

GSBS Cancer Biology Program Candidacy Exam Information

Petitioning for Candidacy

Before petitioning for candidacy, you must be in good academic standing and have completed the following requirements:

- Three tutorial rotations (or two with an approved waiver for the third)
- GS21 1017: Foundations of Biomedical Research – GSBS Core Course
- GS21 1051: Ethical Dimensions of the Biomedical Sciences
- Two online ethics modules, namely:
 - Responsible Authorship and Publication
 - Data Acquisition and Management
 - Instructions for completing the modules will be emailed during the Spring semester to all students who completed the Ethics course from the previous Fall term.
- A course that satisfies the GSBS scientific writing requirement:
 - GS21 1152: Scientific Writing (most common for CBP students)
 - GS03 1111: Scientific Writing for Grant Proposals
 - GS04 1811: G&E Scientific Writing
 - GS07 1092: Topics in Microbiology and Infectious Diseases
- CBP-specific pre-candidacy course requirements:
 - GS04 1235: Basic and Translational Cancer Biology – CBP Core Course
 - **Note:** GS04 1813: History of Biology and Cancer Science is a CBP course requirement for students who joined the program before Spring 2026. Because it is offered every other Spring semester, completion of the course is not required to petition for candidacy.



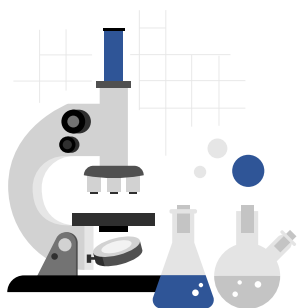
You must obtain approval from your GSBS Advisory Committee, which typically occurs during the Second Committee Meeting. To petition with GSBS, complete the “*Petition for the PhD Examination, On-Topic*” form found on the Forms Page of the GSBS Website, then submit to Bunny Perez at lourdes.v.perez@uth.tmc.edu. The form includes the following components:

- Advisory Committee Signature Page
- Dissertation Summary (Specific Aims Page)
- Student Attestation regarding PhD Candidacy Exam Proposal
- Student Code of Conduct Acknowledgment and Pledge Signed by Student
- PhD Examination Committee Form

Below are guidelines from the GSBS website regarding the timeline for petitioning:

- Students that first enrolled in the Fall semester must petition for candidacy no later than August 31 of their second year of enrollment.

- **Note:** Communicate with GSBS if you need to request an extension for your petition for candidacy.



- The petition must be approved by the Academic Standards Committee (ASC), which meets on the second Wednesday of the month.
- The deadline to submit items for consideration by the ASC is 12:00 PM (noon) on the first Wednesday of the month (i.e., one week before the ASC meeting).
- Students will receive an email when the candidacy exam petition has been approved by the ASC. Please allow at least two weeks after the meeting for processing.

Forming an Exam Committee

The composition of exam committees must comply with the following general GSBS guidelines:

- The PhD Examining Committee consists of 5 members, with at least 2 who have not served on the student's Advisory Committee.
- The advisor (chair of the student's Advisory Committee) may not serve in any capacity on the Examining Committee and is not permitted in the exam room.
- The Examining Committee Chair must be a member of the student's Program.
- At least one member's research **must** lie outside the student's major discipline.
- Students with an approved Second Area of Research Concentration should have at least one member from that program serve as a member of the Examining Committee.
- The spouse, domestic partner, parent, or child of the advisor may not serve in any capacity on the Examining Committee.
- Individuals outside the GSBS Faculty may serve on a student's committee when their particular areas of expertise are not represented on the GSBS Faculty, but there may be no more than two such members on the committee. Students must submit an NIH format biosketch for all proposed members who are not GSBS faculty.
- Faculty with a terminal MS or SMS degree may serve on an Examining Committee only if the faculty member has specific relevant expertise not found among available GSBS members who hold a doctorate, and a written justification is provided to the Academic Standards Committee along with the committee composition form.

CBP adheres to the GSBS guidelines with the added requirement that at least 2 members should be selected from CBP faculty. The Exam Chair must be a CBP faculty member.

Candidacy Exam Format

The CBP Candidacy Exam consists of three components:

- On-Topic Written Proposal (**due 2 weeks prior to exam day**)
- Breadth of Knowledge Response (**due 2 weeks prior to exam day**)
- Oral Presentation (**on exam day**)



The written proposal should follow the format of the research section in an NRSA F31 Fellowship Application:

- 1 page for Specific Aims
- 6 additional pages for Research Strategy (these page limits do not include the Bibliography/References section)
 - **Note:** Other components of the F31 are not needed
 - **Background/Significance:** background information about the key elements of your project (i.e., specific pathways, cellular processes, proteins, disease context); broader context of your proposal, explain what gap in knowledge you will fill and how this will move the field forward.
 - **Innovation:** concise summary of novel ideas, technical innovations, model systems, etc. that make your project unique.
 - **Approach:** detailed description of experimental strategies, including the overall rationale, techniques, any preliminary data, expected outcomes, and plans for statistical analyses. Be sure to also discuss potential problems and alternative approaches.
- Margins should be 0.5" or greater, and final font size should be Arial 11-point font (or larger). Smaller font sizes may be used for figures; however, they must be clear and legible.

