



DOCTOR OF PHILOSOPHY IN APPLIED LIFE SCIENCES

# | PhD Handbook

## 2022-2023

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## PhD Degree Program Overview

The mission of KGI's PhD in Applied Life Sciences is to endow a select group of students with expertise in research areas relevant to applied biosciences with the ability to use interdisciplinary tools and approaches to solve problems, and with the motivation to translate knowledge to beneficial applications to advance new horizons in the applied biosciences. The program is designed to prepare students for research and development positions in a variety of bioscience industrial or academic environments.

Prior to entering the PhD Program, students must complete a master's degree program with learning objectives broadly matching the Master of Business and Science (MBS), Master of Science (MS) in Applied Life Sciences, or Master of Engineering (MEng) in Biopharmaceutical Sciences degree programs at KGI; they will therefore be able to draw upon the interdisciplinary and applied educational foundation supplied by such a curriculum as they continue their studies. MS students were expected to acquire a broad knowledge base in interdisciplinary life sciences (biomedicine, drug discovery and drug translation, systems biology, and bioengineering) and will have an opportunity to focus on coursework in an area of interest to them for more in-depth knowledge. Students in the PhD program will gain competence in the methods of scientific inquiry by conducting and communicating original research for their dissertations. Through exposure to industry issues and applied problems, the students will become adept in the translation of discoveries in science and engineering into beneficial products and processes.

### 1. Admissions Criteria

Consideration for admission requires a completed on-line application found at [kgi.edu/apply](http://kgi.edu/apply). The students applying into the PhD program should meet the following criteria:

- A master's degree from an accredited institution.
- A minimum of 3.0 (4.0 basis) average GPA in their MBS program or other MS in Applied Life Sciences/Pharmaceutical Sciences or MEng programs.
- The candidate's master's degree should be in a life sciences or engineering field and should have least 48 credits of course work that includes experiential and professional development content.
- Financial support approval letter from a KGI Dissertation Advisor: See a list of faculty with their research interests at [kgi.edu/faculty-and-research/faculty-directory](http://kgi.edu/faculty-and-research/faculty-directory); or
- Financial support of a sponsorship company: A letter of support from the company advisor and an executed contract of financial support for three years will need to be in place.
- Candidates may need to take additional courses as recommended by the Admissions Committee to meet KGI PhD Program learning outcomes.
- Dissertation Advisor may also recommend candidates take additional courses.
- Possess good oral and written communication skills.

### 2. Program Schedule and Format

Completion of the PhD program is anticipated to require at least an additional three years of full-time study beyond the master's degree with the possibility for extension depending on the particular research project. Students are encouraged to enter the PhD Program following graduation from the MBS program or other KGI MS or MEng programs if the student seeks a TA-ship. If the student is funded through a grant or corporate sponsorship, then entry to the program at other times is possible. External applicants: Please follow the online instructions for admission criteria and timelines at [kgi.edu/apply](http://kgi.edu/apply).

### 3. Online Application

An online application form is required that contains questions about your personal and educational background. Additional requirements (below) can be submitted along with your online application or separately.

- Personal statement
- Resume/CV
- Letters of recommendation
- Transcripts
- Standardized test scores
- English Language Proficiency
- \$75 non-refundable application fee

#### Personal Statement

The personal statement gives you an opportunity to describe your academic, career, and personal objectives. Please use the statement to outline the basis of your interest in KGI's program, to demonstrate your potential for making research contributions in the biosciences, and to bring to the attention of the Admissions Committee other significant matters. This statement should include your technical skills and touch on your relevant work experiences. This statement should also address the available project for which you are applying and your fit with that research area. Please limit your response to the equivalent of three double-spaced typewritten pages.

#### Recommendations

Contact information for two recommenders is required during the online application process. If you have a sponsorship company, please request a letter from an industry supervisor/sponsor. At least one letter should be from a person who can comment on your potential to effectively carry out independent research leading to a PhD degree. Two recommendations are required but additional recommendations may be submitted if desired. Recommenders will be contacted via email to submit their recommendation online. If they prefer otherwise they can email or mail a copy to the Admissions Office along with this [recommendation form](#).

#### Unofficial Transcripts

Unofficial transcripts may be submitted for evaluation purposes. If admitted and you choose to matriculate, official transcripts must be submitted from all college or universities attended. Translated copies must be submitted for international students.

#### Standardized Test Scores

We require every applicant to submit scores from ONE of the following standardized tests. Unofficial copies and self-reported scores may be submitted for evaluation purposes. If admitted and you choose to matriculate, official copies must be submitted.

- GRE: School code 4166
- MCAT: Scanned or mailed printout is required and must include verification code and AAMC ID
- GMAT: Provide Keck Graduate Institute as school name when prompted

### **English Language Proficiency**

International students are required to submit official scores from one of the following tests of English language proficiency: TOEFL, PTE, IELTS, or iTEP. Students who have studied at a U.S. institution for more than two years and those from a country where English is the primary or official language are exempt from this requirement. Unofficial copies and self-reported scores may be submitted for evaluation purposes. If admitted and you choose to matriculate, official copies must be submitted.

### **Admission Interviews**

A phone, Skype, or on-campus interview is a requirement for admission. The Office of Admissions will schedule individual interviews once your application is completed.

### **Application Review**

The Admissions Committee is made up of faculty and senior administrators who will thoroughly and conscientiously review each application. Applications will be considered in the context of the total applicant pool, as well as in relationship to our general admissions standards. We do not use arbitrary grade point or test score cutoffs.

All admissions decisions are final for the academic year in which they are rendered.

## **Student Graduation Requirements**

### **Graduation Dates**

KGI has three graduation dates per year in May, July, and December. If students graduate any time within the calendar year at any of the three graduation dates, they may walk at the Spring Commencement Ceremony in May. However, students will not be able to obtain their diploma until all requirements or milestones are submitted, even if allowed to participate in Commencement. Students may participate in the spring Commencement.

### **General Timelines**

All graduate students must successfully complete the following requirements at specified timelines below for on time graduation. It is the student's responsibility to complete any paperwork needed along with required signatures and submit to the Registrar's office.

### **First Year**

#### **1st Semester**

1. PhD Thesis Committee Established: Documented by Committee Recommendation/ Revision Form signed by advisor and submitted by the student to PhD Office (within three months of starting program; external member CV or resume required.)
2. Dissertation Literature Mastery Seminar (on PhD research): Documented by rubrics filled by attending faculty administered by PhD Office, Milestone reporting form by Advisor submitted to PhD Office immediately following seminar.

