Preface: This policy handbook outlines all key information for students and faculty of the
Department of Pathology Graduate Program. 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://www.grad.uiowa.edu/graduate-college-manual) which describe
University policies pertaining to graduate students in detail. The handbook lists the Program
leadership, course requirements, laboratory rotation policies, thesis and thesis committee guidelines,
student stipend and tuition support, academic and professional standards, and vacation and leave
policy.

PROGRAM WEBSITE:
https://medicine.uiowa.edu/pathology/education/master-science-pathology

Introduction. The Department of Pathology Graduate Program offers the M.S. degree to students
who have successfully completed 21 semester hours of required and elective coursework and 9
semester hours of laboratory research (30 semester hours total). In addition, students must complete
a laboratory-based research project, write up a scholarly description of the project results in the
form of a dissertation thesis, and successfully defend the thesis (Master’s Final Examination) prior
to being awarded the M.S. degree.

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PROGRAM LEADERSHIP

Program Director:

Thomas Waldschmidt Ph.D.
Professor and Vice Chair for Research
106B MRC
335-8223
thomas-waldschmidt@uiowa.edu

Program Oversight Committee:

Vladimir Badovinac Ph.D.
Associate Professor
3-550 BSB
384-2930
vladimir-badovinac@uiowa.edu

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

Andrean Simons-Burnett Ph.D.
Associate Professor
1161 ML
384-4450
andrean-simons@uiowa.edu

Munir Tanas M.D.
Assistant Professor
106A MRC
335-6637
munir-tanas@uiowa.edu
2020-2021 ACADEMIC CALENDAR

Fall semester 2020:

  First day of classes – August 24
  Last day of classes – December 11

  Graduate Degree Applications due – October 2
  Plans of study for master's recipients and final exam requests – October 13
  Final thesis exam reports due – November 30
  Final thesis deposit due – December 7

Spring semester 2021:

  First day of classes – January 19
  Last day of classes – May 7

  Graduate Degree Applications due – February 26
  Plans of study for master's recipients and final exam requests – March 9
  Final thesis exam reports due – April 20
  Final thesis deposit due – April 27

Graduation checklist for students planning to defend their thesis:

https://www.grad.uiowa.edu/theses-and-dissertations/graduation-checklist
PROGRAM CURRICULUM

All Pathology M.S. students must complete a minimum of 21 semester hours of coursework and 9 hours of research. These include 14 hours of required courses and 7 hours of elective courses. All coursework is typically completed within the first two years.

11 semester hours of required coursework:

- BMED:5207:0001 Principles Molecular & Cellular Biology (3 s.h.) - Fall of year 1
- BIOS:4120:0AAA Introduction to Biostatistics (3 s.h.) – variable, usually year 2
- PATH:6220:0001 Seminar in Pathology (1 s.h. x 2 semesters) - Spring of years 1 and 2
- PATH:5270:0001 Pathogenesis of Major Human Diseases (3 s.h.) - Spring of year 1 or 2
- BMED:7270:0002 Scholarly Integ/Resp Conduct of Rsrch I – Fall of year 2
- BMED:7271:0002 Scholarly Integ/Resp Conduct of Rsrch II – Spring of year 2

Required coursework results in: 1. A basic understanding of molecular and cellular biology. 2. A basic understanding of biostatistics. 3. An advanced understanding of pathobiology, histology and mechanisms of human disease.

10 semester hours of elective coursework:

Remaining coursework consists of electives focused on the area or topic of the student’s thesis project. These electives are graduate level courses offered by a range of departments on the biomedical campus. Students should consult with their mentor or Program Director as to which elective courses best complement their interests and thesis work. Common elective courses taken by Pathology M.S. students are as follows:

- MMED:6220:0001 Mechanisms of Cellular Organization (3 s.h.) - Fall
- MMED:6240:0001 Inflammation, Cell Signaling & Targeted Cancer Therapy (1 s.h.) - Fall
- MMED:6225:0001 Growth Factor Receptor Signaling (1 s.h.) - Spring
- MMED:6226:0001 Cell Cycle Control (1 s.h.) - Spring
- MMED:6227:0001 Cell Fate Decisions (1 s.h.) - Spring
- MMED:6215:0001 Transcription RNA (1 s.h.) - Spring
- MMED:3310 Practical Data Science and Bioinformatics (3 s.h.) - Spring
- FRRB:7001:0001 Molecular and Cellular Biology of Cancer (3 s.h.) - Fall
- IMMU:6247 Graduate Immunology and Human Disease (4 s.h.) - Fall
- IMMU:6201 Graduate Immunology (3 s.h.) - Spring
- BMED:5205:0001 Practical Bioinformatics (1 s.h.) - Winter

