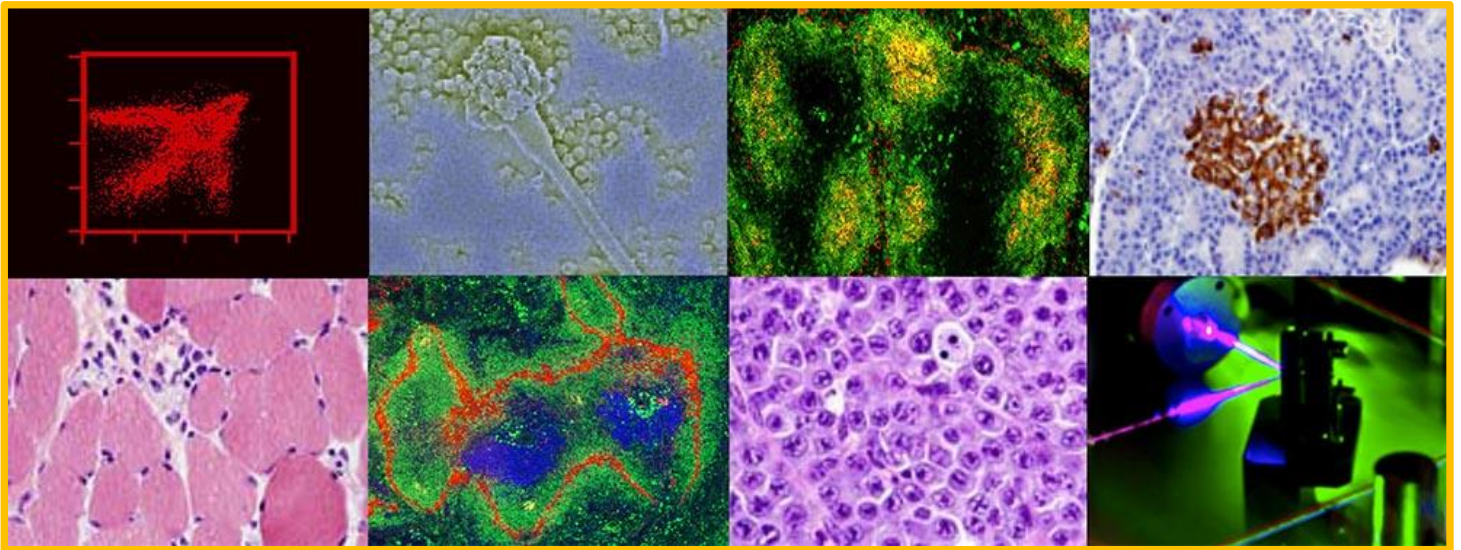


# Experimental Pathology Graduate Student Handbook

## *Biomedical Science Ph.D. Graduate Program*



 THE UNIVERSITY  
OF IOWA

# EXPERIMENTAL PATHOLOGY PH.D. GRADUATE PROGRAM POLICY HANDBOOK

## **Mission Statement:**

The Experimental Pathology Ph.D. Graduate subprogram is centered in the [Department of Pathology](#) and is a member of the [Biomedical Science Graduate Program](#) in the Carver College of Medicine at the University of Iowa. Our mission is to provide Ph.D. students with advanced knowledge of disease pathogenesis at the genetic, molecular, cellular and systems levels. In addition, research performed for the Ph.D. thesis will teach cutting edge basic and translational research skills enabling graduates of our program to successfully investigate the basis of disease and lay the foundation for new and better therapies.

## **Introduction:**

This policy handbook outlines all key information for students and faculty of the Experimental Pathology Ph.D. subprogram. The handbook is a supplement to the University of Iowa General Catalog (<http://catalog.registrar.uiowa.edu/>) and the Graduate College Manual of Rules and Regulations (<https://grad.uiowa.edu/academics/manual>) which describe University policies pertaining to graduate students in detail. The handbook lists subprogram leadership, admissions, curriculum, comprehensive exam, thesis and thesis committee guidelines, thesis defense, student stipend and tuition support, academic and professional standards, student resources and the vacation and leave policy.

## **Program Website:**

<https://medicine.uiowa.edu/pathology/education/experimental-pathology-phd-graduate-program>

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## **PROGRAM LEADERSHIP**

### **Program Director:**

Vladimir Badovinac Ph.D.  
Professor  
1023 ML  
384-2930  
vladimir-badovinac@uiowa.edu

### **Program Oversight Committee:**

Alexander Boyden  
Research Assistant Professor  
1080-A ML  
353-5671  
alexander-boyden@uiowa.edu

Kevin Legge Ph.D.  
Professor  
108C MRC  
335-6744  
kevin-legge@uiowa.edu

Ashutosh Mangalam Ph.D.  
Associate Professor  
1080B ML  
335-8558  
ashutosh-mangalam@uiowa.edu

Munir Tanas M.D.  
Associate Professor  
106A MRC  
335-6637  
munir-tanas@uiowa.edu

### **Program Coordinator:**

Gabe Young  
C683 GH  
gabriella-young@uiowa.edu

## **2024/2025 ACADEMIC CALENDAR**

### **Fall semester 2024:**

First day of classes – August 26  
Last day of classes – December 13

Graduate Degree Applications due – October 4  
Plans of study for master's recipients and final exam requests – October 15  
Final thesis exam reports due – December 2  
Final thesis deposit due – December 9

