INTRODUCTION

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

The guidelines, rules, regulations, and advice in this handbook are meant to help you pass through the Program productively and expeditiously. In establishing these guidelines, effort has been made to assure that the content is in full compliance with the Rules and Policies of the University of Cincinnati Graduate School.

We wish you the best of success in your training experience and future career in Neuroscience!

Best wishes,

James Herman, Ph.D.
Director, Neuroscience Graduate Program
# Table of Contents

Introduction ii  
Table of Contents iii-iv  
Current Neuroscience Graduate Program Officers and Committees v  

I. Application and Admission to the Neuroscience Graduate Program 1  
   A. Application 1  
      1. Process 1  
      2. International Student Admission 1  
      3. Admission and Financial Support 2  
         a. Admission Decisions 2  
         b. Financial Support 2  
         c. Transfer of Credit 2  

II. Doctoral Degree Program 3  
   A. Overview of the Course of Study 3  
   B. Arriving and Beginning the Program 3  
   C. Lab Rotations and Selection of Thesis Advisor 3  
   D. Summary of Course Requirements 4  
      Required Curriculum 5  
      Electives 6  
      Course Descriptions 7-11  
   E. Doctoral Qualifying Examination 11  
   F. Dissertation Research and Dissertation Committee 12  
   G. Submission of Dissertation 13  
   H. Final Defense of Dissertation 13  
   I. Satisfactory Progress in the Program 14  
   J. Procedures for the Evaluation of Student Progress 14  
   K. Minimum Academic Standards 14  
   L. Requirements for the Doctor of Philosophy Degree 15  
   M. Requirements for M.D./Ph.D. Degree in the Neuroscience Graduate Program 16  
   N. Policy Regarding Master's Degree 16
III. Graduate Credits and Grading Practices  17
   A. Course Load  17
   B. Graduate Assistants and University Graduate Scholarship Recipients  17
   C. Grading Practices  17-18

IV. Registration  19
   A. Registration Change Procedure  19
   B. Audit Regulations  19
   C. Pass/Fail  19
   D. Withdrawals  19
      1. Academic Considerations  19
      2. Financial Considerations  19

V. Special Rules and Provisions20
   A. Academic Honesty  20
   B. Sexual Harassment  21
   C. Non-Discrimination Policy  22
   D. Right to Review Records  22
   E. Grievance Procedures  22
   F. Administrators for Graduate Degrees23
   G. Medical Leave of Absence Policy  23

   Academic Misconduct Review Procedures 24
   Summary of Academic Misconduct Procedures  24

Contents are in compliance with the rules and policies of the University of Cincinnati Graduate School
2009-2010 ACADEMIC YEAR

Graduate Program Officers and Support Personnel

Director of Program
Jim Herman, Ph.D.

Director of Graduate Studies
Gary Gudelsky, Ph.D.

Seminar Coordinator
Steve Kleene, Ph.D.

Graduate Program Coordinator
Deb Cummins, B.B.A..

Graduate Program Committees

Steering Committee
Jim Herman, Ph.D., Chair

Admissions and Recruitment Committee
Gary Gudelsky, Ph.D., Chair

Advisory Committee
Kim Seroogy, Ph.D., Chair

Seminar Committee
Steve Kleene, Ph.D., Chair

Curriculum Committee
Jack Lipton, Ph.D., Chair
I. APPLICATION AND ADMISSION TO THE NEUROSCIENCE GRADUATE PROGRAM

A. Application

All applicants are required by the Graduate School to have obtained a baccalaureate degree before entering the graduate program. Prospective students should have a strong undergraduate background in biology, chemistry, physics and mathematics with an overall GPA of at least 3.0 (out of 4.0 total). While grades and test scores are used as part of the ranking process, emphasis is given to the candidate’s personal statement, letters of recommendation, prior research experience and personal interviews.

1. Process

Application materials may be requested by e-mail (Deborah.Cummins@uc.edu) or by connecting to the Neuroscience Graduate Program Home Page directly at http://neuroscience.uc.edu). Alternatively, call 513-558-1703 or write:

Neuroscience Graduate Program  
University of Cincinnati College of Medicine  
2180 East Galbraith Road  
GRI – Bldg A, Rm 141  
Cincinnati, OH 45237-1625

Interested students should take the general aptitude test of the Graduate Record Exam (GRE), administered by the Educational Testing Service, Princeton, New Jersey, 08540, at the earliest date possible. All applicants should complete the Neuroscience Program Application and should arrange for the completed application, three personal references, GRE scores, and a copy of official transcripts to be sent to the Neuroscience Graduate Program at the address given above.

The University Graduate Application, accompanied by a check for the $40 non-refundable application fee payable to the University of Cincinnati, should be paid online at the time of application.

APPLICATIONS AND ALL SUPPORTING DOCUMENTS ARE ACCEPTED AT ANY TIME, BUT SHOULD BE COMPLETED BY FEBRUARY 15 TO BE CONSIDERED FULLY FOR ADMISSION BEGINNING IN THE FALL OF THE SAME YEAR.

After preliminary screening of all applications, selected applicants are scheduled for personal interviews. The interview serves as an opportunity for the applicant to meet faculty and graduate students, to see the program’s research facilities, and for members of the Program to evaluate the prospective student. Offers of admission are generally made by April 1. Students are encouraged to begin the program July 1. Unless unusual circumstances arise, new students are admitted only once per year.

2. International Student Admission

In addition to the requirements described above, all international student applicants who are non-native speakers of English must take the Test of English as a Foreign Language (TOEFL). It is also strongly recommended that international applicants take the Test of Spoken English (TSE). Applicants must obtain a score of at least 550 on the TOEFL. This requirement may be waived (with permission from the University Dean) for international students who have a degree from an accredited American college or university and who have studied oral and written English while a student in the American college or university.
In instances where an international student holds a degree for which the U.S. equivalent is not known or if it is determined by the department and/or the International Student Services Office that the applicant does not have the equivalent of a bachelor's degree, the program must submit a petition for admission without a bachelor's degree to the Graduate Council and provide any supporting documentation deemed pertinent. Before their admission to the University is completed, all international students must fulfill U.S. Immigration Service requirements and register with the International Student Services Office.

Upon arrival at the University of Cincinnati, all international students are required to carry student health insurance. Quarterly fees (reflecting the number of accompanying dependents) will be assessed at each registration period. For additional information: http://www.isso.uc.edu

3. Admission and Financial Support

a. Admission Decisions

All decisions concerning admissions to the Neuroscience Graduate Program rest with the Admissions Committee. The Committee has the authority to set application deadlines, to require certain preadmission examinations, to require satisfactory completion of certain course work prior to admission, and to establish other preadmission requirements. Admission decisions will not be made on the basis of race, age, sex, color, religion, disadvantage backgrounds, sexual orientation or disability except in those disciplines in which the disability will place the student, other students, faculty or staff in physical danger (Affirmative Action Guidelines). Decisions to admit or not to admit are final unless it can be demonstrated that the Program violated a Graduate Division policy or failed to apply fairly and consistently the criteria established by the Program.

b. Financial Support

At present, students receive a 12-month stipend of $22,000. Stipends are increased to $23,000 after students successfully complete their qualifying exam. Students are provided a stipend of $24,000 if they obtain an individual grant from the NIH or external foundation. All students in good academic standing in the Neuroscience Graduate Program receive a graduate assistantship stipend (referred to as a GA) and full tuition scholarship (a University Graduate Scholarship, referred to as a UGS) plus student fees and individual health insurance. Although there are opportunities to serve as teaching assistants, these functions are not required of Ph.D. students in the Neuroscience Graduate Program. Under ordinary circumstances, assistantships and tuition scholarships will not be awarded to students who have reached the University mandated cap of 260 or more graduate credit hours at the University of Cincinnati. All students are required to apply for Ohio Residency after living in Ohio for one year.

