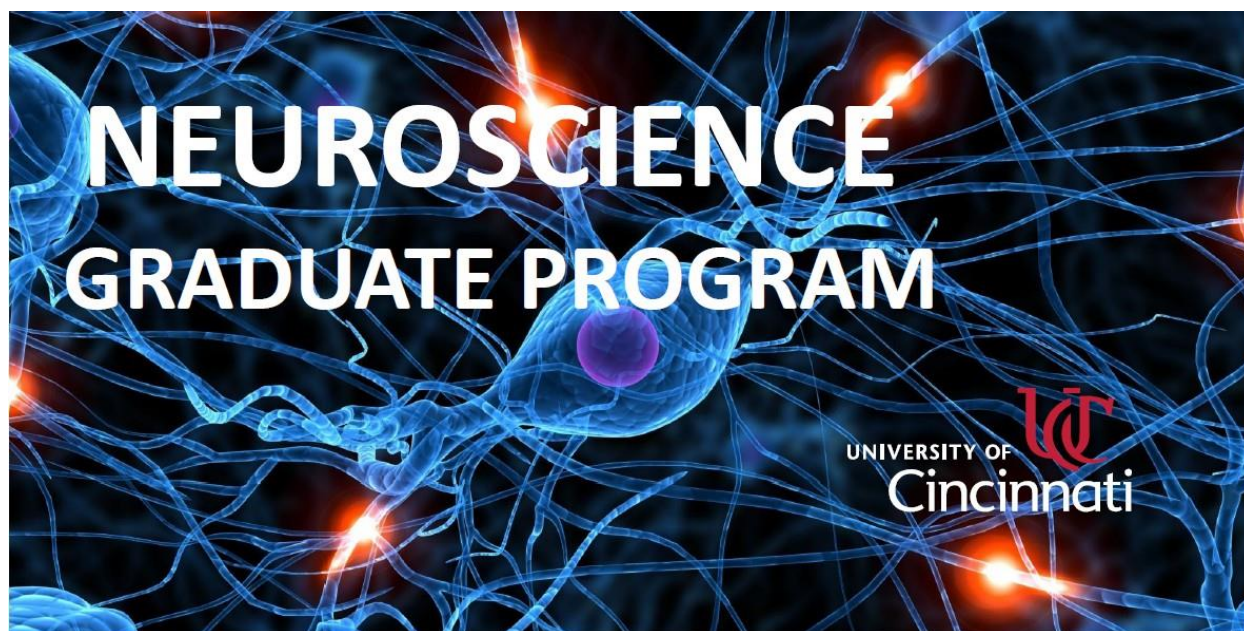




***2026-2029
Graduate Student
Handbook***

Preface

Welcome to the Neuroscience Graduate Program at the University of Cincinnati!

This handbook provides guidelines and policies for the Neuroscience Graduate Program, including the required curriculum, doctoral candidacy, dissertation defense, and other important information.

Additional information can be found on:

The program website:

- <http://med.uc.edu/neurosciences>

We have made every effort to ensure compliance with the University of Cincinnati Graduate College's rules and policies.

We are glad that you chose the University of Cincinnati as the place to begin your academic career. Please review this information carefully, and if you have any questions or concerns, please do not hesitate to contact us.

Best wishes,



Agnes Luo, PhD
Co-Director, Neuroscience Graduate Program



Christina Gross, PhD
Co-Director, Neuroscience Graduate Program

Program Administration

Christina Gross, PhD
Co-Director, Neuroscience Graduate Program

Agnes Luo, PhD
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Joanna Abrams, PhD
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Graduate Program Committees

Admissions and Recruitment Committee

Christina Gross, PhD, Chair
Mark Baccei, PhD
Steve Danzer, PhD
James Herman, PhD
Michael Lacagnina, PhD
Agnes Luo, PhD
Teresa Reyes, PhD
Renu Sah, PhD
Yvonne Ulrich-Lai, PhD
Charles Vorhees, PhD

Curriculum Committee

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Mark Baccei, PhD
Christina Gross, PhD
June Goto, PhD
Anna Kruyer, PhD
Agnes Luo, PhD
Sarah Pixley, PhD
Elliott Robinson, MD/PhD
Matthew Robson, PhD
Renu Sah, PhD
Nick Timme, PhD
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Eric Wohleb, PhD

Faculty Credentialing Committee

Mark Baccei, PhD, Chair
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Christina Gross, PhD
Agnes Luo, PhD
Teresa Reyes, PhD

Kim Seroogy, PhD (emeritus)

Seminar Committee

Jayne McReynolds, PhD, Co-Chair

Temugin Berta, PhD, Co-Chair

Advisory/Steering Committee

Mark Baccei, PhD

Steve Danzer, PhD

James Herman, PhD

Renu Sah, PhD

Kim Seroogy, PhD (emeritus)

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Application and Admission to the Neuroscience Graduate Program

Eligibility

Prospective students should have a baccalaureate or master's degree that includes biology, chemistry, physics, and mathematics coursework with an overall GPA of at least 3.0 (out of 4.0 total).

The Admissions Committee evaluates the candidate's grades, personal statement, letters of recommendation, prior research experience, and personal interviews as part of the ranking process for entry to the Program.

US citizenship or permanent residency status is not required. However, English proficiency is a requirement for doctoral candidacy, with minimum test scores as follows:

- Test of English as a Foreign Language (TOEFL) Internet-based test (iBT): 80
- International English Language Testing System (IELTS): 6.5
- Duolingo English Test (DET): 110
- Pearson Test of English (PTE): 54

International students who have completed Bachelor's or Master's degrees in the US or at a foreign institution where the primary language of instruction is English are not required to take the TOEFL or IELTS exams.

Note: As of 2018, the Graduate Record Exam (GRE) is not required to apply.

Equal Opportunity

The University of Cincinnati Neuroscience Graduate Program encourages and considers applications from all eligible applicants. Admission decisions are not based on race, age, sex, color, religion, disadvantaged backgrounds, sexual orientation, or disability. All students must meet all program standards, with or without accommodation. We ensure that everyone feels welcome and included regardless of their race, gender, sexual orientation, color, age, socioeconomic background, or religion.

Admission Process

The Neuroscience Graduate Program admits students once per year. All applicants must apply through the UC Graduate College's portal (<http://grad.uc.edu>). The application deadline is December 7th, and admissions are complete by spring. Newly matriculating students are expected to arrive on campus by July 1st. Therefore, a student beginning the Program on July 1st, 2023, would have applied no later than December 7th, 2022. The following supporting documentation is required:

- a. Updated curriculum vitae (CV)
- b. Personal statement describing the applicant's research experience and interests within the neuroscience field
- c. Transcripts of all previous undergraduate and graduate coursework: Applicants may upload unofficial transcripts during the application process; upon admission into the Program, they must arrange for official transcripts to be sent directly to the Graduate School. Any discrepancies between the unofficial and official transcripts will be grounds for rescinding an offer of admission and/or dismissal from the Program.
- d. Three letters of recommendation are required to attest to the applicant's interest in neuroscience, academic achievement, scientific accomplishments, research potential, intellectual curiosity, creativity, and ability to work in a team environment.
- e. International applicants whose first language is not English must submit TOEFL iBT, IELTS, or Pearson test of English scores (refer to the Eligibility Criteria above for minimum scores). The testing organization must send the test scores directly to the Graduate College. Please allow at least one week for processing time after the Graduate College receives the scores.

The application fee (see website for most up-to-date fees) is due at the time of application and is payable online.

The Admissions Committee reviews all applications and decides which applicants to invite for interviews. These applicants are invited to visit the UC campus, tour research facilities, meet current graduate students, and have interviews with Program faculty, a faculty panel consisting of three members of the Admissions Committee and a student panel consisting of three current NGP students. Most in-person interviews are in January and February. Virtual interviews may be arranged at the program directors' discretion when a formal visit is impossible.

After the interviews, the Admissions Committee reconvenes and decides to make admission offers. Generally, offers are sent out between February and March.

International students should consult their nearest US Embassy or Consulate for student visa processing. Additional details are available through UC's International Services Office (<https://www.uc.edu/about/international.html>).

Student Matriculation

Arrival

Incoming students are expected to arrive prior to July 1, so that they can start with their first summer lab rotation on July 1 and participate in orientations. Students should contact faculty for potential lab rotations prior to July 1. An earlier arrival also makes it easier for students to:

- Make housing arrangements;
- Make parking arrangements;
- Initiate stipend payments;
- Obtain an ID badge and keys; and
- Register for fall semester classes, which begin in late August. Students should check the Registrar's website (<http://www.uc.edu/registrar.html>) for registration procedures, deadlines, and other important information.

Incoming students who wish to delay their start date due to other commitments need prior approval from the Program Directors.

Orientations – Students are expected to attend the two NGP orientations (one run by the Program Directors, one run by the NGP Student Government) and the Graduate College Orientation during July and August. These events will provide students with information for onboarding, stipends, taxes, coursework, etc.

Credit Transfer

Credit for courses taken at other institutions may be transferable, but the amount of work completed at other institutions that can be included as fulfilling graduate degree requirements is limited. Refer to the Graduate College website for further information (<http://grad.uc.edu>).

The Curriculum Committee decides whether to grant advanced standing or the transfer of credits for graduate courses already taken at other universities or UC. The Committee may recommend additional course requirements and other exceptions designed to tailor the Program of study to each student's needs and interests. The Program Director may bring any course recommendations before the full faculty for advice and final resolution.

Financial Support

All students in good academic standing in the Neuroscience Graduate Program receive a University Graduate Assistantship stipend (referred to as a UGA) and full tuition scholarship (a Graduate Assistant Scholarship, referred to as a GAS) plus student fees and individual health insurance.