### **Spring semester 2025:**

First day of classes – January 21  
Last day of classes – May 9

Graduate Degree Applications due – February 28  
Plans of study for master's recipients and final exam requests – March 11  
Final thesis exam reports due – April 22  
Final thesis deposit due – April 29

### **Graduate College Deadlines can be found at:**

<https://grad.uiowa.edu/academics/deadlines>

### **The University of Iowa Academic Calendar can be found at:**

<https://registrar.uiowa.edu/academic-calendar>

# ADMISSIONS

## Qualifications

Applicants must have a bachelor's degree in a science discipline from a Regionally Accredited American College or University, or an equivalent degree from another country as determined by the Office of Admissions. Applicants must also have a minimum grade-point average (GPA) of 3.00/4.00, or the foreign equivalent as determined by the Office of Admissions. In addition, laboratory-based research experience is necessary. Finally, international students must submit English proficiency test scores that meet institutional requirements. For more information go to: [Graduate College English Proficiency Requirements](#)

## Application Process

Students apply via the Biomedical Science Program Admissions portal found at: [APPLY NOW](#).

All information and documents needed for the application process are listed on the Biomedical Science Program Admissions website.

Application [fee waivers](#) are available to those who qualify. Also, the **cost to apply is reimbursed** by the Carver College of Medicine for all applicants who receive an interview invitation and complete the interview.

Admitted first year BSP students enjoy the flexibility of investigating several disciplines prior to affiliating with a specific subprogram by performing three research rotations in the laboratories of any of the BSP [faculty](#), regardless of the faculty person's program affiliation(s). The BSP has organized its first-year curriculum in order to meet the dual goals of: A) providing all students with an integrated, core foundation in modern molecular and cellular biology, biochemistry, genetics, quantitative literacy, and critical thinking; and B) providing maximum flexibility to accommodate students' individual interests.

Although uncommon, students may also apply for admission directly into the Experimental Pathology Ph.D. subprogram (direct admit pathway). In order for this to happen, the student must have identified a faculty mentor in Pathology willing to fully support them from entry into the program until they complete all requirements and defend their thesis. Accordingly, direct admit students do not perform rotations, but begin work immediately in the mentor's laboratory. Importantly, direct admit students must meet the same academic and research qualifications as applicants admitted into the Biomedical Science Program, as determined by the BSP Admissions Committee.

Students who choose the Experimental Pathology Ph.D. subprogram earn a Ph.D. degree in Biomedical Science (Experimental Pathology).

Questions about admissions procedures can be directed to [BSP staff](#) at [BiomedSci-Admissions@uiowa.edu](mailto:BiomedSci-Admissions@uiowa.edu) or call 319-335-8306.

## STUDENT SUPPORT

### Stipend:

All Experimental Pathology graduate students receive a full stipend until they complete their studies/research and defend their thesis. Stipend amounts are at the same level as other graduate programs on the biomedical campus. Stipend support for the upcoming 12-month fiscal year (ending June 30, 2025) is \$34,500 or \$2875 monthly. The stipend is paid to students on a monthly basis (first day of the month) by direct deposit. Support for new incoming students begins on the first day of classes for the semester.

Support for students appointed to federal training grants (e.g. T32 and F31 grants) is capped at NIH levels that are below stipend levels within the Biomedical Science Program. In all such cases, the difference is made up by funds from the mentor or department.

### Tuition:

All Pathology graduate students have their tuition and fees (below) paid until they complete the Program.

### Fees:

The program will pay the following fees:

All Pathology graduate students:

- *Records and Document Fee* for incoming first year students (\$225 one-time fee).

All International Pathology graduate students:

- *International Graduate Matriculation Fee* for incoming first year students (\$250 one-time fee).
- *Student Health Insurance Fee* (\$275 one-time fee. Please see explanation below).
- *International Student Fee* (\$125 fee charged each semester).

### Health and Dental insurance:

The Program also pays most of the costs for health and dental insurance. For more information on health and dental benefits, please go to:

<https://hr.uiowa.edu/benefits/health-insurance-graduate-students>

This link provides information and monthly rates on both health insurance plans (SHIP and UIGRADCare) as well as the student dental plan.

### **Insurance requirement for incoming first year students:**

The University mandates all students be covered by health insurance upon start of their Graduate Research Assistant appointment in August. Incoming students without proof of health insurance (typically international students) will therefore be charged a fee for coverage during the month of August until their new policy starts on September 1.

### **Signing up for health and dental insurance upon entering the program:**

As stated above, all students must have health insurance coverage. When first year students arrive on campus, they need to register for health insurance once their Graduate Research Assistant appointment has been initiated. Students can apply for either UI Grad Care or SHIP as described above. Most register for UI Grad Care. Students can also register for Delta dental student insurance.

***Importantly***, when first signing up for health and dental insurance as an incoming first year student, ***select September 1 as the start date, not August 1***. As described above, all incoming students without proof of coverage are provided basic health insurance during the month of August.