The Supplementary Information Form must be completed prior to registration by new students entering the University, students transferring from another college, and by students not enrolled in the previous academic year. When filling out this form, you should enter "Neuroscience; code IN NS" on the line "(Program Major)". This form will be provided to you by the program coordinator.

c. Transfer of Academic Credit

1. Some credit for courses taken at other institutions may be transferable, but limits are set on the amount of work completed at other institutions that can be included as fulfilling graduate degree requirements.
II. DOCTORAL DEGREE PROGRAM

A. Overview of the Course of Study

During the first year, students will carry out 2-3 lab rotations - approximately 3-month stays in different laboratories - with the primary goal of selecting a research advisor, but with the important secondary goal of becoming exposed to different research areas. Students will also complete a series of required courses designed to provide them with a secure foundation in neuroscience. At the end of this year, students will select an advisor and begin research work in their advisor's laboratory.

During the second year, students will continue laboratory research and will take required and elective courses to complete the course requirements. During Spring quarter of the second year, students will initiate their Candidacy Examination, which will demonstrate their preparedness to pursue a Ph.D. degree.

In the remaining time, students will devote nearly full-time to research. The culmination of the graduate career is the preparation and defense of a doctoral dissertation.

The particular course of study pursued for the doctoral degree will be arranged in meetings with the Director of Graduate Studies and the Advisory Committee, and, after the first year, with the research advisor. In all cases, the aim of the doctoral program will be to help develop competence in research, scholarship, teaching, and professional performance in general, and a knowledge of Neuroscience as it applies to allied branches of learning. There is no formal Masters Degree program, but Masters Degrees may be awarded under some specialized circumstances, described below.

B. Arriving and Beginning the Program

Incoming students should plan on starting on July 1. This provides an opportunity to find an apartment, register, make parking arrangements, initiate the stipend, obtain a desk in the Neuroscience graduate student room, obtain keys, and begin a research rotation in a laboratory, all before classes begin in September.

To help plan the initial stages of graduate education, you will meet with the Advisory Committee. This Committee will help you decide which courses to take and will offer advice on lab rotations. The Advisory Committee also decides whether to grant advanced standing, or the transfer of credits for graduate courses already taken at other universities or at this university. Additional course requirements and other exceptions designed to tailor the program of study to each student's needs and interests may be recommended by the Advisory Committee or Candidacy Exam Committee. The Program Director may bring any course recommendations before the full faculty for advice and final resolution. Students also have the right to appeal any course requirement decisions to the full faculty.

C. Lab Rotations and Selection of a Research Advisor

During the first year, two laboratory rotations of approximately one quarter each are required, although three are recommended. You should choose a research advisor by the end of Spring quarter of your first year. This choice is the most important decision you will make during your graduate education, because your Advisor, more than any other person, course, or event, influences how much you will learn and what kind of research you will perform. The Advisory Committee can give you useful advice on making this choice.
D. Summary of Course Requirements

1. A summary of the curriculum is presented in Table I. Courses are described on pages 5 - 10. The course requirements for the Ph.D. degree are:

   a. Fundamentals of Neuroscience I (26NS778), Molecular Biology: Proteins and Enzymes (Cell I; 26GNDT872), and Survey of Neuroscience Research (26NS840) should be taken during fall quarter of the first year; Fundamentals of Neuroscience II (26NS779), Molecular Biology of the Cell II (26GNTD873) and Ethics in Research (26GNTD730) during the Winter quarter of the first year; and Brain and Behavior I (26NS841) during spring quarter of the first year; Academic Survival Skills (26NS777) and Molecular Genetics (26GNTD871*) during the Fall quarter of the second year; Molecular Genetics (alternate course 15BIO791*) during the Winter quarter of the second year; and Biostatistics (26MCP849) during Spring quarter of the second year. *Note that either of these two Molecular Genetics courses should be chosen to satisfy the course requirement. These above courses are defined hereafter as core and/or required courses.

   b. Students must take the Neuroscience Journal Club during their first and second years, and the Neuroscience Seminar throughout their graduate career (exception: see M.D./Ph.D. program). One advanced elective also is required.

   c. Additional courses to complete the program may be required by the Advisory Committee or the Candidacy Exam Committee. Final approval rests with the faculty.

   d. Additional electives, if needed, to make a total of 45 credit hours of didactic course work.
### TABLE 1. REQUIRED CURRICULUM
NEUROSCIENCE GRADUATE PROGRAM
(Numbers in parentheses are course credits)

#### YEAR I

<table>
<thead>
<tr>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
<th>Summer</th>
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</thead>
<tbody>
<tr>
<td>Fundamentals of Neuroscience I (4) 26NS778</td>
<td>Fundamentals of Neuroscience II (4) 26NS779</td>
<td>Brain and Behavior I (5) 26NS841 (lab only)</td>
<td></td>
</tr>
<tr>
<td>Mol. Biol.: Prot. &amp; Enzy (3) 26GNTD872 (Cell I)</td>
<td>Cell Biology (Cell II) (3) 26GNTD873</td>
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<td></td>
</tr>
<tr>
<td>Survey of Neuroscience Research (1) 26NS840</td>
<td>Ethics in Research (1) 26GNTD730</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neuroscience Journal Club (1) 26NS910</td>
<td>Neuroscience Journal Club and Ethics Module (1) 26NS911</td>
<td>Neurosciecnce Journal Club (1) 26NS912</td>
<td></td>
</tr>
<tr>
<td>Neuroscience Seminar (1) 26NS901</td>
<td>Neuroscience Seminar (1) 26NS902</td>
<td>Neurosciecnce Seminar (1) 26NS903</td>
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</tr>
<tr>
<td>Research rotation (8) 26NS850</td>
<td>Research rotation (8) 26NS851</td>
<td>Research rotation (11) 26NS852</td>
<td>Research (do not register)</td>
</tr>
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Core courses are in bold.