### **2nd Semester**

1. Research Symposium (Advisor-approved poster presentation): Documented by reviewer faculty rubrics.
2. Dissertation Qualifiers: Thorough background and significance with research plan, early results, and complete references plus presentation to committee. The written report in faculty-specified format (review article or journal article format is typical) is due to the Committee at least two weeks prior to presentation: Documentation by Committee Feedback form filled by Faculty Advisor summarizing committee feedback submitted to both student and PhD Office.

## **Second Year**

### **Summer and 1st Semester**

1. No major deliverables. Student should work on research and prepare to provide the three deliverables in the 2nd semester.

### **2nd Semester**

1. Research Symposium (poster presentation) Documented by reviewer faculty rubrics administered by PhD Office.
2. Graduate Student Literature Seminar (in their Field but not their own Dissertation Research; Transferrable Skills). This provides background for Research Proposal in the Summer. Documented by rubrics filled by attending faculty administered by PhD Office, Milestone reporting form by Advisor submitted to PhD Office immediately following seminar.
3. Dissertation Progress Report and Presentation to Committee: The written report in faculty-specified format (journal article format is typical) is due to Committee at least two weeks prior to presentation: Documentation by Committee Feedback form filled by Faculty Advisor summarizing committee feedback submitted to both student and PhD Office.

## **Third Year**

### **Summer**

1. Transferable Skills – Research Proposal/Business Plan in field but outside dissertation topic. Topic and format approved by Advisor (6-10 page is typical e.g. SBIR Phase I proposal format) to be assessed by committee. Documentation by Committee Feedback form filled by Faculty Advisor summarizing committee feedback submitted to both student and PhD Office before Fall semester begins.

### **1st Semester**

1. Research manuscript published or Publication-Quality draft manuscript where student is the primary or other important contributing author. Documented by Milestone reporting form by Advisor submitted to PhD Office before semester ends.

### **2nd Semester**

1. Research Symposium (oral presentation) Documented by reviewer faculty rubrics administered by PhD Office.
2. Dissertation Draft due to the Committee. Submit by April 7 to graduate in May; at least eight weeks prior to July and December graduations.
3. Dissertation Defense to be scheduled two weeks prior to the required Committee Approval Date. Documented by Dissertation Defense form signed by all Committee Members upon completion of the committee meeting immediately following the defense seminar.
4. Dissertation Completion. Documented by PhD Dissertation Completion form signed by all Committee members after corrections/editing post defense AND confirmation from the library that final Dissertation has been posted

**The following forms and/or documents must be fully executed and submitted to the Registrar prior to graduation:**

1. PhD Dissertation Defense Evaluation Form
2. PhD Dissertation Completion Form
3. Certificate of Completion of Requirements for the PhD
4. PhD Business Plan Grading Rubric OR PhD Research Proposal Grading Rubric
5. PDF of Dissertation
6. Confirmation of Final Dissertation submission to The Claremont Colleges Library

**Any exceptions to the above requirements needs approval (a semester in advance) by the student's dissertation advisor and PhD Program Director(s). The PhD Exception Form may be used for such requests.**

### PhD Learning Outcomes

A key learning outcome for the PhD program is that students develop mastery in an area of interdisciplinary science relevant to applied biosciences sufficient for conducting original research.

In order to graduate, PhD students must demonstrate that they can:

1. Apply rigorous research methodologies to original, independent, experimental, theoretical, and/or computational work in applied bioscience.
2. Integrate the fundamentals of computational and informational science, engineering design, and biomolecular technologies to solve problems in applied life science.
3. Communicate effectively in an academic as well as in an industry environment composed of students, scientists, engineers, administrators, and business professionals.
4. Demonstrate core business analysis and management knowledge needed for the bioscience industry and assume leadership roles in realizing the goals of technical and business projects.
5. Develop both a broad understanding of current scientific advances and mastery in an area of interdisciplinary science of relevance to applied bioscience sufficient for conducting original research.
6. Understand the translation of basic science and engineering discoveries into products and processes which benefit society.
7. Adhere to ethical principles in research, development, and business issues inherent in the bioscience industries.

### PhD Coursework

Students who complete their degrees at KGI (MBS/MEng/MS) do not normally require additional courses during their PhD Program. Students who are accepted from approved external universities may be required to take additional classes or courses that fall under the appropriate topics for the student. The student and his/her primary advisor/Admissions Committee can decide on the number of courses needed. If it is determined that a student must complete additional coursework, a PhD Course Deficiency Documentation Form must be submitted. Upon completion of the course deficiencies, a PhD Course Deficiency Completion Form must be submitted to the program administrative assistant.

1. Current Topics in Applied Life Sciences and Ethics (1.5 units in fall and spring semesters)
2. PhD Research and Milestones (13.5 units in fall and spring semesters, 15 units in summer)
3. Additional courses (if any as recommended by the PhD Committee or Dissertation Advisor)



### **PhD Students Taking Cross-Registration Courses at The Claremont Colleges**

PhD students may take a graduate-level course at Claremont Graduate University if it directly relates to their dissertation topic. This approval is contingent upon approval of their faculty advisor and the PhD Program Director and must go through the normal cross-registration with KGI's registrar.

### **Dissertation Committee**

The Dissertation Committee must be established with at least three members including Dissertation Advisor, within the first three months of admission by the student:

1. Dissertation Advisor will be the Committee Chair.
2. At least one member must be external to KGI.
3. Students can recommend members and initiate conversations followed by approval of the advisor.
4. A Committee member is not required to have a PhD if they have 15 years of relevant experience and expertise in the field.

Students should schedule and meet with their Committee at least once a year (or every nine months). If the Committee prefers to meet more frequently, they may set their own terms for meetings.

#### **Relevant Form:**

1. PhD Dissertation Committee Recommendation/Revision Form

## **Program Milestones**

### **Dissertation Literature Mastery Seminar**

By the end of first semester of the program, the student is required to present a background overview of their research topic. The presentation should cover the background and in-depth analysis of literature relevant to the dissertation field of study. This presentation should be scheduled by the student and an abstract and reference list provided to the advisor at least two weeks in advance. The thesis committee may be invited to attend but attendance by the full committee is not mandatory. Successful completion of the milestone is documented by a PhD Milestone reporting form signed by the faculty advisor.

