -IDP
Courses:	-NSCI 539-1 Unit -1 of the key courses from the 4 tracks. -NSCI 790 *Registration	-NSCI 539-1 Unit -1 of the key courses from the 4 tracks. -NSCI 790 *Registration	-GRSC 802 or NSCI 790 depending on source of support
	5th Semester	6th Semester	
3rd Year Milestones:	-Attend the NGP retreat.	-Present at NGF symposium ***Qualifying Examination	-Continue Research -Appointment of Dissertation Committee. -IDP
Courses:	-NSCI 790 – 6 Units *Registration	-NSCI 790 – 6 Units *Registration	-GRSC 802 or NSCI 790 depending on source of support ****Degree Verification
	7th Semester	8th Semester	
4th Year Milestones:	-Attend the NGP retreat.	-Present at NGF symposium	-Continue Research -APR -IDP
Courses:	-NSCI 794 – 2 Units	-NSCI 794 – 2 Units	-GRSC 802 or NSCI 790 depending on source of support
	9th Semester	10th Semester	
5th- 6th Year Milestones	-Attend the NGP retreat.	-Present at NGF symposium *****Dissertation Defense and Graduation	-Continue Research -APR -IDP
Courses:	-NSCI 794 – 2 Units	-NSCI 794 – 2 Units	-GRSC 802 or NSCI 790 depending on source of support

NOTES/LEGEND***Registration:**

-All students must have a minimum of 6 units to be considered full time and no more than 12 units per semester prior to passing the Qualifying Examination. After advancing to candidacy all students must be registered in NSCI 794 every fall and spring semester to maintain full time status.

**** Competency Examination**

-Written Exam must be taken by the end of the 4th semester, no exceptions.

*****Qualifying Examination**

-A total of 25 course work units must be completed before taking the Qualifying Examination.

-Qualifying Examination must be taken by the end of the 6th semester, no exceptions.

******Degree Verification:**

-Review your degree progress on OASIS to check any deficiencies or problems. Contact Dawn Burke with any concerns or questions

*******Dissertation Defense and Graduation:**

-A total of 60 units are required for the doctoral degree.

-If you decide to postpone your degree date you MUST contact Dawn Burke and the Director MUST approve all requested changes

-Report to Dawn Burke your intent to participate in hooding ceremony by the 2nd week in February.

-Inform your PI of hooding ceremony instructions and participation.

-Provide Deanna Solórzano with your Dissertation Defense information for postings, recording and announcements.

-Make an appointment with Dawn Burke for finalization of paperwork submission and information after dissertation defense.

-Ensure thesis is uploaded by deadline.

-Complete the NGP exit survey!

DIRECTORIES

Important University Numbers

Emergency Contact Information

In case of Emergency, please call this phone number first:

Department of Public Safety Emergency Line:

UPC: (213) 740-4321

HSC: (323) 442-1000

Department of Public Safety Non-Emergency Line:

UPC: (213) 740-6000

HSC:(323) 442-1200

Bookstore

UPC: (800) 447-8620

HSC: (323) 442-2674

Campus Cruiser

<http://transnet.usc.edu/index.php/campus-cruiser-program/>

UPC: (213) 740-4911

HSC: (323) 442-2100

Cashiers Office

UPC: (213) 740-7471

USC Credit Union

STU 106

HSC: (323) 442-3040

SRH 101B

Center for Academic Support

(213)740-1741

STU 301

Center for Women and Men (CWM)

<https://engemannshc.usc.edu/rsvp/>

(213) 740-4900

ESH 356

Counseling Services

<https://engemannshc.usc.edu/counseling/>

(213) 740-7711

Degree Progress

(213) 740-7070

FedEx Office

(213) 746-4234

Graduate Admissions Office

(213) 740-1111

Graduate School

(213) 740-9033

Information Technology

HSC IT: (323) 442-4444

UPC IT: (213) 740-5555

HNB Audio Visual: (213) 905-2474

Library Services

Circulation: (213) 740-4350

Administration: (213) 740-0049

Information Commons: (213) 740-7988

Reference Consultations: (213) 740-6938

Office of International Services

(213) 740-2666

Royal Street Parking Structure Suite 101

Parking (Transportation Services)