#### YEAR II

<table>
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<tr>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
<th>Summer</th>
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</thead>
<tbody>
<tr>
<td>Molecular Genetics (3) 26GNTD871* (east campus)</td>
<td>Molecular Genetics (3) 15 BIO0791* (west campus)</td>
<td>Academic Survival Skills (3) 26NS777</td>
<td>* select fall or winter quarter Molecular Genetics class</td>
</tr>
<tr>
<td>Elective**</td>
<td>Elective**</td>
<td>Elective**</td>
<td>** only one advanced elective is required</td>
</tr>
<tr>
<td>Neuroscience Journal Club (1) 26NS910</td>
<td>Neuroscience Journal Club (1) 26NS911</td>
<td>Neuroscience Journal Club (1) 26NS912</td>
<td></td>
</tr>
<tr>
<td>Neuroscience Seminar (1) 26NS901</td>
<td>Neuroscience Seminar (1) 26NS902</td>
<td>Neuroscience Seminar (1) 26NS903</td>
<td></td>
</tr>
<tr>
<td>Research (6 or 10) 26NS850</td>
<td>Research (12) 26NS851</td>
<td>Research (10) 26NS852</td>
<td>Research (do not register)</td>
</tr>
<tr>
<td></td>
<td><strong>Fall</strong></td>
<td><strong>Winter</strong></td>
<td><strong>Spring</strong></td>
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<tr>
<td></td>
<td><strong>Advanced Topics Neuroscience</strong></td>
<td><strong>Advanced Topics Neuroscience</strong></td>
<td><strong>Neuroendocrinology of Homeostasis</strong></td>
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<td>(1-4)</td>
<td>(1-4)</td>
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<td>26NS930</td>
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<tr>
<td></td>
<td><strong>Intro to Biostatistics (4)</strong></td>
<td><strong>Advanced Mol. Gen. I (4)</strong></td>
<td><strong>Brain and Behavior II (4)</strong></td>
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<tr>
<td></td>
<td>26ENV787</td>
<td>26MG710</td>
<td>26NS861</td>
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<tr>
<td></td>
<td><strong>Developmental Biology (4)</strong></td>
<td><strong>Advanced Biochem. II: Protein Biochemistry (4)</strong></td>
<td><strong>Biochemical Neuropharmacology (3)</strong></td>
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<td>26MG719</td>
<td>25PBI0851.</td>
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<tr>
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<td><strong>Microscopic Anatomy (4)</strong></td>
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<td><strong>Practical Light Microscopy (2)</strong></td>
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<td></td>
<td>26CB825</td>
</tr>
<tr>
<td></td>
<td><strong>Advanced Mol. Gen. II (4)</strong></td>
<td></td>
<td><strong>Advanced Mol. Gen. II (4)</strong></td>
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<td>26MG711</td>
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</table>
COURSE DESCRIPTIONS

REQUIRED COURSES

26NS778. Fundamentals of Neuroscience I. Provides an overview of our current understanding of molecular and cellular neuroscience. This includes the cellular components, architecture and development of the nervous system, generation/properties of membrane and action potentials, fundamentals of chemical synaptic transmission, types of neurotransmitter receptors and general properties of their activation, signal transduction, and mechanisms of synaptic integration and information processing. Fall quarter only.

26NS779. Fundamentals of Neuroscience II. Fundamentals of Neuroscience II is intended to integrate and extend topics covered in Fundamentals of Neuroscience I, and provides an overview of our current understanding of neuroendocrine and motor systems, reward and addiction, and behavioral and cognitive neuroscience. Winter quarter only.

26NS840. Survey of Neuroscience Research. Weekly research seminars by faculty to introduce incoming graduate students to research opportunities in neuroscience at the University of Cincinnati. This series of seminars will assist students in identification of laboratories in which they desire to do laboratory rotations and ultimately dissertation research.

26GNTD872. Molecular Biology of the Cell I: Proteins and Enzymes. Application of classical and molecular techniques to problems of protein structure and function; membrane organization and dynamics; biochemistry of membrane transport processes. Fall quarter only.

26GNTD873. Molecular Biology of the Cell II. This course covers membrane biology and basic cell biology. Emphasizes include membrane structure and generation of resting and action potentials, cell compartmentalization and organelles, protein trafficking and secretion, cytoskeleton, extracellular matrix, nuclear architecture and chromosome structure. The course integrates morphological, biochemical and biophysical approaches. Winter quarter only.

26NS841. Brain and Behavior I. Principals and concepts of nervous system organization: structural organization, neurophysiology, motor systems, sensory systems, higher functions. Spring quarter.

26NS777. 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 NIH is structured, study sections, search committees, how to find post-doctoral and faculty positions, how to prepare CVs, biosketches, and letters of recommendation. The students also write a critical review of an area of research outside the topic area of the student’s own research and prepare specific aims for a grant proposal. Fall quarter.

26MCP849. Statistical Methods in Physiology. A practical course designed to provide students with a solid foundation and intuitive understanding of statistics for the biomedical sciences. The course emphasizes experimental design, parametric statistics, linear and nonlinear regression used in modeling physiological phenomena, effective data presentation, and graphic integrity. Spring quarter.

26GNTD730. Ethics in Research. This seminar course prepares the scientific researcher to deal with essential practical ethical issues, such as paper authorship criteria and responsible collection and presentation of data.

26GNTD871. Introduction to Molecular Genetics. Genetic concepts, DNA structure, replication and repair, recombination, transcription, translation, regulation, cloning methods. Fall quarter only.
15BI0791. Molecular Genetics I. The purpose of this course is to provide a graduate level introduction to current molecular technologies that are applicable to a broad range of biological questions. Winter quarter.

26NS910. Neuroscience Journal Club. This course emphasizes critical analysis of current issues in neuroscience research. Presentations will be made by students, faculty, and postdoctoral trainees, and group discussion is encouraged.

26NS901. Neuroscience Seminar. Formal presentations of current research in neuroscience will be given by distinguished neuroscientists from outside institutions.

ELECTIVES - NEUROSCIENCE

26GNTD863. Molecular Biology of the Cell III. This course emphasizes regulation of cell cycle and cell proliferation. The course introduces the student to cell growth factors and their receptors and discusses their relationship to oncogenes. There is further emphasis on cellular responses to peptide and steroid hormones and involvement of second messengers such as cyclic nucleotides, calcium and protein kinases. Spring quarter only.

26NS861. Brain and Behavior II. An overview of human psychiatric and neurological disorders, including depression, bipolar disorder, schizophrenia, substance abuse, Parkinson’s disease and other movement disorders, Alzheimer’s disease, stroke, brain tumors, and epilepsy. The course is offered during a four-week concentrated block of time. Permission of course director.

26NS830. Neuropharmacology. This course will cover the neurochemical mechanisms underlying the behavioral effects of psychoactive drugs. Permission of course director.

26NS930. Advanced Topics in Neuroscience. 1-4 cr. hrs. Each quarter, current topics in distinct areas of Neuroscience are studied in depth. These courses will build on and expand coverage of Neuroscience beyond that presented in the graduate core courses. Recent offerings include “Neuroendocrinology of Homeostasis”, “Sensory Neurons” and “Receptor Neuropharmacology” Check with the Neuroscience Program graduate office for the list of courses for the current academic year.

26NS940. Advanced Study in Neuroscience. 1-12 cr. hrs. Individualized readings or research in a specialized topic in neuroscience. This course will allow students to study topics independently under the direction of faculty who have expertise in that area. Approval of Neuroscience Program Director.

ELECTIVES - OTHER DEPARTMENTS/PROGRAMS

15BIOL550. Ethology. A broadly comparative introduction to animal behavior with some emphasis on evolutionary and ecological interpretations of behavioral diversity. Prerequisite: Biology 303 or permission of instructor.

15BIOL675. Data Analysis for Biologists. An introduction to quantitative methodologies for examining ecological, cellular, and molecular data. Emphasizes understanding of statistics used in biological literature. Prerequisite: permission of instructor.

15BIOL676. Advanced Data Analysis. A second course in data analysis and statistics for graduate students. The instructor begins with linear models of regression and ANOVA, and works through
multivariate, time series and advanced graphical methods. Prerequisite: Biology 675 or permission of instructor.

15BI OL680. **Vertebrate Reproduction.** An examination of the reproductive process of several vertebrate models. Emphasis will be placed on the control of reproduction by endocrine and environmental factors. Prerequisite: Biology 571 or permission of instructor.