### **Dissertation Progress Presentation and Report: Qualifier (Year 1)**

Before the end of first year, each student must provide a written progress report and present an oral status report to their Dissertation Committee. The report and presentation should cover but is not limited to the following:

1. Background and significance
2. Detailed discussion of project aims and experimental design
3. Detailed discussion of early results
4. Overview of project timeline (updated with future milestones)
5. Conclusion

Two weeks prior to the presentation, a six-page minimum Dissertation Progress Report in a faculty advisor-approved format needs to be submitted to the Thesis Committee for a review, outlining topics mentioned above.

This presentation should be scheduled by the student to make sure all Committee members can attend either in person or by remote access. All presentation's content must be approved by the advisor. The presentation

should include 45 minutes of presentation and 15 minutes of general Q&A by the Committee. This is a private examination of the candidate by the Dissertation Committee. If any Committee member is not present, student must present report to absent Committee member outside of this presentation on another day. The Committee will recommend a pass/fail. Planned publication goals should be discussed with the Committee. If a "Fail" is received, one additional opportunity may be given by the Committee. Second time failure will typically result in a failing grade for ALS504 during that semester and may result in the student being asked to discontinue PhD Program. Student is not guaranteed TA/GA assistantship during this time or other funding if on academic probation.

**Relevant Form:**

PhD Milestone Reporting Form to be submitted to PhD Office by faculty advisor.

### **Graduate Student Literature Seminar: Transferrable Skills**

During the second semester of the second year, all PhD students must present to the KGI community on a topic separate from their dissertation, but within the field of their research area. The presentation should include 45 minutes of presentation and 15 minutes of general Q&A. All presentations must be delivered in consent with dissertation advisor.

**Relevant Form:**

PhD Thesis Committee Feedback Form filled by the faculty advisor to represent committee consensus regarding the Proposal/Business Plan.

### **Dissertation Progress Presentation and Report: Original Data Presentation (Year 2)**

Before the end of second year, each student must do a comprehensive presentation to their Dissertation Committee. The presentation should cover but is not limited to the following:

1. Background and significance
2. Detailed discussion of project aims and experimental design
3. Detailed discussion of the form of data presentation, data analysis, and implications
4. Overview of project timeline (updated with future milestones)
5. Conclusion

Two weeks prior to the presentation, a six-page minimum Dissertation Progress Report needs to be submitted to the Dissertation Committee in a faculty advisor-approved format for a review, outlining topics mentioned above.

This presentation should be scheduled by the student to make sure all Committee members can attend either in person or by remote access. The presentation should include 45 minutes of presentation and 15 minutes of general Q&A. The presentation content must be approved by the advisor. This presentation should provide updates on project progression. This is a private examination of the candidate by the Dissertation Committee. If any Committee member is not present, student must present report to absent Committee member outside of this presentation on another day. The Committee will recommend a pass/fail. Planned publication goals must also be set by this time and presented to the Committee. Because of the unpredictable nature of research, the Dissertation Committee may recommend extension of PhD training beyond three years.

All students will be required to execute an original research project under the mentorship of a faculty advisor. The research advisor and the Dissertation Committee members will play a central role in monitoring student progress and preventing an unnecessarily long time to degree completion; they will also decide when the student has amassed a sufficient body of work to start writing the dissertation. Research will be conducted predominantly on site at KGI, but certain portions of the work may be carried out at another institution within the framework of an ongoing collaboration. For externally sponsored PhD students, most or all of the research may be done off-site from KGI. In such cases, a sponsored research agreement developed in consultation with KGI's ORSP and Corporate Partnership office shall be on file.

**Relevant Form:**

PhD Dissertation Committee Feedback Form filled by the faculty advisor to represent committee consensus regarding dissertation progress.

**Dissertation and Defense (Year 3)**

The conferral of the PhD is dependent upon successful completion of an oral exam and dissertation submission, along with completion of all other requirements during the entire tenure as a PhD Student. The oral exam is a public seminar followed by a closed session with the student's Dissertation Committee. At least one month before the oral exam, a substantial final draft of the dissertation must be turned in to the student's Dissertation Committee. At least two weeks before the Dissertation Defense, the student should check in with the Committee and incorporate any changes by the time of the exam. The Dissertation Defense cannot be formally scheduled or publicly announced until the student receives approval from the Dissertation Committee. The student should, however, start scheduling a date and time with the Committee earlier than that to ensure that everyone is available on the projected date. The dissertation presented at the Defense is expected to be in the final form that will be submitted to the university barring any changes suggested by the Dissertation Committee at the Defense. All Committee members must be present (remote participation is acceptable). The schedule is 45 minutes of presentation and 15 minutes of general Q&A. Public presentation is followed by a private examination, sign offs and final requirements for edits/changes to the Dissertation by the Committee.

For PhD Dissertations that include patentable content, the submission and defense may proceed and an embargo placed on public release of the information without public disclosure of inventions. If the student and faculty advisor, in consultation with KGI's Intellectual Property and Tech Transfer (IPTT) committee determines that public disclosure is required for adequate assessment of the student Dissertation, then the presentation and defense should be postpone until such time as patents can be filed.

**Relevant Forms:**

1. PhD Dissertation Defense Evaluation Form
2. PhD Dissertation Completion Form
3. Certificate of Completion of Requirements for the PhD

## Transferable Skills

**Research Proposal (RP)/Business Plan (BP)**

Students, upon approval from their Faculty Advisor during the third year before the end of summer quarter, may choose between the options of several activities that demonstrate development of transferable skills that aid towards career development. Options include writing a research proposal (e.g. NIH R21 or SBIR Phase I), or writing a formal business plan.

A written research proposal or business plan must be crafted and submitted to the Dissertation Committee. An abstract, the research proposal or business plan (with substantial technical component), and reference list should be provided for evaluation. The topic of the RP/BP must not have a substantial overlap with the dissertation.

Students must have prior approval from the PhD Faculty Advisor for anything that differs from that stated above.

**Relevant Form:**

PhD Thesis Committee Feedback Form filled by the faculty advisor to represent committee consensus regarding the Proposal/Business Plan.

## Current Topics in the Applied Life Sciences

During the PhD Program, all students are required to attend colloquia on current topics in the applied life sciences as part of PDEV 7200 course. The colloquia are designed to encourage in-depth reading of primary literature related to the student's dissertation research and to increase knowledge of topics of high general interest. At least 90% attendance is required.

## Ethics/Responsible Conduct of Research Course

All students are required to take an online ethics training modules on Responsible Conduct of Research (RCR) and Human Subjects Research (HSR). Training in Responsible Conduct of Research (RCR) is not just important and the right thing to do; it is a federal requirement for funded research.