(213) 740-3575

McCarthy Way Parking Structure

Registrar One Stop Center

<http://www.usc.edu/dept/ARR>

(213) 740-8500

TRO 101

Room Reservation Contacts

DRB – Susan Cooper: (213) 821-1808

HNB – Jessica Alarcon (213) 740-

RRI – Katie Boeck: (213) 821-4464

ZNI - Emily Chou: (323) 442-3219

Student Account Services

(213) 740-7471

Jefferson Boulevard Parking Structure

USCard Office

(213)740-8709

McCarthy Way Parking Structure

USC Eric Cohen Student Health Center – HSC

USC Engemann Student Health Center – UPC

<https://engemannshc.usc.edu/>

<http://engemannshc.usc.edu/myshr/>

(213) 740-9355

Department Business Officer Contacts**Biokinesiology and
Physical Therapy**

Lydia Vazquez
Division Administrator
lvazquez@usc.edu
323-442-1883

Biomedical Engineering

Karen Johnson
Department Business
Manager
ktierney@usc.edu
213-740-0839

**Children's Hospital Los
Angeles**

Jesse Castro (Primary)
Budget Manager /Home
Department Coordinator
jcastro@chla.usc.edu
323-361-7038

Harleen K. Gill
Coordinator of Research
Training
hgill@chla.usc.edu
323-361-8626

Computer Science

Lisa Avalos
Department Payroll
Assistant
leavalos@usc.edu
213-740-8179

Economics

Christine Patugan
Department Business
Administrator
patugan@usc.edu
213-740-3164

**Eli and Edythe Broad
CIRM Center for
Regenerative Medicine
and Stem Cell Research**

Patt Pholnukulkit
Home Department
Coordinator
pholnuku@usc.edu
323-442-3303

Gerontology

Dominic Alpuche
Senior Business Officer
alpuche@usc.edu
213-740-1495

**Human & Evolutionary
Biology**

Karla De Souza Dias
Operations Manager
souzadia@usc.edu
213-740-8226

Molecular Biology

Karla De Souza Dias
Operations Manager
souzadia@usc.edu
213-740-8226

Neurobiology

Karla De Souza Dias
Operations Manager
souzadia@usc.edu
213-740-8226

**Occupational Science and
Occupational Therapy**

Patty Huevo Gutierrez
Division Contracts and
Grants Coordinator
huevo@chan.usc.edu
323-442-2032

Ophthalmology

Becky Nguyen
HD Payroll/Personnel
Coordinator
bnguyen@usc.edu
323-865-6806

Pharmacy

Veronica Villanueva
Home Department Payroll
Coordinator
villanuv@usc.edu
323-442-1371

Psychology

Eric Chiang
Budget Business Analyst
csevilla@usc.edu
213-740-8344

USC Stevens

**Neuroimaging and
Informatics Institute**
Sandra Phung (Primary)
Home Department
Coordinator
sandra.phung@ini.usc.edu
323-442-7246

Grace Liang-Franco
Program Manager
grace@ini.usc.edu
323-442-7246

**Zilkha Neurogenetic
Institute**

Marlen Turcios
Budget/Business Technician
mturcios@usc.edu
323-442-4401

NGP Faculty

All NGP Faculty appear on <https://ngp.usc.edu/faculty/> with contact information and material on research interests.

New Neuroscience Graduate Students - Fall 2018

<u>Name</u>	<u>School Attended</u>
Julia Anglin Juliano	Arizona State University
Giuseppe Barisano	Universita Vita-Salute San Raffaele
Samantha Betts	Kenyon College
Brandon Butler	University of Texas - Arlington
Erin Donahue	Hamilton College
Lauren Eisenman	Scripps College
Adam Jones	Texas A&M University
Tanisha London	Spelman College
Elizabeth Loxterkamp	Wellesley College
Brock Pluimer	Hendrix College
Anna Pushkin	University of California, Irvine
Boyoon Michelle Seo	University of Washington
Nancy Tran	Arizona State University