Students receive a starting 12-month stipend of \$37,132, as of July 1, 2026, with anticipated annual cost of living increases, pending College of Medicine approval.

Generally, stipends are paid in 26 installments (i.e., twice a month, approximately every two weeks), but this may vary depending on the stipend funding source.

Students who obtain an individual grant from the NIH, or a competitive award from another external funding agency covering 70% or more of the stipend, will receive an additional \$2,000 per year supplement to their existing stipend for the duration of the external award.

Students receiving UGAs or GASs must carry a full-time course load (at least 10 credits, recommended are 12) each fall and spring semester, exclusive of audit credits. Students in good standing will be eligible for tuition scholarships and graduate assistantships for up to nine years of training. Generally, 1st- and 2nd-year students register for 12 credit hours per semester.

The Neuroscience Graduate Program does not require students to serve as teaching assistants; however, some teaching assistant opportunities may be available. Contact the Program administration for further information.

Under ordinary circumstances, students who have reached the University-mandated cap of 174 or more graduate credit hours at the University of Cincinnati may not receive assistantships and tuition scholarships from the NGP or Graduate College.

All graduate students who are not already Ohio residents but US citizens or permanent resident aliens (holders of green cards) must apply for Ohio residency after residing there for one year. Students choosing to reside in certain Northern Kentucky or Southeast Indiana counties after their first year may be subject to a fee according to University guidelines, which the Program does not pay. As of May 2016, the current Kentucky/Indiana State Metropolitan Rate is \$25.00 per credit hour each semester, up to a maximum of a \$300 surcharge (12 to 18 hours per semester). More information can be obtained at <https://admissions.uc.edu/tuition-aid/kyin.html>.

- <https://www.uc.edu/about/registrar/personal-info-changes/residency.html>
- <https://www.uc.edu/about/registrar/personal-info-changes/residency/indiana.html>
- <https://www.uc.edu/about/registrar/personal-info-changes/residency/kentucky.html>

Students supported by graduate stipends may not seek employment outside the Program. Short-term laboratory, research, or tutoring jobs may be permitted in exceptional situations, but other jobs requiring significant time away from the research laboratory are not permitted. Students with external fellowships must abide by the conditions of the fellowship regarding employment. Any student considering outside employment should discuss it with their advisor and the Program Director.

Students seeking an additional certificate or external internship must obtain prior approval from both mentor and program leadership. The pursuit of additional degrees concurrent with the Neuroscience PhD is not permitted.

Students will abide by policies set out by the UC School of Medicine and Cincinnati Children's Hospital (when deemed appropriate) regarding interactions with outside industries. Industries may refer to any corporation, partnership, sole proprietorship, firm, franchise, association, organization, holding company, joint stock company, receivership, trust, enterprise, or other legal entity, whether for-profit or not-for-profit, engaged in the manufacture, distribution or sale of diagnostic or therapeutic drugs, devices, supplies or services for clinical care, research or education. Further details are available from <https://med.uc.edu/landing-pages/lcme-2022/policy-and-guidelines-for-industry-relationships>.

Degree Program Overview

The degree program overview is also summarized as a checklist at the end of this document.

The particular course of study pursued in the doctoral degree will be arranged in consultation meetings with the research advisor, the student's Dissertation Committee (after the advancement to candidacy), and the Program Directors. In all cases, the doctoral Program will aim to help the student develop the following:

- A broad foundation of knowledge in neuroscience, emphasizing an understanding of the neurobiology of disease and the experimental skills that allow for the exploration of underlying mechanisms
- Excellent critical thinking and problem-solving skills
- Outstanding written and oral communication abilities
- Ability to work collaboratively in a team environment
- Strong leadership qualities
- Tools to be successful in diverse scientific careers

Ph.D. students

Students complete a series of required courses during the first two years to attain a strong foundation in neuroscience principles. Table 1 presents a curriculum summary.

All students must register for at least 12 credits per semester, excepting the summer of the first year in the program (10 in the initial summer for 34 total credits in the first academic year and 24 credits per academic year after that).

During the first year, students will complete three lab rotations with the primary goal of selecting a research advisor but the important secondary goal of learning more about different research areas and methods. The duration of each research rotation is flexible and can be determined by the student in consultation with the rotation mentor and program directors. Students can do more than three rotations if desired or required to

identify a thesis laboratory. Students should plan to be in lab rotations (or work in their chosen thesis laboratory) their entire first year. One week gap between rotations is acceptable but anything longer should be discussed with the program directors and requires their approval.

Students must select a research advisor and begin dissertation research work in the advisor's laboratory no later than July 1st (i.e., the beginning of Year 2 in the Program). Students should think carefully about choosing a research advisor; this person, more than any other person, course, or event, influences how much they will learn and what kinds of research they will perform. Students are encouraged to consult the Program Directors, other program faculty, and other program students who can provide useful advice on making this choice. When talking to other students, they should keep in mind, though, that individual experiences, mentoring needs and preferences can differ.

During the second year, students will continue laboratory research with their chosen mentor and complete required and elective courses. The required elective course can be taken at any time during graduate school. Before the end of the spring semester of the second year, students will initiate the Doctoral Candidacy Examination, which will demonstrate their preparedness to pursue a Ph.D. degree. The pre-proposal must be submitted before September 1 of the fall semester of year 3. Any changes to this timeline must be discussed with and approved by the NGP Directors.

After passing the qualifying exam and being admitted to doctoral candidacy, students devote most of their time to research and will register for NS9099 (Research) each fall and spring semester. The culmination of the graduate career is the preparation and defense of a doctoral dissertation.

All students must prepare and submit at least one first-author publication based on their neuroscience research to fulfill graduation requirements. The publication status must be accepted or in press before initiating the defense of the dissertation.

The median time to defense for Neuroscience Graduate Program students is ~5.2 years. All students must complete all program requirements, including completion and defense of the dissertation, within nine years unless they have an approved extension. Refer to the UC Graduate School Handbook for additional details.

All students must complete a total of 30 credit hours of didactic coursework. The Candidacy Exam Committee or Dissertation Committee may require additional courses to complete the Program. Students interested in taking classes outside the College of Medicine must obtain the Program Directors' permission before registration.

TABLE 1. Neuroscience Graduate Program Required Curriculum – Ph.D. students
(Program core courses are in *italics*)

First Year

Summer

Introduction to Research (lab rotations) (NS 8050) 10 credits

Fall

Fundamentals of Neuroscience I (NS 7078) 4 credits

Principles of Molecular and Cellular Biology (GNTD 7001) 4 credits

Survey of Research (NS 8040) 1 credit

Neuroscience Journal Club (NS 9010) 1 credit

Neuroscience Seminar (NS 9001)** 1 credit

Introduction to Research (lab rotations) (NS 8050) 1 credit

Spring

Fundamentals of Neuroscience II (NS 7079C) 5 credits

Ethics in Research (GNTD 7003) 1 credit

Statistics and Experimental Design for Biomedical Sciences (MCP 8050C)* 3 credits

Neuroscience Journal Club (NS 9010) 1 credit

Neuroscience Seminar (NS 9001)** 1 credit

Introduction to Research (lab rotations) (NS 8050) 1 or 4 credits,
depending on
timing of Stats

Second Year (Note: students do not register for summer classes after Year 1)

Fall

Grant Writing in Biomedical Science (MCP 8001) 2 credits

Neuroscience Journal Club (NS 9010) 1 credit

Neuroscience Seminar (NS 9001)** 1 credit

Introduction to Biostatistics (BDS 7022)* 3 credits

Elective*** (varies)

Introduction to Research (lab rotations) (NS 8050) (varies)

Spring

Academic Survival Skills (NS 7077) 3 credits

Neuroscience Journal Club (NS 9010) 1 credit

Neuroscience Seminar (NS 9001)** 1 credit

Introduction to Research (lab rotations) (NS 8050) (varies)

*Students may enroll in either *Introduction to Biostatistics* (BDS 7022) in the fall or *Statistics and Experimental Design for the Biomedical Sciences* (MCP 8050C) in the spring. Although both are accepted, we encourage students to take *Introduction to Biostatistics* in the fall of their second year.

**Students are required to attend Neuroscience Seminar each semester until the semester in which they will defend their dissertations. Third-year and higher students enroll in NS 9001 (Neuroscience Seminar) for 1 credit and NS 9099 (Dissertation Research) each fall and spring semester.

***The elective must be a graduate-level course selected in consultation with the research mentor/program directors and can be taken during any semester.

Medical Scientist Training Program (M.D., Ph.D.) students

Students in the Medical Scientist Training Program (MSTP) may enter the Neuroscience Graduate Program after completing their first two years (i.e., M1 and M2) of medical school. MSTP students will have completed three research rotations and selected a dissertation mentor before beginning their first year in the Neuroscience Graduate Program (G1).

Certain courses may have altered requirements and schedules to reduce redundancy with previous coursework and accommodate a timely return to M3. MSTP students are encouraged to consult their course and program directors regarding requirements. Table 2 presents a curriculum summary.

As with Ph.D. students, all MSTP students must register for at least 12 credits per semester (24 credits per academic year).

MSTP students are required to complete the candidacy exam before the end of the fall semester of G2.