A complete listing of all courses can be found at: https://myui.uiowa.edu/my-ui/courses/dashboard.page
Scholarly Integrity/Responsible Conduct of Research is required of all graduate students in the Pathology Graduate Program. This training program consists of 11 modules of basic SI/RCR training offered through the CITI training web portal. This is described at:

https://www.grad.uiowa.edu/principles-of-scholarly-integrity/approved-courses

The CITI training is to be taken early in the first semester. Once all CITI modules are successfully completed, students are then eligible to take the two semester Scholarly Integrity/Responsible Conduct of Research sequence course taught through the Carver College of Medicine (BMED:7270:0002 and BMED:7271:0002). These are taken during the fall and spring semesters of the second year.

More details on training in the responsible conduct of research can be found at:

https://www.grad.uiowa.edu/postdoc/responsible-conduct-of-research
ROTATIONS

Purpose of rotations:

In order for incoming students to find a laboratory and mentor to carry out their research/thesis project, rotations are essential. The goal is for the student to sample a number of laboratory environments in order to determine which best suits their research interests and personality.

Rotation Policy:

The Program requires two ten week rotations with a third ten week rotation optional. Once on campus, each new student discusses their research interests with the Program Director who then inquires with a range of faculty as to openings in their laboratories. Students are then directed to specific Program faculty to meet and discuss their research and possible rotation time blocks.

General schedule for rotations:

The initial rotation starts the first week of September and ends after the first week of November.

The second rotation starts the second week of November and ends the second week of February. This takes the Thanksgiving and Christmas/New Year holiday breaks into consideration.

The third rotation, if necessary, starts the third week of February and ends the last full week of April.
THESIS AND THESIS COMMITTEE

Thesis:

The thesis project is carried out under the guidance of the mentor and thesis committee. In general, the completed written thesis consists of four chapters with the first being a concise review of the literature, the second materials and methods, and the last two a scholarly description of the project results. Typically, the M.S. thesis is no more than 100 pages in total including references. Upon completion of the thesis, the student presents their work to the Department in a public forum, followed by a defense before the thesis committee. The latter constitutes the Master’s Final Examination.

Thesis Research Credits:

Thesis research is accounted for in the curriculum by registering for at least 9 research semester hours during the course of the student’s program.

- PATH:7211:0IND Research in Pathology

When registering for PATH:7211:0IND, select the Program Director in the drop-down menu while performing rotations. Once a thesis laboratory is selected, select the mentor. Please note that Research in Pathology is graded as S/U.

Thesis Committee:

The thesis committee is composed of the mentor and at least two additional tenured or tenure-track faculty members. One of the members may be a tenure-track faculty member from another department. Other members of the thesis committee are chosen by the mentor and student, and must be approved by the Program Director. A fourth committee member may be added at the discretion of the student and mentor. The fourth member may be a clinical-track faculty member if his/her participation is warranted. Should a clinical-track faculty member be added to the committee, prior permission from the Graduate College is required.

Thesis Committee Meetings:

The student must meet with the thesis committee at least once a year, starting in the second 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.
STUDENT SUPPORT

Stipend:

All Pathology graduate students receive a full stipend until they complete the Program. 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, 2021) is $30,500. The stipend is paid to students on a monthly basis. Support for new incoming students begins on the first day of classes for the semester.

Tuition:

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

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

https://hr.uiowa.edu/benefits/dental

Current monthly costs are detailed at:

https://hr.uiowa.edu/benefits/health-insurance/student-health-plans/undergraduate-students/student-health-insurance-plan

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
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 2.75 GPA as mandated by the Graduate College. If a student’s cumulative GPA falls below 2.75 after completing 9 semester hours of graded (A, B, C, D, F) graduate work at The University of Iowa, the student will be placed on academic probation. If, after completing 9 additional semester hours of graded (A, B, C, D, F) graduate work at the University, the student's UI Cumulative GPA remains below 2.75, the student will be denied permission to re-register for any Graduate College degree program, including the Pathology Graduate Program.

Professionalism:

Students in the Pathology Graduate Program 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 Pathology Graduate Program 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
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 Mentor.

Graduate students are entitled to University-designated holidays.

University-designated Holidays:

- 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 nondiscrimination 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