Neuroscience Graduate Students

Name	Cohort	Lab PI	E-mail
Ahn, Seohee	2015	Dr. Judith Hirsch	seoheeah@usc.edu
Ajayan, Anakha	2017	Dr. Terrence Town	ajayan@usc.edu
Ali Marandi Ghoddousi, Ramin	2017	Dr. Pat Levitt	alimaran@usc.edu
Anglin Juliano, Julia	2018	Rotations	juliaang@usc.edu
Argueta, Jocelyn	2016	Dr. Judy Pa	jlarguet@usc.edu
Barakat, Rita	2016	Dr. Kristi Clark	rbarakat@usc.edu
Bareghamyan, Aida	2015	Dr. Donald Arnold	baregham@usc.edu
Barisano, Giuseppe	2018	Rotations	gbarisan@usc.edu
Bay, Maxwell	2015	Dr. Michael Bonaguidi	maxwellb@usc.edu
Benavidez, Nora	2015	Dr. Hong-Wei Dong	nlbenavi@usc.edu
Betts, Samantha	2018	Rotations	sbetts@usc.edu
Brenner, Rorry	2013	Dr. Laurent Itti	rorry.brenner@usc.edu
Butler, Brandon	2018	Rotations	bdbutler@usc.edu
Camarena, Andres	2016	Dr. Raymond Goldsworthy	andresc@usc.edu
Catich, Edward	2016	Dr. David McKemy	catich@usc.edu
Cheung, Jonathan	2014	Dr. Samuel Andrew Hires	jacheung@usc.edu
Chien, Chun Jerry	2017	Dr. Dion Dickman	chie288@usc.edu
Choi, So Young	2015	Dr. Richard Leahy	choisoyo@usc.edu
Chou, Xiaolin	2012	Dr. Huizhong Tao	xchou@usc.edu
Cooper, Alexander	2014	Dr. Jeannie Chen	cooperaj@usc.edu
Dokovna, Lisa	2014	Dr. Ruth Wood	Dokovna@usc.edu
Donahue, Erin	2018	Rotations	ekdonahu@usc.edu
Donovan, Alexandra	2016	Dr. Ruth Wood	donovana@usc.edu

Dorton, Hilary	2014	Dr. Kathleen Page	hdorton@usc.edu
Eisenman, Lauren	2018	Rotations	leisenma@usc.edu
Enachescu, Vincent	2011	Dr. Stefan Schaal	enachesc@usc.edu
Fang, Qi	2013	Dr. Li Zhang	qfang@usc.edu
Fenske, Sonja	2014	Dr. Jason Kutch	sfenske@usc.edu
Figuieredo Uchoa, Mariana	2014	Dr. Terrence Town	mfigueir@usc.edu
Flores, Ilse	2017	Dr. Michael Jakowec	ilseflor@usc.edu
Furlanello, Tommaso	2014	Dr. Laurent Itti	furlanel@usc.edu
Gonzalez Zacarias, Clio	2016	Dr. Kristi Clark	cliog@usc.edu
Gorin, Alexis	2014	Dr. Judith Hirsch	agorin@usc.edu
Halliday, Matthew	2012	Dr. Michael Jakowec	mhallida@usc.edu
Han, Yifu	2015	Dr. Dion Dickman	yifuhan@usc.edu
Hendricks, Eric	2015	Dr. Justin Ichida	ewhendri@usc.edu
Huang, Po-Hsuan	2017	Dr. Laurent Itti	pohsuanh@usc.edu
Im, Kwok/Chris	2014	Dr. Terrence Town	kwokim@usc.edu
Jin, Lei	2011	Dr. Bartlett Mel	leij@usc.edu
Jones, Adam	2018	Rotations	adammj@usc.edu
Jung, Ahyun	2016	Dr. Huizhong Tao	ahyunjun@usc.edu
Kay, Yuni	2016	Dr. Bruce Herring	ykay@usc.edu
King, Samson	2015	Dr. Samuel Andrew Hires	samsonki@usc.edu
Lanjewar, Alexandra	2017	Dr. Pat Levitt	lanjewar@usc.edu
Li, Xiling	2014	Dr. Dion Dickman	xilingli@usc.edu
Liu, Clarissa	2015	Dr. Scott Kanoski	clarisml@usc.edu
London, Tanisha	2018	Rotations	tdlondon@usc.edu
Loxterkamp, Elizabeth	2018	Rotations	loxterka@usc.edu
Lundquist, Adam	2016	Dr. Michael Jakowec	alundqui@usc.edu
Lynch, Kirsten	2013	Dr. Kristi Clark	kirsteml@usc.edu
Maire, Phillip	2015	Dr. Samuel Andrew Hires	maire@usc.edu
Markowitz, Alexander	2014	Dr. Radha Kalluri	almarkow@usc.edu
Matloff, William	2017	Dr. Arthur Toga	matloff@usc.edu
McCoy, Dakarai	2017	Dr. Richard Leahy Dr. Mary Helen Immordino-Yang	dakaraim@usc.edu
Menendez, Louise	2013	Dr. Justin Ichida	lmenende@usc.edu
Miller, Brendan	2016	Dean Hassy Cohen	brendajm@usc.edu
Murdock, Zachary	2017	Dr. Bartlett Mel	zmurdock@usc.edu
Nasseri, Padideh	2017	Dr. Mara Mather	pnasseri@usc.edu
Nir, Talia	2013	Dr. Paul Thompson	tnir@usc.edu
Peng, Bo	2017	Dr. Li Zhang	pengb@usc.edu
Peng, Lei	2015	Dr. Michael Bonaguidi	leipeng@usc.edu
Peng, Yi-Jheng	2017	Dr. Karen Chang	yijhengp@usc.edu
Pluimer, Brock	2018	Rotations	pluimer@usc.edu
Porat, Shai	2017	Dr. Mara Mather	porat@usc.edu
Prathap, Sandhya	2016	Dr. Giselle Petzinger	prathap@usc.edu
Pushkin, Anna	2018	Rotations	pushkin@usc.edu
Quihuis, Alicia	2015	Dr. Terrance Town	quihuis@usc.edu
Rao, Sadhna	2016	Dr. Bruce Herring	sadhna@usc.edu
Rios, Amanda	2016	Dr. Laurent Itti Dr. Bartlett Mel	amandari@usc.edu
Rose, Kasey	2017	Dr. Jeannie Chen	kaseyvro@usc.edu