KGI offers online training modules through the CITI program that cover required RCR and HSR content. This course is required and should be completed in the first semester of the program. Instructions on how to sign-up for the CITI program can be located within the PhD program PDEV 7200 course site.

Students also need to participate and present topics related to research ethics and responsible conduct during PDEV 7200 class sessions.

## Communication Skills

### Conference Presentations

Each PhD student is encouraged to present his/her research to at least one national or international conference. Oral presentations are encouraged over poster presentations. All presentations must receive approval from the Dissertation Advisor. In the case of externally funded students, sponsoring company reserves the right to review all material presented.

### Research Symposium Presentation

Each year, PhD students are required to participate in the PhD Presentation Day or KGI Research Symposium as determined through discussion with their Advisor. Students in their first and second PhD years are required to present a research poster corresponding to their dissertation topic, while students in their third PhD year are required to give an oral podium presentation. These student presentations will foster communication among students and faculty, aid the development of interdisciplinary ties and create a strong research community.

**Relevant Form:**

1. Research Symposium Poster Presentation Rubric

### Publishable Manuscript

In order to graduate, students must have at least one publishable manuscript or paper to which they have been the major contributor. Students are not required to have a manuscript already published in order to graduate; however, the paper must be ready or in the final stages for submission to a journal.

## After the Final Dissertation Examination

### Library Clearance

Contact the main circulation desk of the Library to make sure that all items have been returned before you leave campus.

### Exit Survey

KGI PhD graduating students are expected to complete the student exit survey with the Program Director or another faculty member specifically assigned by the Dean's Office to conduct the exit interview.

### International Student Checkout

All international students should notify the Student Affairs Office of upcoming graduation dates. To apply for practical training, students should provide at least two to three months' notice prior to the beginning of employment. Forms and instruction for practical training can be obtained from the Office of Student Affairs.

## Submission of Dissertation and Final Checklist for the PhD Degree

- Proofread dissertation and forward to Dissertation Committee Members for their review and approval, sending them the signature page and Abstract. (See draft forms at the end of this section). Include these pages in your dissertation document.
- After approval by Dissertation Committee Members, an electronic copy of the dissertation in PDF format is to be submitted to the Registrar along with a database if applicable. No hard copies are required by Registrar.
- Submit an electronic copy to your Faculty Advisor and the PhD Program Director with a cc to the Administrative Assistant.
- Submit an electronic copy of your Dissertation to the Honnold Mudd Library at [scholarship.claremont.edu](http://scholarship.claremont.edu). Follow instructions on this link to make your electronic submission. If you need to contact them for any further information, please contact [scholarship@claremont.edu](mailto:scholarship@claremont.edu).
- The Survey of Earned Doctorates link will be sent to you by the Administrative Assistant for the PhD Program. Once completed, please let the Administrative Assistant know you have completed this survey along with proof of completion.
- Proof that you have informed the Office of Student Affairs of your completion and have provided them with your forwarding address (can be done by email).
- Send current and/or forwarding address to the Registrar. This address should be one in which you can be reached for at least the next three months. This is for diploma and final transcript mailing.
- An exit interview with the Financial Aid Office must be completed as well.

# Expectations and Guidelines for Mentoring PhD Students

## Role of PhD Mentors in Student Success and Advocacy

Student success can be defined as comprehensive training (psychological, intellectual, and professional development). This includes students' field of study and their professional arenas. The following points should be considered for students to be successfully prepared for graduation and employment.

KGI's PhD Program in Applied Life Sciences is uniquely structured to encourage and enable the student to pursue professional employment opportunities upon graduation. A critical mechanism of the PhD Program to facilitate student career development is to provide, wherever possible, a formal PhD Mentor as part of the Dissertation Committee. Ideally, the PhD Mentor should be someone who has or is closely associated with a direct knowledge of the life science industry.

The PhD Mentor should have an initial meeting to discuss his/her advising style. Establish who will schedule meetings, what should be prepared for meetings and who should prepare it. You may also address how your student's progress will be assessed.

- Strongly encourage students to focus and define their research topic as early as possible. Achieving this will help students stay on track. Establishment and proper development of the research topic and a measurable research plan will help you assess student progress.
- Throughout your student's PhD Program, keep their sense and level of focus in mind. It is the responsibility of the PhD mentor to prevent drifting from focus and/or isolation. Both of these outcomes can intensify stress, loneliness, etc.
- Above all, graduate mentors should create structure and clarify expectations. Make deadlines, timelines, and milestones as clear as possible. Regular meetings and Committee steering and coordination can make the difference between student success and failure. Do not hesitate to ask for administrative assistance when it comes to meetings or materials.
- If you are the primary graduate mentor (advisor/Committee Chair), conflict management among Committee members falls to you. Student success is KGI's priority. If a situation arises where two Committee members are at an impasse of opinion, the primary graduate mentor must resolve it. If the primary graduate mentor does not feel equipped to make a decision in the case of a conflict, they should seek the counsel of the Dean of Research and/or PhD Program Director.

## Explicit Requirements

Program requirements and milestones should be successfully accomplished on time. To reach this goal, proper preparation is required.

- Orientation sessions—new PhD students will meet with the Program Director and administrative personnel to discuss program requirements.
- Milestones and Explanations—written guidelines pertaining to milestones and explanations of requirements contained in this handbook are posted in the syllabi of the RES 7000 and PDEV 7200 courses.

## Program Quality Assurance

The PhD Program Committee will convene as needed for learning outcomes, fairness, accuracy, and other items. This Committee consists of the PhD Program Director, Dean of Research, faculty member, and PhD student representation. Other faculty and administrators may be consulted.

Students should be aware of the following field norms. It is the duty of the PhD Mentor to provide advice on these norms.

- Appropriate use of animal or human subjects
- Appropriate citation of source material and prior research
- Ethical submission and review of publications
- Recognition and avoidance of conflicts of interest
- Ethical use of research funds
- Responsible generation, recording and use of data.

## Administrative Information

### Satisfactory Degree Progress

Students not making satisfactory degree progress are subject to PhD Program Committee and Dissertation Advisor review and/or dismissal.

### Student Internships

Some PhD students can benefit from summer internships. This requires careful consideration as it could delay graduation and affect laboratory research progress. Delay of graduation could result in lack of support via teaching assistantships so the PhD Program Director and Associate Dean must also approve. Internship approval requires that a student:

- Obtain approval of their Dissertation Advisor before applying for internships.
- Carefully consider if any dissertation research is to continue so that a split of time can be defined and proration of any student stipend can be made; and the student transcript can show reduced credit for the course Research and Milestones (PDEV 7000) and a transcript note of the appropriate zero-credit internship course.
- Upon receipt of offer, fill out “Petition to Allow Internship Form”, obtain the necessary signatures of PI, PhD Program Director, Associate Dean, Career Services), and then send the petition to the registrar ([registrar@kgi.edu](mailto:registrar@kgi.edu)).
- This form must be completed before the student accepts the internship. The form is saved in the student’s PhD student folder.