TABLE 2. Neuroscience Graduate Program Required Curriculum – MSTP students

(Program core courses are in *italics*)

G1 (Year 1 of Ph.D. program)

Fall

<i>Fundamentals of Neuroscience I</i> (NS 7078)	4 credits
Grant Writing in Biomedical Sciences (MCP 8001)	2 credits
Neuroscience Journal Club (NS 9010)	1 credit
Neuroscience Seminar (NS 9001)*	1 credit
Survey of Research (NS 8040) (<i>optional</i>)	1 credits
Introduction to Research (lab work) (NS 8050)	4 credits

Spring

<i>Fundamentals of Neuroscience II</i> (NS 7079) #	3 credits
<i>Ethics in Research</i> (GNTD 7030)	1 credit
<i>Academic Survival Skills</i> (NS 7077)##	3 credits
Statistics and Experimental Design for Biomedical Sciences** (MCP 8050C)	3 credits
Neuroscience Journal Club (NS 9010)	1 credit
Neuroscience Seminar (NS 9001)*	1 credit
Introduction to Research (lab work) (NS 8050)	1 credit

G2 (Year 2 of Ph.D. program)

Fall

Neuroscience Journal Club (NS 9010)	1 credit
Neuroscience Seminar (NS 9001)*	1 credit
Introduction to Biostatistics (BDS 7022)**	3 credits
Elective***	(varies)
Introduction to Research (NS 8050)	(varies)

Spring

Neuroscience Journal Club (NS 9010)	1 credit
Neuroscience Seminar (NS 9001)*	1 credit
Dissertation Research (NS 9099)	10 credits

*Students are required to attend Neuroscience Seminar each semester until the semester in which they will defend their dissertations. After passing the candidacy exam, students enroll in NS 9001 (Neuroscience Seminar) for 1 credit and NS 9099 (Dissertation Research) each fall and spring semester.

**Students may enroll in either *Introduction to Biostatistics* (BDS 7022) in the fall or *Statistics and Experimental Design for the Biomedical Sciences* (MCP 8050C) in the spring.

***The elective must be a graduate-level course selected in consultation with the research mentor/program directors and can be taken during any semester.

#MSTP students take gross human neuroanatomy and opt out of the 2-credit hour lab portion of the FNII course with approval from the course directors.

Academic Survival Skills (NS 7077): MSTP students may opt out of certain lectures during the semester in consultation with the course director and program directors.

Course Descriptions

(For updated course descriptions, please see Catalyst)

Core Courses

NS7078, Fundamentals of Neuroscience I. This is the first half of a two-semester course that will serve as an introduction to and foundation in neuroscience for graduate students in the UC Neuroscience Graduate Program and interested students from other UC graduate programs. It provides an overview of our current understanding of molecular and cellular neuroscience. The course mission is to provide graduate students with a solid understanding of the fundamentals of neuroscience in preparation for advanced coursework in neuroscience topics and for research in neuroscience. Students will also develop skills in the scientific process and in self-teaching through inquiry/discussion sessions, group projects, oral presentations, and critical review of primary literature and research techniques. **Course Directors:** Mark Baccei, PhD & Durgesh Tiwari, PhD

NS7079, Fundamentals of Neuroscience II. This is the second half of a two-semester course that will serve as an introduction to neuroscience for graduate students in the UC Neuroscience Graduate Program and interested students from other UC graduate programs. Fundamentals of Neuroscience II is intended to integrate and extend topics covered in Fundamentals of Neuroscience I and will provide an overview of our current understanding of neuroendocrine and motor systems, reward and addiction, and behavioral and cognitive neuroscience. **Course Directors:** Elliott Robinson MD, PhD, & June Goto, PhD

NS7077, Academic Survival Skills. This course stresses academic writing and other survival skills for graduate students. Topics include general exam and thesis committees, how academia and universities are organized, how the NIH is structured, study sections, search committees, how to find post-doctoral and faculty positions, and how to prepare CVs, biosketches, and letters of recommendation. **Course Director:** Matt Robson, PhD

GNTD 7003, Ethics in Research. This course introduces students to general ethical theories and the ethical and regulatory issues they will likely encounter as researchers. Students will learn to identify and analyze ethical issues in research and develop coherent justifications for their ethical and responsible conduct of research. **Course Director:** Holly Bante, PhD, MPH

*Note that a one-credit refresher course, GNTD 8005, Scientific Integrity for Researchers, is required in the spring semester of the 5th year. **Course Director: Jane Strasser, PhD***

Required Courses

NS8040, Survey of Neuroscience Research. Weekly meetings introducing students to the general concept of computational neuroscience, covering introduction into statistics and neural data science, introduction into computational neuroscience and neuroimaging, and NeuroAI. The course is designed as an introduction to computational methods applicable to neuroscience and resources at UC/CCHMC, including high-capacity computation resources available to our faculty and trainees. At the end of this course, students will have a general understanding of the current developments in the field and

where to find further resources and appropriate methods to utilize these cutting-edge technologies in their research at UC. **Course Director:** Brady Williamson, PhD

GNTD7001, Principles of Molecular and Cellular Biology. This course aims to provide fundamental knowledge of the basic principles underpinning modern molecular and cell biology, with attention paid to the underlying biochemistry where relevant. It is anticipated that the material will be appropriate and applicable for all new first-year students in the various doctoral programs of the College of Medicine, as well as a subset of students enrolled in the College's various master's programs. Course topics include Basic information on the range and types of biomolecules; DNA replication, recombination, and repair; Cell cycle regulation; Transcriptional regulation; Mendelian genetics; Chromatin structure and epigenetics; Basic genomics and bioinformatics; Translational regulation; Signal Transduction; Protein trafficking; Membranes, vesicles and sorting; Cell-cell interactions; Cytoskeleton: movement and polarity; Molecular motors; Cell death pathways. **Course Director:** William Miller, PhD

BDS7022, Introduction to Biostatistics. Students will learn basic statistics such as mean, median, mode, standard deviation, variance, etc. Topics include probability, parametric statistics such as t-tests and one-way analysis of variance, and nonparametric statistics including both Wilcoxon tests and Kaplan-Meier estimation of survival. Bayes theorem, discrete (eg Binomial) and continuous probability distributions (eg normal distributions and one variable regression and product-moment correlation and rank correlation are covered. (*Equivalent to MCP 8050C, Statistics and Experimental Design for the Biomedical Sciences.*) **Course Director:** Marepalli Rao, PhD

MCP8001, Grant Writing in Biomedical Science The objective of this course is to provide training in the development of a research proposal and in effective grant writing. The students will learn how to identify a significant research question, develop a hypothesis, and design appropriate experiments to test the hypothesis. A major part of the class is writing the Specific Aims and Research Plan of an NIH-style F31 proposal. Depending on your PhD program, your proposal will be based on a paper assigned to you by your mentor or on your actual thesis project. The course also informs about the NIH application and review process, and students will participate in a mock study section, in which they will critique each other's grant proposals. This course helps to prepare students for their qualifying exam. *The successful student will be able to:* (1) Write an NIH-style F31 grant proposal, review a proposal, and present the critiques in a mock study section, (2) Acquire an understanding of how to write other sections of the NIH grant application including NIH Biosketch, Vertebrate Animals, Human Subjects, Budget, Environment and Facilities etc. **Course Directors:** Yvonne Ulrich-Lai, PhD & Renu Sah, PhD

MCP8050C, Statistics and Experimental Design for the Biomedical Sciences. This course will equip students with a solid foundation and intuitive understanding of experimental design and statistical analysis for the biomedical sciences. The course emphasizes experimental design and power analysis, parametric and nonparametric

statistics in making between-group inferences, linear and nonlinear regression in modeling physiological phenomena, effective data presentation, and graphic integrity. (*Equivalent to BE7022, Introduction to Biostatistics.*) **Course Director:** Bryan Mackenzie, PhD

NS9010, Neuroscience Journal Club. This course will emphasize critical analysis of current issues in neuroscience research, including a review of the primary literature. The students and faculty will make presentations with a strong emphasis on group discussion. **Course Directors:** Anna Kruyer, PhD (fall); Nicholas Timme, PhD (spring)

NS9001, Neuroscience Seminar. Formal presentations of current research in neuroscience will be given by speakers from the University (including graduate students beginning in their third year) and by invited speakers from other institutions. **Course Directors:** Temugin Berta, PhD, & Jayme McReynolds, PhD

NS8050, Introduction to Laboratory Research (Research Rotation). Laboratory research for graduate students who have not yet advanced to candidacy.

NS9099, Dissertation Research. Laboratory research for graduate students who have already advanced to candidacy.

Other Required components of Degree Program

Summer Lecture Series Neurobiology of Disease. This six-part seminar series will be attended by all NGP students in the summer of their first year, and is designed to present students with an overview of current knowledge related to the neurobiology of disease. The primary objective of this course is to provide current perspectives on molecular and cellular mechanisms that contribute to the pathophysiology of respective diseases.

Alumni Lecture Series. Two to three NGP Alumni who pursued careers in various academic and non-academic areas will be invited each summer to talk about their career paths. These are student-only events, and current students will have the opportunity to further interact with the alumni speaker during lunch and/or dinner.

Graduate Student Success Academy (GSSA). Required by the CoM for all PhD programs, the GSSA is designed to support student success. The University of Cincinnati College of Medicine (UC CoM) is dedicated to the comprehensive professional development and academic success of its doctoral trainees throughout the entirety of their graduate education. In support of this commitment, and to ensure that students acquire the essential knowledge, professional competencies, mentor–mentee relationship skills, and institutional resources required for advanced research training, all CoM PhD students are required to participate in the Office of Graduate Education (OGE) Graduate Student Success Academy (GSSA) curriculum.

The Graduate Student Success Academy is an evidence-based, structured professional development workshop series designed to address critical milestones across the doctoral training continuum for students within the College of Medicine. The GSSA curriculum is intended to complement disciplinary research training by:

1. Promoting scientific professionalism;
2. Enhancing communication skills;
3. Fostering peer engagement and the development of professional networks;
4. Strengthening the effective management of professional and mentoring relationships;
and
5. Supporting informed and strategic career development.

Participation in GSSA workshops is a mandatory component of doctoral training for all CoM PhD students. Information regarding session schedules, requirements, and related details will be communicated annually by the OGE. Failure to fulfill GSSA participation requirements may adversely affect a student's academic standing and progression within the PhD program.

