

# Graduate Program in Clinical Investigation

Program Handbook

2024-2025

Institute for Clinical and Translational Research

Reference this handbook to learn about the unique policies, requirements, procedures, resources, and norms for graduate students in the Graduate Program in Clinical Investigation.

Last updated: July 2024

## Welcome from the Graduate Program in Clinical Investigation

We welcome you to the Graduate Program in Clinical Investigation (GPCI) in the Institute for Clinical and Translational Research (ICTR) at the University of Wisconsin–Madison. Clinical Investigation is a field of study in which teams of biomedical investigators, health care professionals, and non-academic partners are welcomed and engaged to propose, design, and conduct research with the intent to translate discoveries to human or animal patient populations. The science of translation generates scientific and operational innovations that overcome long-standing challenges or bottlenecks along the translational research pipeline. Moreover, our program aims to reduce health inequities and address health disparities. This engagement of all to improve health is the epitome of the "Wisconsin Idea" to bring the beneficial influence of the University to every family in the state and beyond (UW President Charles Van Hise, 1905).

#### Navigating Policy and Resources at UW-Madison

This handbook is one of many sources to consult as a student to become familiar with the policies, procedures, requirements, resources, and norms of graduate education at UW-Madison (links provided below image):



#### On your program's website or Guide page

Detailed reference for your program's unique requirements, policies, procedures, resources, and norms.

May refer you to other sources for policy detail.



#### guide.wisc.edu/graduate

Master catalog of all graduate programs on campus & the official source for your program's policies and requirements.

May reference other sources of policy.

## Graduate Student Life

#### gradlife.wisc.edu

Info about life as a Badger graduate student in Madison that will support your overall well-being.

Not sure where to start?

### **AP&P**

grad.wisc.edu/ academic-policies

The Graduate School's
"Academic Policies &
Procedures" that defines key
components of graduate
education on our campus.

# Policy Library

policy.library.wisc

Database of universitywide policies. Find resources curated for prospective and current students, as well as faculty & staff, at:

grad.wisc.edu

https://guide.wisc.edu/graduate/ https://gradlife.wisc.edu/ https://grad.wisc.edu/academic-policies/ https://policy.wisc.edu/ https://grad.wisc.edu/

#### How to Use This Handbook

This handbook provides basic information about the academic policies and procedures of the Graduate Program in Clinical Investigation (GPCI) for current and prospective MS, PhD, and PhD Minor students. The UW-Madison Graduate School has the final authority for granting degrees at UW-Madison. ICTR administers the Graduate Program in Clinical Investigation (GPCI) under authority of the Graduate School.

The Graduate School Academic Policies and Procedures (<a href="https://grad.wisc.edu/academic-policies/">https://grad.wisc.edu/academic-policies/</a>) provide essential information about general requirements. The Graduate Program in Clinical Investigation's authority to set degree requirements beyond the minimum required by the Graduate School lies with its program faculty. Policies in this handbook have been approved by program faculty.

#### Who to Contact for Questions

Many of your questions about how to meet expectations and thrive as a graduate student will be answered by the various sources of policies, procedures, requirements, resources, and norms listed above. Several key positions in this department and on campus are ready to answer your remaining questions:

#### **Graduate Program Managers**

Beth Bierman	Deidre Vincevineus
bbierman@wisc.edu	vincevineus@wisc.edu
608-262-3768	608-263-3274
Rm. 2111J, Heath Sciences Learning Center (HSLC)	Rm. 2111J, Heath Sciences Learning Center (HSLC)

#### Director of Graduate Studies

Randy Kimple, MD, PhD, MBA rkimple@humonc.wisc.edu

608-263-8500

Rm. 3107, Wisconsin Institute for Medical Research (WIMR)

#### **Graduate School Services**

For general inquiries and graduate student services from the Graduate School (https://grad.wisc.edu/contacts/).

#### **Key Information**

Advisors	Advisors must have tenure track faculty appointments (not CHS appointments)
Funding	GPCI and ICTR does not provide funding or tuition remissions
MS Committees	Advisor + 2 other faculty members
PhD Committees	Advisor + 4 other faculty members
Committee Due Dates	Committees must be formed by the end of the student's first academic year.
Enrollment Min/Max	Part time graduate students are required to enroll in a minimum of 2 credits per term (fall/spring); Full time graduate students enroll in 8-15 credits per term (fall/spring).
Dissertator Enrollment	PhD students after passing their prelim exam are required to enroll in 3-credits per term (fall/spring and summer).
Annual Student Progress	Graduate Program Manager will send this out prior to the start of the spring term. This form is due
Form	on 3/1, before summer and fall enrollment begins
Degree Credit Minimums	MS= 30 for thesis; PhD= 35 for preliminary exam and 51 for final defense
Warrant Request Link	https://uwmadison.co1.qualtrics.com/jfe/form/SV 9M2A8L722NJ1ziS

#### Department & Program Overview

GPCI's focus is to provide teams of academic, clinical, and community investigators with the knowledge and skills needed to conduct and translate biomedical discoveries into clinical and/or community applications through patient (human or animal)-oriented research. Patient-orientated research includes the study of disease, development of new technologies and therapies, clinical research, and dissemination of these findings to improve health.