15BI OL789. **Scientific Writing and Ethics.** A practical course in preparation of abstracts, posters, figures, oral presentations, manuscripts, and grant applications in the biological sciences; a discussion of ethical issues involved in the collection and presentation of scientific data. Prerequisite: permission of instructor.

15BI OL840. **Sensory Physiology.** Physiological bases of vision, hearing, touch and smell. Current concepts of transduction, neural pathways, transmitters and research techniques. Prerequisite: Biology 540 or equivalent.

15BI OL850. **Behavioral Ecology.** Study of the adaptive value of animal behavior; foraging; territoriality; communication; mating systems; social behavior. Prerequisite: Biology 550 or Biology 578, or permission of instructor.

15BI OL880. **Structure and Function of Biomembranes.** Current trends in membrane research; biological and ultrastructural aspects; artificial membranes, probes isolation techniques. Prerequisite: permission of instructor.

15PSYC922. **Clinical Neuropsychology I.** Discussion of the theoretical and empirical literature on brain-behavior relationships and examination of the clinical features of the major neurobehavioral syndromes, including visuoperceptual, aphasic, amnestic, and apraxic disturbances. Prereq: Students who have not been admitted to the PhD program in Clin. Psych. must obtain the consent of the instr., the Dir. of Clin. Training, and the Dir. of Grad. Studies prior to enrolling in this course.

15PSYC923. **Clinical Neuropsychology II.** Emphasis is on the etiology and assessment of focal and nonfocal cerebral impairment related to trauma, neoplasm, cerebrovascular disease, degenerative dementias, and toxico-metabolic disorders. Prereq: Students who have not been admitted to the PhD program in Clin. Psych. must obtain the consent of the instr., the Dir. of Clin. Training, and the Dir. of Grad. Studies prior to enrolling this course.

15CDI S732. **Neurogenic Language Disorders.** Study of Language disorders associated with cerebrovascular accidents and neurologic diseases as well as the language and behavioral manifestations of closed head injury. Assessment and management procedures are covered.

15CDI S810. **Dysphagia.** This course covers the neurophysiologic bases of swallowing and the assessment and management of swallowing disorders.

15CDI S810. **Sensory Systems and Cerebral Dominance.** Nature of methods for studying senses; structure and function of the various sense modalities, emphasis on hearing; left-brain, right-brain neurophysiologic differences.

15CDI S715. **Neurophysiology of Audition.** The neuroanatomy and physiology of the inner ear and higher auditory pathways.

15CDI S822. **Vestibular System Assessment.** Electronystagmography and other principles of vestibular assessment.
25PBI0851. Biochemical Neuropharmacology. The study of the characteristics of neurotransmitter systems and drugs that affect those systems. Offered in Autumn Quarter, alternate years, even years.

25PBI0850. Pharmacodynamics. An introductory course on the general principles of the sites and mechanisms of drug action and factors influencing drug actions.

26DB852. Developmental Biology. Description of mammalian embryology complemented by molecular basis of developmental processes leading to organ formation and functional competence and the developmental basis of clinical malformation.

26PMM721. Methods in Experimental Pathology. Rigorous laboratory course designed to familiarize the aspiring scientist in the biological sciences with contemporary research methods (including molecular biologic techniques) as they are applied to the study of human disease. Prereq.: Perm. of the course director.

26CB825. Principles and Biological Applications of Light Microscopy. Course will focus on the practical, biological applications of all types of light microscopy including phase, DIC, fluorescence, confocal, and video-enhanced microscopy.


26CB841. Microscopic Anatomy. The normal microscopic structure of cells, tissues and organs with emphasis on structural-functional relationships. Perm. of college and course director. College of Medicine graduate students only.

26GNTD880. Cancer Biology. A one quarter course that covers a broad spectrum of issues relating to the genesis and progression of cancer. Some topics that are covered include cell kinetics and cell cycle regulation in normal and cancerous cells, oncogenes and growth factors, tumor suppressors, the genetics of cancer, mutation and environmental exposure, signal transduction and the role of the immune system in cancer.

26ENV787. Introduction to Biostatistics. Descriptive statistics, probability distributions, estimation, types of error, significance level, test of hypotheses, sample size, correlation, linear regression, non-parametric methods. Emphasizes practical-applied aspects.

26MG710. Advanced Molecular Genetics I. Provides a literature-based view with student discussions of major research questions, with emphasis upon gene structure and the regulation of gene expression. Prereq.: 26-950-871 or perm. of instr. Winter quarter only.

26MG711. Advanced Molecular Genetics II. Provides a literature-based view with student discussions of examples of programmed gene expression during differentiation. Topics include patterns of Drosophila and mouse development, muscle differentiation, immune system development and oncogenes. Prereq.: 26-941-710. Spring quarter only.

26MG719. Biochemistry II: Protein Biochemistry. Designed for graduate students who have completed Molecular Biology of the Cell I. Mechanisms of protein folding; macro-molecular assemblies; molecular mechanisms of catalysis; physical methods for analysis of macromolecules; growth factor receptors and signal transduction; fluorescence, and applications to the study of membranes. Prereq.: 26-950-872 or perm. of instr. Winter quarter only.
26MCP851. Special Topics in Neurophysiology. 3 cr. hrs. Principles of sensory and motor organization and higher functions of the brain. Prereq.: Molecular Biol. of the Cell II (26-950-862) or perm. of instr.

26MCP873. Advanced Topics in Electrophysiology. 3 cr. hrs. Membrane potentials and electrical models of nerve muscle and synapse, analysis of ionic theories for bioelectric phenomena. Prereq.: Biophysics II (26-968-991) and perm. of instr.

26MCP985. Neural Network. Application of theories of control systems and mathematical modeling to problems in the central nervous system. Prereq.: perm. of instr.

E. Doctoral Candidacy Examination

During the second year in the Program, students will complete the course requirements, begin work on their dissertation research, and prepare for and take the Candidacy Examination. The Doctoral Candidacy Examination, a requirement of the University of Cincinnati, represents one of the most careful evaluations of students' intellectual development and capability by the University and the Program. This section lists the rules by which the examination will be conducted by the Neuroscience Graduate Program.

Rules

1. The Doctoral Candidacy Examination should be initiated prior to the end of Spring quarter of the second year. Your Candidacy Exam Committee will consist of your advisor, one faculty ‘reader’ assigned by the Neuroscience Program Director, and three additional neuroscience program faculty members of your choosing. The program faculty reader will act as the Committee chair. The Examination should be completed by the beginning of the third year.

   The Exam consists of the preparation of an NIH-style research proposal on a topic of your choice, followed by an oral examination. You may elect to write the research proposal on the subject area of your dissertation research, or on a topic distinct from your area. First, before writing anything, you should consult with your advisor to be sure that your selected topic is appropriate. Second, you should contact the Program Director and/or the Director of Graduate Studies for their approval of the subject area. If the topic selected is in the area of the dissertation, the student needs to propose work that is not part of the advisor's current or proposed research plans.

2. You will then convene a meeting of the Candidacy Exam Committee to present a brief summary of your plans. You should prepare and distribute a pre-proposal outline (two-pages) of your project prior to the initial Committee meeting. The purpose of this Committee meeting is to evaluate the scope of the project; the Committee will not advise the candidate on issues of experimental design. Approval to move forward and prepare the final research proposal is determined by a private vote of the Committee. Approval will require the vote of the majority of the Committee.

