# PhD in Translational Health Sciences (THS) A Guide to Planning the Dissertation Defense and Preparing for Graduation

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# School of Medicine & Health Sciences

THE GEORGE WASHINGTON UNIVERSITY



# PhD in Translational Health Science (THS)

THE GEORGE WASHINGTON UNIVERSITY (GW)
SCHOOL OF MEDICINE AND HEALTH SCIENCES (SMHS)
CLINICAL RESEARCH AND LEADERSHIP(CRL)

Washington, D.C.

A Guide to Planning the Dissertation Defense and Preparing for Graduation

This text acts as a guide for PhD in Translational Health Sciences (THS) dissertation defense and preparing for graduation within the Department of Clinical Research and Leadership (CRL) in the School of Medicine and Health Sciences.

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#### INTRODUCTION

The doctoral dissertation defense is the culminating experience of the PhD program. The candidate presents their research and responds to critical questions about the conceptual foundation, methods, results, and interpretation of findings from the committee members and outside readers. The candidate must demonstrate that they have conducted research that has scientific merit using rigorous research methods. The translation of knowledge to practice must be the central question addressed by the dissertation research. The candidate must demonstrate that s/he can critically synthesize literature in multiple domains relevant to the research topic, discuss the theoretical and translational importance of the topic, discuss, and demonstrate the principles of translational health science including team science, and discuss the relevance and implications of the findings for future research in the area. In all aspects, the research must demonstrate the core principles of translational health science including integration of different methodological approaches, team science, and the inclusion of stakeholder voices throughout the research process from problem definition to interpretation and dissemination of results. Unlike PhDs in other disciplines, research in translational health sciences is not a solitary endeavor but involves multi-disciplinary and collaborative relationships, skilled communication, systems thinking, and boundary crossing to solve challenging health care problems.

#### **DISSERTATION DEFENSE PROCEDURES**

The dissertation defense for the PhD in Translational Health Sciences includes some components that are required and other that are at the discretion of the dissertation chair. Those that are required are in regular type face; those that are at the chair's discretion are in italics.

#### **Defense Participants**

The dissertation defense is an open proceeding meaning any members of the GW community can attend and listen to the oral presentation and examination. Whether the audience is permitted to ask questions is at the discretion of the chair, in consultation with the candidate. The oral examination is conducted by the dissertation committee and led by the dissertation chair. Two readers who are knowledgeable about the topic and have not been directly involved in the dissertation research read and critique the written dissertation as well as participate in the oral questioning. Only the dissertation committee and chair vote on the outcome of the oral defense. The Director of Doctoral Research (DoDR) participates in the oral defense as an independent advocate and adjudicator on questions of procedure and protocol. If the DoDR is a committee member or chair of the dissertation, the Academic Program Director will serve in that role.

The brief guide, "Ensuring the quality and translational nature of the dissertation and oral defense for the PhD in translational health sciences," is provided in the appendices and should be shared and reviewed with readers in advance of the defense.

Title	Number	Attends	Asks	Reads/Critiques	Votes on
		Oral	Questions	Written	Outcome
		Exam.	at Exam.	Dissertation	of Exam.
Chair	1	✓	✓	✓	✓
Committee	3 max.	./	./	./	./
Member	S Max.	•	•	•	•
Readers	2	✓	✓	✓	
Audience	Many	✓			
Advocate	1	✓			

#### **Pre-examination Preparation**

The timeline below is a recommended guide to assist the candidate, Chair, and committee members in preparing for the defense. Gantt charts are provided in the appendices to assist students in planning each of the steps necessary for reasonably assuring graduation in the semester in which the student defends. The dates provided in the Gantt charts are the absolute latest at which tasks should occur if the student plans to graduate in the semester in which they defend. Students are strongly encouraged to defend their dissertations well in advance of these dates.

Students should be aware that university holidays will affect the last possible dates in different semesters. Students should consult the Gantt charts provided and confirm dates with the program administrator for their relevant semester.

- **7-9 Weeks Prior to Defense:** The Chair files the Request for Defense form (CP1), confirming to the DoDR the committee have all agreed that the written portion of the dissertation is acceptable to proceed to defense. No materials should be circulated to the Readers until the DoDR has counter-signed this form.
- **6-7 Weeks Prior to Defense:** The Chair and candidate identify the readers and invite their participation in the oral defense. Upon securing agreement to participate, file the Designation of Dissertation Readers form (CP2).
  - The Program Administrator and Conference Coordinator will work with the candidate and Chair to set up the virtual conference and provide links for the committee and public audience. The IMPACT team has developed a 'run of show' guide (below) that should be modified as appropriate by the Chair and candidate and shared with committee members, and readers.
- 5-6 Weeks Prior to Defense: The candidate provides the Program Administrator with the announcement details, which include the names of the candidate and chair, dissertation title, and a brief description in lay language. An example is provided later in this document. The Program Administrator posts the first announcement of the event.
- 4 Weeks Prior to Defense: The dissertation version that will be defended is circulated to all examination committee members and readers at least one month prior to the examination.
- 1-2 Weeks Prior to Defense: The Program Administrator posts the second announcement. The candidate, Chair, and Conference Coordinator should schedule a 'trial run' of the webinar within the next 10 days to ensure video and audio capabilities are functioning.
- 1 Week Prior to Defense: The candidate should prepare and send introductory remarks for the Chair. At this time, the Program Administrator will send a reminder announcement of the event to the committee members, readers, and wider community.
- Day of Defense: The Chair, candidate, and Conference Coordinator should plan to initiate the virtual meeting link 30 minutes prior to the start of the defense to allow time for the committee and readers to join and start promptly at the scheduled time.

