

# Qualifying Exam Requirements

Spring 2023

**UCDAVIS**

**GRADUATE GROUP IN INTEGRATIVE PATHOBIOLOGY**

# Purpose of the QE

## Two-fold:

- To assess the adequacy and depth of the student's core training – does the candidate possess sufficient breadth and depth of knowledge in molecular, cellular, and systems biology to pursue independent, doctoral research?
- To determine that the student has identified a research project that asks a significant/novel question and that the research proposal demonstrates creativity and rationality of research design.

**Goal: To successfully defend a hypothesis driven project in both written and oral formats.**

# QE preparation resources and requirements

1 QE Informational Session  
Spring Year 1

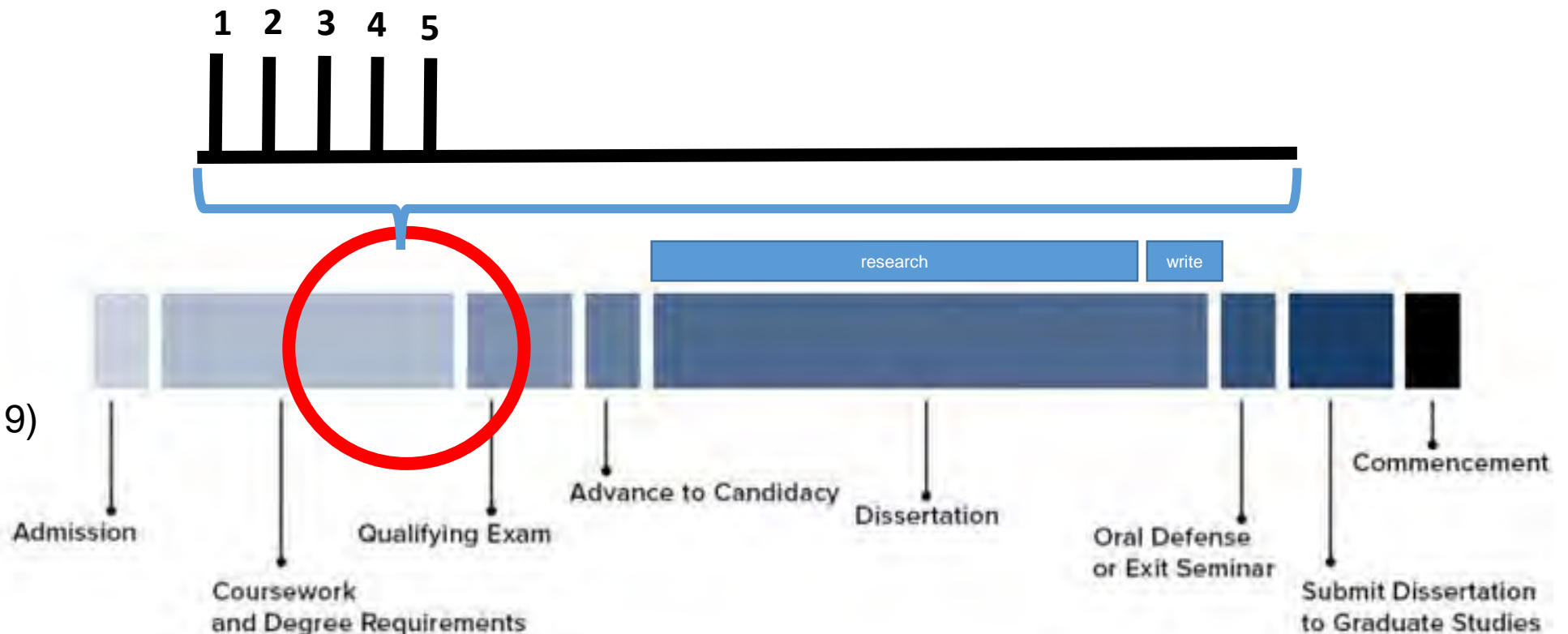
2 QE Prep Course (PMI 290)  
Fall Year 1

3 QE Contract &  
Mentor Statement  
Due **Oct. 1**

4 GGIP finalizes  
committees  
by **Dec. 1**

5 QE Application (GS319)  
Submitted to  
Graduate Studies

**QE held: April 1 – August  
of Year 2**



# QE Expectations/Requirements

- Participate in the QE Informational Session spring of year 1
- Initiate conversations regarding your QE with your major professor over the summer; start discussing proposal research projects
- Enroll in the QE prep course (PMI 290) fall of year 2
- End of summer/early fall consult with your major professor regarding QE committee composition and submit QE contract and major professor statement by **October 1**.