Additional Requirements, as set forth by the NGP, including but not limited to:

All student meetings (2 times per year)

Program director/mentor/mentee meetings (once per year)

NGP Retreat (once per year)

Elective Courses

Students should choose their graduate elective courses in consultation with their mentor and/or Dissertation Committee, and with approval from the program leadership. The elective course is intended for professional development or to expand a student's knowledge of their dissertation specialty. Available courses for a given semester can be found at <http://www.uc.edu/academics.html>

Other commonly selected electives include:

BDS 7010	Biostatistics	MCBP 7027	Intro to Intellectual Property Law
BDS 7088	Regression Analysis	MG 7023	Immunology
BDS 8028	Epidemiology/Biostatistics Seminar	MG 8006	Biochemistry Techniques
ENGL 9010	Dissertation Workshop	PD 8041	Teaching Effectiveness
GC 7080	Teratology	PD 8042	Job Search Colloquium
GNTD 8001C	Intro to Functional Genomics	PH 8076	Scientific Writing
GNTD 8004	Communicating Science	PH 8083	Data Analysis with R and SAS
MCBP 7010	Drug Discovery	PSYC 9060	Neuropsychology
MCBP 7020	Safety Pharmacology	PWRT 7001	Intro to Professional Writing

Grading Practices

The Office of the Registrar (Records Services) will issue an official academic achievement report to each student at the end of each semester (accessible through Catalyst). The grading scale is as follows.

- A. Excellent; work of outstanding character
- B. Good quality; commendable but not outstanding
- C. Acceptable but not distinguished quality
- D. Unsatisfactory quality for a graduate course
- F. Unsatisfactory work for a non-credit graduate course
- P. The student completed the minimum requirements to complete the course (students may take any course on a Pass/Fail basis with the approval of both program directors and the course instructor. Instructors are under no obligation to accept a student on a Pass/Fail basis)
- S. Satisfactory
- I. A student did not complete one or more course requirements, such as a project or examination. In consultation with the course instructor, the student must complete the requirements within one calendar year after receiving an I grade; otherwise, the grade will automatically revert to F. An I grade can only be removed upon approval from the instructor and the Associate Dean of the Graduate College.
- W. Official withdrawal indicates the student or instructor processed a drop or official withdrawal from the course. Students may drop courses in the first three weeks of the semester without a W on their academic records. After that, students must obtain the instructor's permission. Students may not drop courses after the eighth week of the semester.
- UW. Unofficial withdrawal indicates that a student stopped attending the course but did not complete the withdrawal process. This grade has zero quality points and will be calculated as an F for GPA purposes.
- T. Audit -- The audit option is intended for the student who desires, or is advised, to do work in a course in which a grade is deemed unnecessary by the student in consultation with the student's advisor or Program. Admissions and conditions for participation in audit courses are at the instructor's discretion.
 - Students should audit no more than one course per semester.
 - Students who (at a minimum) attend course sessions regularly will receive a T grade.
 - Audit hours do not count toward the 174-credit hour limit (as a condition of eligibility for financial assistance), nor are they included in determining full-time status. Such hours may be charged to a tuition scholarship only if at least 12 graduate credits are taken that same semester and if the total is less than 19 credits.

NG. This grade indicates no basis for evaluation existed or was required when the grades were due that semester. Circumstances warranting a grade of NG include dissertation work, internships, or other circumstances preventing an instructor from awarding a grade (such as a possible case of academic misconduct that is still under review at the end of the semester). The NG grade is normally removed before graduation. Programs or colleges may allow a student to graduate with the NG grade when such action is deemed appropriate.

Evidence of Satisfactory Progress

- Completing at least two (preferably three) lab rotations and then successfully choosing an advisor and laboratory by the end of the first year
- Maintaining minimum academic standards, as defined below
- Participating in the Neuroscience Journal Club during the first and second years
- Attending the Neuroscience Seminar each year
- Initiating the candidacy exam in the spring semester of the second year. The pre-proposal (see Candidacy Examination Guidelines) must be submitted to the qualifying exam committee before September 1st of the student's third year, but earlier submission is encouraged
- Passing the candidacy examination
- Forming a Dissertation Committee within three months of passing the candidacy exam
- Completing a total of 90 graduate credit hours for the doctoral degree within nine years of matriculation into the NGP
- Having at least one first-author publication accepted or in press prior to scheduling defense
- Submitting and satisfactorily defending the doctoral dissertation.

Minimum Academic Standards

- All students must attain a B- or better grade in all neuroscience core courses, as shown in Tables 1 and 2. Any grade below a B- must be remediated at the earliest opportunity. Failure to fulfill these requirements is grounds for dismissal from the Program.
- Students are required to maintain an overall grade point average of 3.0.
- Oral English skills are rated in four areas: 1. Pronunciation 2. Grammar 3. Fluency 4. Overall intelligibility. The OEPT is conducted four times during the academic year (September, December, March, and May) to accommodate new arrivals and students who have prepared to retake the test. Each student can only be tested twice during an academic year. Those who do not pass should complete an English as a Second Language (ESL) course suited to their needs.

- Students must initiate the candidacy exam in the spring of the second year. They must submit a pre-proposal by September 1st of the third year unless granted an extension by the Program Directors in consultation with the assigned faculty Reader.
- All students will prepare at least one first-author, primary research journal article and submit it for publication. The article's status must be accepted or in press before the defense of the doctoral dissertation.
- Students who do not receive University Graduate Assistantships, but are still working on their dissertations, must register for at least one graduate credit hour in the academic year in which they plan to graduate. Failure to do so will jeopardize the student's eligibility for graduation.

Academic Probation

Students who fail to maintain a cumulative 3.0 average for any given semester will be placed on academic probation for the following semester.

Regardless of the overall grade point average, students obtaining an F in any course are automatically placed on academic probation during the semester after receiving a grade of F.

Any student placed on academic probation three times will be dismissed from the Program unless there are extenuating circumstances as determined by the program directors.

Student Meetings with the Program Directors

All NGP students will participate in meetings with their research advisor(s) and the Program Directors. During this meeting, the directors will review the student's progress, receive input from the research advisor(s) and the student, ensure the student has identified a clear path forward to graduation, and discuss the student's Individual Development Plan (see below). This meeting will normally occur twice yearly for first-year students and at least annually for students beginning in their second year.

Individual Development Plan

All Neuroscience Graduate Program students are required to develop an Individual Development Plan (IDP) no later than the end of the fall semester of the first year. The IDP is a dynamic document that identifies each student's professional development needs, career objectives, and a plan for fulfilling and achieving them. Furthermore, IDPs are a valuable communication tool between students and their research advisors.

For each student/program directors meeting, all students must update their IDP document listing goals, objectives, and achievements. The student and their research advisor(s) must sign the IDP, indicating review, and provide a copy to the Program

Manager at least two business days before the meeting. The IDPs must be updated at least annually.

Doctoral Candidacy (Qualifying) Examination

A checklist of the timeline and requirements for the qualifying exam process can be found at the end of this document.

Qualifying Exam Readers

- Diego Perez-Tilve, PhD
- Michael Lacagnina, PhD

Candidacy Exam Initiation

PhD students must select faculty members for their Qualifying Committee before the end of the spring semester of the second year. This information must be transmitted to the Program Manager, and the Reader will be assigned at this time. The deadline to submit the pre-qualifying written document is September 1st of the third year, but earlier submissions are encouraged.

MSTP students must select faculty members for their Qualifying Committee before the end of the spring semester of the first year. This information must be transmitted to the Program Manager, and the Reader will be assigned at this time. The deadline to submit the pre-qualifying written document is June 1st.

Qualifying Committee

The qualifying committee consists of five voting members: the Reader, the student's mentor, and three UC or CCHMC faculty members, two of whom must be NGP faculty members. Additional external committee members may serve as non-voting consultants. The Reader will be one of two NGP faculty members assigned by the program directors.

Reader's Role

The Reader will lead and chair the pre-qualifying and qualifying exams, ensure adherence to the rules and guidelines stated in the NGP handbook, serve as a liaison between the student and committee, and verbally communicate the committee's decisions to the student via email. The Reader will also communicate the committee's decisions to the program directors via email. Thus, the Reader provides oversight to maintain consistency and fairness in the entire process between different committees. The student is encouraged to contact the Reader first with questions about the exam.

Mentor's Role

Before submitting the student's pre-proposal, the mentor must ensure that the student's proposal was conceived by the student and does not involve any studies that have already been described in the mentor's current or pending grants. The mentor can answer questions about techniques or methods but *is not allowed to discuss or help with the development, design, or writing of either the pre-proposal or proposal. The*

mentor is also prohibited from helping the student answer questions during the exams. The mentor is a voting member and can ask a limited number of questions. Most of the questions should come from other committee members.

Timeline

- The student should send the pre-proposal (written document) to the committee 1-2 weeks before the pre-qualifying exam (oral exam) meeting. The Reader will provide a written document of comments from this meeting. If the committee does not approve the pre-proposal after the pre-qualifying exam, the student will have 1-2 weeks, as determined by the committee, to submit a revised document. The committee will discuss the revised pre-proposal by email, and the Reader will provide a summary of comments within one week. Only one in-person pre-qualifying exam is permitted, and only one revision of the pre-proposal is permitted, after which the student will move on to the full proposal.
- After the pre-proposal has been either approved or revised, the student will receive an email containing the committee's instructions and comments to guide the student in preparing the full proposal. The student will have four weeks from the date of the email to complete the full proposal and submit it, by email, to all committee members.
- The student should schedule the qualifying oral exam 10-14 days after the full written proposal due date. Students are highly encouraged to start scheduling their qualifying meeting as soon as they are approved to write their full proposal. If necessary, due to faculty schedules, the qualifying meeting can be scheduled more than 14 days after the proposal due date. The student must submit the revised document within two weeks if a conditional pass is given. If the committee decides the student requires a re-examination, the student should schedule it as soon as possible (typically within two weeks) after the committee has informed the student of their decision. If a second revision is needed, the student must submit it no later than one week after notification. The committee's final decision will be communicated to the student within one week of receiving the revised document. If the student fails the qualifying exam, a new qualifying exam must be scheduled no earlier than three months but not later than six months after failing the first exam.