### **International tax withholdings:**

According to IRS regulations, payments provided to international graduate students that qualify as ‘scholarships’ are not reported to the IRS and are not subject to tax withholding. These include the following:

- Tuition and fees required for enrollment or attendance at an educational organization
- Fees, books, supplies, and equipment required for courses of instruction at the educational organization

However, items paid by the Department/Program for international students which are not for any of the purposes listed above are **not** considered ‘scholarship’, are reportable to the IRS and are subject to income tax withholding. These include some of the fees described above (such as the August student health insurance fee). **The student is responsible for paying these withholding charges.** More information can be found at:

<https://ubill.fo.uiowa.edu/tax-information>

### **Summer tax information:**

Graduate students do not normally register for classes during the summer. Due to this, IRS regulations may result in FICA being withheld from summer stipend checks. These deductions amount to approximately \$300. This issue is discussed in more detail on the following websites:

<https://hr.uiowa.edu/payroll/student-fica-information>

<https://financialaid.uiowa.edu/studentemployment/employers/university/fica>



## **STUDENT GUIDANCE**

Students entering the Experimental Pathology subprogram will be advised by both the subprogram Director and the faculty mentor. In addition to ensuring completion of all classroom requirements, regular meetings (at least yearly) with the Dissertation committee will be enforced until the student completes the program. Dissertation committee meetings start in the fall semester of the second year.

# CURRICULUM AND REQUIREMENTS

## Coursework:

**Year 1:** First year Biomedical Science Program students take a common curriculum as listed below. These courses are described in more detail on the [BSP Curriculum](#) website.

### Fall semester of Year 1:

BMED:5207 Principles of Molecular and Cellular Biology (3 s.h.)  
BMED:5208 Topics in Principles of Molecular and Cellular Biology (1 s.h.)  
BMED:7777 Biomedical Science Seminar (1 s.h.)  
One of the following Biostatistics courses:  
    PCOL:5204 Basic Biostatistics and Experimental Design (1 s.h.)  
    BIOS:4120 Introduction to Biostatistics (3 s.h.)  
BMED:7888 Biomedical Science Research (Arranged)

### Spring semester of Year 1:

PATH:5270 Pathogenesis of Major Human Diseases (3 s.h.)  
MMED:6260 Methods for Molecular/Translational Medicine (1 s.h.)  
PHAR:6504 Mastering Reproducible Science (1 s.h.)  
BMED:7777 Biomedical Science Seminar (1 s.h.)  
BMED:7888 Biomedical Science Research (Arranged)

**Year 2:** Students committed to the Experimental Pathology subprogram they are required to take a semester long biostatistics course (*Introduction to Biostatistics*), a professional development class (*Pathology Seminar*) and an elective in the area of their thesis research (see list below). Students also take *Scholarly Integrity and Responsible Conduct of Research* during both semesters of the second year.

### Fall semester of Year 2:

One Elective (3-4 s.h.) is required *either in the fall or spring semester*  
BIOS:4120 Introduction to Biostatistics (3 s.h.) *if not taken during Year 1*  
BMED:7270 Scholarly Integrity/Responsible Conduct of Research (0 s.h.)  
PATH:7211 Research in Pathology (Arranged)

### Spring semester of Year 2:

One Elective (3-4 s.h.) is required *either in the fall or spring semester*  
PATH:6220 Seminar in Pathology (1 s.h.)  
BMED:7271 Scholarly Integrity/Responsible Conduct of Research (0 s.h.)  
PATH:7211 Research in Pathology (Arranged)

**Subsequent semesters:**

PATH:7211 Research in Pathology (minimum of 2 s.h.)

**Total Hours:**

Total student hours of coursework = 19-20

Total student hours of research = 52-53

Total student hours = 72

**Possible Electives:**

Electives are determined by the area of thesis research

MMED:6220 Mechanisms of Cellular Organization (3 sh)

MMED:8115 Molecular Physiology (4 sh)

MMED:6226 Cell Cycle Control (1 sh)

MMED:6227 Cell Fate Decisions (1 sh)

FRRB:7001 Molecular and Cellular Biology of Cancer (3 sh)

MICR:6247 Graduate Immunology and Human Disease (4 sh)

MICR:6267 Graduate Viruses and Human Disease (4 sh)

MICR 6259 Graduate Bacteria and Human Diseases (3 sh)

IMMU:6201 Graduate Immunology (3 sh)

NSCI:5653 Fundamental Neurobiology (3 sh)

NSCI:7235 Neurobiology of Disease (3 sh)

GENE:6150 Genetic Analysis of Biological Systems (3 sh)

GENE:7191 Human Molecular Genetics (3 sh)

**Teaching:**

The Experimental Pathology subprogram does not have a teaching requirement. However, there are opportunities to teach or TA if students desire this experience.

**Publication requirements:**

Students must have one first author peer-reviewed paper published or in press, as well as a co-authored peer-reviewed paper or review article published or in press prior to being allowed to schedule their dissertation defense.

## INDIVIDUAL DEVELOPMENT PLAN (IDP)

The IDP is a tool to assist trainees with career and professional development. The IDP provides a platform for trainees to identify professional goals, assess competencies relevant to these goals, and develop a plan to achieve specific objectives related to their career goals. The trainee-developed IDP becomes a platform for discussion with their Ph.D. mentor, to foster communication important for the trainee's professional development. The process is interactive and reiterative to ensure training success and satisfaction. Several steps are involved in the development, implementation, and revision of the IDP. The trainee and mentor are active participants, working together to design a plan that helps the trainee meet goals identified in the IDP. The process involves identification of short-term objectives, with clear expectations and milestones that address long-term career goals.