***You must complete all GGIP course requirements before your exam!***

# Major Professor Statement for the QE

**Major Professor Statement for the QE**

**Integrative Pathobiology Graduate Group**

I acknowledge that my graduate student [redacted] (first and last name) will be adequately prepared to take the Qualifying Exam (QE) in Integrative Pathobiology within 3 months of his/her proposed exam date. This student will be given appropriate mentoring and the opportunity to develop his/her aims and has or will be given the opportunity to practice his/her presentation and study for the general knowledge portion of the exam (see below for further description of QE preparedness.)

## **Guidelines for QE preparedness:**

1. Coursework completed with minimum required scholarship.
2. Development of the project hypothesis (hypotheses), specific aims, and experimental approach, including analytic methods.
3. Successful practice of oral presentation and defense of ideas to an audience of other scientists (faculty and peers).
4. Adequate exploration of alternative methods and solid understanding of appropriate analytical methods for their area of research.

# QE Committee

- Comprised of a minimum of 4 faculty members, a 5<sup>th</sup> can be added if deemed necessary
  - Majority of members **MUST** be from GGIP  
(This means at least three members will be from GGIP)
  - **QE Chair must be a member of GGIP**  
**(<https://integrativepath.vetmed.ucdavis.edu/all-faculty>)**
  - Your major professor and their close collaborators will be excluded from serving on the QE committee
  - If you are participating in a Designated Emphasis (DE), one member must be a member of that DE group

# QE Topics

- Choose three topics of research on which you will be examined
  - **Your three proposed topics should cover three aspects of your general area of research. Pathology of a certain tissue relative to the disease of interest being studied would be a common topic.**
  - You do not want the topics to be too narrow in scope.  
(We want to make sure you have knowledge in all aspects of your research area)
  - The topics will be presented to the selection committee for approval.
  - The approved topics will be communicated to you after the meeting (by December 1).

# Your QE committee members

## Choosing your QE committee members

- Talk with your mentor to choose your QE committee members.
- It helps if your QE Chair is familiar with your topic of research.
- You are encouraged to have a mix of Assistant, Associate and Full Professors serve on your exam.
- Before you choose your QE committee, get a rough idea of what your three subject areas will be.
- Ideally, you would want to choose one faculty member who would specialize in each of your 'topic' areas.
- You will provide a preferred member and an alternate in each category (non-overlapping).

## Steps in selection

- Once you and your mentor discuss/select committee members, submit your proposed committee to the grad program coordinator by **October 1** (online survey).
- She will present the list to the GGIP selection committee and the *approved* committee will be communicated to you by **December 1**.
- It is your responsibility to confirm the members are available and willing to serve on your QE.
- If all members agree, submit the [Qualifying Examination Application \(GS319\)](#) to Graduate Studies at least 30 days in advance of your exam.

Note: You can have one external member serve on your exam. For this, you will need to submit their CV and the [External Committee Membership Application \(GS311\)](#).

## How and when to approach your QE committee members

- Approach your committee members as soon as the GGIP selection committee approves the list.
- Once they agree to be on your committee make an appointment to meet, either in person or virtually.
- Explain to them the general topic of your research. Inform them if they are the Chair.
- For the other committee members, let them know which of your three topics they will be covering.
- Ask them if there are specific aspects of that topic that you should be focusing on.

You may also want them to vet the first draft of your proposal when you are in the process of writing.

You definitely want to give them a final version **at least two weeks prior** to your QE or as recommended by the Chair.