The curriculum draws from existing courses in our partner schools, and including courses developed for the GPCI. Together, these courses provide a solid foundation in research methods and analysis, including biostatistics, study design, and responsible conduct of clinical research, as well as the science of translation. Students pursue their own specialization in patient-oriented translational, clinical, and community research through electives and research. To accommodate the complex schedules of clinicians and students, the GPCI programs has flexible course schedules for both full- and part-time enrollment.

GPCI first admitted graduate students in 2008 and is made possible by funding from the National Institutes of Health (NIH) Clinical and Translational Science Award (CTSA). GPCI embodies the ICTR's, Marshfield Clinic's, and several other UW-Madison's schools and college's commitment to offer graduate training in clinical and translational sciences.

#### Mission Statement

GPCI's mission statement is to prepare successful and productive translational investigators who will sustain successful research careers, by enabling students from multiple disciplines to:

- Independently lead, manage, design, execute, interpret, and report multidisciplinary research in an ethically sound and responsible manner;
- disseminate knowledge through teaching and mentoring students;
- assume leadership roles in higher education, community health programs, or industry; and
- establish a reputation as a role model in an area of clinical and translational research.

#### Diversity, Equity, and Inclusion

The University of Wisconsin–Madison fulfills its public mission by creating a welcoming and inclusive community for people from every background — people who as students, faculty, and staff serve Wisconsin and the world. Diversity is a source of strength, creativity, and innovation for UW–Madison. The UW values the contributions of each person and respect the profound ways their identity, culture, background, experience, status, abilities, and opinion enrich the university community. The UW commits ourselves to the pursuit of excellence in teaching, research, outreach, and diversity as inextricably linked goals (<a href="https://diversity.wisc.edu/institutional-statement-on-diversity/">https://diversity.wisc.edu/institutional-statement-on-diversity/</a>).

The University of Wisconsin School of Medicine and Public Health is a diverse and inclusive academic community committed to excellence and equity in health and wellness through teaching and learning, clinical service, advocacy, and research in all forms of biological science, population health, and health care (<a href="https://www.med.wisc.edu/about-us/diversity/">https://www.med.wisc.edu/about-us/diversity/</a>).

ICTR relies on participation from a broad array of stakeholders to solve problems in translating knowledge into clinical practice, community health programs and health policy. ICTR's infrastructure is intentionally designed to build capacity of both campus-based investigators and research partners, from patient and family advocates to community non-profits to health care delivery system providers to state and federal regulatory and research compliance offices (<a href="https://ictr.wisc.edu/stakeholder-community-engagement-2/">https://ictr.wisc.edu/stakeholder-community-engagement-2/</a>).

#### Governance Structure

ICTR is the administrative home for the MS and PhD degree programs in Clinical Investigation. GPCI is governed jointly by representatives of ICTR's academic partners: Schools of Medicine and Public Health, Nursing, Pharmacy, Veterinary Medicine, College of Engineering, School of Education, and Marshfield Clinic. Faculty members from each academic partner serve as instructors, mentors, and leaders to strengthen GPCI's training with multidisciplinary clinical-research knowledge and skills as they develop into independent clinical-research scientists.

Executive Committee (EC): Comprised of faculty members from partner schools/colleges/health systems, the EC has the authority to establish degree requirements beyond the minimum required by the Graduate School, approve policies described in the GPCI Handbook. Faculty are appointed to renewable 3-year terms.

Admission Subcommittee (AC): Makes final decisions on admission to the GPCI MS and PhD programs for fall and spring admission. Faculty are appointed to renewable 3-year terms.

Curriculum Subcommittee (CC): Reviews and makes recommendations to the EC about curricular changes, additions, and omissions and considers and approves course waiver requests for specialized independent study. Faculty are appointed to renewable 3-year terms.

GPCI periodically will request volunteers to represent students as non-voting (advisory) curriculum subcommittee members. Membership ends with MS thesis or PhD dissertation defense.

#### New Graduate Student Checklist

Be sure to review all steps listed on this webpage for new graduate students (<a href="https://grad.wisc.edu/current-students/">https://grad.wisc.edu/current-students/</a>). In addition to a checklist for all new graduate students, that webpage includes sections with additional steps to take if you are a new international student, student with a disability, student veteran, student with children, or student with funding.

#### Advising & Mentoring

Advising relationships are a central part of academia, important to both the experience and development of students and faculty members alike (<a href="https://policy.wisc.edu/library/UW-1232">https://policy.wisc.edu/library/UW-1232</a>).

GPCI is a direct-admit program, students are required to secure an advisor prior to applying for admission. Only applicants that declare an advisor in their application materials will be reviewed. GPCI encourages prospective students to review the GPCI website to review our trainer list (<a href="https://ictr.wisc.edu/graduate-program-in-clinical-investigation/#">https://ictr.wisc.edu/graduate-program-in-clinical-investigation/#</a>). Faculty who are not currently listed as trainers may be eligible to apply for trainer status by contacting the Faculty Director.

The advisor has two main roles: 1) to assist the student in acquiring the highest possible level of knowledge and competence in the field, and 2) to help the student convene the committee that will determine whether the student has performed at an acceptable level in each degree milestone. Additional roles for the advisor may include tracking student's degree process, assisting with course selection and planning the student's academic path, and helping them identify additional possible research mentors, committee members, and research opportunities.