Ryan, Erin	2017	Dr. Jason Zevin	erinryan@usc.edu
Seo, Boyoon Michelle	2018	Rotations	boyoonse@usc.edu
Shkirkova, Kristina	2017	Dr. William Mack	shkirkov@usc.edu
Smith, Colton	2017	Dr. Donald Arnold	coltonsm@usc.edu
Song, Monica	2015	Dr. Hong-Wei Dong	monicaso@usc.edu
Sweeney, Melanie	2013	Dr. Berislav Zlokovic	mdsweene@usc.edu
Teng, Bochuan	2015	Dr. Emily Liman	bochuant@usc.edu
Tian, Chen	2015	Dr. Bruce Herring	tianc@usc.edu
Tran, Nancy	2018	Rotations	nancyltr@usc.edu
Tsan, Linda	2017	Dr. Scott Kanoski	ltsan@usc.edu
Tubi, Meral	2016	Dr. Paul Thompson Dr. Meredith Braskie	tubi@usc.edu
Ventura, Christopher	2012	Dr. Radha Kalluri	cmventur@usc.edu
Wang, Xiyue	2015	Dr. Li Zhang	xiyuewan@usc.edu
Wei, Chao	2017	Dr. David McKemy	wei428@usc.edu
Yuan, Rachel	2012	Dr. Sarah Bottjer	rachelyu@usc.edu
Zavaliangos-Petropulu, Artemis	2016	Dr. Paul Thompson Dr. Sook-Lei Liew	zavalian@usc.edu
Zhang, Chen	2012	Dr. Laurent Itti	zhan455@usc.edu
Zingg, Brian	2012	Dr. Huizhong Tao	bzingg@usc.edu
Zou, Jing	2016	Dr. Samuel Andrew Hires	jingzou@usc.edu
Zyuzin, Jekaterina (Katie)	2013	Dr. Isabelle Brocas	_zyuzin@usc.edu

LA LIFE

Housing

On Campus:

The USC Student Housing Office is in McCarthy Way Parking Structure. Please see the housing website for more information <https://housing.usc.edu/>.