### Leave of Absence

If a break in continuous formal study is needed, graduate students must request a formal leave of absence from their advisor and the PhD Program Director. The maximum period of leave granted is one year, and the Leave of Absence petition is required. Graduate students on a leave of absence do not receive any financial support from the department. Students should consult with student services staff if considering this option; staff will discuss administrative resources, impacts, etc.

## Honor Code and Fundamental Standard

The Honor Code, KGI's statement on academic integrity, can be found in the Riggs School Student Handbook. It articulates KGI's expectations of students and faculty in establishing and maintaining the highest standards in academic work. Some of the principles inherent in this Code are:

- Students shall treat all members of the community with respect and without malicious intent to ensure that all students share equal opportunities.
- Students shall conduct themselves in a manner that upholds their reputation of honesty and integrity in order to promote an environment of trust.
- It is the obligation of the students to participate in making the honor system viable by reporting violations of potential academic and professional misconduct.

The Fundamental Standard sets the standard of conduct for KGI students. KGI students are expected to show, both within and without the school, such respect for order, morality, personal honor, and the rights of others as is demanded of good citizens. Failure to do this will be sufficient cause for removal from KGI. The full KGI Henry E. Riggs School of Applied Life Sciences handbook, which includes school-wide policies and full Honor Code to which all Riggs School students are held to, may be referenced on the [KGI website](#).

## Scientific or Research Misconduct

Scientific or research misconduct is defined as fabrication, falsification, plagiarism, or other practices that seriously deviate from those that are commonly accepted within the academic and scientific community for proposing, conducting or reporting research, and does not include honest error or honest differences in interpretation or judgments of data. (Further information can be obtained from the [U.S. Office of Research Integrity, Department of Health and Human Services](#)). Possible incidences of misconduct are to be reported immediately to the Deans of the respective schools who will initiate the appropriate procedures.

## Dismissal from the Program

Students not meeting satisfactory degree requirements are subject to Dissertation Committee review and/or dismissal. In cases where a student is subject to dismissal, the Department will follow the Guidelines for Dismissal of Graduate Students for Academic Reasons.

For more information, consult the Student Handbook at [kgi.edu/handbook](http://kgi.edu/handbook).

# Financial Aid

## General Policy

Students receive funding from a variety of sources (teaching assistantship, research assistantship, graduate fellowships, etc.) for a maximum of three years. Students in the PhD Program are provided with a stipend/salary, tuition, and health insurance for four academic quarters each year.

Students are able to defer previously taken loans as long as they are registered for and pass a minimum of 6.0 credits/units for both the fall and spring semester of each academic year.



## Graduate Fellowship Application

It is optional, but recommended, that applicants seek extramural funding for their PhD Program of study. Further in this section on Financial Aid provides more information on various graduate fellowship programs that are available, such as the NSF Pre-Doctoral Fellowship.

## Teaching Assistantship

Teaching assistantships (TA-ships) provide balance between teaching and research. KGI covers half of the stipend and all of the tuition and associated fees. The other half of the stipend must be covered from the research funds of the advisor accepting the student. Due to the limited number of TA positions, the preference order for TA-ship allocation is directly proportional to the year of study of the PhD student, i.e. highest priority given to first-year PhD students and lowest priority to the third-year students. Stipends from TA-ships will begin in the Fall semester independent of whether the student starts their research earlier, in June, or in the Fall. An advisor can optionally cover the stipend for those summer months, if they choose, from their RDA funds; but there is no requirement that this will occur. If a TA-ship is not awarded, the PhD student stipend is covered by a research assistantship through the advisor or a graduate fellowship.

Teaching responsibilities should be clearly understood before a student accepts a teaching position. Typical teaching responsibilities include the following:

- Assist in the preparation and grading of exams, problem sets, etc.;
- Hold regular office hours;
- Assist in preparation and distribution of course handouts;
- Attend lectures;
- Provide student course feedback to instructor;
- Initiate and plan discussion sections;
- For lab courses: set up experiments, check equipment and supervise clean up.

## Research Assistantship

- Awarded through externally funded project grant written by faculty advisor and covers stipend, tuition and associated fees.
- Awarded through dissertation advisor in charge of writing grant and is project-focused.

## Graduate Fellowships

- Individual fellowship – awarded fellowship application written by student that covers stipend, tuition, and fees.
- All students are encouraged to apply for any/all fellowships for which they are eligible. Students are encouraged to consult their faculty advisors when preparing fellowship applications.

## Sponsored PhD Students

KGI accepts PhD students who are sponsored by external entities. The sponsored PhD fellowship terms are covered by properly executed contracts between KGI and external companies or government agencies. Please contact the PhD Program Director and your prospective advisor before applying to the program when considering a sponsored PhD Program.

## Laboratory Safety Training

### Safety

Keck Graduate Institute is fully committed to maintaining safe conditions in all its teaching and research labs as well as in its classrooms, offices, and support facilities. KGI's Laboratory Safety Manager has expertise in these areas: biological safety, chemical safety, environmental affairs (including hazardous waste management), fire safety, occupational safety and health, risk management, and shipping and receiving of hazardous material. The Lab Safety Manager is KGI's primary resource for information on state and federal safety and training requirements and maintains training records organized so that it can be easily searched by regulating bodies. For any questions related to the topics listed above, please contact the Laboratory Safety Manager (see contact information at the beginning of this manual). Additionally, the Laboratory Safety Manager is responsible for the distribution of safety information between the laboratories and the campus; serves as a contact for initiatives (hazardous waste management, laboratory labeling, safety training, environmental and lab safety audits, etc.); ensures that training requirements for faculty, students and staff are met; and assists during regulatory agency interactions.

### Training

All incoming graduate students are required to complete safety training based upon the types of research that will be performed during the course of their PhD Program. Specific training requirements are based on particular responsibilities and differ across various laboratories. Students should consult the advising faculty to specifically identify those required courses. Once identified, the students must send an email to the Laboratory Safety Manager to register for courses. All courses are web-based and can be completed at the student's convenience.