GPCI Students are often full-time health professionals who are earning their MS or PhD part-time. Neither GPCI nor ICTR provides funding to students during graduate studies. Students without faculty appointments usually earn stipend, benefits, and tuition remission through graduate assistantships—Teaching Assistant, Research Assistant, or Project Assistant—through their advisor's funding or major home department.

Students are directly admitted into the GPCI with an advisor. A student's advisor should be a tenure-track, or tenured faculty member in the program whose expertise and project/research interests match closely with those that you intend to acquire. To learn more about the faculty in your program, consider consulting the following sources:

- GPCI program website (https://ictr.wisc.edu/graduate-program-in-clinical-investigation/)
- Faculty publications (https://pubmed.ncbi.nlm.nih.gov/?otool=uwisclib)
- Students currently in a prospective advisor's group/lab

Additionally, students may wish to have a discussion with a prospective advisor. Below are some questions to consider asking in this discussion, though it is not a complete list. A student should spend some time identifying what is most important to them in their graduate training and ask questions accordingly.

Through this interactive, self-paced micro-course, students learn about the characteristics of functional and dysfunctional relationships with faculty advisors, strategies for communicating effectively and aligning expectations, as well as program grievance processes and Hostile and Intimidating Behavior resources. Completion of the micro-course takes about 20 minutes and is optional but encouraged for all graduate students.

No faculty member is obligated to accept a student's request to serve as advisor, though invitations are often accepted unless the faculty member judges that a different advisor would better serve the student's needs. As the advisor-student relationship is one of mutual agreement, it may be terminated by either party. If the student would prefer collaborating with a different advisor, the student should discuss this with the new prospective advisor to seek the change.

**Students are required** to meet with their advisor annually and complete the "Annual Student Progress Form" during the spring term. This form will be sent to individual students in the spring term by the Graduate Program Manager. Failure to return this completed form will result in an academic hold being placed on the student's record.

If you change your advisor, you must notify your Graduate Program Coordinator and follow any related procedures.

#### Master's Degree

All students in Clinical Investigation are responsible for keeping aware of the following requirements to complete the degree. The Graduate School's Academic Policies and Procedures essential information regarding general university policies (https://grad.wisc.edu/academic-policies/).

For all current requirements to complete degree requirements (e.g., credits, courses, milestones, learning outcomes/goals, etc.) refer to GPCI's <u>Graduate Guide</u>. Note that the current <u>Guide</u>, one will be viewing the current year's version. To find past versions of program requirements, see the <u>Guide Archive</u> to search for program and the year matriculated into graduate school.

#### Timeline & Deadlines

The Graduate School maintains a list of steps to complete the master's degree, including deadlines and important things to know as the student progresses toward graduation (https://grad.wisc.edu/current-students/masters-guide/).

#### Sample MS Course Plan

	Fall		Spring		Summer	
Required Courses (12 credits)	BMI 541 (3) PHS 797 (3) Human Onc 750 (1)	T/TH: 1-2:15 PM (online/person) T/TH: 4:30-5:15 PM W: 4:30-6:30 PM	BMI 542 (3)	T/TH: 4:45-7 PM	NSG 705 (2)	T: 4-7 PM
RCR/Ethics (1 credit)	OBS&GYN 955 or MED PHYS 701 or SURG SCI 812 or	T: 9:00-10:40 AM TH: 8:50-10:45 AM TH: 3-5:00 PM	OBS&GYN 956 or ONC 715 or PHARM 800	T: 8:30-10:10 AM TH: 3-5:00 PM T: 5-7:00 PM	NSG 802 (1)	M/TH: 9-11 AM
Clinical Translational Science (3 credits)	BMI 544 (3) or	T/TH: 4-5:30 PM	PHS 709 (3) or BMI 773** (3)	T: 4-6 PM M/W: 10:30-11:45 AM		
Research Design (3 credits)	NSG 804 (3) or EDPYSCH 771 (3) or BMI 567 (3) or BMI 771 (3) or BMI 775 (3) or	M: 4-6:45 PM T/TH: 2:30-3:45 PM W/F: 1-2:20 PM M/W: 2:30-3:45 PM T/TH: 1-2:15 PM	BMI 552 (3) or BMI 651 (3) or BMI 741 (3) or BMI 841** (3) or CURRIC 719 (3) EDPSYCH 761 (3)	M/W: 4-6 PM M/W: 2:30-3:45 PM M/W: 2:30-3:45 PM T/TH: 2:30-3:45 PM T/TH: 1:30-2:45 PM T/TH: 9:30-10:45 AM		
Research Credits	edits MED 990		MED 990		MED 990	

\*Scheduling times might change

\*\*Taught even years

#### Thesis & MS Defense

The MS thesis comprises a technical report or a traditional thesis on the project approved by the student's 3-member MS committee. To fulfill this requirement, students complete an independent research project, and write and defend this work with their 3-member MS committee.