3. Upon approval by the Committee you will have four weeks to prepare and submit the final research proposal which should be a maximum of 10 single-spaced pages, excluding references, and should follow the format of an NIH predoctoral fellowship application.

4. The oral examination should be held within two weeks of submitting your final research proposal.

5. The research proposal, as well as the pre-proposal outline, should be prepared independently from beginning to completion. You should not solicit nor receive any unsolicited assistance, with the
design of the proposal, or preparation of any portion of the written document(s) or in the oral presentation of the proposal. However, as you may not be familiar with some of the methods you propose to use, you are permitted to seek guidance from faculty on purely technical matters. To aid you in preparation of the written document, proposals from previous years will be made available to you (see the Program Coordinator).

6. Prior to the committee meeting, obtain the Candidacy Exam sign-off form from the Program Coordinator.

7. At the oral examination, you will make a brief presentation (approx. 20-30 min) of your proposal to the committee. Committee members will question you on aspects of the written proposal and oral presentation, and may also ask questions about related issues or fundamental concepts in any area of Neuroscience. The student’s research advisor, cannot assist the student during the meeting. At the end of the defense you will leave the room to allow the Committee to discuss your performance.

8. The outcome of the exam is determined by a private vote of the Committee. A pass will require the vote of the majority of the Committee. Possible outcomes of the examination include: (1) Pass without stipulations. (2) Pass with the stipulation that additional requirements must be completed. For example, you may be required to rewrite the proposal if the English composition is not satisfactory. Academic work to remedy a deficit revealed by the examining process may be required. Other requirements may be mandated by the Committee. (3) Fail. A failing performance may be reversed by the completion of additional requirements set by the committee which can include (but are not limited to) complete formulation and defense of a new independent proposal. Lesser requirements may be set as necessary. Requirements for retaking the proposal are governed by University policies.

9. After the vote, you will return to be informed of the decision by the Committee chair. The chair will discuss the strengths and weaknesses of the written documents and your oral defense, as well as any other suggestions or requirements. In addition, copies of a short written report of your performance will be prepared by the Committee chair and distributed to you, your advisor, the Candidacy Exam Committee, and the Neuroscience Program Director.

10. In the event of a failure, students will be required to take a second exam on a different topic. Second examinations for candidacy must not be held until at least one quarter has elapsed, but must be taken within six months after the original exam. Should the student fail the examination on the second attempt, they will be dismissed from the program.

11. Any irresolvable disputes or issues arising at either the initial committee meeting or the candidacy exam will be referred to the Neuroscience Program Advisory Committee for resolution.

12. Upon successful completion of the Doctoral Candidacy Exam, students will be eligible for admission to Ph.D. candidacy, provided they have passed all neuroscience core courses with a “B-” or better. If course requirements remain to be satisfied, Ph.D. candidacy status cannot be granted until their successful completion.

F. Dissertation Research and Dissertation Committee

Upon passing your qualifying exam, you should form a Dissertation Committee and begin registering for Dissertation research credits. This committee must meet within three months of the qualifying exam date. The Dissertation Committee monitors the progress of your dissertation research on a continuing basis and provides valuable advice on technical questions, research directions, or
alternative approaches. The student and his/her advisor recommend relevant committee members to
the Program Director, who is responsible for final approval of the committee composition. The
Dissertation Committee consists of five or more members, at least three of whom are members of the
Neuroscience Program. The Chair of the dissertation committee is appointed by the Program
Director and cannot be the student’s dissertation advisor.

Committee meetings must occur regularly, at least once every six months. Within one week after the
meeting, you must submit a summary of the meeting and have it approved by your advisor and the
committee chair. These summaries should include a description of progress since the last meeting;
plans for the next few months; and a projected target date for completion of the dissertation.

G. Submission of the Dissertation

As your research progresses, meetings with your Dissertation Committee will indicate a logical end
point for your dissertation work. As you approach this point, you should begin writing your
dissertation. The Neuroscience Graduate Program permits two possible formats for the dissertation:

a. Traditional Model:

Introduction - presents the research problem, the background which critically evaluates existing
knowledge and specifically identifies gaps that the research has attempted to fill. This section
generally concludes with a statement of your hypothesis.

Materials and Methods - complete description of materials and methods employed in carrying out
your research.

Results - presentation of the data/findings from the research incorporating necessary tables,
illustrations and photographs, and diagrams.

Discussion - discussion of results, conclusions drawn, relevance to existing knowledge, difficulties of
interpretation of particular data.

Bibliography - listing of all cited literature references, including all authors, titles, dates, volume and
inclusive pages.

Appendix - additional materials including tables or figures, if desired.

b. Combination of Published and Supplementary Material:

This mechanism allows the inclusion of material previously published by the student in the
dissertation without substantial rewriting. The bound dissertation consists of reproductions of work
published or in press and also 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 in accordance with University guidelines for doctoral dissertations. This second
option can be selected by the student with the approval of the research advisor and a majority of the
Dissertation Committee.

H. Final Defense of the Dissertation

The final defense of your dissertation consists of the presentation of a seminar that is open to all
members of the academic community and the public, followed by an oral examination by your
Dissertation Committee. After the seminar, the general audience is free to ask questions and make
comments. After the audience leaves the room, members of the Dissertation Committee will ask
pertinent questions of the candidate. At the conclusion of the defense, the student will withdraw, and the Dissertation Committee votes to accept or reject the dissertation and its defense. Then, you return to the room to receive the decision of the Committee. Upon a favorable decision, the approval form is signed by the committee members and transmitted to the appropriate office of the Graduate Division. At least 4/5 of the voting members of the dissertation committee must approve the dissertation.

I. Satisfactory Progress In The Program
Satisfactory progress in the program is defined by:

1. completing at least two lab rotations and then choosing an advisor by the end of the first year;
2. achieving a grade of B- or above in neuroscience core courses by the end of the second year and maintaining a 3.0 overall grade point average.
3. participating in the Neuroscience Journal Club during your first and second years;
4. attending the Neuroscience Seminar during all years;
5. for non-native English speakers, passing the Oral English Proficiency Test before the end of the second year;
6. initiating the candidacy examination prior to the end of the Spring quarter of the second year in the program and completion of the examination by the beginning of the third year;
7. forming a dissertation committee within 3 months after passing the qualifying exam;
8. completing a total of 135 graduate credit hours for the doctoral degree within the specified time stipulated by the rules of the Graduate School of the University of Cincinnati; and
9. submitting and satisfactorily defending a doctoral dissertation

J. Procedures for the Evaluation of Student Progress

1. Progress of each student in the program is monitored by the Program Director, Director of Graduate Studies, and, in the case of first year students, the Advisory Committee, on a quarterly basis.

2. Dissertation Committee meetings must be held at least every six months. A summary of each meeting, signed by the student, advisor, and Committee chair must be submitted to the Director of Graduate Studies within one week after the meeting. The summary should review the progress since the last Dissertation Committee meeting, outline plans, and project a target date for completion of the dissertation research.

K. Minimum Academic Standards

1. By the end of your first year, students must attain a grade of B- or better in 2 out of the 3 neuroscience core courses defined as Fundamentals of Neuroscience I, Fundamentals of Neuroscience II, and Brain and Behavior I. Any grade below a B- must be remediated by the end of the 2nd year in the program. Failure to fulfill either of these requirements is grounds for dismissal from the program.