7-9 weeks	6-7 weeks	4 weeks prior	3-4 weeks	2 weeks prior	1 week prior to	Day of
prior to exam	prior to exam	to exam	prior to exam	to exam	exam	exam
Submit Request	Latest time to	Circulate	Submit	Announcement	Reminder sent	Conference
for Dissertation	identify readers	version of	announcement	distributed with	to Committee &	Coordinator,
Defense form		dissertation to	information to	virtual meeting	Readers, and	Chair, and
	File Designation	be defended	Program	information	audience	candidate log in
Request to	of Dissertation		Administrator			to Zoom 30
Graduate form	Readers			Schedule trial	Candidate/chair	mins before
is filed				Zoom run with	review	start time
separately 6				Conference	introductory	
weeks prior to				Coordinator	remarks with	
end of semester					DoDR	

#### **Examination Procedures**

The letter/email/conversation from the chair inviting the committee and readers to participate in the oral examination should outline the expectations of these members. The Chair should review these expectations with the members on the day of the exam prior to starting the exam and the general audience being admitted.

The Chair has some latitude in how the oral examination proceeds. Some chairs prefer highly structured procedures while others design more open conversations. The overall goal of the oral defense is for the candidate to demonstrate the ability to respond critically and thoughtfully about the design and implementation of their study, limitations of the study and the impact of these on interpretation of results, and future implications of the research. In other words, the candidate demonstrates the highest levels of learning: creating, evaluation, analyzing.

A traditional approach may include: a brief presentation from the candidate, two rounds of questioning, the outside examiner questioning the candidate first, and each committee member questioning the candidate for 10-15 minutes per round. The dissertation Chair does not participate in the questioning.

A more contemporary approach may include: a 30-40-minute presentation from the candidate that is appropriate for the wider research community in attendance, followed by open questioning from the readers and committee, concluding questions from the chair.

In selecting a format, be mindful that these defenses are open to members of the wider community and a presentation that is too brief, too scant on details, or assumes the audience has already read the dissertation, will be less likely to be understood by the audience.

Regardless of the format chosen, the chair should cover the following issues with the committee at the time of invitation and again at prior to the start of the exam:

- 1. The format of questioning
- 2. The order of questioning
- 3. Time allocated for questioning
- 4. The time when the audience will leave the proceedings

#### Managing a Virtual Oral Dissertation Defense

In the PhD in THS program, oral examinations are conducted in virtually but may also have an in-person component. There is no expectation that the candidate, chair, committee, or readers be physically present, but all must have audio and video capabilities on their computer so that they can be both always seen and heard by others. The Program Administrator will work with the candidate to ensure the committee are able to log in to the virtual conference. It is recommended that the audience observes the candidate presentation and reader/committee questions only and does not ask questions. However, if the candidate and chair determine audience engagement is appropriate, they should work with the Program Director to coordinate this.

#### Order of Proceedings

- Opening the examination: The Director of Doctoral Research welcomes the audience, family members & friends of the candidate and announces that this is a final examination in partial fulfillment of the requirements of a PhD in Translational Health Sciences. The Director then introduces the chair of the research briefly and invites the Chair to introduce the candidate.
- <u>Chair's Welcome</u>: The Chair introduces the candidate briefly with information about their background, their study.
- <u>Candidate's Welcome</u>: The candidate thanks the Chair, thanks/welcomes the audience, and introduces the committee members and readers. This should be brief but sufficient, so the audience appreciates these individuals' expertise and role in the examination.
- <u>Candidate's Presentation</u>: The candidate presents their work using PowerPoint and other digital audio-visual material as appropriate. The length of the presentation should be between 20-30 minutes and no longer than 45 minutes. The length and content are determined between the Chair and the candidate but should reflect the following considerations:
  - Readers have read the written material but have not been engaged in the study so may need context for why methodological decisions were made
  - The audience may be knowledgeable about the conduct of research but new to issues in health sciences so will need some context relative to the gap in knowledge/practice the study attempts to fill
  - The concept of translational health sciences and the way in which the candidate's study advances the field of THS should play a central role in the presentation.
- The Oral Examination: At the conclusion of the presentation, the Chair thanks the candidate and calls on the readers and committee members to begin the questioning. The order of questioning is determined by the chair. Some chairs prefer to begin with the readers, others prefer to begin with committee members. In general, because of the Chair's close involvement in the design and implementation of the study, her/his questions should be minimal and asked when all other questioning is completed. The Chair should generally avoid answering questions for the candidate. However, this is a public defense, the goal of which is for the candidate to demonstrate mastery of the intellectual domain and their methodology, analytic procedures and interpretation. As such, the Chair is charged with ensuring the examination is rigorous, fair, and collegial. Questioning is not designed to 'trip' the candidate up and should reflect the goals

and spirit of translational research which is embodies the principles of team science, including integration of qualitative and quantitative methods, collaboration, and the inclusion of stakeholder voices. The Chair should determine to what extent collegial conversation and questioning among committee members and readers is part of the proceedings.

- Concluding the Public Portion of the Examination: When the questioning is completed, the
  Chair thanks the audience and the Conference Coordinator will cease the recording of the
  examination. The Conference Coordinator places the candidate in a 'waiting room'; the Chair,
  committee members, and readers are placed in a separate meeting room. The audience remains
  in the main meeting room.
- <u>Determining the Outcome of the Examination</u>: The Chair summarizes the merits of the dissertation and the student's performance at the examination for the committee members and readers. Each reader and dissertation committee member offer an evaluation of the dissertation and examination.
  - The examination committee decides separately on the outcome of the oral examination and the written dissertation. The outcomes of the oral examination are pass or fail. The outcomes of the written dissertation are pass, conditional pass, and fail. The decisions to pass the dissertation and the oral examination are reached by a majority vote. In rare cases, where there is a tie, the Director of Doctoral Research (or appointee) casts the deciding vote. The Chair records the committee's decision, and all members sign the Outcome of Written Dissertation and Oral Examination form (CP3). Readers may contribute to the discussion but do not cast a vote and do not sign the form. Generally, the readers stay in the meeting while the voting occurs in order to be present when the candidate is invited back into the meeting to hear the outcome. Whether the readers participate in the committee's deliberation and/or remain on the call during voting is at the discretion of the chair.
  - o For the dissertation decision of conditional pass, the committee should clearly detail what revisions need to be made. The examination committee must also decide which members wish to see and approve the revised dissertation, as well as the deadline by which revisions must be submitted. This information is included in the Outcome of Written Dissertation and Oral Examination form (CP3). By the specified date, the DoDR will send the Final Approval of Requested Dissertation Revisions form (CP4) to the dissertation chair and committee for signature, confirming that the required revisions have been made and are satisfactory.
  - The committee may decide to confer a decision of pass for the written dissertation when minimal, non-substantive revisions are required. In this case, the required revisions are clearly described on the outcome form along with a due date but it is not required that CP4 be completed.
- Announcing the Outcome to the Candidate: Once these matters have been decided, the candidate is invited back with the committee. The chair coordinates with the Conference Coordinator to readmit the candidate (or can do this themselves). The chair announces the results of the examination to the candidate, reviews any required revisions to the written