A technical report addresses a scientific problem or project of a substantial nature. The general requirement for the report is that it treats some significant scientific problem or project in sufficient depth to contribute to clinical or translational knowledge. The technical report should be conducted and prepared in a manner suitable for publication in a national academic journal. A publishable/published descriptive literature review by itself is not adequate to fulfill this requirement. A traditional thesis involves more substantial research than a technical report. Students prepare their thesis or technical report using the guidelines for writing a scientific report available in the UW Writing Center handbook (<a href="https://writing.wisc.edu/handbook/">https://writing.wisc.edu/handbook/</a>). Briefly, a scientific report includes six basic elements: title, abstract, introduction, methods, results, and discussion. (<a href="https://grad.wisc.edu/current-students/masters-guide/">https://grad.wisc.edu/current-students/masters-guide/</a>).

Master's committees advise and evaluate satisfactory progress, evaluate a thesis, and/or sign a degree warrant. For general guidance from The Graduate School on the role and composition of committees as well as an online tool to determine if your committee meets minimum requirements (<a href="https://policy.wisc.edu/library/UW-1201">https://policy.wisc.edu/library/UW-1201</a>). The student's advisor chairs the committee and provides individualized guidance on how to select committee members.

After completing all degree requirements, students are responsible for scheduling their final MS Thesis Defense. The student's advisor and committee members must attend. In addition, students must their request final MS degree warrant at least 3-weeks prior to their scheduled MS defense by completing this online warrant request: <a href="https://uwmadison.co1.qualtrics.com/jfe/form/SV\_9M2A8L722NJ1zis">https://uwmadison.co1.qualtrics.com/jfe/form/SV\_9M2A8L722NJ1zis</a>.

During the MS Thesis Defense, the student's advisor is responsible for leading the thesis defense and supporting the student throughout the process. The MS Thesis Defense will last about 2 hours  $-\frac{1}{2}$  hour for your oral presentation of your thesis or technical report, 1 hour for questions by your committee, and  $\frac{1}{2}$  hour private discussion by the committee members. Committee members may ask questions at any time during the exam. The advisor will begin by asking the student to provide a brief background for the committee (i.e., BS degree, professional degree, work experience, and how you got interested in your research topic). The oral presentation should be concise and factual. The introduction and review should be brief, and presentation should emphasize research methods and results. The committee is primarily interested in the student's own work. Questions by the committee during the presentation are for clarification purposes only. The oral presentation might be "open" to the public.

Following the formal presentation, committee members will ask extensive questions referring to specific parts of the thesis and oral presentation. The major advisor functions as the moderator and every committee member will be allowed sufficient time to question the student.

Next, the student will be asked to briefly summarize the most important new findings of your thesis research and you will be asked to leave the room. The committee will focus on evaluating the student's thesis research, defense, and overall record in a private closed-door session. There should be time for the committee to consider each of these items, and, if necessary, to formulate instructions to be implemented by advisor. The committee will pay particular attention to whether the student's own contributions are clearly delineated and thoroughly documented in the thesis. At the conclusion of this private closed-door session, the committee will decide whether the student has passed or failed the thesis defense and subsequent efforts that must be undertaken by the student to complete their degree requirements. Finally, the student will be invited to rejoin the meeting and the advisor will let the student know the outcome. The student is likely to have corrections to make in the thesis report. It is important that the advisor keep track of verbal comments. Any committee member that requires a change before they sign the warrant must make that requirement clear.

#### **Doctoral Degree**

The Doctor of Philosophy is the highest degree conferred at UW-Madison. GPCI's PhD is a research degree granted on evidence of distinctive attainment in a specific field with an emphasis on the science of translation. PhD candidates must demonstrate an ability for independent scientific investigation, as evidenced by a dissertation presenting original research or creative scholarship with a high degree of literary skill. All students in the Clinical Investigation Graduate Program are responsible for being aware of the requirements to complete the degree.

For all current requirements to complete the degree (e.g., credits, courses, milestones, and learning outcomes/goals) see the program's page in the <u>Graduate Guide</u>. Note the current <u>Guide</u> posted online is the current year's version. To find past versions of program requirements, see the <u>Guide Archive</u> and search for program and the year that would be referenced.

#### Timeline & Deadlines

The Graduate School maintains a list of steps to complete the PhD degree, including deadlines and important things to know as the student progress toward graduation (<a href="https://grad.wisc.edu/current-students/doctoral-guide/">https://grad.wisc.edu/current-students/doctoral-guide/</a>).

Full time PhD students must pass their preliminary exam within four years of matriculation and part-time PhD students must pass their preliminary exam within six years of matriculation.

Dissertators are expected to pass their final oral examination and deposit their dissertation no later than five years from the date of passing their preliminary exam.