Off-Campus:

The USC Student Housing website also has contact information for off-campus housing. It is also helpful to speak with fellow graduate students about housing options, as well as possible roommates. Please note that off-campus housing near UPC is limited and may be difficult to secure.

There are several newspapers that have listings of apartments and houses for rent.

- Los Angeles Times - www.latimes.com/
- Daily Breeze (Redondo-Hermosa-Manhattan Beach) - www.dailybreeze.com/
- The Star News (Pasadena) - www.pasadenastarnews.com/
- The Eastsider (Eagle Rock, El Sereno, East Los Angeles) - <https://www.theeastsiderla.com/>

You can also check listings in the student newspaper at USC, the *Daily Trojan*. Some students have also had success with the *Apartments for Rent* website www.rent.com.

In addition, listed below are several locations where current graduate students reside.

Culver City	Los Feliz
Downtown Los Angeles	Santa Monica
Arts District, Korea Town, and Little Tokyo	Silver Lake
Eagle Rock	South Pasadena / Pasadena
Echo Park	Venice
Hollywood – North and West	Wilshire District

Transportation and Parking

USC Transportation Services

USC operates various transportation services. The shuttle service provides transportation to the housing areas off campus and to campus parking lots Monday through Friday. It also provides convenient and frequent connection between the UPC and HSC, as well as Union Station. There are additional shuttles that run to the Marina Del Rey campus, the Soto Street Buildings (HSC), and the City Center (AT&T Building). For information on shuttle schedules and locations go to <http://transnet.usc.edu/>.

You can also call the Campus Cruiser Escort Service or a USC Lyft. Either service will transport you to locations within approximately one mile of the center of campus (including

the off campus housing area). If you are working late at night in the lab, it is a good idea to use this service rather than walk to the parking structure alone. For information on both services go to <http://transnet.usc.edu/>.

If you will be commuting to campus by car you will need to purchase a USC Parking permit, which will entitle you to park in certain designated areas on campus. For current costs, you can go to <http://transnet.usc.edu/>. Permits are sold at the USC Trojan Transportation center, located in McCarthy Way Parking Structure at UPC. Regardless of where you park you should always lock your car and make certain that you leave nothing of value in your car.

If you live close to campus and chose to commute on a bicycle take necessary precautions with the storage of your bike. It is advised to purchase a lock and be sure to use the bike racks that are available all over campus. For information on bicycle rules and regulations, as well as licensing and registration procedures, go to <https://dps.usc.edu/services/bikes/>.

Public Transportation

The transportation system in Los Angeles is called the Metropolitan Transportation Authority (MTA). There is excellent express bus and rail services from several cities into the downtown area. Some routes include stops right at USC.

The rail transit system in Los Angeles has several lines, which serve as a major transportation resource for students. Below is a list of the most commonly used rail lines:

- Blue Line runs from Downtown Los Angeles to Downtown Long Beach
- Expo Line runs from Downtown Los Angeles (with stops at USC) to Downtown Santa Monica
- Gold Line runs from Azusa to East Los Angeles, passing through Pasadena and Union Station
- Red Line runs from Union Station to North Hollywood. With a station stop for CHLA, located at Sunset Blvd and Vermont Ave.

For information about Metro bus schedules and current fares, you can go to <http://www.metro.net/>, call the toll free number 800.COMMUTE (266.6883), or download the app to your cell phone.

For a map of the rail lines go to http://media.metro.net/riding_metro/maps/images/rail_map.pdf.

In addition, LADOT has a Dash Line that will take you to and from USC to Downtown Los Angeles. For information about the LADOT and Dash Lines, you can go to <http://www.ladottransit.com/>, call the toll free number 1-800-COMMUTE or download the app to your cell phone.

Culture and Recreation

Los Angeles has no shortage of cultural and recreational activities. There is something for everyone!