All lab training must be completed prior to conducting any research in KGI laboratories. Advisors can and may require additional training. Please note that any student who will be working with bloodborne pathogens will be required by state law to take an annual refresher training on the topic. Contact the Laboratory Safety Manager for the refresher training. All students conducting research in KGI labs are required to read the Chemical Hygiene Plan, the Biological Safety Manual, and Afterhours Laboratory Access Policy, and follow the procedures contained in the documents. All documents mentioned above can be found in every lab at KGI and [on the website](#). Please ask the advisor or lab manager to locate those materials for you.

Each PhD advisor or lab manager is required to provide laboratory specific training to all students, including location of Personal Protective Equipment, eyewash and shower stations, Standard Operating Procedures detailing safety procedure to include but not limited to chemical spill response, fire extinguisher location, safe evacuation procedures from the lab, emergency contact information, and waste management. Finally, each lab must maintain updated MSDS sheets and direct the new students to the location. It is the student's responsibility to read, understand and follow the safety aspects of any chemical or biological sample with which they will be working.

## Dissertation Preparation and Submission

### Note on Deadlines

The deadlines for scheduling the final oral examination, payment of fees, and submission of the dissertation are determined on a case-by-case basis by the Dissertation Committee of the student and the Director of the PhD Program. Completion dates cannot be waived or extended without severe extenuating circumstances and must be approved by the Director of the PhD Program or the Research Dean in consultation with the dissertation advisor. If there are questions regarding institutional requirements for the completion of your degree, please contact the Registrar.

## General

The PhD degree is conferred by Keck Graduate Institute primarily in recognition of breadth of scholarship, depth of original research, and power to investigate problems independently and efficiently, rather than for the completion of definite courses of study through a stated period of residence. The work for the degree consists of original research and systematic studies that advance knowledge. In addition, the candidate must have acquired the power of clear and forceful self-expression in both oral and written English. Therefore, the candidate must describe his/her work in a dissertation and defend it in an oral examination to the faculty. For more information, consult the [KGI Student Handbook](#).

An electronic copy of the final dissertation must be presented to the Institute. The electronic copy should be prepared in accordance with the instructions given here, and the electronic copy must be completed and accompanied by all illustrative material. Rewriting and changes may be necessary if the specifications are not met. The degree will not be officially awarded until the dissertation is submitted in satisfactory form to the Dissertation Committee and approved by the Dean of Research and Program Director.

A dissertation may be organized as a single paper or as a series of relatively independent chapters unified by a summary chapter. The chapters are often papers that have been or will be submitted to journals in the field or have already been published. Where the student is not the only or first author, the student must establish their major contribution, typically through an introductory chapter describing the “theme of the dissertation.” In addition, there may be certain special requirements that will vary from option to option, particularly in the preparation and presentation of draft copies, format, bibliographical form, number of copies needed for the Dissertation Committee, and additional final copies beyond the electronic copy submitted to the ETD database. Candidates should consult the Director of PhD Program concerning these additional requirements.

## Dissertation Draft

You are advised to submit a final draft of your dissertation to your PhD Dissertation Committee for approval prior to the final preparation. All arrangements for scheduling the final oral examination should be made through the Director of PhD Program in consultation with your PhD advisor(s). Depending on when your Committee advises you to defend your dissertation, the PhD Program Director should be consulted regarding the feasibility of such a plan.

A general reference is *How to Write a Better Dissertation* by David Evans, Paul Gruba and Justin Zobel (Springer, 2014. ISBN# 978-3-319-04285-5). However, it should be understood that this reference is only a general rule. Consult with your advisor to determine whether or not there are any special formats or procedures pertaining to your discipline.

The title page and signature page must conform to the models included in this document in original format. Along with your dissertation, you are required to submit the *Doctoral Dissertation Agreement Form* from University Microfilms International as well as the *Survey of Earned Doctorates* from the National Science Foundation. These forms are available in the Registrar’s Office.

## Proofreading and Editing

All manuscripts should be proofread before being submitted to the Registrar’s office in KGI. The consistency and accuracy of the spelling, punctuation, capitalization, abbreviations, and word divisions are primarily the responsibility of the dissertation writer, who should consult a dictionary and a manual of style for correct usage. Students are especially urged to use the “spell-check” feature of the computer software being used and to proofread the manuscript carefully or to enlist the help of a friend or professional proofreader. The Institute proofreader will return to the student for correction and resubmission any dissertation that has obviously not been carefully proofread. Students should also allow a minimum of two weeks for proofreading before the final examination is scheduled. Similarly, the dissertation writer is fully responsible for editing the style and grammar of the manuscript. Any student who is unsure of his/her abilities should seek the help of a friend or professional editor. Up-to-date advice on software packages suitable for manuscript preparation can be obtained from the Information Management Services and Systems (IMSS) organization or from experienced students in the same field. Some academic options provide templates for preparing the manuscript but due to the variation in requirements between options, the Graduate Office does not provide such templates.

## Format and Paper

Dissertations (both original and copy) must be produced on white bond paper, 8.5x11 inches, of not less than 20 lb. weight. All paper in the dissertation must be the same size and weight. Exceptions may be made in the case of over-sized charts or non-text materials, which have been duplicated for inclusion. Pages should be printed on one side only. The print should be letter quality with dark black characters that are consistently clear and dense. Use of color font is not permitted except when these occur in figures. If you are including your previously published papers, use the word version (or Latex version formatted as below), not the final printed copy from the publisher.

A one and one-half inch margin is required on the left-hand binding edge, and a margin of at least one inch is required at the top, right and bottom of each page. Any pages which exceed the standard size must be assembled according to binding specifications. Any and all materials included with the body of the dissertation such as appendices, etc. must conform to the margin requirements.

It is assumed that authors preparing a dissertation will be doing so using word processing or other electronic means. All textual materials must be double-spaced. Footnotes and long quotations may be single-spaced. Footnotes should be avoided as much as possible, and all abbreviations must be collected and expanded on a separate page following the table of content pages. The page of the list of abbreviations must be included in the table of content.

Any standard type is acceptable, and the same type must be used throughout the dissertation.

Italics and/or bold face type may be used for emphasis, and non-English words or phrases should be italicized. Type size should be 12 point or larger for Times New Roman font or 10 points or larger for Arial or its equivalent, as the document will be reduced in size on microfilm reproductions. Type which resembles written script as well as 'novelty' typefaces are not acceptable. The print should be clean and even in quality and should be letter quality with consistently clear and dense black characters.

