

**CLINICAL
RESEARCH
GRADUATE
GROUP
HANDBOOK**



Table of Contents

Clinical Research Graduate Group (CRGG).....	page 3
Administration – our team	
Admissions	pg 4
Application Process and Fees	pg 5-6
Curriculum	
▪ Curriculum Table	pg 7
▪ Typical course schedule	pg 8
▪ Course Descriptions	pg 10
CRGG Practical Information	pg 14
Mentoring General Guidelines	pg 15
Individual Development Plan (IDP) and Progress Reports	pg 17
Helpful Resources.....	page 19
Appendices.....	page 20
Appendix A: Application Checklist	
Appendix B: Individual Development Plan (IDP) Template	
Appendix C: CRGG Degree Requirements	
Appendix D: CRGG Bylaws	

Clinical Research Graduate Group

Mission

Our mission is to empower a new generation of exceptional clinical and translational investigators to advance human and animal health. The program will provide students with the foundations for disciplinary excellence, including the knowledge, skills and perspective to engage in interdisciplinary investigations that will result in innovation and accelerated rates of translation of basic biomedical science into clinically useful therapies. Our fundamental goal is to develop investigators who thrive in a multidisciplinary, team science environment, are committed to excellence, and have the skills to conduct innovative research leading to the practical application of biomedical discoveries that will improve human health and enhance the quality of life in our communities.

Administration

The Clinical Research Graduate Group Team includes:

Program Chair:

Stephen Henry, M.D., M.Sc.

Associate Professor

Department of Internal Medicine

Graduate Program Advisors:

Oanh Meyer, Ph.D., M.A.S.

Associate Professor

Department of Neurology

Daniel K. Nishijima, M.D., M.A.S.

Professor

Department of Emergency Medicine

Graduate Program Coordinator:

Robyn Fujii-Schofield

Clinical and Translational Science Center

Mentored Clinical Research and Training Program Manager:

Stacy Hayashi, M.Ed.

Clinical and Translational Science Center

Admissions

The M.A.S. degree in Clinical Research is intended for working health professionals who have a high level of interest and potential to pursue innovative translational research (ranging from pre-clinical to clinical to community-based), and a long-term goal of pursuing a translational research career. Typical students are Junior Faculty clinicians, fellows, and medical students on a research track, who are currently at a research-oriented academic medical center and who have the ability and desire to conduct long-term research studies. Many students who enroll in the M.A.S. degree program do so as part of the UC Davis Mentored Clinical Research Training Program (MCRTTP). However, the MCRTTP is independent from the Clinical Research Graduate Group and participation in the MCRTTP is not required for the M.A.S. degree. Some students may come from other training programs such as the TL1.

Admissions Criteria

- Completion of a professional doctoral degree (Ph.D., M.D., D.D.S., D.M.D., O.D., N.D., D.O., Pharm.D., D.V.M., D.N.S. etc.) is required.

Applications from students currently enrolled in Ph.D. or M.D. programs who demonstrate an interest in translational research (pre-clinical, clinical or community-based) will be considered on an individual basis. These students who pursue the one-year option will be required to take a temporary educational leave from their professional degree program to complete the M.A.S.

- Cumulative GPA of 3.0 (graduate degree GPAs will be considered along with the undergraduate GPA)
- Candidates must demonstrate a high level of interest and potential to pursue innovative translational research (ranging from pre-clinical to clinical to community-based), and a long-term goal of pursuing a translational research career.
- Candidates must have identified mentors at the time of application and have the ability to conduct research, either in a medical facility or research lab. This program does not match students with mentors or labs, nor does the program provide job opportunities or access to research positions. Applicants who anticipate conducting research at institutions other than UC Davis are strongly encouraged to identify mentors from their home institution.

Application Process

Congratulations on taking the first step to furthering your education. We know the application process can be daunting, so we've put together this step-by-step guide letting you know what to expect during each part of the process. In addition, please review the [application checklist \(PDF\)](#). See Appendix A for the checklist.

Step 1: Submitting Your Application

- [Submit your application online](#). The application fee is \$135.
- Submit your application materials, please review [application deadlines](#).
- Please contact the UC Davis School of Medicine [Financial Aid office \(or the financial aid office at your home institution\)](#) as soon as possible if you need to apply for financial aid, to ensure funds are available prior to the start of the term.