#### Sample PhD Course Plan

	Fall		Spring		Summer	
Required Courses (15 credits)	BMI 541 (3) PHS 797 (3) Human Onc 750 (1)	T/TH: 1-2:15 PM (online/person) T/TH: 4:30-5:15 PM W: 4:30-6:30 PM	PHS 709 (3) BMI 542 (3)	T:4-6:00 PM T/TH: 4:45-7 PM	NSG 705 (2)	T: 4-7 PM
RCR/Ethics (1 credit)	OBS&GYN 955 or MED PHYS 701 or SURG SCI 812 or	T: 9:00-10:40 AM TH: 8:50-10:45 AM TH: 3-5:00 PM	OBS&GYN 956 or ONC 715 or PHARM 800	T: 8:30-10:10 AM TH: 3-5:00 PM T: 5-7:00 PM	NSG 802 (1)	M/TH: 9-11 AM
Clinical Translational Science (3 credits)	BMI 544 (3) or	T/TH: 4-5:30 PM	BMI 773** (3)	M/W: 10:30-11:45 AM		
Research Design (6 credits)	NSG 804 (3) or EDPYSCH 771 (3) or BMI 567 (3) or BMI 771 (3) or BMI 775 (3) or	M: 4-6:45 PM T/TH: 2:30-3:45 PM W/F: 1-2:20 PM M/W: 2:30-3:45 PM T/TH: 1-2:15 PM	BMI 552 (3) or BMI 651 (3) or BMI 741 (3) or BMI 841** (3) or CURRIC 719 (3) EDPSYCH 761 (3)	M/W: 4-6 PM M/W: 2:30-3:45 PM M/W: 2:30-3:45 PM T/TH: 2:30-3:45 PM T/TH: 1:30-2:45 PM T/TH: 9:30-10:45 AM		
Grant Writing			CS&D 900 or S&A PHARM 701	M: 12-1:00 PM TH: 2-3:40 PM		
Research Credits	s MED 990		MED 990		MED 990	

<sup>\*</sup>Scheduling times might change

#### Committee

Doctoral committees advise and evaluate satisfactory progress, administer preliminary and final oral examinations, evaluate a thesis or dissertation, and/or sign a degree warrant. For general guidance from the Graduate School on the role and composition of committees as well as an online tool to determine if the committee meets minimum requirements, see this policy page: <a href="mailto:policy.wisc.edu/library/UW-1201">policy.wisc.edu/library/UW-1201</a>. In addition to this general guidance, GPCI requires five committee members, including the student's advisor. Your advisor should provide individualized guidance on how to select committee members. An advisor is sometimes referred to as the major professor, mentor, or trainer, and usually serves as chair of a student's final examination committee.

<sup>\*\*</sup>Taught on even years only

Preliminary Exam Written Proposal & Oral Presentation (Dissertator qualifying examination)

The preliminary examination (prelim) consists of a written research proposal and oral presentation. Students are expected to have completed required coursework and at least 35 credits prior to scheduling their preliminary examination. The prelim is a comprehensive assessment of a student's knowledge and skills acquired through the graduate curriculum and abilities to apply clinical and translational research concepts to a field of study. GPCI encourages students to meet with their advisor when preparing for the Preliminary Examination. To review the Graduate School's preliminary examination requirements and deadlines: <a href="https://grad.wisc.edu/current-students/doctoral-guide/#complete-your-preliminary-examinations">https://grad.wisc.edu/current-students/doctoral-guide/#complete-your-preliminary-examinations</a>.

The written research proposal subject matter will align with the student's anticipated dissertation research and is a comprehensive assessment of the student's knowledge and skills acquired through the graduate curriculum and abilities to apply clinical and translational research concepts to a field of study. The primary objectives of the preliminary exam are to:

- Determine whether the student can independently identify an important and novel scientific problem and provide feasible step by step research strategies to address the problem;
- Assess the student's ability to recognize barriers in the long-range planning of a research proposal and present methods of adaption to overcome such barriers;
- Determine whether the student can develop a logical approach to a specific problem (i.e., which experiment comes first, second, etc...) or research question and to gauge the anticipated timeline for the proposed research project;
- Determine whether the student can present the proposal with clarity in written and oral form; and
- Determine whether the student can defend the proposal and effectively respond to criticism and questions.

Students circulate the written proposal to the student's degree committee at least two weeks prior to the oral exam. Students are allowed to submit an NIH-style grant proposal to the degree committee for their prelim. The program recommends an approximate length for the written proposal at 30 pages using 12-point double-spaced type. This excludes tables, figures, appendices, and references.

Specific Aims (recommended: 1 page): 1) state the broad long-term objectives; and 2) describe concisely and realistically what the specific research is intended to accomplish and any hypotheses to be tested.

Background & Significance (recommended: 3-4 pages): 1) briefly summarize the required background from which to evaluate the proposal's significance and novelty; 2) critically evaluate existing knowledge; 3) specifically identify the gaps in knowledge that the project is intended to fill; and 4) state concisely the importance of the research described in by relating the specific aims to the broad long-term objectives.

Experimental Design & Methods (recommended: up to 25 pages): 1) out the experimental design and the procedures intended to accomplish the specific aims of the project; 2) detail the means by which the data will be collected, analyzed, and interpreted; 3) describe any new methodology and its advantage over existing methodologies; 4) discuss the potential difficulties and limitations of the proposed procedures and alternative approaches to achieve the aims; 5) provide a tentative sequence or timetable for the investigation; and 6) point out any procedures, situations, or materials that may be hazardous to personnel and precautions to be exercised.

Literature Cited (does not count toward total 30-page total): 1) each citation must include the title, names of all authors, book or journal, volume number, page numbers, and year of publication (use a consistent format); and 2) make every attempt to be judicious in compiling a relevant and current list of literature citations (it need not be exhaustive).

Figures & Tables (does not count toward total 30-page total): 1) the student will have the opportunity to present other figures and tables at the oral exam.

Human Subjects: 1) a student's research proposal must address the inclusion or exclusion of women, minorities, children, and special populations in human subjects are involved; 2) lack of this information will result in an immediate failure of the preliminary examination; and 3) a copy of completed IRB application materials should be included, if applicable.