- dissertation and the timeframe for completing these. The dissertation chair submits Outcome of Written Dissertation and Oral Examination form (CP3). This form routes through all committee members, and DoDR for signature, and to the candidate for acknowledgement of receipt.
- <u>Announcing the Outcome to the Audience</u>: Once the Committee has concluded its work, they, the Readers, and the candidate rejoin the audience, where the Chair announces the result, and the audience can congratulate the candidate.

#### **GRADUATION PROCEDURES**

#### Final Tasks Related to the Written Dissertation

After successful dissertation defense, students recommended by faculty for conferral of the PhD in THS, begin the process of being cleared graduation. A student may not attend graduation if any of the following tasks are incomplete. A complete graduation checklist must be filed with the program.

#### Final Approval of Written Dissertation

After final approval of the written dissertation is received (Form CP4), the candidate must submit a copy of the dissertation to the program for final review of formatting. The student must complete all requested formatting changes prior to submitting the dissertation electronically for archiving.

In general, students should plan to about 4 weeks revising their dissertation and finalizing formatting after the dissertation defense and one additional week for final format review. Students have one week after receiving final format approval to deposit their dissertation electronically for archiving.

#### Electronic Archiving of the Written Dissertation

All students are required to submit an electronic version of their approved dissertation to the GW Himmelfarb Library Health Sciences Research Commons (HSRC) repository. The repository will provide graduates with a permanent URL, which allows the work to be Google searchable, and allows capture of usage metrics. Students submit a copy of the dissertation and the HSRC Non-Exclusive Distribution License to the Metadata and Scholarly Publishing Librarian, at <a href="mailto:hsrc@qwu.edu">hsrc@qwu.edu</a>

- Dissertations are deposited in: Health Sciences Research Commons > School of Medicine and Health Sciences > Clinical Research and Leadership > Doctor of Philosophy in Translational Health Sciences Dissertations
- o <a href="https://hsrc.himmelfarb.qwu.edu/smhs">https://hsrc.himmelfarb.qwu.edu/smhs</a> crl dissertations/

#### **Revising IRB Status**

Students must provide evidence that they have closed or revised the IRB status related to their study to the program administrator.

The student and chair should determine together how they will revise the IRB status of the project. Options include: i) closing the study; ii) revising the study to indicate change study personnel; or iii) revising other aspects of the study protocol to enable continued use of the data.

If the student is closing the study, go to <a href="http://humanresearch.gwu.edu/">http://humanresearch.gwu.edu/</a>, complete the Study Closure form to terminate their research and submit to the Principal Investigator (PI) (i.e., dissertation chair) for signature.

Closure forms are not required for exempt studies. An email to the program administrator should state the IRB project number and exempt status determination.

#### **Exit Survey and Contact Information**

Students must complete a program exit survey and provide the program administrator with contact information for follow up after graduation. The program administrator will also confirm with the student that they have completed all coursework, program requirements, and have no financial encumbrances.

#### Graduation, Commencement, and Recognition Reception

#### Important Dates in Applying for Graduation

Students may apply for graduation once they have scheduled their dissertation defense but no later than:

- Spring = 3rd week of March (March 15)
- Summer = 3rd week of July (July 15)
- o Fall = 3rd week of November (November 15)

To reasonably assure graduation in the same semester as the defense, students should understand the timeline and all required steps for graduation. Check the website, Guide to Dissertation Defense, and with the program administrator for dates.

Students will find the online application to graduate form in GWeb Instructions: <a href="https://registrar.gwu.edu/online-graduation-application-instructions">https://registrar.gwu.edu/online-graduation-application-instructions</a>

#### Clearance for Graduation

Clearance is verification that the student has completed all the necessary requirements to be awarded the degree. Students who fail to complete all graduation tasks by two weeks prior to the last day of the semester will not be cleared to graduate. **Students who are not cleared will not be allowed to attend graduation, commencement, or the recognition reception.** 

#### **Graduation Checklist**

A completed graduation checklist must be filed with the program not later than two weeks before the last day of the semester. Requirements include:

- o Dissertation deposited in Health Sciences Research
- o Revision of IRB status
- Completed Exit Survey
- Contact information
- o Completion of all course work

#### Commencement, Graduation, and PhD in THS Recognition Reception

These events occur at the end of the Spring Semester. Students who indicate on the graduation application that they plan to attend Commencement, will begin receiving communications regarding these events (tickets, parking, obtaining regalia, etc.). Regardless of these communications, **students not cleared to graduate will not be allowed to attend these events.** 

Before <u>diplomas</u> are ordered by Graduation Services, students are first cleared to graduate by the school. Diploma delivery is typically 6-8 weeks after awarding if mailed within the US, or 8-10 weeks for international mailing.

- Degree Conferral Dates:
  - Spring = Date of Commencement Ceremony
  - Summer = August 31
  - Fall = January 8

Graduates unable to complete all required activities in the semester in which they apply to graduate, will need to re-apply in next semester. Students must be continuously enrolled in the semester in which they apply to graduate.

#### **APPENDICES**

#### **SPRING SEMESTER GRADUATION**

NOTE: These are the absolute last dates for these steps to occur. The program strongly recommends you defend well in advance of the third week of February.