### Basic steps for Trainee:

Conduct a self-assessment

- Define your time commitment to various components of the graduate experience
- Assess your skills and interests
- Use outside resources to get feedback on your skills, strengths, and weaknesses. The following **self-assessment tools** provide excellent guidance  
<http://myidp.sciencecareers.org> (very detailed)  
<https://www.grad.uiowa.edu/individual-development-plan> (straightforward)

Survey opportunities with mentor

- Identify career opportunities that interest you
- Define differences between your current skills and additional skills needed for your identified career objectives
- Prioritize areas for development and discuss strategies for addressing objectives with your mentor

Write/update your IDP, share it with your mentor, and review together

- Identify specific skills that you need to develop in the short-term (e.g. 1-2 years)
- Define strategies to develop each skill
- Implement the plan, and revise as needed (at least annually)
- Review your plan with your mentor on a regular basis

### Basic steps for Mentor:

Be familiar with training requirements and opportunities

Discuss opportunities with trainee

Review your trainee's IDP and help revise. Provide written comments at the end of this document

Establish regular periods for IDP review and revision, as needed

## COMPREHENSIVE EXAM

The Comprehensive exam will normally be taken during the second (spring) semester of the second year. For students with advanced standing, they will be eligible to take the exam during the first (fall) semester of the second year.

The goal of the Comprehensive exam is to determine whether the student has acquired the basic skills to continue with the dissertation phase of their Ph.D. program and ultimately succeed as a scientist. These skills include the ability to fully understand a basic problem in the field, create an appropriate hypothesis and generate an experimental approach to address the hypothesis. By nature of the exercise, the student's ability to communicate in written and oral form will also be tested.

The Comprehensive exam process is governed by the Manual of Rules and Regulations of the Graduate College:

<https://grad.uiowa.edu/academics/manual/academic-program/section-xii-doctors-degrees>

It is important to note the Comprehensive Exam policies and timelines are established to ensure uniformity in the process to the greatest extent possible. This is in the best interests of the students and faculty who serve on Comprehensive exam committees. However, if there are mitigating circumstances that interfere with the established process/timeline (e.g. illness, family emergencies, etc), alternative arrangements can be made. Such arrangements will be made in consultation with the Program Director.

### **Comprehensive exam committee**

The Comprehensive exam committee will consist of the student's Dissertation committee minus the mentor. A replacement member will be appointed by the Experimental Pathology Director in consultation with the four standing members of the Dissertation committee (five members total). The chair of the Dissertation committee (who is not the mentor) will also serve as chair of the Comprehensive exam committee.

### **Duties of the Comprehensive exam committee chair**

The chair of the committee will have a key role throughout the exam process. The student will send their abstract and proposal to the chair who will in turn distribute the documents to the other committee members. The chair will be responsible for all communication with the student, the other committee members, the Program Coordinator and if necessary, the Program Director. The chair will meet with the student to discuss needed revisions to the abstract or discuss why a given abstract was deemed 'fatally flawed'. The chair will also determine if the submitted proposal complies with all formatting instructions. Importantly, the chair will oversee the in-person Comprehensive exam (proposal defense), meet with the student at the end of the exam to communicate the outcome and if necessary, summarize necessary steps to mitigate any reservations.

## The Comprehensive exam is ‘off-topic’

The Comprehensive exam will take the form of a grant proposal and will be ‘off-topic’. Specifically, the focus of the proposal will be in the field of the student’s research, but must not be directly related to the dissertation project. In order to determine the topic, each of the five comprehensive exam committee members will choose a *recent high-profile paper* in the area of the student’s research interests (but not directly related to the dissertation project). The chair of the committee will oversee the process to ensure selected papers are appropriate and not redundant. After examining the papers, the student will choose one and make it the basis of their comprehensive exam (i.e. the chosen paper is to define the topic or focus of the proposal). Importantly, the student *is not restricted to this paper* for rationale or preliminary data when defining the project and is encouraged to utilize other papers in the literature similar to the chosen article.

## Comprehensive exam process

**Abstract description:** Upon choosing the topic of the exam, the student will have four weeks to prepare and submit a two-page single spaced abstract to the committee (not including references). The abstract will include the background/rationale, the significance of the question being asked and an outline of the specific aims. The specific aims should highlight the major experimental approaches, but not include methodological details. Students may not consult with their mentor regarding the content of the abstract, although they may inquire regarding potential overlap with their thesis project. The format of the document will be identical to NIH applications with 0.5 inch margins (all sides) and the use of Arial with an 11 point font size. Importantly, students are encouraged to examine successful exam abstracts of others as well as the Summary (rationale) and Specific Aims pages of grant applications submitted by their mentor or other faculty and trainees (e.g. post-doctoral fellows). Once completed, the student will submit the abstract to the Comprehensive exam committee chair.

**Committee evaluation of the abstract and outcomes:** The Comprehensive exam committee will have one week to evaluate the abstract and arrive at one of three outcomes:

1. The abstract is found to be acceptable and the student can begin work immediately on the full proposal. This will be communicated by the committee chair. The student will then have four weeks to complete and submit the full proposal.
2. The abstract has the potential to lead to a defensible proposal but requires revision. The committee chair will meet with the student to provide a written summary of the committee’s concerns and an overview of needed revisions. The student will have one week to submit a revised abstract to the committee chair.
3. The abstract is fatally flawed and the student will need to generate a new abstract. The committee chair will meet with the student to provide a written summary that describes

the basis for the committee's decision. The student will then have three weeks to prepare a new (second) abstract on a different topic. The latter will be derived from one of the remaining four papers originally selected by committee members. The process for the committee to evaluate the second abstract is identical to the first abstract (steps 1 and 2 above).