Pre-proposal guidelines

The proposed research plan should be designed for a two-year period. It should be conceived by the student and cannot overlap with any of the mentor's grants. **The project can be related to (or represent a continuation of) their dissertation work or other ongoing research in the mentor's lab. Students are encouraged to write proposals they can submit as F31 or F30 NRSA fellowship proposals after passing their qualifying exam.** The proposed research may be based on preliminary data from the student's lab or from published papers. These data should support and justify the hypothesis, but preliminary data to support the feasibility of

certain methods or techniques are not needed. In addition, students can propose using experimental approaches or tools not currently available in their dissertation labs. The student can ask mentors, other faculty, or postdocs for advice on specific techniques or methods **but cannot ask them for conceptual help with the proposal aims and design.** Peers and lab members, but not the mentor or other faculty members, can proofread the document for clarity of writing. *Formatting guidelines:* up to 2 pages, font Arial 11, 0.5-inch margins, single-spaced (similar to NIH/NRSA format). Figures or diagrams to illustrate hypotheses and research design are encouraged and count towards the page limit. References do not count toward the page limit.

Pre-qualifying exam guidelines

The student must schedule a meeting with the committee for the pre-qualifying exam. The student will submit the pre-proposal to the committee one to two weeks before the meeting. The committee will assess whether the proposed research could be developed into a full proposal that would pass the qualifying exam. If these criteria are not met, the committee should ask questions and provide comments that will point out potential flaws without explicitly proposing alternative strategies/hypotheses. At the beginning of the exam, the student will leave the room so the committee can discuss the pre-proposal and the student's progress. The student will then give a ~20 min presentation of their pre-proposal, which should include background, rationale, hypothesis, aims, and planned research design (including methods, experimental groups, and statistics), as well as alternative strategies. The student need not take notes as the Reader will provide written feedback. **Committee members will ask questions during and after the presentation. These questions should be used to clarify approaches/hypotheses and methods, point to potential flaws or problems, and hint towards alternative/better approaches. However, the Committee will not make specific recommendations for alternative aims or methods to help the student.** After the presentation, the student will leave the room, and the committee will discuss the pre-qualifying exam and decide, per majority vote, on one of two possible results:

1. Approve the student to continue to the full proposal.
2. Request a revised pre-proposal.

The results of these discussions will be communicated to the student directly after the meeting. The Reader will provide a written summary of the discussion. This will be approved (or modified) by all committee members and then sent to the student and program directors, including specific instructions and the timeline for moving forward. If a revised pre-proposal is required, it must be submitted two weeks after receipt of the written comments.

There will be only one in-person pre-qualifying meeting. The student is allowed one revision of his/her pre-proposal, after which they must proceed to the full proposal/qualifying exam. The committee will discuss the revision, and

the Reader will communicate the outcome to the student. This email will clearly state whether the committee thinks that the pre-proposal fulfills all criteria necessary for a successful full proposal or if the committee recommends minor or major changes to the research plan that should be incorporated into the full proposal.

Full proposal guidelines

The student has four weeks from the Reader's email communicating the instructions to submit a full proposal. The deadline will be specified in the email and must be met. In case of emergencies where this deadline cannot be met, a formal request for an extension must be submitted in writing (email) to the committee and program directors. The Committee will decide on whether to approve the extension request. If the extension is not approved and the proposal has not been submitted by the stated deadline, the student fails the exam and must start over. The student is responsible for scheduling the qualifying exam. The exam date should be 10-14 days after the student submits the full proposal. Peers and lab members, but not the mentor or other faculty members, can only proofread the document for clarity of writing.

Formatting guidelines: One specific aims page plus six pages for the research strategy (excluding references); font Arial 11, single-spaced, 0.5-inch margins; "NIH" style including significance and experimental approach.

Candidacy exam guidelines

The committee will discuss the proposal's strengths and weaknesses without the student's presence. The student will then give a 20-25 min presentation of the proposal. Committee members may ask questions at any time. Questions may be directly related to the proposal but may include more general questions testing the student's comprehension of the topic and general neuroscience knowledge.

After concluding the presentation and answering questions, the committee will discuss the exam privately and decide, per majority vote, on one of three possible results: Pass, Conditional Pass, or Fail (as described below). After the meeting, all committee members will sign a form indicating the student's name, the date, and the decision and will send it to the Program Manager and Directors.

Pass. No revisions are necessary, and the student may begin forming a dissertation committee.

Conditional pass with minor written revisions. The student must revise the proposal (due two weeks after receiving the qualifying exam summary from the Reader) and submit it to the committee. The Reader will provide a summary of all comments and concerns raised during the meeting. The revision should include a separate concise, point-by-point response to all comments listed in the Reader's summary (no page limit). In addition, all changes in the revised proposal should be indicated (e.g., using different

colors, brackets, etc.). Students who receive a conditional pass may seek guidance from anyone (including the mentor or other committee members) when revising the document. The committee may approve the revisions as submitted or request another round of written revisions and/or an oral re-examination (at the committee's discretion). Students with a conditional pass can only submit two rounds of written revisions. The student will fail if revision criteria are not met after the second revision.

Major revisions with re-examination required. The committee has identified major deficiencies that require a significant revision to the written document (due two weeks after the summary statement) and an oral re-examination (two weeks after submission of the written revisions). The oral re-examination may include questions related to fundamental concepts in neuroscience related to the proposal. An additional document responding to each of the committee's concerns must be provided in a point-by-point introduction to the revision. This introduction has no page limit. If criteria are not met after re-examination, a round of minor written revisions may be requested (at the committee's discretion), or the student will fail.

Fail. The student can retake the qualifying exam once, beginning with a new pre-proposal submitted within 8 weeks of receiving a notice of failure. A student who fails the second time will be dismissed from the program.

Dissertation Research

Dissertation Committee

The student will form a dissertation committee within 3 months of passing the candidacy exam. The following semester, the student will begin registering for dissertation research credits (NS9099). The Dissertation Committee consists of five or more members, at least three of whom are members of the Neuroscience Graduate Program faculty (including the mentor). The committee members select the Dissertation Committee Chair (subject to approval by the Program Director) who cannot be the student's dissertation advisor. If the mentor has not graduated a PhD student before, the Dissertation Committee Chair must be a senior faculty member who has graduated PhD students before and is responsible to ensure that the mentor and the student are aware of all NGP graduation requirements.

MSTP students' dissertation committees must include at least one doctor of medicine (MD) and one member of the MSTP faculty.

A student who wishes to add a committee member who is not affiliated with the University of Cincinnati must complete an application to add an external committee member per the Graduate College's procedures. The student must provide a rationale for the external committee member (such as special expertise on the dissertation topic). The dissertation committee chair and the program director must approve the application before it is submitted to the Dean of the Graduate College.

The primary roles of the dissertation committee are to provide intellectual, methodological, and professional development support and guidance to facilitate the student's growth and progress. The committee monitors the student's dissertation research progress and provides valuable advice on technical questions, research directions, or alternative approaches.

The student must have their first dissertation committee meeting within 6 months of passing the candidacy exam. The committee must meet at least once every six months. In each meeting, the committee should discuss scientific rigor and reproducibility of the experiments with the student. Within one week after the meeting, the committee chair must provide a summary document to the student's mentor and other committee members for approval. The chair must then send the approved summary to the program directors and program manager.

The summary document must contain:

- A description of the student's progress since the previous meeting
- A statement of how rigor and reproducibility was discussed and addressed
- Plans and goals until the next meeting (which should be incorporated into the student's IDP)
- A target date for completing the dissertation (starting from year 4).
- Both mentor and student have to sign the form.

Dissertation Submission

The student will begin writing the dissertation based on research progress and with the dissertation committee's consent. The standard dissertation content includes:

Chapter 1: Introduction. This chapter presents the research problem with background information demonstrating that the student has evaluated existing knowledge and identified specific gaps that the research will attempt to fill. This section generally concludes with a statement of the hypothesis.

Data Chapters (Chapter 2 and following). The remainder of the dissertation presents the main research rationale, materials and methods used to carry out the research, results, discussion, overall conclusions, and summary.

Last Chapter: Overall Discussion. The overall discussion will place the collective findings in the context of the neuroscience field and discuss the overall impact of the research findings, outline potential future research directions that may emerge due to the work, consider limitations of the chosen approaches, and discuss alternative strategies.

Bibliography. The bibliography lists all cited references, including all authors, dates, volume, and inclusive pages.

Appendix. This section may include additional materials, including tables and figures.

The student may include material previously published in the dissertation without substantial rewriting. In this instance, the dissertation consists of reproductions of work published (or in press) and any additional literature review, methods, results, and/or discussion deemed necessary by the student's advisor and Committee. Any reproductions of published materials must be formatted per University guidelines for doctoral dissertations. Note that the student must obtain written permission from the publisher to include the published work in the dissertation.

Additional information on formatting the dissertation is available from:

<https://grad.uc.edu/student-life/etd.html>

Dissertation Defense

The student should notify the program manager of their intent to initiate the defense at least five weeks in advance to allow time to reserve appropriate rooms for the events.

The dissertation defense consists of two phases: a private defense for the dissertation committee and a public defense for at least two weeks after the private defense. The student must receive either a conditional pass or a pass on the private defense from the dissertation committee before the *announcement* of a public defense can occur. Upon receipt of a conditional pass or pass, the student should immediately contact the Program Manager to announce the public defense. If a shorter timeline between private and public defense is needed, the student should discuss this with the committee and program leadership well in advance. The public defense will need to be rescheduled if the student does not receive a conditional pass or pass.