	Duration	Start	End		Nove	embe	er		Dece	embe	er		Jar	nuary			Febr	ruary			Ма	irch			Ap	oril			M	ay
Semester				1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3 4
Written Dissertation	≈4 w				х		х	х	х	х																				
Send WD for initial review	1d				f																									
Provide formatting feedback	4 w						m			f																				
Scheduling Dissertation Defense	≈9								х	х			х	х	х	х	х	х												
Complete request form (CP1)	1 w								F	f																				
Complete reader form(s) (CP2)	2 w												m	f																
Readers review dissertation	4 w														m	-	-	f												
Send required info to Admin	1 w												f																	
Secure Zoom link	1 w													m																
Dissertation Defense	≈8																	х	х	х	х	х	х	х	х	х				
Dissertation held	1d																	F												
CP3 form completed	1 w																	f	f											
Student submits revisions	4 w																			m	-	-	f							
Chair committee review	2 w																							m	f					
CP4 form completed	1 w																								f	F				
Graduation Tasks	≈3 w																					х	-	-	-	х	х	х	х	
Register to graduate	1 d																					15								
Send WD for final review	1w																									f	f			
Deposit final WD to library	5 d																										f	f		
Revise IRB & notify PD	2 w																										m	f		
Complete exit survey	1 d																												m	
Provide contact info	1 d																												m	
Confirm clearance w. Admin	1 d																												m	

F=Friday; M=Monday; 15=15<sup>th</sup> day of the month

#### **SUMMER SEMESTER GRADUATION**

NOTE: These are the absolute last dates for these steps to occur. The program strongly recommends you defend well in advance of the first week of June.

	Duration	Start	End		Febr	ruary	,		Ma	arch			Αŗ	oril			М	ay			Ju	ne			Jι	ıly			Aug	gust	
Semester				1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Written Dissertation	≈5 w						х	х	х		х	х																			
Send WD for initial review	1d						f																								
Provide formatting feedback	4 w							m				f																			
Scheduling Dissertation Defense	≈7												х	х	х	х			х	х											
Complete request form (CP1)	1 w												F	f																	
Complete reader form(s) (CP2)	2 w														m	f															
Readers review dissertation	4 w																300		-	f											
Send required info to Admin	1 w														f																
Secure Zoom link	1 w															m															
Dissertation Defense	≈8																			х	х	х	х	х	х	х	х	х			
Dissertation held	1d																			F											
CP3 form completed	1 w																			f	f										
Student submits revisions	4 w																					m	-	-	f						
Chair committee review	2 w																									m	f				
CP4 form completed	1 w																										f	F			
Graduation Tasks	≈3 w																									х	-	-	-	х	х
Register to graduate	1 d																									15					
Send WD for final review	1w																											f	f		
Deposit final WD to library	5 d																												f	f	
Revise IRB & notify PD	2 w																												m	f	
Complete exit survey	1 d																														m
Provide contact info	1 d																														m
Confirm clearance w. Admin	1 d																														m

F=Friday; M=Monday; 15=15<sup>th</sup> day of the month

#### **FALL SEMESTER GRADUATION**

NOTE: These are the absolute last dates for these steps to occur. The program strongly recommends you defend well in advance of the second week of September.

	Duration	Start	End		Ju	ne			Jı	ıly			Aug	gust		5	Septe	embe	r		Oct	ober		1	Vove	embe	er	]	Dece	mber
Semester				1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2		4	1	2	3 4
Written Dissertation	≈4 w				х	х	х	х	х																					
Send WD for initial review	1d				f																									
Provide formatting feedback	4 w					m	-	-	f																					
Scheduling Dissertation Defense	≈7w									х	х	х	х	х	х	х	х													
Complete request form (CP1)	1 w									F	f																			
Complete reader form(s) (CP2)	2 w											m	f																	
Readers review dissertation	4 w													m	-	-	f													
Send required info to Admin	1 w											f																		
Secure Zoom link	1 w												m																	
Dissertation Defense	≈8 w																х	х	х	х	х	х	х	х	х					
Dissertation held	1d																F													
CP3 form completed	1 w																f	f												
Student submits revisions	4 w																		m	-	-	f								
Chair committee review	2 w																						m	f						
CP4 form completed	1 w																							f	F					
Graduation Tasks	≈4 w																								х		х	х	х	
Register to graduate	1 d																								15					
Send WD for final review	1w																								f		f			
Deposit final WD to library	5 d																										f	f		
Revise IRB & notify PD	2 w																										m	f		
Complete exit survey	1 d																												m	
Provide contact info	1 d																												m	
Confirm clearance w. Admin	1 d																												m	

F=Friday; M=Monday; 15=15<sup>th</sup> day of the month

# ENSURING THE QUALITY AND TRANSLATIONAL NATURE OF THE DISSERTATION AND ORAL DEFENSE FOR THE PHD IN TRANSLATIONAL HEALTH SCIENCES

To graduate, the candidate completes a written dissertation and an oral examination regarding their dissertation research. Ensuring the quality of both written dissertation and the oral defense is the primary concern of the committee. The quality of the defense is enhanced by including readers who bring perspectives of those not involved in the research.

The dissertation research must address a tangible problem in contemporary healthcare and make a significant contribution to the knowledge base of translational health science. The dissertation topic and scope are agreed to by the candidate, chair, and committee members and must reflect excellence in application of theory/conceptual model, research methods, and team science.

The purpose of both the written dissertation and the oral examination is for the candidate to demonstrate the highest levels of learning: creating, evaluating, analyzing. The conduct of the research must have scientific merit and employ rigorous research methods. The translation of knowledge to practice must be the central question addressed by the dissertation research. In completing the dissertation and oral examination, the candidate should demonstrate the ability to critically synthesize literature in multiple domains relevant to the research topic, discuss the theoretical and translational importance of the topic, discuss and demonstrate the principles of

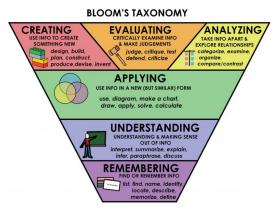


Figure Credit: Rawia Inaim / Kwantlen Polytechnic University as used in: Lewis, Beth. "Using Bloom's Taxonomy for Effective Learning." ThoughtCo, Aug. 28, 2020, www.thoughtco.com/blooms-taxonomy-the-incredible-

translational health science including team science, and discuss the relevance and implications of the findings for future research in the area. In all aspects the research must demonstrate the core principles of translational health science including integration of qualitative and quantitative methods, team science, and the inclusion of stakeholder voices throughout the research process from problem definition to interpretation of results, and where applicable, publication.