If neither the original or second abstract is deemed acceptable (i.e. both are 'fatally flawed'), this will constitute a first failure and the student must wait four months prior to attempting the comprehensive exam again.

**The proposal:** Upon approval of the abstract, the student will be given permission to prepare a full proposal. As stated above, the student will have four weeks to complete and submit the document. The proposal will be seven single spaced pages (not including references) and must follow the standard R21 grant application format. Specifically:

**Specific Aims:** Page 1 will describe your Specific Aims. These are to be highly consistent with your approved abstract and should summarize the specific question or problem, state the hypothesis, clearly list the aims/objectives of the proposed project and the potential impact of the planned research on the field.

**Research Strategy:** Pages 2-7 (remaining six pages) will define the Research Strategy and will consist of the Significance, Innovation and Experimental Approach.

1. The **Significance** section should explain the importance of the problem or question you are approaching, and how the proposed project will provide new knowledge and/or solutions to address the problem. This section should summarize key findings from the field that led you to identify the problem.
2. The **Innovation** section should describe any novel concepts, approaches or methodologies you plan to use to address the underlying problem. This can include use of existing methods in novel ways to approach technical challenges, as well as refinements or improvements of current technology.
3. The **Experimental Approach** section should be organized around your Specific Aims and list the rationale, experimental approaches, expected results/outcomes, potential pitfalls/unexpected outcomes, and alternative approaches. A basic description of experimental and technical approaches is expected. However, detailed protocols should not be included, and students should instead provide key references describing them. It is important to propose technical approaches that are feasible and consistent with experimental goals. Considering and listing appropriate controls is also key.

**Format:** The format of the proposal will adhere to NIH grant application rules with 0.5 inch margins (all sides) and use of the Arial font with an 11 point font size. As stated above, references are not included in the seven-page limit, although no more than five pages of references are allowed.

**Preliminary data:** It is appropriate to show preliminary data in the Significance and/or Experimental Approach section. Since the Comprehensive Exam is off topic (and there can be no data figures from the student's thesis work), it is permissible to use a limited number of figures (2-3) from the published literature to justify the rationale and approach.

**Figures and Tables:** It is expected that a limited number of figures and tables (such as preliminary data or experimental approaches) will be included in the proposal. Importantly, the size of imported figures and tables should be *minimal*, similar to any NIH grant application. Also, students should use a smaller font size (such as 8) for figure and table legends.

**Examples:** Again, students are encouraged to examine successful proposals submitted by previous students, or successful R21 applications submitted by their mentor or other faculty. The NIH also has a website with several well written, highly scored R21 grant applications available for viewing. The link is:

<https://www.niaid.nih.gov/grants-contracts/sample-applications#r21>

**Input from others:** Fundamentally, the Abstract and Proposal are to be the original work of the student. However, students undertaking the comprehensive exam may consult with senior students, post-doctoral fellows and faculty *other than their advisor* regarding technical approaches or general questions about the topic. Students may *not* present the paper chosen as the basis for their proposal in a lab meeting or journal club to solicit input. Students may *not* ask other faculty to review the abstract or proposal, or provide experimental details. Students may *not* utilize editing services (such as the Grad College Success Center). Importantly, each student must take full ownership of their abstract and proposal. In this regard, students are expected to defend their ideas and experimental approaches based on precedent (the literature) and not the personal views of others. Equally important, mentors must remove themselves from the exercise and not serve as an intermediary prior, during or after the comprehensive exam process.

**Proposal submission:** Once completed, the student will submit the proposal to the committee chair. The chair will determine if the proposal complies with the instructions listed above. Specifically, the proposal must be correctly formatted, consist of 7 pages (not including references), contain the key sections (Specific Aims, Significance, Innovation and Experimental Approach) and include appropriately sized figures and tables. If the chair finds the proposal is not in compliance, it will be returned to the student for correction. If the proposal is fully compliant, it will be sent to all members of the Comprehensive exam committee for their review.

**Proposal defense:** All proposals will be defended orally with the Comprehensive exam committee, with one exception (see below). The Program Coordinator will schedule a time for the proposal defense to occur at least two weeks after submission and approval of the completed document. The chair of the committee will lead the meeting.



The defense will begin with a PowerPoint presentation by the student where an overview of the proposal is given. The overview will include the background and rationale for the proposal, the specific aims and the experimental approaches. The overview may include updates such as any recent publications that have a direct bearing on the proposal, or needed corrections recognized by the student after submission of the proposal document. The student may *not* generate extra slides to be used beyond the initial presentation (such as slides with detailed rationale or technical approaches). It is recommended the overview last no longer than 15 minutes and committee members refrain from specific questions until after the overview is complete. However, slides from the overview should be used during the defense as a context for questions and discussion. No additional material, aside from the proposal and the PowerPoint overview, may be used during the defense. This includes primary papers, review articles or extra slides (as stated above).