Regardless of the interval between the private and public phases of the defense, the student is responsible for filing an official announcement of the public defense with the Graduate School at least two weeks before the public defense. Please note that the student must do this via the [online graduation application system](#) and is independent of other forms of advertisement (emails, posters, etc.) that the Program Manager may handle.

Private Defense

The student must submit the final dissertation to the dissertation committee for review at least ten business days before the scheduled private defense unless granted an extension by both the committee and program directors.

All members of the dissertation committee members must participate (in person or by videoconference) in the private defense to have a quorum.

The private defense format is as follows:

The committee starts the meeting with a private discussion in the student's absence to confirm that the dissertation document is of sufficient quality to proceed with the defense.

The student delivers an oral summary of their dissertation research to the dissertation committee. In preparation for the presentation, the student and committee decide whether the student will give a full version of the public presentation, or whether a shorter version of the seminar can be delivered which includes less introduction and more emphasis on experimental design and data analysis/interpretation (given the expertise of the dissertation committee and their familiarity with the research). However, if the student and committee decide on the shorter presentation, the student is nonetheless encouraged to show the committee the slides that will be included in the public seminar to receive additional feedback on the public presentation.

The committee proceeds with questions/comments about the presentation and dissertation document. After the presentation and Q&A, the committee meets privately without the student present to vote on the outcome of the private defense as follows:

- Pass
- Conditional Pass
- Fail

At least 4/5 of the voting members of the Dissertation Committee must approve the dissertation (conditional pass or pass) for the student to proceed to the second phase of the defense (i.e., the public defense).

In the event of a conditional pass, the student may complete the revisions during the period between the private defense and the public defense. Additional time for revisions is allowed at the committee's discretion (i.e., the public defense can occur before all revisions are made, with the committee chair's approval). However, **all revisions must be completed, and the finalized document uploaded to the Graduate College before the Electronic Submission of Thesis/Dissertation (ETD) deadline in a given semester** (check with the Program Manager and the Graduate School website for [critical dates and deadlines](#)).

Public Defense

The student should post an announcement of the public defense on the Graduate College website through the Graduation Checklist two weeks in advance.

Four of the five Dissertation Committee members must participate (in person or by videoconference) in the public defense to have a quorum. The public seminar is open to all academic community members and the general public. After the seminar, any member of the audience (including dissertation committee members) may ask questions and make comments.

If the committee is satisfied with the dissertation and public seminar, the committee members will then sign the approval form provided by the student. The student must upload the original, signed form as part of the final dissertation submitted to the Graduate

College. As a result, all phases of the dissertation defense (including all revisions to the document) must be completed prior to the ETD deadline for that semester.

Graduation Requirements

Doctor of Philosophy degree (PhD)

The doctoral degree will be granted for no less than the equivalent of three years of full-time graduate study. All degree requirements must be completed within eight (8) consecutive years of initial enrollment. This period includes a maximum of four (4) years before achieving candidacy and a maximum of four (4) years beyond candidacy. If additional time is needed, the student must apply for a formal extension from the Graduate College (contact the Program Manager and Program Directors for details).

A period of seven (7) months must elapse between admission to doctoral candidacy and receipt of the degree.

Students must complete all coursework satisfactorily and have accumulated at least 90 graduate credit hours, including 30 didactic credits at the University of Cincinnati.

Students must have maintained minimum academic standards, as defined previously, and have no grades of NG or I noted on their transcripts.

Students must have at least one first-author, peer-reviewed journal article published (or in press) based on their original dissertation research. Please note that review articles do not satisfy this graduation requirement.

Students must have prepared, successfully defended and uploaded their dissertations per Graduate College procedures.

Students must have no outstanding financial obligations to the University.

Students must complete confidential exit surveys on the doctoral experience conducted by the Graduate School and the graduate program. The results will be shared with the Program without personally identifying information.

Doctor of Medicine, Doctor of Philosophy Degree (MD, PhD)

Students must satisfy all requirements for the Doctor of Philosophy degree listed above.

Neuroscience Master's Degree

The University of Cincinnati does not offer a Master's degree in Neuroscience.

Special Rules and Provisions

Academic Honesty

Scientific inquiry is a community endeavor founded on honesty, trust, and cooperation. We expect all students participating in the Neuroscience Graduate Program to uphold the highest standards of behavior. All students are bound by the standards outlined in the University of Cincinnati's Student Code of Conduct, which can be found in the Graduate School Student Handbook. In addition, instruction in appropriate scientific behavior is provided by the Ethics in Research course.

Allegations of academic misconduct are investigated via a standard process described on the following pages. Acts of academic misconduct are considered extremely serious, and generally, any student who has engaged in academic misconduct will be dismissed from the Neuroscience Graduate Program.

Academic misconduct or dishonesty is defined in the University of Cincinnati's Student Code of Conduct and includes, but is not limited to:

Cheating. Any dishonesty or deception in fulfilling an academic requirement, such as:

- Using and/or possessing unauthorized material or technology during an examination (any written or oral work submitted for evaluation and/or grade), such as but not limited to: notes, tests, calculators, mobile devices (smartphones, cell phones, etc.), or software.
- Obtaining assistance with or answers to examination questions from another person with or without that person's knowledge.
- Furnishing assistance with or answers to examination questions to another person.
- Possessing, using, distributing, or selling unauthorized copies of an examination or computer program.
- Representing as one's own, an examination taken by another person.
- Taking an examination in place of another person.
- Obtaining unauthorized access to the computer files of another person or agency, and/or altering or destroying those files.

Fabrication. Falsification of any information or citation in an academic exercise.

Plagiarism. Submitting another's published or unpublished work, in whole, in part, or in paraphrase, as one's own without fully and properly crediting the author with footnotes, citations, or bibliographical references. This definition includes submitting material

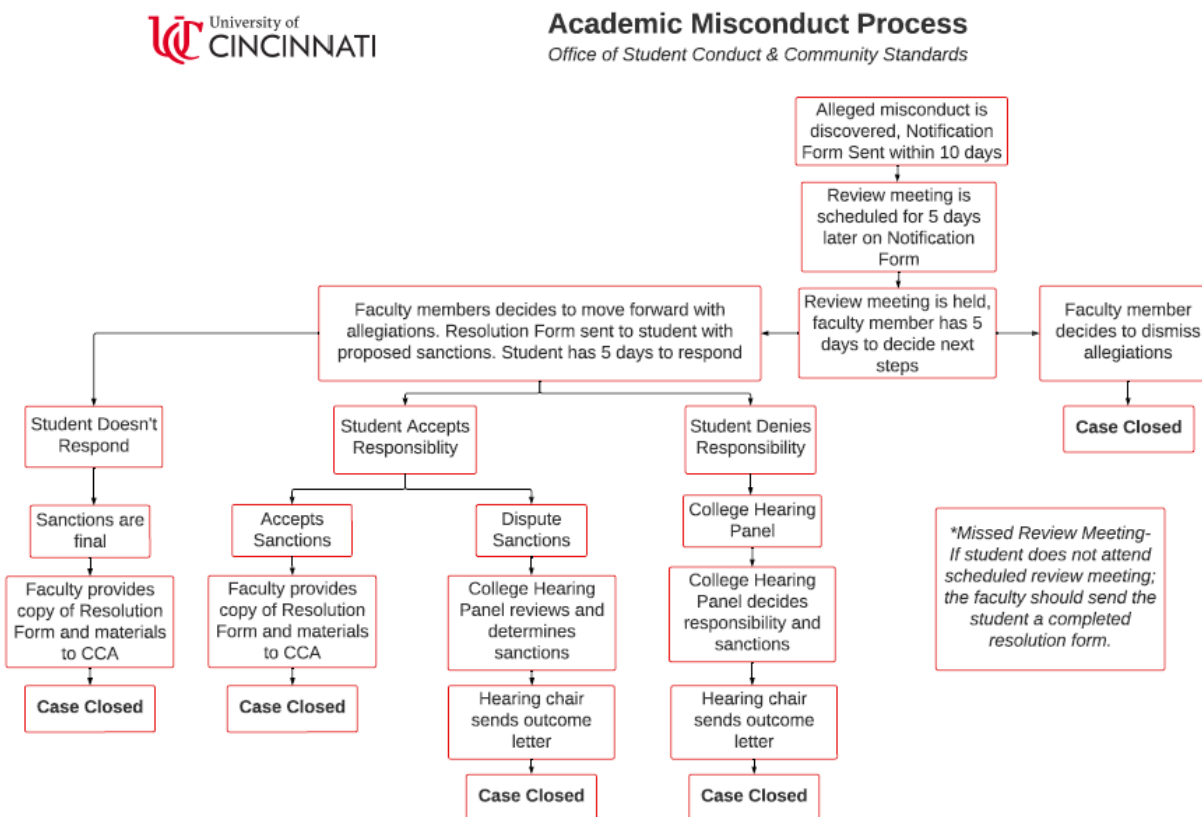
produced through unacknowledged collaboration as one's own, original work unless the collaborators have provided written consent.

Aiding or Abetting Academic Misconduct. Knowingly helping or encouraging another person to engage in academic misconduct.

The Student Code of Conduct also covers acts of nonacademic misconduct that include a variety of inappropriate conduct, including theft, unauthorized possession of weapons, threatening others, and harassment. Acts of nonacademic misconduct are subject to a wide range of penalties. Serious violations may lead to suspension or dismissal from the Program.

Academic Misconduct Procedures

The Neuroscience Graduate Program will follow the College of Medicine's protocol, to deal with cases of alleged academic misconduct. The chart below summarizes the College of Medicine procedure.