The core competencies this program expects students to achieve by the conclusion of their dissertation are:

- a) Create new knowledge through cross-disciplinary inquiry including: 1) Conduct systematic reviews of the literature to describe the evidence practice gap and 2) Utilize critical appraisals of the literature to inform translational research in health care.
- b) Appraise barriers and facilitators to translating research in practice and policy
- c) Communicate effectively across diverse setting and stakeholder groups to include 1) conflict management and resolving matters in dispute and 2) interpersonal relationship skills for team effectiveness
- d) Engage in collaborative leadership including: 1) Demonstrate strategies for establishing a collaborative environment 2) Practice behaviors that facilitate adaptation to changing

- environments and expectations and 3) Apply strategies that facilitate goal attainment across the research team
- e) Facilitate the development of shared mental models which is the shared knowledge that members of the research team use in order to collaborate in the conduct of their science.
- f) Incorporate diverse perspectives within the planning and implementation of a translational research project in a way which accounts for diversity in all aspects of the research process.
- g) Design an evidence-based research proposal: 1) Formulate research questions that yield insights for health, clinical practice and/or policy innovation; 2) Appraise how stakeholders will engage in translational research; 3) Integrate appropriate regulatory and professional standards;
   4) Select valid study designs; 5) Formulate an evaluation approach that integrates process and outcomes
- h) Implement, manage, and monitor a translational research project in a professional and ethical manner
- i) Interpret the evaluation results to derive conclusions about intervention/innovation efficacy and effectiveness make recommendations that inform future research, practice and policy
- j) Facilitate the dissemination of knowledge to future research, practice and policy

#### PhD in THS Dissertation Defense

#### **RUN OF SHOW**

#### 30 minutes to ETA: Initiate Zoom meeting

Conference Coordinator starts Zoom meeting, everyone except the audience joins

#### **INSERT ZOOM Meeting information here**

#### 30 mins to ETA: Preparations

- Conference Coordinator makes chair and herself Co-Hosts
- Conduct mic checks
- > Student tests sharing of slides/screen
- > Committee members rename themselves for sorting (e.g. @Firstname LastName)
  - o Feature found as option in list of participants window panel
  - Using the @ puts all those names at the top and makes them easier to identify

#### 5-15 mins to ETA: Chair reviews procedures with the committee

- Conference Coordinator places student in breakout/waiting room
- Committee reviews questions to be asked and order and assures there are no duplicate questions
- Readmit student for final preparations
- Proposed Order of Questioning
  - Use this space to list the order in which committee members and readers will ask questions

#### 5 mins to ETA: Audience is admitted from Waiting Room

- Conference Coordinator asks them to please remain on mute
- Conference Coordinator mutes anyone who hasn't muted themselves by the start of the defense.

#### <u>Defense</u>: Director of Doctoral Research (or Program Director) begins the defense proceeding

- > DoDR tells the audience how things will work.
  - O Good morning everyone. I am Dr. Trudy Mallinson, and I am the Director of Doctoral Studies for the PhD in Translational Health Sciences. It gives me great pleasure to welcome you all to the doctoral defense of [INSERT CANDIDATE NAME] in partial completion of the requirements of the PhD in Translational Health Sciences in the Department of Clinical Research and Leadership in the GW School of Medicine and Health Sciences. We are honored to welcome so many of CANDIDATE's family, friends, and colleagues to this exciting event.
  - Some housekeeping notes as we get started. Your microphones have been placed on mute; we ask that you remain on mute throughout the presentation by the candidate and oral questioning by the committee. We also ask that you do not use the chat feature during the presentation or oral questioning. We ask that you do not join the webinar by phone. Once the dissertation presentation has begun no one will be admitted to the

- presentation. If you lose your connection, you will not be readmitted. We are not asking you to turn off your videos but please be mindful of distracting backgrounds and movement so as to avoid distracting the candidate. Today's presentation is being recorded so please keep your microphones muted throughout.
- The Doctoral dissertation defense is the culminating event in a candidate's progress towards being awarded the degree of Doctor of Philosophy in Translational Health Sciences. To reach this stage, the committee has already positively reviewed and assessed the written dissertation material and determined that the candidate is ready for the oral defense. The purpose of this oral dissertation defense is for the candidate to demonstrate mastery of the material. A successful defense and submission of the written dissertation represent an important transition from student to member of the Academy.
- The purpose of both the written dissertation and the oral examination is for the candidate to demonstrate the highest levels of learning: creating, evaluating, analyzing. The candidate must demonstrate that they have conducted research that has scientific merit using rigorous research methods. The translation of knowledge to practice must be the central question addressed by the dissertation research. The candidate must demonstrate that s/he can critically synthesize literature in multiple domains relevant to the research topic, discuss the theoretical and translational importance of the topic, discuss and demonstrate the principles of translational health science including team science, and discuss the relevance and implications of the findings for future research in the area. In all aspects, the research must demonstrate the core principles of translational health science including integration of qualitative and quantitative methods, team science, and the inclusion of stakeholder voices throughout the research process from problem definition to interpretation and dissemination of results. Unlike PhDs in other disciplines, research in translational health sciences is not a solitary endeavor but involves multi-disciplinary and collaborative relationships, skilled communication, systems thinking, and boundary crossing in order to solve challenging health care problems. We hope that you will see these skills of reflected in the collegial exchanges our candidate enjoys with his/her committee members during this defense.
- Without further ado, I would like to introduce Dr. CHAIR'S NAME, who is the chair for the doctoral dissertation. Dr. CHAIR'S NAME is RANK in the DEPARTMENT, COLLEGE. ANY RELEVANT DETAILS.
- o CHAIR: Thank you, Dr. Mallinson. It gives me great pleasure to introduce to you CANDIDATE'S NAME. CANDIDATE will present her doctoral dissertation research titled: DISSERTATION FULL TITLE. INTRODUCTORY COMMENTS. Today s/he will present her/his research that examines BRIEF LAY DESCRIPTION OF STUDY.