# Role of QE Chair

## Prior to the exam

- Meet with the student to discuss scheduling, procedures, format, general content, etc.
- Provide the student with clear written guidelines on these matters
- Discuss these guidelines with the members of the committee
- If any participants will be remote, set up and practice the Zoom or Skype before the exam

## During the exam

- Put the student at ease so they can focus on the content of the exam
- Ensure the committee conducts the exam fairly and in a professional manner
- Ensure the exam addresses both breadth and depth of knowledge
- Ensure the exam adheres to the expected schedule and that breaks are taken if needed

## Following the exam

- Facilitate discussion among committee members
- Ensure the committee makes every reasonable effort to reach a unanimous conclusion
- Lead the committee in informing the student of the result
- File the QE Report with Graduate Studies within 72 hours of the exam, including any additional documentation for a decision of 'not pass' or 'fail', split decision, committee attendance, etc.

*Reminds all committee members that the QE outcome should be based on 1) the relevant portions of the student's academic record, 2) the student's performance during the examination, and 3) an overall evaluation of the student's potential for scholarly research.*

# Role of Student – QE Preparation Timeline

- ❑ After QE is finalized internally, student MUST submit GS-319 and begin scheduling
  - the exam
- ❑ 8-12 weeks before exam date – hold initial meeting with QE Chair to discuss format,
  - expectations, and subject area. Should also meet with other QE faculty members to
  - discuss general expectations and which topics s/he/they will be covering
- ❑ 5-6 weeks before exam date – Send initial proposal to QE Chair for discussion
- ❑ 3-5 weeks before exam date – Send revised proposal to **all** committee members
- ❑ 2-4 weeks before exam date – Hold follow-up meeting(s) with QE Chair and other
  - members.
- ❑ 1 week before the exam date – Send friendly reminder to all committee members
  - (date, day, time, and location)
- ❑ 1 night before exam – Send friendly reminder to all committee members
  - (date, day, time, and location)

*\*Communicate with your QE Committee and Major Professor regarding your proposal and the three topic areas.  
Interact with your committee before the exam!*

# Timeframe for the QE & Student's Responsibilities

- You must take your QE **before** the end of fall quarter in year 3.
- Students can start scheduling QEs starting Spring of Year 2
  - The QE should be scheduled between April 1 – August 31<sup>st</sup> of year 2.
  - You are responsible for scheduling the date, time, and place of your exam.
  - Scheduling can be challenging! Let us know if you run into problems.
  - The graduate coordinator can help schedule rooms on the SVM campus.
- Should you need special accommodations for your exam, you should submit a request to the Chair of your QE committee
- After GGIP assigns your committee, you **MUST** get it approved by Graduate Studies **30 days before your proposed exam date**. Complete/Submit form: GS-319.
- Students should expect to spend 3 months preparing for the exam
  - See “Major Professor Contract” – “Guidelines for QE preparedness” & “Student QE Preparation and Timeline”

# Format of the QE

- The Qualifying Exam has two parts:

1. Research Proposal (4-5 page research proposal)

- Specific aims
- Background significance
- Preliminary studies
- Research design and methods
- References (not included in 5 page limit)
- Figures and figure legends (not included in 5 page limit)