In addition, the Neuroscience Graduate Program may conduct internal deliberations, as described here, in cases of alleged academic misconduct that may occur among students in the graduate program, at the discretion of the Neuroscience Graduate Program Steering Committee. These rules, based upon the existing University of Cincinnati Student Code of Conduct, (<http://grad.uc.edu>; see Institution rules, policies and procedures) are

designed to protect the accused student's rights and to protect the rights of innocent students whose academic integrity and success depend upon association with a University, a College, and a Graduate Program that uphold high academic and ethical standards.

Instances of alleged academic misconduct must be reported to the Dean of the College of Medicine or the University Student Conduct Officer within 10 days of the incident. Informal procedures described in the Student Code of Conduct may resolve the matter. If not, the formal procedures described below shall be implemented. The result will be a recommendation for appropriate action, ranging from exoneration to dismissal from the University. Recommendations may be appealed as described in the Student Code of Conduct.

First level resolution. Instances of academic misconduct may occur within the context of courses, laboratories, seminars, or other academic settings. Therefore, academic misconduct allegations may originate with faculty, students, or staff. Faculty and staff suspecting misconduct must inform the student immediately and allow the student the opportunity to explain or respond. Students suspecting misconduct may report allegations to the program faculty and/or program directors. If conversations between the student and the person making the allegation do not resolve the problem to both parties' satisfaction within 10 business days, further action is required. In this case, the misconduct allegation should be reported to the program directors.

In a course setting, a faculty member who has confirmed academic misconduct may alter a grade or assign a failing grade for the paper, exam or course. If such action is taken, the faculty member must notify the Dean of the College of Medicine and the Program Directors within 10 business days of informing the student. In settings other than courses, the person(s) bringing charges of academic misconduct may initiate appropriate disciplinary action by reporting the incident to a faculty member (in the case of a student accusing another student), the Program Directors, and the Dean of the College of Medicine. Reports may also be made to the University Student Conduct Officer within 10 days after the alleged offense.

The report should include:

- a. Date of the report
- b. Name(s) of individual(s) involved
- c. Location/activity/setting of incident
- d. Date and time of the incident
- e. Description of incident
- f. Names of witnesses
- g. Name and phone number of person(s) submitting the report

Any instance of alleged academic misconduct that is not resolved between the student and the person making the allegation will be investigated by the Neuroscience Graduate

Program Ad Hoc Misconduct Review Committee. When appointed, the Neuroscience Graduate Program Misconduct Review Committee will consist of two faculty members, two students in the Neuroscience Graduate Program, and a chair appointed by the Program Director. No faculty member or the student directly involved in the pending allegation may serve on the Neuroscience Graduate Program Misconduct Review Committee.

The purposes of the investigation are to determine if the alleged misconduct occurred, to assess its severity, and to explore extenuating circumstances. Procedures to be used during the inquiry must be consistent with those described in the University Student Code of Conduct brochure under "Committee Procedures: Academic and Nonacademic Misconduct." All reports and documentation will be handled confidentially and in keeping with the manner appropriate for student records. Accused students should be given adequate time (generally, at least 48 hours) to prepare for the Misconduct Review Committee's inquiry. Should a student not wish to appear before the Misconduct Review Committee, the case will still be heard.

The Committee may recommend actions ranging from exoneration to expulsion of the student from the Program. This recommendation will be forwarded to the Program Directors, who will review the incident and inquiry, may solicit additional information, and recommend final action to the Dean of the College of Medicine.

Second level resolution. If First Level Resolution is not achieved, any party may request a Formal Hearing by the College Hearing Panel. Requests for a Formal Hearing must be made to the Dean in writing within 5 days after the Dean has notified the parties that the First Level Resolution process is complete.

The College Hearing Panel shall consist of a Hearing Officer appointed by the Dean, two faculty representatives selected by the Faculty Forum President and two student representatives. The student representatives will be the two Co-Presidents of the Graduate Student Governance Association (GSGA) or their designated representatives. Either party may challenge "for cause" a specific member's presence on the Hearing Panel by notifying the Hearing Officer of the challenge. The Hearing Officer will decide if the challenge is granted. The College Hearing Panel shall be convened within 15 days of receipt by the Dean of a request for a Formal Hearing and shall continue until the Formal Hearing is completed. The purposes of the hearing are to determine if the alleged misconduct occurred, to assess its severity, and to explore extenuating circumstances.

Procedures used during the inquiry must be consistent with those described in the University Student Code of Conduct brochure under "Committee Procedures: Academic and Nonacademic Misconduct." All reports and documentation will be handled confidentially and in keeping with the manner appropriate for student records. Should a student not wish to appear before the Hearing Panel, the case will still be heard.

The College Hearing Panel shall then determine the appropriate response and recommend this action to the Dean. This recommendation will be based on a majority vote. All members must be present to have a quorum. The Hearing Officer will forward the Review Board's recommendation to the Dean, the student, and the faculty parties within five days of the conclusion of the hearing. The Dean will notify all parties of the action taken by the Dean within five days of receipt of the Review Board recommendation.

Appeal. The Dean's decision and any subsequent student appeal shall proceed as defined in the Student Code of Conduct.

Sexual harassment

Sexual harassment is forbidden by law and completely contrary to the rules of our Program and the trust and cooperation central to scientific endeavors. Anyone who feels that they may have been subjected to sexual harassment is strongly encouraged to speak to the University Title IX office, Program Director or Associate Director and/or to take action through the University Grievance procedure. The Program takes these complaints very seriously and will take every necessary step to solve the problem. The Program will do everything possible to ensure discretion and that the act of lodging a complaint in no way compromises a student's career.

Notice of non-discrimination

The University of Cincinnati does not discriminate based on disability, race, color, religion, national origin, ancestry, medical condition, genetic information, marital status, sex, age, sexual orientation, veteran status, or gender identity and expression in its programs and activities.

The University does not tolerate discrimination, harassment, or retaliation on these bases and takes steps to ensure that students, employees, and third parties are not subject to a hostile environment in University programs or activities.

The University responds promptly and effectively to allegations of discrimination, harassment, and retaliation. It promptly conducts investigations and takes appropriate action, including disciplinary action, against individuals who violated its policies and provides appropriate remedies to complainants and the campus community. The University takes immediate action to end a hostile environment if one has been created, prevent its recurrence, and remedy the effects of any hostile environment on affected campus community members.

Student's right to review records

Enrolled students have the right to review their educational records, except those excluded by law, such as records maintained by a physician, psychiatrist, or parents' financial statements. Educational records are maintained in such offices as Student

Records, the different College Deans' Offices, program offices, Student Financial Aid, Career Development and Placement, and Educational Advising.

The student should first address the proper University, collegiate, or Program office. Students who encounter difficulty obtaining a review may appeal to the Family Educational Rights and Privacy Act Committee. University of Cincinnati policy is that the kinds of student records referred to in this statement will be reviewable by any qualified student at any reasonable time. Copies of any portion of the record will be provided at cost, except transcripts of students' permanent academic records for which the University's transcript policy will apply.

It is the policy of this institution that all student records, other than "Directory Information," are to be treated with confidentiality so that the only access afforded to university faculty or staff is on a "need to know" basis. The University defines "Directory Information" as the student's name, address, telephone number, college, class, major field of study, dates of attendance, registration status, and degrees and awards received. The office responsible for the maintenance of any student record will be responsible for maintaining confidentiality.

Grievance procedures

If the Neuroscience Graduate Program cannot resolve a grievance all parties' satisfaction, the University of Cincinnati provides an opportunity for resolving disputes involving graduate students in a fair and collegial manner. Graduate student grievance procedures establish a formal academic process for graduate students to request review and redress certain grievances arising out of their academic relationships with their programs, colleges, or the University. The grievance must be filed within 90 working days of the alleged improper mistreatment.

The grievance begins with a mediation process and may proceed, if necessary, through the more formal fact-finding and decision or appeal processes. Students are encouraged to seek assistance from the University Ombudsman's Office for possible resolution before initiating the formal grievance process. Students, faculty, and staff should note that grievance procedures are not legally binding but are an effective means of resolving conflicts. The Graduate School endorses this procedure and expects all programs and students involved to follow the procedure according to the established guidelines. No outside parties, such as lawyers, priests, family, etc., are allowed to participate in or impose on the procedure. The Graduate Student Grievance Procedure cannot supplant final sanctions stemming from the University of Cincinnati Student Code of Conduct process.

The procedures apply to the following types of grievances:

- grievances alleging improper dismissal or suspension from a graduate program;

- grievances alleging the improper withholding or termination of financial support of any kind;
- grievances alleging any other improper treatment of a graduate student by a faculty member or university agency except:
 - allegations of discriminatory treatment arising from the student complainant's age, race, gender, sexual preference, disability, national origin, or religion;*
 - allegations of improper evaluation of the quality and quantity of academic work;
 - allegations of unfair recommendation for employment or further graduate study.

*Note: Allegations of discrimination and sexual harassment will be handled according to the university discrimination procedure, as outlined by the University of Cincinnati's Notice of Non-Discrimination.

Further details regarding the Graduate Student Grievance Procedures can be found at <http://grad.uc.edu/student-life/policies/grievances.html>

Medical leave of absence policy

A student who suffers from a major medical illness that interferes with normal academic progress in the Program must:

- Immediately inform the Program Directors and mentor of the illness.
- Provide a letter from their physician affirming the student's inability to maintain normal academic progress in the Program. The leave of absence must be taken for at least one semester (but usually for one academic year) immediately upon notification of the illness.
- Provide a letter from their physician before re-entering the Program affirming the student's ability to resume normal progress in the graduate program.