The following may be modified by the chair as appropriate

o This doctoral defense provides both the committee members and readers the opportunity to reflect on the candidate's work as a whole and how it will inform future academic research. Readers serve an important role in this regard by bringing new perspectives and insights to the work. I want to extend my gratitude to our esteemed readers for today's defense who will be introduced to you shortly. We know the time

- and effort you have put into your thoughtful reviews and we are grateful for your commitment to our program.
- o The procedure for today's defense will be as follows: PROVIDE DETAILS OF THE PROCEDURE. AN EXAMPLE IS PROVIDED BELOW BUT THIS IS JUST AN EXAMPLE.
- o Jen will introduce her committee and readers to you. Then she will present to the committee the results of her research for about 30-35 minutes. At the conclusion of her presentation, each committee member will, in turn, ask her a specific question. The order of questioning will be: Dr. Davidson, Dr. Papdimitriou, Dr. Van der Wees, Dr. Carlozzi, and Dr. Schultz. After a committee member asks a question and Jen responds, other committee members may ask clarifying and follow-up questions. When that line of questioning is complete, I will ask the next committee member or reader to ask their question. Each round of questions will take about 10 minutes. When all questions have been asked, the committee will retire to a breakout room to deliberate. Jen will be placed in another breakout room, and you the audience, will remain in this main room. When the committee has determined their decision, Jen will join them in the breakout room to receive the decision. After that, the committee and candidate will return to the main room to share the results with you all. Without more ado, I will turn the proceedings over to Jennifer. Karen, can you please begin the recording.
- > Chair indicates to Conference Coordinator when to begin recording.
- Conference Coordinator continues to admit any other audience members Waiting Room who are a few minutes late and immediately mutes them.

#### 5 mins: Candidate begins defense presentation

- Begin sharing slides.
- Conference Coordinator turns OFF chat.
- No one else enters the meeting until after candidate finishes defense.

#### 40 mins: (approx) - Committee / discussion / Q&A begins.

- The Chair is free to arrange this however they wish and example is provided below. This
  is just an example.
- o **EXAMPLE**
- Chair: Thank you Jen for an excellent presentation. I will turn the floor to Dr. Leslie Davidson, who will ask her question.
- o Are there other questions from the committee or readers?
- o Thank you Dr. Davidson. Dr. Papadimitrou, will you ask your question?
- Are there other questions from the committee or readers?
- o Thank you Dr. Papadimitriou. Dr. Van Der Wees, will you ask your question?
- o Are there other questions from the committee or readers?
- o Thank you Dr. Van der Wees. Dr. Carlozzi, will you ask your question?
- o Are there other questions from the committee or readers?
- o Thank you Dr. Carlozzi. Dr. Schulz, will you ask your question?
- o Are there other questions from the committee or readers?
- Chairs question ...

 As chair, I want to thank our candidate, the committee, and readers for an excellent discussion today. Jen, you will now be placed in a break out room by yourself.
 Committee and readers, we will now be placed in the break out room.

#### 1 hour 15 mins (approx): Committee retires to deliberate

- > Conference Coordinator moves committee into their own breakout room
- Conference Coordinator moves candidate into her/his solo breakout room.
- Audience remains in main room

#### <u>1hour 15 mins – 1 hour 45 mins</u> (approx.): Deliberations.

- > Chair takes notes and summarizes the committee's comments.
- > Committee makes two votes, one for doctoral dissertation, one for oral defense.
- When the committee is done, Chair texts Conference Coordinator they are ready.
- Conference Coordinator admits candidate to the committee room and they announce the results to candidate

#### 1 hour 45 mins (approx.): Results announced

- Conference Coordinator ends breakout rooms
- > Chair announces the results to audience

#### ANNOUNCEMENT INFORMATION

#### Provide the Program Administrator with the following details:

- 1. Candidate's Name
- 2. Dissertation Chair's Name and Degree
- 3. Date and Time of the Dissertation Defense
- 4. Full Dissertation Title
- 5. Brief description of the research (2-3 sentences) in lay language

Note: An example of how the Announcement will look is provided below.

The PhD in Translational Health Sciences Program is proud to announce the Dissertation Defense of:

PhD Candidate: Kevin Bugin

Modelling Cross-Disciplinary Integration in FDA Multidisciplinary and Integrated Reviews for New Drug Products: A phenomenological descriptive comparative case study

Dissertation Committee Chair: Gaetano Lotrecchiano, PhD

December 21, 2020, 3-5 pm ET

Cross-disciplinary integration is a key feature of interdisciplinary research and the collaborative form is often a desired outcome of Team Science endeavors. In recent years, FDA has sought to increase cross-disciplinary integration in its new drug product marketing application reviews, going as far as developing and implementing in 2019 a new interdisciplinary focused process and integrated review document. While increased cross-disciplinary integration is sought, FDA and in fact the Science of Team Science, lacks an approach to objectively evaluate integration and enable comparisons. This phenomenological descriptive comparative case study has identified, modelled, and comparatively analyzed instances of collaborative integration occurring in FDA review teams from a case involving the new interdisciplinary review and a case involving the prior multidisciplinary review.

This dissertation defense is open and will be held virtually. Participants are requested to RSVP to receive the link to the presentation.

#### **ROLES AND RESPONSIBILITIES**

ROLES AND RESP	ONS	IBILI	TIES				
	Candidate	Chair	Committee Members	Readers	DoDR/Progra m Director	Program Administrator	Conference Coordinator
Responsibilities					۵	or	
Forms		1		1			
Initiate Request for Dissertation Defense form	•						
Initiate Designation of Dissertation Readers form	•						
Initiate Outcome of Written Dissertation and Oral Examination form		•					
Initiate Final Approval of Requested Dissertation Revisions form		•					
Initiate Request to Graduate form	•						
Complete Graduation Checklist	•					•	
Scheduling Defen	se					•	
Determining when the dissertation is ready to defend		•	•				
Determining the date of the defense	•	•	•	•			
Sending out the letters inviting committee members and readers to participate		•					
Identifying & designating readers	•	•	•				
Announcing the Defense Date							
Sending date, time, brief statement to Program Administrator	•	•					
Creating digital announcement and distributing						•	
Setting Up the Virtual Co	onfer	ence					
Creating the Zoom meeting link						•	
Opening Zoom meeting 30 mins prior on day of defense	•	•					•
Setting up & managing waiting rooms							•
Admitting audience attendees							•
Muting mics							•
Managing the Defe	nse						
Revising and distributing the Run-of-Show	•						
Introduction, welcome, meeting etiquette					•		
Introduction of the candidate		•					
Introduction of the committee and readers	•						
Order of questioning							
Managing the Deliberations							
Setting rules for conversation		•					
Calling the votes		•					
Summarizing and recording comments and required revisions		•					
Announcing result to candidate							
7 timodricing result to carialdate	<u> </u>				1		1