Upon completion of the overview by the student, committee members will then ask questions on any aspect of the written proposal. Committee members also have license to ask general questions to assess the student's depth of knowledge in the area of the proposal. Questions will continue until all committee members have completed their inquiries, or the committee chair decides to end the questioning period. The student will then leave the room and the committee will decide on the outcome of the exam. This outcome will then be communicated to the student by the committee chair.

#### **Proposal defense outcomes:**

- 1. Defense is not allowed or postponed:** If upon receiving the proposal document, the majority of the Comprehensive exam committee members judge the proposal to be significantly below standards (and hence indefensible), the Comprehensive exam committee can decide to give the student an Unsatisfactory without an oral defense, meaning the student will fail their first attempt. This outcome is rare and will only occur if the student did not put in the effort to generate a minimally defensible proposal. Alternatively, the committee could decide the proposal is defensible upon revision. The committee chair will meet with the student to provide a written summary of the committee's concerns and an overview of needed revisions. The student will have three weeks to revise the proposal and submit the document to the chair. If the committee again decides the revised document does not meet minimum standards for an oral defense, the outcome will be Unsatisfactory and the student will fail. The student must wait four months prior to attempting the comprehensive exam again.
- 2. The Comprehensive Exam is judged as 'Satisfactory':** If four of five committee members judge the defense as Satisfactory, the student passes and moves forward towards earning the Ph.D. degree.
- 3. The Comprehensive Exam is judged as having 'Reservations':** If two or more of the committee members rate the exam outcome as having Reservations, the student must correct the deficiencies as directed by the committee. Specifically, the committee chair will meet with the student and provide a written summary of the committee's concerns,

an overview of needed revisions and a clear timetable to complete revisions. This written summary must also be provided to the Graduate College (by the Program Director). The student will complete the revisions as directed by the committee within the defined time frame. The student will also prepare a document (no more than one page) which summarizes (point-by-point) their revisions. The latter is to ensure all concerns raised by the committee are addressed. The committee will then examine the revised document to ascertain whether the reservations have been addressed. The committee also reserves the right to hold a second oral exam with the student to evaluate and judge the revised proposal. If four of five committee members judge the revised proposal as Satisfactory, the student passes and moves forward towards earning the Ph.D. degree. If at least two members of the committee judge the revised document to be Unsatisfactory, the student fails and must wait four months prior to attempting the comprehensive exam again.

- 4. The Comprehensive Exam is judged as ‘Unsatisfactory’:** If at least two members of the committee judge the Exam as Unsatisfactory after the oral defense, the student fails and must wait four months prior to attempting the comprehensive exam again.

## Comprehensive exam timetables

### Spring Comprehensive exam schedule:

The typical Ph.D. student who spends their first year in the Program performing required coursework and defining a thesis project will begin the Comprehensive Exam process in January of their second year of graduate study.

**January 2 or the first workday of January:** The chair of the Comprehensive exam committee will send out a notice to committee members to begin the process of selecting an off-topic paper that meets the criteria listed above.

**January 15:** The chair of the Comprehensive exam committee members will provide the selected papers to the student. The student will select one, inform the chair of their decision, and prepare a two-page single spaced abstract (not including references) as described above.

**February 15:** The student will submit the completed abstract to the committee for review.

**February 22:** The student will be informed whether to proceed with a full proposal, revise the existing abstract or generate a new second abstract, as detailed below:

**Revision:** The student will have one week to submit a revised abstract to the committee for review. The committee will then inform the student within one week of its decision. The student will either be granted permission to proceed with a full proposal or generate a new abstract, as described below.

**New second abstract:** The student will generate and submit a second novel abstract to the committee for review within three weeks. The committee will inform the student

within one week of its decision (proceed with a full proposal or revise the abstract). If the decision is to edit the abstract, the student will have one week to submit the revision, after which the committee will have one week to inform the student of its decision. The student has only one opportunity to submit a second new abstract during a given exam cycle.

**Please note:** If the Proposal Defense extends into the summer semester, the student must be registered for at least 2 s.h. (Research in Pathology) during the summer.

**Fall Comprehensive exam schedule:**

Students with advanced standing may take the Comprehensive exam during the fall semester of their second year. These include MSTP students as well as those with an M.S. degree.

**August 1:** The chair of the Comprehensive exam committee will send out a notice to committee members to begin the process of selecting an off-topic paper that meets the criteria listed above.

**August 15:** The chair of the Comprehensive exam committee members will provide the selected papers to the student. The student will select one, inform the chair of their decision, and prepare a two-page single spaced abstract (not including references) as described above.

**September 15:** The student will submit the completed abstract to the committee for review.

**September 22:** The student will be informed whether to proceed with a full proposal, revise the existing abstract or generate a new second abstract, as detailed below:

**Revision:** The student will have one week to submit a revised abstract to the committee for review. The committee will then inform the student within one week of its decision. The student will either be granted permission to proceed with a full proposal or generate a new abstract, as described below.

**New second abstract:** The student will generate and submit a second novel abstract to the committee for review within three weeks. The committee will inform the student within one week of its decision (proceed with a full proposal or revise the abstract). If the decision is to edit the abstract, the student will have one week to submit the revision, after which the committee will have one week to inform the student of its decision. The student has only one opportunity to submit a second new abstract during a given exam cycle.

**Deadlines:** If a deadline falls on a Saturday or Sunday, it will be moved forward to the following Monday.

## **DISSERTATION (THESIS) AND DISSERTATION COMMITTEE**

### **Dissertation research credits:**

Thesis research is accounted for in the curriculum by registering for:

PATH:7211:0IND Research in Pathology

When registering for PATH:7211:0IND, select the thesis mentor in the drop-down menu. Please note that Research in Pathology is graded as S/U.