The program suggests allotting two hours for the oral preliminary presentation and examination. This consists of an oral presentation (30-40 minutes in length) and a defense of the student's written proposal describing the research planned as a basis for the PhD dissertation. The oral presentation is made to the student's committee with includes five graduate faculty members, at least two of who are from GPCI faculty, including the student's advisor. After the examination, the committee will reach consensus on the student's performance and readiness for dissertator status.

The student is examined on details of the proposed work as well as on the underlying principles and concepts of the field. This written proposal or oral presentation should not be approached as draft documents. The committee will evaluate the student's research proposal on originality, appropriateness of methods and design, and clarity of presentation. The written proposal and oral presentation should demonstrate proficiency in conducting independent research.

Preliminary exam outcomes including passing, written revisions only, written revisions and new oral proposal examination, and fail. If the student passes their preliminary exam, their committee signs the preliminary warrant. If the student's committee requires written revisions, the committee notifies the Graduate Program Manager of this requirement and once those revisions have been made by the student. The signed prelim warrant will be submitted to the Graduate School after confirming that satisfactory revisions have been made. If the student is required to submit written revisions and repeat of the oral proposal examination, the student is required to notify the Graduate Program Manager and reschedule a new preliminary exam date. If the student fails their preliminary exam, the student discusses the committee's recommendations with the Graduate Program Coordinator and what next steps are available. If the preliminary exam is not successfully completed, students cannot continue in the GPCI PhD program.

Students advance to dissertator status and become PhD candidates after completing all requirements for the PhD and passing the preliminary exam. Dissertators must enroll in 3 credits of research per term (e.g., MED 990).

#### Dissertation & Final Oral Defense

A PhD in Clinical Investigations requires a minimum of 51 credits and successful defending of the student's dissertation (<a href="https://policy.wisc.edu/library/UW-1211">https://policy.wisc.edu/library/UW-1211</a>). PhD students have five years from the date of passing their preliminary exams to defend their dissertation (final examination) and submit their dissertation to the Graduate School.

A student's dissertation research project (topic) is a written report of the student's original contribution to scientific literature that was proposed in the oral preliminary exam and approved of by student's committee. The dissertation must be prepared according to Graduate School standards (<a href="https://grad.wisc.edu/current-students/doctoral-guide/">https://grad.wisc.edu/current-students/doctoral-guide/</a>). The Graduate School provides dissertation support (<a href="https://grad.wisc.edu/current-students/dissertation/">https://grad.wisc.edu/current-students/dissertation/</a>).

Students formally notify GPCI of their plan to defend their dissertation and graduate by completing a final warrant request (<a href="https://uwmadison.co1.qualtrics.com/jfe/form/SV\_9M2A8L722NJ1ziS">https://uwmadison.co1.qualtrics.com/jfe/form/SV\_9M2A8L722NJ1ziS</a>). The Graduate School requires that a student's warrant request be submitted 3-weeks prior to the student's schedule defense date. The student should submit their completed dissertation to their committee at least 4-weeks prior to their scheduled defense, or as allowed by their committee.

A student, in consultation with their advisor, should choose one of the following two formats to write their dissertation, a traditional format or a 3-paper research format.

Traditional Format	<ul> <li>Title Page</li> <li>Abstract (250 words or less)</li> <li>Acknowledgements</li> <li>Table of Contents (including a list of tables and figures)</li> <li>Introduction</li> <li>Background/Literature Review</li> <li>Specific Aims</li> <li>Methods</li> <li>Results</li> </ul>
	<ul><li>Results</li><li>Conclusions</li></ul>

	<ul> <li>Bibliography</li> <li>Appendices (including material such as extensive tables, questionnaires, and measurement protocols)</li> </ul>
Research Paper Format	<ul> <li>Title Page</li> <li>Abstract (250 words or less)</li> <li>Acknowledgements</li> <li>Table of Contents (including a list of tables and figures)</li> <li>Introduction and Literature Review</li> <li>Specific Aims</li> <li>Methods</li> <li>Manuscripts (formatted for the proposed journal)</li> <li>Conclusion</li> <li>Bibliography</li> <li>Appendices (including a detailed methods description, and materials such as extensive tables, questionnaires, and measurement protocols)</li> </ul>

The dissertation manuscript should be appropriate for publication in peer reviewed national or international journals. The manuscript should be ready for submission (or previously submitted) and follow the formats of the journals chosen by the student and advisor. The appendix must demonstrate the full development of the dissertation material and is constructed based on the guidance of the advisor and committee.

The program suggests allotting two hours for the student's oral defense presentation and final examination. This consists of an oral presentation (30-40 minutes) and a defense of the student's dissertation. Following the examination, the student's committee will meet for an executive session. To pass the final examination, the student must receive no more than one dissenting vote from their committee. A missing signature is considered a dissent.

Once the final warrant has been signed, it is submitted to the Graduate School. The student is required to upload a signed copy when submitting their final/corrected dissertation to ProQuest and complete their exit interviews. The student should review the Graduate School's degree conferral (<a href="https://grad.wisc.edu/documents/degree-conferral-payroll-end-dates/">https://grad.wisc.edu/documents/degree-conferral-payroll-end-dates/</a>) and dissertation deposit deadlines (<a href="https://grad.wisc.edu/deadlines/">https://grad.wisc.edu/deadlines/</a>).