#### FREQUENTLY ASKED QUESTIONS (FAQS)

#### How soon should I start planning for the dissertation defense?

You should start planning the semester before you plan to defend, that is, at least 7-9 weeks before you want to defend. Remember, the dates provided in the Gantt charts are the absolute latest we recommend. You should start planning well ahead of these dates.

#### Who sends out the final dissertation draft to the committee?

Once the Chair and committee have decided the candidate is ready to defend the dissertation, the Chair should send the draft version of the dissertation to the committee and to the designated readers. This should be accompanied by a cover letter/email that includes the date and time of the defense, the roles and responsibilities of the committee member or reader, and the Zoom link information. Any other information the Chair deems necessary should be included in the letter/email.

#### How is the defense held?

At this time all PhD in THS dissertation defenses are held virtually using Zoom. The Program Administrator and Conference Coordinator will help you arrange this when you file the Request for Dissertation Defense form.

# Who will set up the links and send out invitations with access information to the committee and reader?

The Program Coordinator will send out the Zoom link to the student and Chair. The Chair will distribute this information to the committee members and readers.

#### Who presides over the dissertation defense?

The Chair leads the dissertation defense. See roles and responsibilities table for further details.

#### How does the defense proceed? What is the order of events?

See the defense procedures and the Run of Show procedures for guidance on how order of events.

#### What are our options for passing the defense?

There are two decisions that are made by the Chair and committee members. For the oral examination (defense) the decisions are pass or fail. For the written dissertation, the decisions are pass, conditional pass, and fail. For conditional pass, the Chair specifies the required changes and revisions that are needed in order to pass and the timeframe in which the changes should be submitted.

# What are the responsibilities during and following the defense and who takes the lead for each? For example, do we record or just document our deliberations?

See the roles and responsibilities table.

#### Who checks all the items for graduation?

Students must apply for graduation by the required time in the semester in which they plan to graduate.

Spring: April 15 Summer: July 15 Fall: November 15

#### Am I forgetting anything?

This guideline is designed to help navigate planning and conduct the dissertation defense. If you have questions that are not answered by this guide, or you have suggestions for improving the guide, please contact the Director of Doctoral Research.

#### PREPARING FOR GRADUATION

#### INTRODUCTION

Graduation is an important rite-of-passage for successfully completing a PhD in Translational Health Sciences. At GW, there are three important ceremonies that mark graduation. Each of these occurs during graduation weekend in the middle of May each year.

#### Recognition Reception

This is an intimate celebration for PhD in THS graduates, their family and friends, and program faculty. It is a time to greet students and faculty you have not seen for a while, introduce them to your family and friends, and for us to recognize your achievements with more time and attention than in possible in the other two events. During the recognition reception, graduates are presented with a program pin to wear on their regalia. At the recognition reception, PhD in THS students who are being inducted into Alpha Eta, the Health Sciences honor society receive their cords.

#### Health Sciences Graduation

The Health Sciences graduation occurs on Saturday afternoon in Lisner Auditorium. All graduates from Health Sciences programs are recognized at the event. After faculty process in, graduates process in and take their seats. The Dean of SMHS typically welcomes the students, followed by presentation of a number of awards. Students are then invited to the stage, in order, undergraduate, masters, doctorate. PhD in THS students are hooded by their chair and Director of Doctoral Research, are congratulated and photographed shaking hands with the Dean of SMHS, and are giving a token certificate. Your actual diploma may be provided to you before or after the graduation ceremony, depending on which semester you graduated in.

#### Commencement

GW was established by congressional charter in 1821, meaning that Congress determined the purposes, powers, and authority of the organization, including the awarding of degrees. GW all-schools commencement is held on Sunday, on the Mall, in Washington, DC. GW is the only University allowed to hold commencement on the Mall. All-schools commencements began about 1890 but fell out of favor and were re-established in 1992. Degrees are called out in order of which schools were established, SMHS was the second school established after the Columbian College of Arts and Sciences. Commencement speakers are often highly respected national figures, including past presidents. It is a colorful and exciting end to a weekend of graduation celebrations.

#### STEPS IN PREPARING FOR GRADUATION

Following a successful dissertation defense, the candidate prepares for graduation. There are multiple key tasks that must be completed in order to graduate. Failure to complete any of these steps will result in the candidate not being cleared to graduate.

#### Submit Final Version of the Written Dissertation for Format Approval

After the final approval of the dissertation defense (CP3) and written dissertation (CP4) (if needed), a student submits a final version of the written dissertation to the Director of Doctoral Research for formatting review. This review is for formatting only, not content. The chair and committee have determined that the content of the dissertation has been approved by signing forms CP3 and CP4 (if necessary). Graduates should allow at least one week from time of submission for the dissertation

format to be reviewed. Longer review times can be anticipated if the written dissertation does not material follow the guidance provided in the Dissertation Style Guide. Graduates needing a smooth and timely review of their written dissertation in order to graduate in a given semester should ensure that they follow the Style Guide as closely as possible. On completion of review, graduates will receive form CP5 Approval of Written Dissertation Format; this form will describe any changes that need to be made. If changes are needed, form CP5 will be marked as "not approved." The graduate must make the changes and resubmit the dissertation again to the Director of Doctoral Research. When the dissertation format is approved, for CP5 will be marked "approved."