Required Documents

Applying to the Master of Advanced Studies in Clinical Research is done through the [Graduate Studies Application Management System](#). All required documents are uploaded into the application through this system. Required documents include:

- A completed application
- Transcripts from all universities or colleges attended (undergraduate and graduate education) ([UCD transcript policy](#))
- Two to three professional letters of recommendation
 - One from your immediate supervisor/mentor and one from another qualified individual (second mentor; not a peer) who can comment on your ability to succeed in the program. You need an additional letter from your Department Chair if you are taking 70% release time to obtain the degree for the UC Davis MC RTP program.
- Personal statement which includes past successes, career goals and objectives for seeking this degree (this is a section in the application)
- Resume/ CV
- Writing Sample: Research Proposal Form
 - On this form, you must supply a 2-4 page description of the research project you are proposing: Project Title, Significance/Statement of Problem, Aims, Research question/Hypothesis, Methodology, Research

Design, Project timeline, Career Development Goals and a Mentoring Plan. The mentoring plan must make clear how the disciplinary expertise of each mentor will contribute to the candidate's research and training plans. It should describe how the mentors plan to work together and what each will contribute to the candidate's research and training. The mentoring plan should describe specific plans for the frequency of contact between the mentors and the candidate and identify expectations for candidate productivity (i.e. expectations regarding manuscripts, submission of applications for extramural funding, etc.). They should indicate a willingness to complete the required quarterly mentee progress reports and participate in seminars with the other studentstudents and their mentors.

- Additional requirements for International Students. Please note, this program does not qualify under the STEM Visa program.

Curriculum

MAS Program Requirements - 2 Year Plan (most common plan)

Note: Most CLH required courses are scheduled on Tuesdays and Thursdays. Please email if you would like to see a sample schedule.

Course Requirements	Course #	Quarter	Units
Core Courses - Summer Quarter			4
• Introduction to Translational Research	CLH 200	July/August	1
• Introduction to Clinical Research	CLH 202	Sept	3
Core Courses – Academic Year 1			25
• Clinical Epidemiology and Study Design for Health Prof.	SPH 205A	Fall	4
• Introduction to Medical Statistics	CLH/SPH 244	Fall	4
• The Ethics of Research	CLH 204	Spring	3
• Critical Assessment of the Biomedical Literature	CLH 211	F/W/Sp	3 (1/ qtr)
• Methods in Clinical Research	CLH 203	Winter	2
• Biostatistics for Biomedical Science	CLH/SPH 245	Winter	4
• Biostatistics for Clinical Research	CLH/SPH 246	Spring	4
• Team Science	CLH 207	Spring	1
Other Courses- Academic Year 2			7
• Mentored Research	CLH 299	F/W/Sp	3 (1/ qtr)
• Introduction to Grant Writing, I (for preapproved students only; counts as ELECTIVE)	CLH 208	Fall	2
• Introduction to Grant Writing, II (for preapproved students only; counts as ELECTIVE)	CLH 209	Winter	2
• Other Elective Course	Student choice	Student choice	Extra (Not Required)
Total Unit Requirements			36
Clinical Research Degree Capstone Requirements		Completed	
• Written – grant application or journal article manuscript	Submit in Final Year		
• Oral – Annual Scholar Symposium (May or June)	Scholars participate each year (required in spring of student's graduation)		

Typical Timeline and Sequence of Events for the Clinical Research Graduate Degree Program:

Each year we attempt to schedule most required courses on Tuesdays and Thursdays, though this is not guaranteed. Elective courses are not included and can be on any day of the week. Certain irregular activities maybe scheduled on different days. It is the students' responsibility to confirm course schedules for each academic year.

Typical Two-Year Plan for Part-Time Working Professionals

Year One			
Summer (4 units)	Fall (8 units)	Winter (6 units)	Spring (8 units)
Introduction to Translational Research (CLH 200) Introduction to Clinical Research (CLH 202)	Introduction to Medical Statistics (CLH 244/SPH 244) Epidemiology for Health Professionals (SPH 205AY)	Biostatistics for Biomedical Science (CLH 245/ SPH 245) Methods in Clinical Research (CLH 203)	Biostatistics for Clinical Research (CLH 246/ SPH 246) The Ethics of Research (CLH 204) Team Science (CLH 207)
Year Two			
Summer (0 units)	Fall (4 units)	Winter (4 units)	Spring (2 units)
No Courses	Critical Assessment of the Biomedical Literature (CLH 211) Intro to Grant Writing, I (CLH 208) Mentored Research (CLH299)	Critical Assessment of the Biomedical Literature (CLH 211) Intro to Grant Writing, II (CLH 209) Mentored Research (CLH299) Advancement to Candidacy	Critical Assessment of the Biomedical Literature (CLH 211) Elective (as needed) Mentored Research (CLH299) Capstone Oral and Written Requirements