### **Dissertation committee:**

Students will be required to select and meet with their Dissertation committee by the end of the first (fall) semester of their second year. The committee will consist of the mentor and four additional faculty. Two of the committee members may be faculty from outside the Experimental Pathology subprogram, although they must have an appointment in a Ph.D. degree granting program or department. A member of the committee other than the mentor will serve as chair. The chair will be determined by mutual consent during the first committee meeting.

### **Dissertation committee meetings:**

The student must meet with the thesis committee at least once a year, starting in the second semester of the first year. After each meeting, the student must submit a satisfactory report to the Program Director. This report is to consist of a PowerPoint file of the student's presentation and a list of committee recommendations. The list of recommendations is compiled by the student and mentor shortly after the meeting, and approved by the Dissertation committee chair.

### **Dissertation defense, dissertation document and final exam:**

Students will be allowed to schedule their dissertation defense/final exam once the following have been met:

- Completed all curricular requirements (72 s.h. of classroom and research credits)
- Are in good standing with the Graduate College, Biomedical Science Program and Experimental Pathology subprogram
- Have met publication requirements
- Have been granted permission by their Dissertation committee

Two weeks prior to the dissertation defense/final exam, the student must provide the entire committee with a completed draft of their dissertation. Prior to distribution, the dissertation must have been approved by the student's research advisor and must be formatted as per Graduate College guidelines. On the day of the defense, the student will present a public seminar of the dissertation work. This will then be followed by defense of the dissertation before the entire Dissertation committee. A final version of the dissertation will then be prepared based on suggested edits provided by the committee. After final approval by the research advisor and committee, the dissertation will be submitted to the Graduate College.

**Graduation checklist for students planning to defend their thesis:**

<https://grad.uiowa.edu/academics/graduation-checklist>

**Food and beverage at committee meetings:**

The Experimental Pathology program does not expect students to provide food and/or drink for committee members during any meeting, including the Comprehensive exam or Dissertation defense. This is consistent with a recent resolution by the University of Iowa Graduate Student Senate passed on 02-04-20.

## ACADEMIC AND PROFESSIONAL STANDARDS

### Coursework and GPA:

As stated above, all coursework is typically completed within the first two years. In order to remain in good standing, students must maintain at least a 3.0 GPA as mandated by the Graduate College:

<https://grad.uiowa.edu/academics/manual/academic-program/section-iv-academic-standing-probation-and-dismissal>

*Specifically:* A doctoral student on regular status shall be placed on academic probation if, after completing 9 semester hours of graded (A, B, C, D, F) graduate work at The University of Iowa, the student's UI Cumulative GPA falls below 3.00. A student regains good academic standing when his or her UI Cumulative GPA returns to 3.00. If, after completing 9 more semester hours of graded (A, B, C, D, F) graduate work at this University, the student's UI Cumulative GPA remains below 3.00, the student will be dropped from the degree program and denied permission to re-register within any Graduate College doctoral degree program. The student may apply for and be accepted into a non-doctoral degree or certificate program.

### Professionalism:

Students in the Experimental Pathology subprogram are expected to adhere to accepted standards of behavior at every level. This includes time commitment, classroom and laboratory integrity and interactions with peers and faculty.

**Time commitment:** Graduate school is a full-time commitment that requires at least 40 hours of work per week focused on classroom and laboratory activities. Additional time is typically spent in the evenings and weekends completing classroom assignments, reading the primary literature, evaluating and compiling data or carrying out experiments. As such, students may not be employed in other jobs. During rotations, students are expected to work in their rotation laboratory during the day when not taking classes. The rules for vacations, sick leave and other time away is described below in the *Experimental Pathology Graduate Subprogram Vacation and Leave Policy* section. Importantly, open communication with the rotation or thesis mentor is key when planning time away.

**Cheating/plagiarism:** Any form of cheating or plagiarism with respect to curricula, coursework, examinations, thesis or manuscripts is grounds for dismissal from the Program. The policy and procedures regarding academic misconduct are defined in the University of Iowa Graduate College Manual of Rules and Regulations

<http://www.grad.uiowa.edu/manual-part-1-section-iv-academic-standing-probation-and-dismissal>

**Scientific misconduct:** The U.S. Public Health Service has a formal policy dealing with misconduct. It is described in a special July 18, 1985 issue of the NIH Guide to Grants and Contracts. Any intentional fabrication, falsification or plagiarism of experimental data/result is

considered scientific misconduct. Any deviation from federally defines standards regarding the use of animals in research or human subjects is also considered scientific misconduct. Normal human errors or differences of opinion in regards to data interpretation is not considered misconduct. Scientific misconduct is grounds for dismissal from the Program.

**Sexual Harassment:** Sexual harassment will not be tolerated in any form. The University of Iowa has specific guidelines and regulations on sexual harassment. These are described at:

<https://opsmanual.uiowa.edu/community-policies/sexual-harassment>

It is the obligation of each student to read and be familiar with the University of Iowa policies regarding sexual harassment.