## Abstract

The abstract heading must conform to the model included in this document. The title of the dissertation, your name, Keck Graduate Institute of Applied Life Sciences, and the year the degree will be awarded must appear on the first page of the abstract. The abstract must be double-spaced and may not be more than 775 words (text only). It should explain in narrative form the nature and scope of the problem or topic, the method employed in developing the dissertation and a summary of the conclusions. Prepare your abstract carefully as it will be published by University Microfilms International in Dissertation Abstracts. Publication is automatic when your dissertation is sent for microfilming.

## Order and Pagination

Dissertations typically have three main parts: preliminaries, text, and references. All pages of your dissertation, including any blank pages, must be counted in the numbering. The preliminary part of the dissertation is numbered with small Roman numerals (i, ii, iii, etc.). The first page of the introduction or chapter one would start with Arabic number one (1, 2, 3, etc.). The first page of each chapter is to be numbered at the bottom center of the page with all other pages numbered in the upper right hand corner. Beginning with chapter one, page one, all pages of the dissertation must be numbered; and there should be no breaks in the numbering sequence.

Below is a summary of the proper sequence for counting and numbering:

Sequence	Page	Count?	Print Page Number?	Number Type
1	Title Page	Yes	No	N/A
2	Copyright Page (optional)	Yes	No	N/A
3	Signature Page	Yes	No	N/A
4	Abstract (double-spaced)	Yes	No	N/A
5	Dedication (optional, double-spaced)	Yes	No	N/A
6	Acknowledgments (optional, double-spaced)	Yes	Yes	Small Roman
7	Preface (optional)	Yes	Yes	Small Roman
8	Table of Contents (include appendices and bibliography)	Yes	Yes	Small Roman
9	List of Abbreviations	Yes	Yes	Small Roman
10	Table of Figures or Plates (optional)	Yes	Yes	Small Roman
11	Introduction (optional)	Yes	Yes	Arabic Page 1
12	Chapter One	Yes	Yes	Arabic (page 1 if no Intro)

## Appendices

Appendices are sometimes necessary for recording detail mathematical derivations or additional methods, especially when the dissertation is a compilation of published research papers where detail methods or mathematical derivations were not included due to a variety of reasons. These relevant materials should be collected in a series of Appendices at the end of the final concluding chapter but before the Bibliography.

## Charts, Graphs, Tables, and Photographs

Please keep in mind:

- Illustrative material in black will reproduce satisfactorily while colors will appear as slightly varying shades of gray. Labels or symbols rather than colors should identify lines on a graph.
- Shaded areas—such as countries on a map—will have better contrast if cross-hatching is used instead of color.
- Photographs should be professional-quality black and white or color. Most color photographs will reproduce acceptably on positive microfilm or microfiche as shades of gray but will lack clarity on xerographic copies made from the microfilm.
- Charts, graphs, and maps that are larger than the standard 8.5x11 page size may be used in your manuscripts but are best avoided.

## Bibliography

Include a bibliography in the table of content and paginate. Use any of the standard formats of bibliography used in leading science journals for original research articles such as Nature, Cell, PLOS Biology. All citations should be complete in terms of all authors names (do not use et al. in the bibliography, but you are free to do so in the text) and use standard journal abbreviations. You are encouraged to use standard bibliographic software such as EndNote or Reference Manager.

## Additional Data

Increasingly these days, large amounts of data are collected and analyzed for the conduct of research that leads to a PhD dissertation. In cases that such data are used for the dissertation, the final data must be organized in an appropriate format standard to the field, for example, the MIAME format for microarray data, and must be submitted in an electronic format on an acceptable data storage medium such as CD/Flash drive, in two copies. One copy will be held by the Registrar's Office, and the second copy will be held by the Chair of the Dissertation Committee (usually the advisor).

## Use of Published Material

Published articles of which the candidate is author or joint author may be included as part of the dissertation with due regard to copyright regulations (see next section). For the "original copy" of the manuscript, such printed pages must follow the same requirements, maintaining margins, type size (at least 8 point), and page number sequencing.

## Use of Copyrighted Material

As the author of the dissertation manuscript, you will be asked to certify that any previously copyrighted material used in your work beyond "fair use" is with written permission of the copyright owner and that KGI will not be held responsible for any damages which may arise from copyright violations. By signing the Copyright Agreement Form, you agree to the above terms.

Often, no problem will arise if the use of the copyrighted material is for nonprofit educational use; and the amount and substantiality of the portion used is small enough. Some definitions of "small enough" seem to be a complete

article of 2,500 words or less, or an excerpt from prose work of not more than 1,000 words or 10% of the total work, whichever is less. If the dissertation itself is copyrighted and some profit is to be derived from its use, then this exception probably will no longer apply. However, for each published article included in the dissertation, copies of permission letters from copyright owners must be attached to the Agreement Form. These permission letters must state that the copyright owner is aware that UMI may supply single copies on demand.

## Microfilming and Copyright

You are required to sign an agreement authorizing the Institute to reproduce your dissertation in microfilm and pay a special fee to cover the cost of microfilming. A copy of your title page and abstract must be included with the agreement form. Your dissertation is microfilmed by Proquest, and the negative is deposited with that organization. Copies may be ordered through Proquest. Microfilming does not deprive you of the right to publish your dissertation in book or other forms. If you wish to copyright your dissertation through Proquest, a fee of \$65.00 (updated yearly) is required. A certified check or money order, payable to Proquest, must be submitted with your dissertation. The microfilm contract and copyright contract are included in the agreement form, which must accompany your dissertation. If you choose not to copyright your dissertation through Proquest, you still retain the rights to your work.

If you have obtained permission to use copyrighted material from another source in your dissertation, you must submit with your dissertation permission from the source(s) for Proquest to reproduce the material upon request as part of your dissertation. This is generally not a problem but should be planned for in advance.

## Privacy of Dissertation Material

Note that your dissertation is a public document, and KGI is under legal obligation to make available all portions of the dissertation, but not necessarily all original data that produced the dissertation, to any outside entity and will do so through microfilming of your entire dissertation or photocopy or by transmission of the electronic archival copy. If you are concerned about the privacy of any information, you must first protect this information according to legally acceptable practices or you have the freedom to not include such information in the dissertation.

Note, however, that it is up to the Dissertation Committee to determine whether or not your dissertation can be properly evaluated for intellectual criteria satisfying the PhD degree requirements; and if you opt not to include such data on grounds of privacy, the prudence of such an action should first be discussed with your Dissertation Committee.