#### Deposit Approved Version of Written Dissertation to Himmelfarb Research Commons

After receiving final approval of the format, students submit a digital copy of their dissertation to Himmelfarb Research Commons. Students have 5 working days after receiving CP5 approval to deposit their dissertations. The repository will provide graduates with a permanent URL, which allows the work to be Google searchable, and allows capture of usage metrics. To archive a copy of the dissertation in HSRC, graduates submit a copy of the dissertation, form CP5, and the HSRC Non-Exclusive Distribution License to the Metadata and Scholarly Publishing Librarian, at <a href="mailto:hsrc@gwu.edu">hsrc@gwu.edu</a>

There are no exceptions. All approved dissertations must be deposited to the Health Sciences Research Commons within 5 working days of form CP5 approval. Graduates planning to publish their research may place an embargo on their submission for up to twelve months as part of submitting to the Repository.

- Other examples of PhD in THS dissertations can be found at: Health Sciences Research Commons > School of Medicine and Health Sciences > Clinical Research and Leadership > Doctor of Philosophy in Translational Health Sciences Dissertations
- https://hsrc.himmelfarb.gwu.edu/smhs\_crl\_dissertations/

#### Provide Evidence of Revised IRB Status

Graduates must demonstrate that they have appropriately revised the status of their IRB. The graduate and chair should determine together how they will revise the IRB status of the project. Options include: closing the study; revising the study to indicate change study personnel; or revising other aspects of the study protocol to enable continued use of the data.

If the student is closing the study, go to <a href="http://humanresearch.gwu.edu/">http://humanresearch.gwu.edu/</a> and complete the Study Closure form to terminate their research and submit to the Principal Investigator (PI) (i.e., dissertation chair) for signature. It is the student's responsibility to submit the study closure form to the IRB Office.

Closure forms are not required for exempt studies. An email to the program administrator should state the IRB project number and exempt status determination.

If the plan is to revise the IRB status to include another site or to change the PI, these changes must be completed before graduation is approved. If the student plans to continue working with the data set, appropriate human subjects' protection and data security procedures must be implemented prior to graduation.

#### Provide Follow-Up Contact Information

Graduates must provide effective contact information to the Program Administrator. This includes at, a minimum, a working telephone number and email address. PhD programs must provide a great deal of information about the success of students after graduating from the program to the university and to educational accrediting bodies. We appreciate you cooperation with us in responding to our outreach about your progress after graduation.

#### **Completion Dates**

All requirements for graduation must be completed by the required date in order to graduate in a given semester. Graduation requirements are listed below.

- Spring = 3rd week of March (March 15)
- Summer = 3rd week of July (July 15)
- o Fall = 3rd week of November (November 15)

#### Applying for Graduation

Students may <u>apply for graduation</u> once they have scheduled their dissertation defense but not later than:

- Spring = 3rd week of March (March 15)
- Summer = 3rd week of July (July 15)
- o Fall = 3rd week of November (November 15)

It is important to note that applying for graduation does mean that you have been, or will be, cleared to graduate. You will not be cleared to graduate by the Director of Doctoral Research until you have completed all graduation requirements. If you are not cleared to graduate, you will not be allowed to attend the recognition reception, graduation, or commencement ceremonies.

#### Eligibility for Graduation

Per the GW Graduate Bulletin <a href="http://bulletin.gwu.edu/university-regulations/#graduatetext">http://bulletin.gwu.edu/university-regulations/#graduatetext</a> , all the following are required for a student to be eligible to graduate:

- Have met the admission requirements of the school in which registered
- Completed satisfactorily the scholarship, curriculum, residence, and other requirements for the degree as stated in this bulletin
- Filed an application for graduation by the published deadline date; and,
- Be free from all indebtedness to the University

Degrees are conferred in Spring, Summer, and Fall semesters. Students must be registered in the semester in which they graduate/degree conferred. If you plan to graduate in Spring semester but are delayed until the summer, you must register for the Summer Semester.

#### **Graduation Requirements**

To be cleared for graduation/degree conferral, you must have completed all requirements for the degree. In the case of the PhD in THS, this includes:

- Satisfactorily completed all didactic coursework
- Successfully completed comprehensive exams
- Successfully defended dissertation proposal and final dissertation research
- Deposited an approved version of the final written dissertation in Himmelfarb Health Sciences Research Commons
- Provided evidence of updated/revised IRB status
- Provided follow-up contact information

Failure to meet any of these requirements renders the student ineligible for graduation, including attendance at the recognition reception, health sciences graduation ceremony, and university all-school commencement.

#### Participating in Commencement

PhD students who complete all program requirements in the previous summer, fall, or the current spring semester are eligible to participate in Commencement. Per the GW Bulletin, PhD students may not have any outstanding course work in order to participate in Commencement. The nine-credit minimum remaining does not apply to PhD students. In addition, the Bulletin does not imply that PhD students

may attend Commencement if they have not completed all requirements by the required dates. Per the GW Bulletin, all requirements must be met for degree conferral and participation in Commencement.

#### Timelines for Graduation

The following timelines are recommended to ensure readiness for graduation in each semester:

- <u>Last day of class</u>: Completion of Graduation Checklist AdobeSign Form (CP6). Please allow 5 business days for completion of the Graduation Checklist.
- <u>Last day of class -21 days</u>: Last day to submit approved formatted dissertation for review. Please allow 5-10 business days for review of the final dissertation format. Review will not be conducted if CP4 is incomplete.
- <u>Last day of class -60 days</u>: Last day for dissertation defense. Please allow 4-6 weeks to make required revisions to the written dissertation and formatting. If you defend after this date, the program cannot reasonably assure participation in Spring graduation.
- March 15, July 15, November 15: Last day to apply for graduation through Banner.
- Up to about April 29: Register for University Commencement and HS Graduation

**Note:** Because students must register for commencement and graduation before the last day on which they could defend and still graduate, students should be fully aware that registering for graduation does not mean they will be cleared for graduation. If you are not cleared for graduation, you will not be allowed to attend graduation ceremonies.

Following completion of Form CP6 you will receive a letter from the Director of Doctoral Dissertation Research stating that you have been cleared for graduation. You should make your graduation travel plans in accordance with the above requirements and limitations.