#### Academic Exception Petitions (Course Waiver Request)

Students may qualify for Course Waivers if they demonstrate subject matter competency for certain courses in the curricula. A student's Course Waivers may be exempt from up to (6) units of study, if approved. If a student is granted a Course Waiver, they must satisfy the unit requirement by identifying and completing courses, with the approval of their program director or advisor (e.g., enrolling in additional MED 990-research credits to fulfill the Graduate School's degree credit minimum).

To determine your eligibility for a Course Waiver, we ask that you submit specific details for evaluation. Your request should present significant academic experiences, which have prepared you to meet most of the course objectives, concepts, and learning outcomes stated in the course description for the program course that you wish to waive.

Submit the following to request a Course Waiver Request:

- A completed and signed Course Waiver Form (request this form the Graduate Program Manager).
- Transcript(s) from your previous institutions (if not submitted with UW graduate application materials).
- Official syllabus, or course description per course.

#### Here is an overview of the evaluation parameters:

- Demonstration of academic or professional work that has direct equivalency to an approved program requirement.
- Course completed at an accredited higher education institution, with a grade of B or better.
- Course currency demonstrated by taking the course during the last two (2) years. Exceptions to the 2-year limit are made at the discretion of the Graduate Program Director.

Course Waiver Requests are initially reviewed by the Graduate Program Director before being discussed by the Curriculum Subcommittee's semi-annual meetings. Course Waivers requests are submitted to the Graduate Program Manager prior to the Curriculum Subcommittee's semi-annual meetings for review and approved/denied in a timely manner (e.g., Fall = 10/1, Spring = 3/1).

Keep in mind that some academic exceptions may need to be approved by the Graduate School. For further information about this, contact the Director of Academic Services.

#### Academic Progress & Misconduct

A student's continuation as a graduate student at UW-Madison is at the discretion of the program, the Graduate School, and the student's advisor. Any student may be placed on probation or dismissed from the Graduate School for not maintaining satisfactory academic progress, and this can impact your academic (https://policy.wisc.edu/library/UW-1218).

Students may be discipline or dismissed from the graduate program for any type of misconduct (academic, non-academic, professional, or research) or failure to meet program expectations regardless of their academic standing in the program. Disciplinary actions can range from reprimand, removal of funding, placement on academic probation, restitution, failure to advance PhD candidacy, withdrawal of admission offer, placement on leave, dismissal from the program, or denial or revocation of degree.

The UW has established policies governing student conduct, academic dishonesty, discrimination, and harassment/abuse as well as specific reporting requirements in certain cases. If a student learns about, observes, or witnesses misconduct or other wrongdoing they may be required to report that misconduct or abuse.

Degree and Dissertation Deposit Deadlines:	https://grad.wisc.edu/deadlines/
Graduate School Policy & Procedure: Academic	https://policy.wisc.edu/library/Info-112
Misconduct	
Office of Student Conduct & Community	https://conduct.students.wisc.edu/academic-misconduct/
Standards	
Nonacademic Misconduct	https://conduct.students.wisc.edu/nonacademic-misconduct/
Student Nonacademic Disciplinary Procedures	https://policy.wisc.edu/library/Info-113
Research Misconduct	https://research.wisc.edu/integrity-and-other-requirements/research-
	misconduct/
Conflict of Interest	https://policy.wisc.edu/library/UW-4001
Responsible Conduct of Research	https://research.wisc.edu/integrity-and-other-requirements/responsible-
	conduct-of-research-rcr/

#### MSTP MD/PhD

Starting in 2023, Graduate Program in Clinical Investigation (GPCI) and the Medical Scientist Training Program (MSTP) joined to combine clinical medicine with graduate training in clinical investigation. Through team-research experience and coursework, MSTP students gain exposure to faculty from a variety of scientific disciplines to prepare them to direct or contribute to patient-oriented clinical research teams.

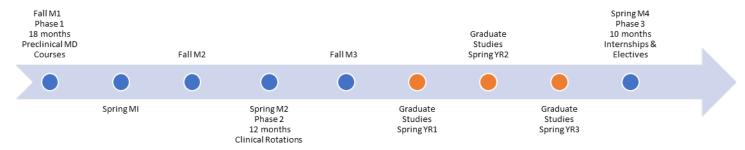
The MD/PhD Program's goal is to create a combined physician and clinical investigator who will make major contributions to human health. The PhD in Clinical Investigation is an applied degree in which students focus on the creation of novel methodologies and tools for translational science within the context of a specific biomedical discipline.

At the completion of the MD/PhD Program, students leave with an MD/PhD degree. MD/PhD students complete 2.5 years of Medical School and then begin their PhD training in Clinical Investigation.

MD/PhD students apply to change from the Cellular and Molecular Biology Graduate Program (CMB) to the Graduate Program in Clinical Investigation by October 1<sup>st</sup> of Fall M3 of "Phase 2: Clinical Rotations" (https://grad.wisc.edu/documents/change-program/) via their Graduate Student Portal (in the MyGradPortal in MyUW).

GPCI is a direct admit program and does not provide stipends or tuition remission, students are required to have secured a primary faculty advisor and have discussed appointments prior to applying to changing PhD programs and have identified a research project to start immediately.