## The Claremont Colleges' Dissertation Writing Resources

KGI PhD students may contact the Scholarly Communication Coordinator/Librarian Jennifer Beamer ([jenniferb@claremont.edu](mailto:jenniferb@claremont.edu)) at The Claremont Colleges Library for additional resources used for writing their dissertation. The Claremont Colleges Library offers training and/or workshops on the following:

- Scholarly Identity and Sharing your Work
- Open Access - Green Open Access and Article Processing Fees
- Copyright and Fair Use Advice
- Depositing work in Scholarship@Claremont (institutional repository)
- Depositing Dissertation or Dissertation
- Measuring Research Impact
- Open Science

## Sample Pages

### The Preliminaries

The following pages provide samples of the preliminary pages of a dissertation. Some pages have been abbreviated into text boxes and combined into one page. An actual dissertation would not follow these practices. All printing is to be on one side of the page, and each item identified as being a separate page should be set up as such.

The italicized sections are instructions or places where you would insert the pertinent information for your dissertation.

### The Title Page

A sample title page for a PhD Dissertation is shown on the next page. Please note that there is one circumstance where the wording on the title page would be different from that shown.

This will be the case of a joint doctorate program. In this case, the wording would be:

A Dissertation submitted to the Faculty of Keck Graduate Institute of Applied Life Sciences and (Name of Joint Institution) in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Applied Life Sciences.

Claremont and (*City of Joint Institution*)

2018

(*Name of Joint Institution Co-Chair*), Co-Chair

(*Name of KGI Co-Chair*), Co-Chair

(*Name of KGI Program Director*), PhD Program Director



This and the following pages provide sample formatting of the preliminary pages of a dissertation.

(TITLE OF DISSERTATION)

BY

(YOUR NAME)

A Dissertation submitted to the Faculty of Keck Graduate Institute of Applied Life Sciences in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Applied Life Sciences

Claremont, California

20xx<sup>1</sup>

Approved by:

*(Signature of Dissertation Chair)*

*(Typed name of Dissertation Chair)*

<sup>1</sup>The date inserted here should be the calendar year in which the degree will be awarded, not the year in which the dissertation is submitted - particularly for January degrees. You would not have a footnote associated with the year on your actual title page.

Copyright by (Your Name) 20xx

All rights Reserved

We, the undersigned, certify that we have read this dissertation of (your name) and approve it as adequate in scope and quality for the degree of Doctor of Philosophy.

Dissertation Committee:

(Typed name of Chair), Chair

(Typed name), Member

[Redacted Name]

(Typed name), Member

[Redacted Name]

(Typed name), Visiting Examiner (a visiting examiner is optional, upon approval of your Dissertation Chair)

[Redacted Name]

(Typed name), PhD Program Director

## Abstract of the Dissertation

(Title)

By

(Your Name)

Keck Graduate Institute of Applied Life Sciences: 20xx

*(The abstract must be double spaced and not more than 775 words. It should explain in narrative form the nature and scope of the problem or topic, the method employed in developing the dissertation and the conclusions reached in summary form. This abstract will be published by University Microfilms International in Dissertation Abstracts, so you should prepare it with care. Please note that Dissertation Abstracts will truncate any abstract over 350 words, even if it is in the middle of a sentence).*

## Dedication

A dedication is not required, although many people choose to honor someone of particular importance in their lives by dedicating their dissertation to them. Dissertations are frequently dedicated to parents, spouses/life partners, or mentors. The dedication should be brief.

No page number.

## Acknowledgments

This page is also not required but is frequently used. This is where you would acknowledge the assistance of those who were significant contributors to the process of writing your dissertation: Committee Members, outside readers, someone who helped you formulate your prospectus, someone who helped with computer work or statistical analysis. Funding sources which supported your research would be acknowledged here as well.

Please note that page numbering begins with this page, with small roman numerals as noted like “vi.”

## Preface

Following the Acknowledgments section, you may include a Preface. If included, it should be a separate page with a small Roman numeral numbering like “vii.”

## Table of Contents

Listing the page numbers of significant headings and subheadings of the dissertation. If necessary, the Table of Contents would be followed by a Table of Figures and/or a Table of Plates.

Small Roman numeral page numbering continues through these sections such as “viii.”

## Introduction (optional) or Chapter One

This should begin the page numbering for the body of the dissertation, starting with page 1 and continuing throughout the document. Numbering must be consistent, and all pages must be numbered, including figures, graphs, charts, and plates. Numbering continues to the end of the reference section.

## Common Errors

- Reversed punctuation of quotations. Periods and commas always precede final quotation marks even if the quotation consists of a single letter. For example: We shall call the shear stiffness “K.”
- Incorrect punctuation of abbreviations. The Latin abbreviation for “and others” contains only one period “et al.” The abbreviations “i.e.” and “e.g.” are punctuated with two periods and set off by commas from the sentences in which they appear. For example: Analysis of long and narrow buildings, e.g., the Jet Propulsion Laboratory, must take into account the shear stiffness, i.e., K in our equation.
- Names of authors spelled differently in the text and in the bibliography.
- Reference numbers or dates in the text that do not agree with the bibliography.
- Unnumbered pages, especially those containing figures or captions to figures.
- Inconsistent hyphenation of compound words, such as “ray-tracing,” “ray tracing,” and “raytracing.”
- Inconsistent capitalization of proper names used as adjectives, such as “Boolean” and “Hamiltonian.”
- Inconsistent presentation of bibliographic information.



#### ABOUT KECK GRADUATE INSTITUTE (KGI)

KGI, A MEMBER OF THE CLAREMONT COLLEGES, IS A RECOGNIZED LEADER IN BIOTECHNOLOGY AND HEALTHCARE EDUCATION. KGI OFFERS INNOVATIVE POSTGRADUATE DEGREES AND CERTIFICATES THAT INTEGRATE LIFE AND HEALTH SCIENCES, BUSINESS, PHARMACY, ENGINEERING, AND GENETICS, WITH A FOCUS ON INDUSTRY PROJECTS, HANDS-ON INDUSTRY EXPERIENCES, AND TEAM COLLABORATION.

WITH AN ENTREPRENEURIAL APPROACH AND INDUSTRY CONNECTIONS, KGI PROVIDES PATHWAYS FOR STUDENTS TO BECOME LEADERS WITHIN HEALTHCARE AND THE APPLIED LIFE SCIENCES. KGI CONSISTS OF THREE SCHOOLS: HENRY E. RIGGS SCHOOL OF APPLIED LIFE SCIENCES, SCHOOL OF COMMUNITY MEDICINE, AND SCHOOL OF PHARMACY AND HEALTH SCIENCES.

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