2. Students are required to maintain a grade point average of 3.0. Any student who fails to obtain a B average in their major core courses for any given quarter will be placed on academic probation for the following quarter. Students will be placed on academic probation for all quarters in which their cumulative average is below 3.0.

3. Regardless of grade point average, students obtaining an F in any course are automatically placed on academic probation during the quarter following receipt of the grade of F.
4. Any student who is placed on academic probation three times will be dismissed from the doctoral program unless there are extenuating circumstances as determined by the faculty in the Neuroscience Graduate Program.

5. Non-native speakers of English must pass the Oral English Proficiency Test (OEPT) before beginning their third year in the Program and prior to taking the Candidacy Exam. Their oral English skills are rated in four areas: 1. Pronunciation 2. Grammar 3. Fluency 4. Overall intelligibility. Those who do not pass are recommended for an English as a Second Language (ESL) course that is suited to their needs. In addition, it may be recommended that this course be taken in the second year even if the oral exam has been passed. Oral Proficiency testing 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. Failure to fulfill this requirement is grounds for dismissal from the Program.

6. Students must initiate the Candidacy exam by the end of the Spring quarter of the second year and complete the exam by the beginning of the third year. In special circumstances, extensions may be granted by the Director of Graduate Studies. If a student fails the first exam, a second exam may be scheduled no less than 3 and no more than 6 months after the first exam. Students who fail to pass the second exam will be dismissed from the Program.

Other Requirements:

1. Students must abide by the University's Student Code of Conduct. As described in section VI, students who commit serious acts of academic misconduct or non-academic misconduct may be suspended or dismissed from the Program.

2. Students supported by fellowships or stipends should not seek employment outside the program. In exceptional situations short term laboratory, research or tutoring jobs may be permitted but other jobs requiring significant time away from the research laboratory will not be allowed and such employment may result in loss of stipend support. Any student considering outside employment should first discuss this with his/her advisor and the Program Director.

L. Requirements for the Doctor of Philosophy Degree

1. The doctoral degree will be granted for no less than the equivalent of three years of full-time graduate study. All requirements for the doctoral degree must be completed within nine (9) consecutive years of initial enrollment. This period includes a maximum of five (5) years before achieving candidacy and a maximum of four (4) years beyond candidacy. A period of seven (7) months must elapse between admission to doctoral candidacy and receipt of the degree.

2. Satisfactorily complete all course work and accumulate 135 graduate credit hours, including 45 credit hours of didactic courses taken at the University of Cincinnati.

3. All graduate students who are not already Ohio residents but who are U.S. citizens or permanent resident aliens (holders of a green card) must apply for Ohio residency after residing in the state for one year.

4. Maintain a G.P.A. of at least 3.0 in all course work.

5. Submit a dissertation based on an experimental investigation of considerable magnitude, giving evidence of originality and ability for independent research.

6. Provide public notification of the defense of the dissertation at least two weeks before the actual defense takes place.
7. Give a completed copy of the dissertation to every member of the Dissertation Committee at least one week before the date of the public defense of the dissertation.

8. Successfully defend the dissertation.

9. Satisfactorily complete all Neuroscience Graduate Program requirements.

10. All NG and I grades must be removed from transcripts.

11. Graduation guidelines, deadlines, procedures and process flow can be found at http://grad.uc.edu. Submit one bound copy to Advisor (paid by Advisor). Submit one bound copy to Neuroscience Program (paid by Program). Any additional copies will be paid for by the student. Complete a required (anonymous) exit survey on your doctoral experience conducted by The Division of Research and Advanced Studies. The results will be shared with the doctoral programs.

M. Requirements for M.D./Ph.D. Degree in the Neuroscience Graduate Program

1. Satisfy course requirements as determined by the Advisory Committee. The coursework taken in the M.D. program will satisfy the requirement for other required courses. All students will be required to complete Brain and Behavior I (currently part of the medical curriculum), Fundamentals of Neuroscience I and II, Academic Survival Skills, Neuroscience Research and Experimental Design, the Neuroscience Seminar and Neuroscience Journal Club. Additional coursework may be required of individuals receiving support from extramural training grants or other fellowship programs. The remainder of courses to be taken will be decided on an individual basis.

2. The composition of the dissertation committee is the same as for Ph.D. candidates in the neuroscience program with the addition of one M.D. and one member of the PSTP program.

3. Because of the advanced standing at entrance to the program, M.D./Ph.D. students should complete their candidacy exam before the end of the spring quarter in the second year of their Ph.D. training.

4. All other requirements will be the same as for the Doctor of Philosophy Degree.

N. Policy Regarding Master's Degrees

The Neuroscience Graduate Program does not offer a curriculum leading to the Master's of Science Degree. The Program recognizes, however, that there may arise certain conditions in which a student might not be able to complete the requirements of the Ph.D. Such conditions might include, but are not limited to, the following: 1) inability to pass the Ph.D. candidacy examination and subsequent retesting; 2) relocation of a spouse to a site not easily accessible to Cincinnati; or 3) hardship, either financial, physical or emotional. Inability to pass (with a grade of B or better) required course work is not a condition which will permit a student to seek a Master's of Science Degree.

In the event that a student feels that he or she is unable to continue in the Ph.D. program, but does feel that significant time and effort have been invested in advanced studies, the student should petition his/her Dissertation Committee requesting permission to seek the Master's of Science Degree. The petition should clearly state the reason or reasons for this action. Upon a positive recommendation from the Dissertation Committee, the Program Director and Director of Graduate Studies will consider the request in conjunction of an M.S. degree-providing department.
III. GRADUATE CREDITS AND GRADING PRACTICES

A. Course Load

1. Students should consult with the program coordinate for registration. Generally 1st and 2nd year students register for 18 credit hours for Autumn, Winter, and Spring Quarters.
2. Classes taken outside the College of Medicine required the Director’s permission.

B. Graduate Assistants and University Graduate Scholarship Recipients

Students receiving Graduate Assistantships (GAs) or University Graduate Scholarships (UGSs) must carry a full-time course load (12 credits or more) each quarter exclusive of audit credits. Under ordinary circumstances, assistantships and tuition scholarships will not be awarded to students who have accumulated 260 or more graduate credit hours. Students in good standing will be eligible for tuition scholarships and graduate assistantships for up to 9 years of training. In addition, they must register for a minimum of 12 graduate credit hours each quarter.

C. Grading Practices

At the end of each quarter, the Office of Student Records mails to each student an official report of academic achievement. Reports are rendered in the form of grades which should be interpreted as follows:

A Excellent work; i.e., work of outstanding character;
B Work of good quality, commendable but not outstanding;
C Work of acceptable but not distinguished quality;
D Not a valid grade; converted to N;
S Satisfactory
F Unsatisfactory work for graduate credit. Graduation with F on the transcript will be permitted only if:
1. The student meets published Program or college standards for the degree program, and
2. A grade of F in a required course is superseded by a grade of C or better in the same course retaken by the student.
U Unsatisfactory work for non-credit graduate course
I Incomplete
1. The I grade is awarded only when the student fails to complete one or more course requirements, such as the final examination or a paper or project.
2. The I grade should not be used when an F or N grade would be more appropriate.
3. Conversion of I Grades:
   a. A grade of I will automatically be converted to an F one calendar year after the initial grade was given. Normal appeal channels are open to students documenting hardship cases.
   b. Graduation will not be permitted if a student has a grade of I on the transcript. Course work must be completed or the grade will be changed to an F.
W  Official withdrawal: Indicates that the student or Professor processed a drop or official withdrawal from a course for which he/she was registered. Students who drop courses through the first three weeks of the quarter will have the courses deleted from their schedules and they will not appear on the permanent academic record. Thereafter, students dropping courses must obtain the professors' signatures and grades (W or F) on add/drop forms. No drops will be accepted after the eighth week of classes for the quarter.