#### MD/PhD Timeline



#### MD/PhD Course Plan Sample

YR1	Spring*		Summer*		Fall*	
Required Courses	BMI 542 (3)	T/TH: 4:45-7 PM			BMI 541 (3)	T/TH: 4:45-7 PM
RCR/Ethics (1 credit)	ONC 715 (1) OR other	TH: 3:00-5 PM	NSG 802 (1)	M/TH: 9-11 AM		
Research Credits	MED 990		MED 990		MED 990	
<u>YR2</u>	Spring		Summer		Fall*	
Required Courses	BMI 773** (3)	M/W: 10:30- 11:45 AM			BMI 544 (3)	T/TH: 4-5:30 PM (conflict)
Research Credits	MED 990		MED 990		MED 990	
<u>YR3+</u>	Spring (prelimina	ary exam)	Summer		Fall*** (defense)	
Research Credits	MED 990		MED 990		MED 990	

#### Minor in Clinical Investigation

PhD students in Engineering, Nursing, Veterinary Medicine, and other disciplines may want to complete a minor in Clinical Investigation as a way to learn about applications of science to clinical disciplines (<a href="https://ictr.wisc.edu/program/minor-in-clinical-investigation/">https://ictr.wisc.edu/program/minor-in-clinical-investigation/</a> and <a href="https://guide.wisc.edu/graduate/institute-clinical-translational-research/clinical-investigation-doctoral-minor/#requirementstext">https://guide.wisc.edu/graduate/institute-clinical-translational-research/clinical-investigation-doctoral-minor/#requirementstext</a>).

#### **Enrollment Requirements**

Students are responsible for following Graduate School policies related to course enrollment requirements and limitations.

Adding / Dropping Courses	https://grad.wisc.edu/documents/add-drop/
Auditing Courses	https://policy.wisc.edu/library/UW-1224
Canceling Enrollment	https://grad.wisc.edu/documents/canceling-enrollment/
Continuous Enrollment Requirement for Dissertators	https://policy.wisc.edu/library/UW-1204
Enrollment Accountability	https://grad.wisc.edu/documents/enrollment-accountability/
Minimum Enrollment Requirements	https://policy.wisc.edu/library/UW-1208
Add/Change Program	https://grad.wisc.edu/documents/change-program/

#### **Professional Development**

The Graduate School develops and curates a wide variety of resources for professional development, including a tool to assess your skills, set goals, and create a plan with recommended activities on campus (e.g., the popular "Individual Development Plan" or IDP) as well as programming to help you explore careers, prepare for a job search, build your network and learn from alumni, manage projects, communicate about your research, and much more.

DiscoverPD helps master's and doctoral students at UW-Madison advance their academic and professional goals with customized recommendations based on a skills self-assessment. The 400+ professional development recommendations available in the DiscoverPD database are available in a range of formats to best meet your diverse needs, including inperson, virtual, asynchronous, and synchronous opportunities. The Graduate School communicates professional development opportunities through an e-newsletter, *GradConnections*, that all graduate students receive at their wisc.edu email. Graduate students in traditional graduate degree programs receive the newsletter weekly during the academic year and every other week in the summer. Graduate students in online degree programs receive the newsletter every other week during the academic year and monthly during the summer (<a href="https://grad.wisc.edu/professional-development/">https://grad.wisc.edu/professional-development/</a>).

#### Mental Health Resources

University Health Services (UHS) is the primary mental health provider for students on campus (<a href="https://www.uhs.wisc.edu/">https://www.uhs.wisc.edu/</a>). UHS has a variety of Mental Health Services (MHS) to address student needs (<a href="https://www.uhs.wisc.edu/mental-health/">https://www.uhs.wisc.edu/mental-health/</a>).

To initially connect to MHS, students schedule an Assess Consultation phone screening. Scheduling can be done by calling the MHS reception desk at 608-265-5600 (option 2) or logging into MyUHS for 24-hour web appointment booking (https://myuhs.uhs.wisc.edu/login\_dualauthentication.aspx).

Tuition and fees cover UHS service costs.

#### **Grievance Process**

Each college or program on campus has a grievance process that students can use to address other concerns regarding their experience in the program (<a href="https://guide.wisc.edu/graduate/institute-clinical-translational-research/clinical-investigation-phd/#policiestext">https://guide.wisc.edu/graduate/institute-clinical-translational-research/clinical-investigation-phd/#policiestext</a>).

Incident Reporting (Hate, Bias, Sexual Assault, Hazing, Students of Concern, Bullying)

Hostile and intimidating behavior, sometimes by the shorthand term "bullying" is defined in university policy as "unwelcome behavior pervasive or severe enough that a reasonable person would find hostile and/or intimidating and that does not further the University's academic or operational interests" (<a href="https://hr.wisc.edu/hib/">https://hr.wisc.edu/hib/</a>). Students who feel they have been subject to HIB are encouraged to review the informal and formal options on the "Addressing HIB" tab of this website.

The Dean of Students Office maintains a portal to report incidents of hate, bias, sexual assault, hazing, dating/domestic violence, stalking, missing students, and students displaying other concerning behaviors at UW-Madison (https://doso.students.wisc.edu/report-an-issue/).