**Professional interactions:** Students are expected to maintain professional interactions with all members of the classroom, laboratory environment and Department. This includes all faculty, fellow students, other laboratory trainees and staff, and support personnel within the Department. Professional interactions are simply defined by treating all individuals with respect regardless of race, creed, color, religion, national origin, age, sex, sexual orientation or any other classification as defined in the Diversity Statement on page 13. A persistent failure to adhere to this expectation may result in dismissal from the Program.

#### **Appeals:**

In the event that a student is failing to meet the academic and professional standards described above, the department will notify the student of this fact in writing and specify the deficiencies. If the student does not remedy the deficiencies within a reasonable specified time, the student may be dismissed. If the student judges that this or any other departmental action is improper, the student has a right to request a review. If the student wishes to appeal the decision, the Department Chair should be contacted to arrange the appeal process following the rules of the Graduate College. These are described at:

<https://www.grad.uiowa.edu/manual-part-1-section-iv-academic-standing-probation-and-dismissal>

## **RESOURCES:**

### **Counseling:**

We need to be constantly vigilant about not only the scientific health and status of our students and faculty, but also about their mental health. Graduate school is an extremely stressful time for students and faculty alike. We would like to remind our students and faculty that if concerns arise about their mental health status, for whatever reason, that it is appropriate to seek help. Individual faculty or students should feel free to contact those services directly or, if they feel it appropriate, discuss with the Program Director. The University offers counseling services for students at University Counseling Service (3223 Westlawn, 335-7294) and for faculty at Faculty Services (5101A D, 335-2085). Detailed information is found at:

<https://counseling.uiowa.edu/>

### **Office of the Ombudsperson:**

The Office of the Ombudsperson (3rd floor of Jefferson Building, 129 East Washington Street) provides conflict management and problem solving to the entire campus community. Their services are confidential, neutral, informal, and independent. Appointments are suggested and can be scheduled by phone, 319-335-3608, or by email:

[ombudsperson@uiowa.edu](mailto:ombudsperson@uiowa.edu)

Detailed information is found at:

<https://uiowa.edu/ombuds/>

### **Student Disability Services:**

The University is committed to providing an educational experience accessible to all students. If a student has a diagnosed disability or other disabling condition that may impact the student's ability to complete the course requirements as stated in the syllabus, the student may seek accommodations through Student Disability Services (SDS). SDS is responsible for making Letters of Accommodation (LOA) available to the student. The student must provide an LOA to the course instructor as early in the semester as possible, but requests not made at least two weeks prior to the scheduled activity for which an accommodation is sought may not be accommodated. The LOA will specify what reasonable accommodations the student is eligible for and those the instructor should provide. Detailed information is found at:

<https://sds.studentlife.uiowa.edu/students/>



## VACATION AND LEAVE POLICY

Successful graduate education in the biomedical sciences does not begin and end with the usual academic calendar, but rather is a full-time occupation. Reasonable vacation periods are certainly appropriate, but long or repeated absences are generally not permitted. Vacations or any other planned absences should be discussed in advance with the faculty member in charge of the laboratory where the student is rotating or performing their thesis work.

### **Paid Leaves:**

Graduate students are entitled to University-designated holidays and up to (15) working days per fiscal year of absence without pay deduction.

All paid leave must be scheduled with the approval of the student's mentor.

The **University-designated holidays** are as follows:

- New Year's Day
- Dr. Martin Luther King, Jr.'s Birthday
- Memorial Day
- Independence Day
- Labor Day
- Thanksgiving Day
- Friday after Thanksgiving Day
- Christmas Day
- A day before or after Christmas Day

Monday will be recognized as a holiday for all holidays occurring on a Sunday and Friday for all holidays occurring on a Saturday.

### **Sick Leave**

Graduate students may be absent due to illness without loss of pay not to exceed (18) days during a twelve-month appointment.

If a Graduate student has exhausted paid sick leave due to illness, they may request an unpaid leave of absence which will be granted at the discretion of the Mentor and Program Director.

### **Family Illness Leave:**

Graduate students may use available sick leave for care of and necessary attention to ill or injured members of the immediate family or for parental leave including birth and adoption.

**Bereavement Leave:**

Graduate students may use available sick leave for three (3) work days when a death occurs in the employee's immediate family.

**Additional paid leave:**

Such leaves may be granted provided the Program and mentor determines the graduate student is able to meet the time and effort obligation reflected in the percentage of appointment over the full term of individual's appointment.

**Unpaid Leave of Absence:**

A Graduate student may be granted an unpaid leave of absence during the term of their appointment, upon request to and at the discretion of the Mentor and Program Director.

The Mentor and Program Director shall authorize leave requests in accordance with the provisions of the Family and Medical Leave Act of 1993 for qualifying individuals.

## **DIVERSITY STATEMENT**

The University of Iowa prohibits discrimination in employment, educational programs, and activities on the basis of race, creed, color, religion, national origin, age, sex, pregnancy, disability, genetic information, status as a U.S. veteran, service in the U.S. military, sexual orientation, gender identity, associational preferences, or any other classification that deprives the person of consideration as an individual. The university also affirms its commitment to providing equal opportunities and equal access to university facilities. For additional information on non-discrimination policies, contact the Director, Office of Equal Opportunity and Diversity, the University of Iowa, 202 Jessup Hall, Iowa City, IA, 52242- 1316, 319-335-0705 (voice), 319-335-0697 (TDD), [diversity@uiowa.edu](mailto:diversity@uiowa.edu)