T  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 discretion of the instructor.
1. Registration for audit may be utilized in deficiency/remedial registrations in the major area and may be utilized in elective registrations outside the major area.
2. It is recommended that there be a maximum audit registration of one course per quarter.
3. The T grade should denote (at the minimum) that a student has regularly attended the course.

N  No grade reported
1. The N grade should be limited to the following situations and not be used as a substitute for the I grade:
   i) Thesis/dissertation, research, projects and multi-quarter seminars in which no basis of evaluation existed or was required by the time grades were due for that quarter.
   ii) Internships
2. Programs or colleges are encouraged to prepare published listings of those courses for which N grades are applicable.
3. The N grade should not be used as a final grade in normal lecture courses.
4. In those situations in which a professor is prevented from awarding a grade, for any reason, a grade of the N will be given. This would specifically cover cases of academic misconduct still under consideration -- two quarters limit.
5. Normally an N grade should be removed prior to graduation. Programs or colleges, however, may allow a student to graduate with the N grade when such action is deemed appropriate.
IV. REGISTRATION

A. Registration Change Procedure (Add/Drop)

Once a student has completed registration, the official record can be changed only with a registration change form secured from the student's college office or advisor, to be used only when changes in a program are absolutely necessary. There is no charge to process an add/drop transaction. Such changes must be processed through the Office of Registration and Scheduling by Friday of the second week of classes, unless the college offering the course has established an earlier deadline. After Friday of the second week of the quarter, only withdrawals or drops of courses will be accepted.

B. Audit Regulations

The audit option is intended for cases in which course work is desired or advised but in which a grade for credit purposes is deemed unnecessary by the student in consultation with their advisor. Admissions and conditions for participation in audit courses are at the discretion of the instructor, who is not obligated to accept a student for audit.

Graduate students generally register to audit a course to obtain remedial/deficiency instruction in major or minor areas of their program of study.

Audit hours do not count toward the 260 credit hour limit (as a condition of eligibility for financial assistance), nor are they included in the determination of full-time status. Such hours may be charged to a tuition scholarship only if at least 12 graduate credits are taken that same quarter and if the total is less than 19 credits. Also, no more than one audit course per quarter should be charged to a tuition scholarship.

C. Pass/Fail

With the approval of both the Director of Graduate Studies and the instructor, a graduate student may take any course on a Pass/Fail basis, but no instructor is obligated to accept a student on a Pass/Fail basis.

D. Withdrawals

1. Academic Considerations

A student may drop a course by Saturday of the third week of classes with no academic penalty. From the fourth through the eighth week, a student may drop a course with a grade of either "W" or "F" to be assigned at the discretion of the instructor. After Saturday of the eighth week no withdrawal will be approved, except for reasons beyond the control of the student, such as sickness or accident. The appropriate graduate office judges the advisability of such exceptions. All withdrawals must be made through the graduate office either in person or by letter. A student may be withdrawn by the instructor at any time in the quarter when excessive absences have been incurred. A student withdrawn because of excessive absences is not eligible for academic credit, refund of fees, or reinstatement as an auditor in that course.

2. Financial Considerations

Official dropping from individual courses or completely withdrawing from the University must be initiated by the student in writing through the appropriate graduate office. The withdrawal date to
be used in determining refund eligibility shall be the date the official request is submitted for approval to the Dean of the college in which the student is enrolled. Students who officially withdraw from classes for any reason shall receive refunds of instructional fees, general fees, and non-resident surcharges on the basis of the following schedule:

DO YOU WANT TO KEEP THIS IN HERE SINCE WE PAY FOR THE TUTION AND THE STUDENTS DO YOU RECEIVE REFUNDS?

Prior to first day of class  100%
First week  100%
Second week  80% less $100
Third week  70% less $100
Fourth week  60% less $100
Fifth week  50% less $100
Sixth week  40% less $100
After sixth week 0%

Similar proportionate adjustments are made for summer session three-and-one-third week terms and for other short-term courses, based on the length of the program. Examples of actions that are not considered official notice of withdrawal are: failure to attend class, giving notice to an instructor, stopping payment on a check used to pay fees, or verbal notice to any University office.

For the purpose of refunds, the first week of the quarter is defined as beginning on the day following the end of the regular registration period and ending at 11:00 a.m. on the Saturday of the week in which classes begin. The following Saturdays are then counted sequentially as ending the second and third weeks of the quarter.

In an academic quarter in which the official first day of classes begins on a day other than Monday, a first week refund of 100% cash is authorized for a student withdrawing after the first regularly scheduled class meeting and before the eighth calendar day of the quarter.

Any outstanding financial obligation to the University will be deducted from a cash refund until all such obligations have been discharged. A refund will not be issued to a student who has been awarded a University Graduate Scholarship (UGS) to support their tuition. In the event of disciplinary suspension or dismissal, fees will not be refunded in whole or in part. Questions concerning interpretation of the regulations governing refund of student fees should be referred to the Registrar.

V. SPECIAL RULES AND PROVISIONS

A. 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 must read and abide by the standards outlined in the University of Cincinnati's Student Code of Conduct which can be found at [http://grad.uc.edu](http://grad.uc.edu), in the Graduate School Student Handbook page 65. In addition, instruction in appropriate scientific behavior is provided by the Advisory Committee and the Ethics in Research Course. In addition, a wealth of useful material on proper academic conduct is available through the Chemistry Department at Virginia Tech - simply connect to their home page (at [http://www.chem.vt.edu](http://www.chem.vt.edu)) and select the "Ethics in Research" link.

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 found to have engaged in an act of academic misconduct will be dismissed from the Neuroscience Program.
The Student Code of Conduct describes Academic Misconduct as including, but not limited to:

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

1. Use and/or possession of unauthorized material or technology during an examination (any written or oral work submitted for evaluation and/or grade), such as tape cassettes, notes, tests, calculators, or computer programs.

2. Obtaining assistance with or answers to examination questions from another person with or without that person’s knowledge.

3. Furnishing assistance with or answers to examination questions to another person.

4. Possessing, using, distributing, or selling unauthorized copies of an examination, or computer program.

5. Representing as one's own an examination taken by another person.

6. Taking an examination in place of another person.

7. Obtaining unauthorized access to the computer files of another person or agency, and/or altering or destroying those files.

FABRICATION: The falsification of any information or citation in an academic exercise.

PLAGIARISM:

1. 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 reference.

2. Submitting as one's own, original work, material obtained from another individual or agency without reference to the person or agency as the source of the material.

3. Submitting as one's own, original work, material that has been produced through unacknowledged collaboration with others without release in writing from collaborators.

AIDING or ABETTING ACADEMIC MISCONDUCT: Knowingly helping, procuring, or encouraging another person to engage in academic misconduct.