Deciding on a breadth of knowledge question is a dynamic conversation between you and your Exam Chair. Below is a workflow to deciding upon a specific breadth question and completing your response:

- **At least six weeks prior to your exam date:** the student will contact the Exam Chair to discuss and agree on 3 "areas of breadth" that are distinct from their dissertation research.
 - **Note:** "Distinct" does not necessarily mean "unrelated" to your dissertation research. It is recommended that you choose topics that you will gain useful insight from.
- **At least four weeks prior to your exam date:** the Exam Committee will provide the student with questions that fall into the three areas of breadth. The student will select 1 question to respond to in a 3-page response (similar to a mini-review article).
- **Two weeks prior to your exam date:** the student will submit their on-topic proposal and breadth of knowledge response to the entire Exam Committee for evaluation and Bunny Perez at lourdes.v.perez@uth.tmc.edu for a Turnitin Plagiarism Evaluation.

On the day of your candidacy exam, you will give a 45-minute presentation on your proposal, with key aspects of your written proposal included:

- **Background:** provide relevant background information for your project (i.e., specific pathways, cellular processes, proteins, disease context)
- **Gap in Knowledge:** identify the question you seek to address with your research.



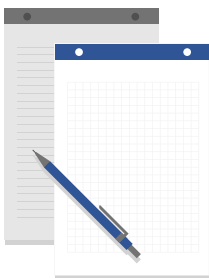
- **Premise/Hypothesis:** outline previous publications and preliminary data that contribute to your central hypothesis.
 - **Note:** The premise can include data from relevant publications, previous data from your lab, and your own preliminary data.
- **Specific Aims:** outline your aims/sub-aims as included in your written proposal.
- **Research Strategy:** provide the rationale for your workflow of experiments for your aims and discuss expected results. Alternative approaches can also be addressed; however, your committee may ask you to identify more alternatives during Q&A session.
 - **Note:** Avoid text-heavy and busy slides by incorporating figures for workflows and strategically utilizing slide animations.
- **Summary/Conclusion:** briefly summarize the key points of your proposal and provide a graphic for your working model.

After your presentation, your Exam Chair will facilitate questions from the Exam Committee. There will be at least 2 rounds of questions. Common question types include:

- Biological and theoretical concepts related to your proposal (cellular pathways, oncogenes/tumor suppressor genes related to your cancer type, hallmarks of cancer etc.)
- Scope and significance (“Why is this an important problem?”)
- Rationale (“Why did you pick transcription factor x, and not y?”)
- Scientific methods (fundamental principles, pros and cons)
- Details of experimental outcomes (raw data, analyses, statistics)
- Limitations of your proposal and alternative approaches

Results of the Candidacy Exam

Following the question session, your Exam Chair will ask you to leave the room so that the Exam Committee can determine your exam result. Your exam outcome is not a grade and has no impact on your chances to obtain future funding. The possible outcomes are described below:



- **Unconditional Pass:** The Exam Committee is satisfied with the written and oral components of your Candidacy Exam. You are done!
- **Conditional Pass:** The Exam Committee has identified a few areas for improvement before granting an “Unconditional Pass.” They will ask that you address their concerns (i.e., revise your written proposal, expand your breadth of knowledge response, polish your presentation)
- **Re-examination:** The Exam Committee has identified major issues with your written proposal and/or oral presentation. You will be asked to re-take the exam after 3-6 months.
 - **Note:** This outcome for the Candidacy Exam is highly unlikely!

Be sure to provide your Exam Chair and Exam Committee with the “*Results of the PhD Candidacy Exam*” and “*Evaluation of the Candidacy Exam Performance*” forms found on the Forms Page of the GSBS Website, then submit to GSBS at gsbs.reports@uth.tmc.edu.

Helpful Resources

- **GSBS Website Helpful Information Page:**
<https://gsbs.uth.edu/academics/candidacy-exam#TID-995aeed5-13ab-4fca-b3e7-baa13c6a8bc3-5>
- **GS21 1152: Scientific Writing:** the proposal you prepare for Scientific Writing is a valuable template for your Candidacy Exam written proposal, even if your project has changed directions.
- **NIH NINDS Writing a Research Strategy Page:**
<https://www.ninds.nih.gov/funding/preparing-your-application/preparing-research-plan/writing-research-strategy>
- **Fellowship Instructions for NIH and Other PHS Agencies (Pages 60-63):**
<https://grants.nih.gov/grants/how-to-apply-application-guide/forms-h/fellowship-forms-h.pdf>
- **GSBS AMBR Mock Candidacy Exams:** AMBR assists students in forming a mock candidacy exam session by contacting requested faculty and students and setting up meeting details.
- **Post-candidacy CBP Students!**