The costs associated with maintaining student health insurance during the medical leave of absence may be covered by the Neuroscience Graduate Program at the discretion of the program directors. However, the student's stipend will not be paid during the leave of absence. Stipend payments resume once the student has resumed normal progress in the graduate program.

To start the process please log on to:

<https://gradapps.uc.edu/GradTracker/SubmitForms.aspx>

Winter weather policy

The NGP follows all University snow policies and procedures. All classes and exams are canceled when the University has closed. On days when the University delays opening, classes and exams will resume at the hour that the University reopens, if this is at or before 3:00 pm.

Graduate student presence in research laboratories is allowed during Winter Weather Emergencies and is decided on a case-by-case basis. Students should consult their mentors about any expectations or attendance requirements applicable to their research during such periods.

University faculty and administrators' eligibility for graduate degrees

No graduate degree will be granted to any faculty member above the rank of instructor who teaches in the same college in which the degree is to be granted. The only exception to the above rule applies to those members of the faculty who were, as of September 1st, 1963, candidates for advanced degrees. This rule is also applied to adjunct appointments at any professorial rank and interdisciplinary degrees when the same college is one of the interdisciplinary colleges; the only exception in the latter case will be when the faculty member was admitted to the interdisciplinary degree program before September 1st, 1976.

No holder of an academic administrative title of Assistant Dean or equivalent or above shall be granted a graduate degree from the University of Cincinnati. The only exception will be when the administrator was admitted to the graduate program before September 1st, 1976. This rule applies only to those who hold faculty rank above instructor. Those holding "equivalent rank" must petition the Graduate Council.

Reporting student mistreatment, harassment, and mentoring problems

The COM Graduate Student Mistreatment/Harassment Policy & Mentoring Policy is available as individual webpages on the [Office of Graduate Education website](#) under the Student Support/Resources/Policies tab that display the full policies and have a link to submit reports. Links to these individual webpages are below:

- [Student Mistreatment Policy and Reporting](#)
- [Problem Mentoring Policy and Reporting](#)

UCCOM Graduate Student Mistreatment & Problem Mentoring reporting

URL: <https://comdo-wcnlb.uc.edu/EMOS/Resources/GradMistreatment.aspx>

Checklists for Student Progress

Degree Program Overview: Neuroscience PhD Checklist & Timeline

Non-course Recurring events for all years (all events strongly encouraged; asterisk denotes requirement)

- NGP Retreat* (daytime event on a Friday in September or October)
- Fall and Spring all student meetings* (lunch meetings in December and May)
- NGP Summer Alumni Speaker Series* (2-3 speakers each summer; select Fridays in June or July)
- NGP Public Defenses* (days and times vary, scheduled by graduating student)
- NGP Recruitment Events (late January and early February each year)
- Summer Welcome Picnic (a select Friday in August)
- OMV Winter and Spring Neuroscience Days
- NGP Events at SfN (Grad Fair Booth, NGP Dinner)
- NRC Retreat (May)

Year 1 (Foundations + Rotations)

- ☐ Register at least 12 credits per semester (10 credits in first summer; ~34 total year 1).
- ☐ Begin required core neuroscience courses.
- ☐ Complete ~3 lab rotations (3 rotations required, 4 as necessary).
 - Remain continuously in lab/rotations (gaps ≤ 1 week unless approved).
 - Explore research areas and methods.
 - Evaluate potential research advisors.
- ☐ Year one non-course requirements: Program Orientation, Student Government "boot camp," College of Medicine Orientation, Neurobiology of Disease summer seminar series

By July 1 (Start of Year 2)

- ☐ Select a research advisor and complete required paperwork (mentor/mentee agreement and financial agreement)
- ☐ Begin dissertation research

Year 2 (Coursework, Research, Initiate Candidacy Exam)

- ☐ Register ~24 credits/year (12 per semester, fall and spring).
- ☐ Continue required coursework
 - May include statistics, if not completed in first year
 - May include one elective course or may wait until after qualifying
- ☐ Continue research with advisor.
- ☐ Initiate Doctoral Candidacy Exam before end of spring semester
 - Send list of committee members to program manager prior to end of spring semester

- Await announcement of reader, usually in mid-May
- Once a reader has been identified, send the list of committee members, as well as a pre-proposal title, to your reader
- ❑ Year two non-course requirements: attend required CoM Graduate Student Success Academy during summer between 2nd and 3rd year (note that Graduate Student Success Academy may be required again, later in a student's graduate career, as decided by the CoM Office of Graduate Education)

Year 3 (Candidacy Milestone)

- ❑ Submit pre-proposal before September 1.
- ❑ Complete qualifying/candidacy exam.

Post-Candidacy (Years ~3–5+)

- ❑ Register for NS9099 (Dissertation Research) each fall and spring.
- ❑ Register for NS9001 (Seminar) each fall and spring.
- ❑ Register for at least one elective course, in consultation with program leadership and advisor (note, this may be completed earlier, but many students will wait to complete candidacy first)
- ❑ Focus on dissertation research.
- ❑ Submit at least one first-author publication (accepted/in press before defense).
- ❑ Special note for 5th year students: be sure to enroll in the Ethics Refresher Course, required by the NIH, during the spring of your 5th year

Final Stage (Defense & Completion)

- ❑ Write dissertation
- ❑ Defend dissertation (private, pre-public defense and public defense)

Program Milestones & Limits

- Median time to defense: ~5.2 years.
- Maximum completion time: 174 credit hours or 9 years

Additional Notes on Requirements. All students must:

- Maintain enrollment
- Get approval for courses outside College of Medicine
- Complete any additional committee-required coursework
- If using student health insurance, opt in in Catalyst (every semester) and apply for GSHI Award (once per year)

Qualifying Exam Student Checklist

Committee Setup

Note that the program assigns the Reader. These assignments are typically released in May.

- ☐ Notify program manager of qualifying exam committee members during the spring semester of your second year.
 - a. Confirm the committee includes 5 voting members.
- ☐ Watch for Reader assignment notification in May of the year you will take the exam.
 - a. Confirm the committee includes the Reader, mentor, and 3 UC or CCHMC faculty members.
 - b. Confirm at least 2 of the 3 additional faculty members are NGP faculty.
- ☐ Immediately after the full committee is formed, including reader assignment, schedule the pre-qualifying exam with the committee (must be before September 1 of that year).
- ☐ Inform the Program Manager of the pre-qualifying exam date.

Pre-Proposal Preparation

- ☐ Choose title for prequalifying proposal
- ☐ Send title and list of committee members to your assigned reader
- ☐ Develop a student-conceived research plan.
 - a. Confirm the plan does not overlap with the mentor's current or pending grants.
 - b. Design the project for a 2-year research period.
 - c. Include background, rationale, hypothesis, aims, research design, methods, experimental groups, statistics, and alternatives.
 - d. Keep the document to 2 pages or fewer, including figures but excluding list of references.
 - e. Use Arial 11, single spacing, and 0.5-inch margins.
 - f. Include figures only if they fit within the page limit.
- ☒ Ask peers or lab members to proofread for clarity if needed. **Do not ask the mentor, faculty or peers for help with aims, design, or writing.**

Pre-Qualifying Exam

- ☐ Send the pre-proposal to the committee 1-2 weeks before the meeting.
- ☐ Prepare a 20-minute presentation.
 - a. Be ready to explain the hypothesis, aims, methods, statistics, limitations, and alternative strategies.
 - b. Expect questions during and after the presentation.

You will be sent out of the room before and after the presentation/exam. Wait for the committee's decision after private discussion.

If a Pre-Proposal Revision Is Requested

- ☐ Review the Reader's written summary.
- ☒ Submit the revised pre-proposal within 2 weeks of receiving comments. **Remember that only one pre-proposal revision is allowed.**

- ☐ Wait for the Reader's email describing whether the committee recommends minor or major changes for the full proposal.
- ☐ When informed to proceed to the full proposal, schedule the qualifying oral exam.
- ☐ Inform the Program Manager of the qualifying oral exam date.
- ☐ Confirm the oral exam date is 10-14 days after the due date for the full proposal submission.

Full Proposal

- ☐ Note the deadline in the Reader's email.
- ☐ Submit the full proposal within 4 weeks of that email.
 - a. Include 1 Specific Aims page.
 - b. Include a 6-page Research Strategy.
 - c. Use Arial 11, single spacing, and 0.5-inch margins.
 - d. Use NIH style, including Significance and Experimental Approach.
 - e. List of references do not count towards the page limit.
- ☒ Have peers or lab members proofread for writing clarity if needed. ***Do not ask the mentor, peers or faculty for help with proposal design or writing.***

Qualifying Oral Exam

- ☐ Prepare a 20-25 minute presentation.
- ☐ Be prepared for questions about the proposal and general neuroscience knowledge.
- ☐ Bring any required program forms.

You will be sent out of the room before and after the presentation/exam. Wait for the committee's decision after private discussion.

If You Receive a Conditional Pass

- ☐ Review the Reader's summary of required revisions.
- ☐ Prepare a point-by-point response to all comments (no page limit).
- ☐ Revise the proposal and clearly mark all changes in the revised proposal.
- ☐ Submit the revised proposal and response to the committee within 2 weeks of receipt of the Reader's summary.
- ☐ Remember that only 2 rounds of written revisions are allowed.

If Major Revisions and Re-Examination Are Required

- ☐ Review the Reader's summary carefully.
- ☐ Submit the revised written document within 2 weeks.
- ☐ Include a point-by-point response to committee concerns.
- ☐ Schedule the oral re-examination, typically 2 weeks after submitting revisions.
- ☐ Prepare for proposal-specific and general neuroscience questions.

After You Pass

- ☐ Begin forming the dissertation committee.

- ☐ Form the dissertation committee within 3 months.
- ☐ Schedule the first dissertation committee meeting within 6 months.
- ☐ Plan to meet with the dissertation committee at least once every 6 months.