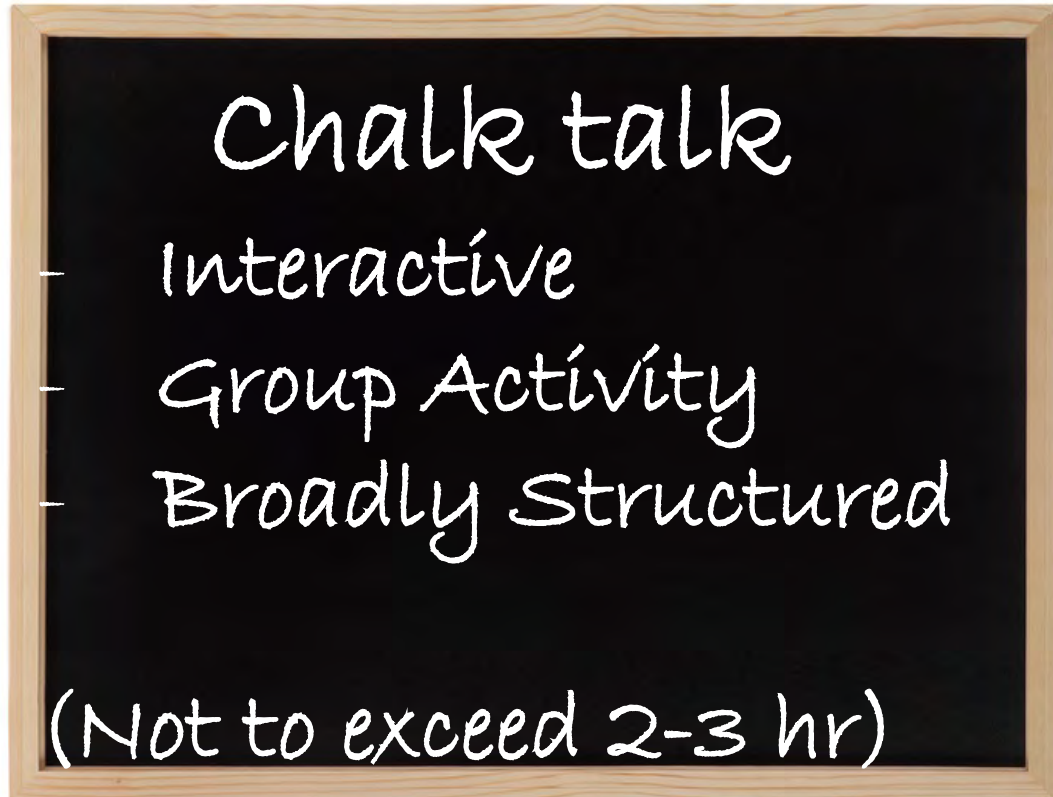
Final proposal  
DUE to  
committee  
3-5 weeks  
before exam

2. Subject Areas

- Student, with help from mentor should choose 3 subject areas of special focus

QE's must be held fully in-person with the option to include up to one committee member participating remotely, other than the QE chair, with Graduate Studies approval of a [Remote Participation Request](#).

# Format of the QE



Student allowed 10-15 minutes uninterrupted time to describe the research proposal

Next hour or so – Active Questioning & Discussion of Research project

Break

Additional questions on subject areas

***\*Should discuss the format and expectations of the exam with all committee members***

# QE Outcomes

**Pass**

**Not Pass**

**Fail**

**Most Common Outcome**

**Occasional Outcome**

**Exceptional outcome for first attempt**

- Gap in knowledge
- Not adequately prepared
- Problems with proposal

Advance to Candidacy

Second QE Attempt

Disqualification from degree objective

Pass

Fail

# MANDATORY IN-PERSON PARTICIPATION IN THE QUALIFYING EXAMINATION

As of Sept. 10, 2022 and in accordance with the [Graduate Council Policy on Service on Advanced Degree Committees](#), QE's must be held fully in-person with the option to include up to one committee member participating remotely, other than the QE chair, with Graduate Studies approval of a [Remote Participation Request](#).

## **Forms, Policies, & Resources**

### **QE Forms**

[Qualifying Exam Application](#) (must be submitted 30 days prior to exam)

[Remote Committee Member Request](#)

[External Member Request](#)

[Qualifying Exam Report](#)

[Second Qualifying Exam Report](#)

### **QE Policies & Resources**

[Doctoral Qualifying Examinations](#) (GC2005-02)

[Service on Advanced Degree Committees](#) (GC1998-01)

[UC Davis Qualifying Exam Regulations](#)

[Acing Your Qualifying Exam](#)

The Qualifying Examination can be a stressful experience.  
Please be aware of campus resources: (530-752-2349);  
see [Mental Health and Counseling Services](#)

If you are struggling, please reach out to us.

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**Questions?**

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