Amusement Parks	Disneyland Knott's Berry Farm Magic Mountain
Art Museums	Huntington Library and Art Gallery J. Paul Getty L.A. County Museum of Art Museum of Contemporary Art (MOCA) Norton Simon
Museums	California Afro-American Museum Getty Center La Brea Tar Pits L.A. County Museum of Natural History L.A. County Museum of Science and Industry Museum of Tolerance Page Museum
Music Concerts	Hollywood Bowl Microsoft Theatre Music Center Walt Disney Concert Hall
Horse Races	Santa Anita Race Track
Sports	Baseball – Dodgers and Angels Football – College and Pro (LA Coliseum)
Zoos / Aquariums	Los Angeles Zoo San Diego Wild Animal Park San Diego Zoo Sea World

For more information about what's going on in LA, you can visit:

- Los Angeles Magazine, www.lamag.com/
- Los Angeles Times, www.latimes.com/
- L.A. Weekly, www.laweekly.com/

Recreational facilities in the Los Angeles area are outstanding. There are beaches, parks, golf courses and tennis courts. The mountains are an hour away where hiking and skiing are the main attraction.

There is also plenty going on at USC, including plays, concerts, first-run movies, film retrospectives, and art shows. Most popular, however, are the athletic events, especially the football games. The best ways to learn about the cultural and recreational goings-on at USC are the student newspaper, the Daily Trojan, available at kiosks around campus. In addition you can visit the Student Affairs website, <https://studentaffairs.usc.edu/>, for a list of activities, as well as the Graduate Student Government website <https://gsg.usc.edu/>.

At both UPC and HSC campuses, there are state of the art recreational centers. Access to both facilities are free to registered students with a current I.D. For information on both facilities and their features go to <https://sait.usc.edu/recsports/>.

Catalina

USC maintains a research lab on Santa Catalina Island at Big Fisherman Cove near Two Harbors. You should see this lab at least once to explore research possibilities and experience the somewhat exotic locale. Catalina Express, a commercial carrier, operates regular boat service from San Pedro to Two Harbors most of the year. Please visit their website for more information: <http://www.catalinaexpress.com/>

Banking and Shopping

Banking (near USC)

In the neighborhood surrounding USC there are several banks and ATM's within walking or biking distance.

USC Credit Union (ATM)

UPC – Campus Center/Student Union Building
HSC – Seaver Residence Hall

Citibank (ATM)

3615 S Vermont Ave
Los Angeles, CA 90007

Bank of America (ATM)

3400 S Vermont Ave
Los Angeles, CA 90007

Wells Fargo (ATM)

2801 S. Figueroa St.
Los Angeles, CA, 90007

At **CHLA**, ATMs of most major banks (Wells Fargo, Bank of America, Citibank) are located within 1-2 blocks.

NEVER GO ALONE TO AN AUTOMATIC TELLER MACHINE AFTER DARK and do not cash checks for anyone you do not know.

Department Stores

Contact other graduate students for ideas where to shop. The Dash shuttle bus (Line F) has stops in Downtown Los Angeles from USC where there are several department stores and shops. For information on the Dash lines, departure and drop off locations, fare, and trip planning go to <http://www.ladottransit.com/dash/>.

Supermarkets

In the neighborhood surrounding USC there are two supermarkets within walking or biking distance.

Smart and Final
3607 South Vermont

Ralph's
2600 South Vermont

Elsewhere in Los Angeles there are other large chain supermarkets. There are many to choose from, including Albertsons, Ralph's, Vons, Food-4-Less and Super King. Whole Foods, Gelson's, Trader Joe's and Costco are alternatives to traditional supermarkets.

Also look for farmers markets on or near the various campuses <https://www.ccfm.com/>.

USC Travel Portal Services

USC utilizes the Christopherson Business Travel (CBT) agency to assist with travel arrangements. For full agency details, service fees, reference codes, and contact information follow this link <https://procurement.usc.edu/travel/usc-travel/>.

Other Important Locations

California Department of Motor Vehicles (DMV)

3615 S. Hope St.
Los Angeles, CA 90007
800-777-0133

The DMV is near the 110 freeway, 2 blocks east of campus. There are numerous other offices scattered across the city, please visit the website for more information, <https://www.dmv.ca.gov/portal/dmv>.

Post Office

3585 S. Vermont Ave
Los Angeles, CA 90007
213-731-9458

The Post Office is just across the street from campus. You may purchase money orders there as well. There is also a mail stop in the McCarthy Way Parking Structure that provides a limited number of postal services.