In addition, the Student Code of Conduct covers acts of non-academic misconduct that include a variety of inappropriate conduct, including theft, unauthorized possession of weapons, threatening others, etc. You should be aware that harassment, particularly sexual or racial harassment, is unacceptable. Acts of non-academic misconduct are subject to a wide range of penalties, but serious violations may lead to suspension or dismissal from the Program.

B. Sexual Harassment

Sexual harassment is forbidden by law and also is completely contrary to the rules of our program and to the trust and cooperation that are central to scientific endeavors. Anyone who feels that they may have been subjected to sexual harassment is strongly encouraged to speak to the Program Director or the Director of Graduate Studies and/or to take action through the University Grievance
procedure. Complaints will be investigated promptly and discreetly and forceful actions will be taken to solve the problem. The Program will do everything possible to make certain that the act of complaining in no way compromises a student's career.

C. Non-Discrimination Policy

The Graduate Program in Neuroscience strongly affirms its policy that discrimination on the basis of race, color, religion, national origin, sex, sexual orientation, disability or age will not be practiced in any of its activities. Any complaints involving the abridgement of this policy should be addressed to the Director of the Program or to the University Affirmative Action Coordinator at 556-5503.

D. Right to Review Records

Students, once enrolled, have the right to review their educational records, except for those excluded by law, such as records maintained by a physician or psychiatrist, or parents' financial statement. 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.

In order to gain a review of such records, along with any appropriate explanation or interpretation, the student should first address the proper university, collegiate, or Program office. Should the student encounter any difficulty in obtaining a review of the student record they may appeal to the Family Educational Rights and Privacy Act Committee. It is the policy of the University of Cincinnati 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 "Director Information," are to be treated with confidentiality so that the only access afforded University faculty or staff is on a "need-to-know" basis. The University considers the following information as "Director Information": 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 particular student record will be responsible for seeing to it that such confidentiality is maintained.

E. Grievance Procedures

Any graduate student who believes that he or she has valid grounds for a grievance should prepare a written statement of the grievance setting forth the specific allegations with reasonable particularity and submit it as follows:

a. To the Program Director for grievances against a faculty member or an agency associated only with that program with a copy simultaneously sent to the University Dean.

b. To the college dean for grievances against faculty members in two or more programs of that college or a college-wide agency with a copy simultaneously sent to the University Dean.

c. To the University Graduate Dean for grievances against faculty members in two or more colleges or a university-wide agency.

Program Review: Within one academic calendar week after the Program Director receives such a statement of grievance, he or she will appoint an ad hoc review committee consisting of three disinterested members of that college's graduate faculty (excluding himself or herself) and two disinterested graduate students, all drawn from that program, and will inform the grievant and all
other parties to the grievance of these nominees. Either the grievant and all other parties to the grievance may challenge the disinterestedness of any nominee. When a committee acceptable to all parties to the grievance is appointed, this committee will convene within one academic calendar week after their appointment.

F. Eligibility of University Faculty and Administrators 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 1, 1963, candidates for advanced degrees. This rule is applied also to adjunct appointments at any professorial rank and to 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 prior to September 1, 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 prior to September 1, 1976. This rule applies only to those who hold faculty rank above instructor. Those holding "equivalent rank" must petition the Graduate Council.

G. Medical Leave of Absence Policy:

If a student suffers from a major medical or psychiatric illness that interferes with normal academic progress in the program, the student must:

1. Immediately inform the Program Director, Director of Graduate Studies, and his/her Advisor of this illness. In addition, first and second year students must inform the Chair of the Advisory Committee.
2. Provide a letter from his/her physician stating that they are unable to maintain normal academic progress in the program. The leave of absence must be taken for at least one quarter immediately upon notification of the illness.
3. Provide a letter from his/her physician before re-entering the program. The letter should attest to the student’s ability to resume normal progress in the graduate program.
ACADEMIC MISCONDUCT REVIEW PROCEDURES
Neuroscience Graduate Program

Summary

The Neuroscience Graduate Program has established the following procedures to deal with cases of alleged academic misconduct that may occur among students in the graduate program. These rules, based upon the existing University of Cincinnati Student Code of Conduct, (http:grad.uc.edu, see Institution rules, polices 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. 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, which may range from exoneration to dismissal from the University. Recommendations may be appealed as described in the Student Code of Conduct.

Academic Misconduct

Academic misconduct or dishonesty is defined in the University of Cincinnati Student Code of Conduct and includes, but is not limited to, acts of cheating, plagiarism, falsification, and misappropriation of credit.

Allegations of Misconduct

First Level Resolution

Instances of academic misconduct may occur within the context of courses, laboratories, seminars or other academic settings. Therefore, allegations of academic misconduct may originate with faculty, students, or staff. The person suspecting misconduct must inform the student immediately and allow the student the opportunity to explain or respond. If the student is not informed or if no further action is taken within 10 days, the allegation shall be considered dismissed. If conversations between the student and person making the allegation do not resolve the problem to the satisfaction of both, further action is required.

In a course setting, a faculty member who has confirmed that academic misconduct has occurred may alter a grade or may 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 Director within 10 days after 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 Director, and the Dean of the College of Medicine. Reports may also be made to the University Student Conduct Officer within 10 days of the alleged offense having occurred.

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 incident

e. Description of incident

f. Names of witnesses

g. Name and phone number of person(s) submitting report

Any instance of alleged academic misconduct that is not resolved between the student and person making the allegation will be investigated by the Neuroscience Program Misconduct Review Committee. The Neuroscience Program Misconduct Review Committee consists of two faculty members and two students in the Neuroscience Program and a chair appointed by the Program Director. No faculty member or student directly involved in the pending allegation may serve on the Neuroscience 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, who will review the incident and inquiry, may solicit additional information, and will 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 Committee. Requests for a Formal Hearing must be made to the Dean, in writing. Such requests must be made within 5 days after the Dean has notified the parties that the First Level Resolution process is complete.

The College Hearing Committee 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 OHSGS or their designated representatives. Either party may challenge "for cause" a specific member’s presence on the Hearing Committee by notifying the Hearing Officer of the challenge. The Hearing Officer will decide if the challenge is granted. The College Hearing Committee shall be convened within 15 days of receipt by the Dean of a request for 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 Committee, the case will still be heard.

The College Hearing Committee shall then determine what response is appropriate 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

A decision by the Dean and any subsequent appeal by the student shall proceed as defined in the Student Code of Conduct.

Summary of Academic Misconduct Procedures

Report Allegations to:

Dean of the College of Medicine:

David Stern, M.D.
CARE, E870
513.558.7333

Assistant Dean of Students/Director of University Judicial Affairs:

Daniel S. Cummins
Steger 745, Student Life Center (West Campus)
513.556.6814

Neuroscience Program Director:

James Herman, Ph.D.
Genome Research Institute, Bldg A, room 145
513.558.7628

Neuroscience Graduate Program Misconduct Review Committee:

Committee Chair (to be appointed by the Director of the Program), two Neuroscience faculty members, and two Neuroscience graduate students.

Timetable for Action:

Incident must be reported within 10 days.
Possible First Level Resolution. If not, Dean appoints Hearing Officer.
Hearing Officer convenes College Hearing Committee within 15 days after failure of First Level Resolution procedures.
College Hearing Committee must notify Dean of recommendation within 5 days after hearing is held.
Dean must notify all parties of action taken within 5 days after receiving Hearing Committee's recommendation.