Typical One Year Plan for Full Time Students

Year One			
Summer (4 units)	Fall (12 units)	Winter (10 units)	Spring (10 units)
<p>Introduction to Translational Research (CLH 200)</p> <p>Introduction to Clinical Research (CLH 202)</p>	<p>Introduction to Medical Statistics (CLH 244/SPH 244)</p> <p>Epidemiology for Health Professionals (SPH 205AY)</p> <p>Critical Assessment of the Biomedical Literature (CLH 211)</p> <p>Intro to Grant Writing, I (CLH 208) OR Research Integration (CLH 240)</p> <p>Mentored Research (CLH299)</p>	<p>Biostatistics for Biomedical Science (CLH 245/ SPH 245)</p> <p>Methods in Clinical Research (CLH 203)</p> <p>Critical Assessment of the Biomedical Literature (CLH 211)</p> <p>Intro to Grant Writing, II (CLH 209) OR Research Integration (CLH 240)</p> <p>Mentored Research (CLH299)</p> <p>Advancement to Candidacy</p>	<p>Biostatistics for Clinical Research (CLH 246/ SPH 246)</p> <p>The Ethics of Research (CLH 204)</p> <p>Team Science (CLH 207)</p> <p>Critical Assessment of the Biomedical Literature (CLH 211)</p> <p>Elective (as needed)</p> <p>Mentored Research (CLH 299)</p> <p>Capstone Oral and Written Requirements</p>

Course Descriptions

Introduction to Translational Research: CLH 200

Summer – 1 unit

This foundational course introduces the student to the faculty responsible for the master's degree in clinical research, introduces select topics such as the development of conceptual models, scientific writing, career planning and development in translational research including facilitating the interaction of the student with other faculty who have successfully completed the program. The course combines some didactic presentations with interactive student exercises.

Introduction to Clinical Research: CLH 202

Summer (September) – 3 units

This intensive 8-day course in clinical research methods covers developing a research question, study design, questionnaire design, data collection, data management, analysis, and preparing abstracts and publications, with a practical component focused on students' own research projects. This course dates vary by year but are typically scheduled in September prior to the start of other Fall Quarter courses.

Methods in Clinical Research: CLH 203

Winter – 2 units

This survey course will expose students to a variety of different methods and approaches that may be used in clinical and translational science. Laboratory, pre-clinical, clinical, and epidemiological methods will be discussed, as well as methods in health services research and health informatics. In addition, the course is designed to be interactive and includes some sessions on scientific communication (peer to peer, and to the public). Students are expected to be active participants in each discussion.

The Ethics of Research: CLH 204

Spring – 3 units

This course will address several topics in research ethics. Students will acquire information about the ethical responsibilities that biomedical researchers face, explore some of the major questions in ethics and values generated by contemporary biomedical research, discuss the application of ethical principles and concepts to ethically challenging aspects of scientific research, and gain an appreciation of the role of trust in biomedical research.

Epidemiology for Health Professionals: SPH 205AY

Fall – 4 units

This is an introductory course to cohort research, population research, and the rich interaction between these two methods of clinical-translational investigation. The student is expected to learn basic epidemiologic concepts and study design of clinical trials and population health issues. The course covers a wide spectrum of topics, e.g., measures of morbidity and mortality, diagnostic and screening tests, clinical and epidemiologic study design, confounding, interaction, bias, measures of risk and effect, and criteria for causality.

Team Science: CLH 207**Spring – 1 unit**

This course focuses on skills required to build and participate effectively in interdisciplinary research teams, challenging perceptions and building team work skills. Topics include leadership, conflict management, roles on teams, and effective communication. The course includes weekly reading assignments that are the basis for the discussion sections and weekly presentations from visiting faculty who bring real world academic experience to team science.

Critical Assessment of the Biomedical Literature: CLH 211**Fall, Winter, Spring – 1 unit**

This course has a journal club format, and exposes students to topical issues and controversies in the design of interdisciplinary translational research, with an emphasis on critical assessment of the biomedical and health sciences literature.

Introduction to Health Sciences Statistics: CLH 244/SPH 244**Fall – 4 units**

This course provides a basic introduction to the foundations of probability and statistics by focusing on quantitative methods for describing and visualizing data, statistical inference, and determining appropriate statistical tests for a variety of data types. Examples and instruction will be in SAS.

Biostatistics for the Health Sciences: CLH 245/SPH 245**Winter - 4 units**

This course covers the basic concepts of experimental study designs and statistical methods that are commonly used in health science research for inference and group comparison. Major topics include experimental design, ANOVA, linear regression methods, and logistic regression.

Biostatistics for Clinical and Population Research: CLH 246/SPH 246**Spring – 4 units**

Emphasizes critical biostatistics for clinical research and targets biomedical audience. Students will develop understanding for basic planning and analysis of clinical studies and learn to develop collaborations with biostatisticians.

CLH Elective Options**Introduction to Grant Writing, I: CLH 208****Fall – 2 units**

This is the first in a two-quarter series (Fall/Winter). Students are expected to enroll in both classes. The two-course sequence provides training in practical aspects of competitive grant writing. The focus is on NIH format, but the information is applicable to other funding agencies. During the Fall quarter, students will write several sections of an NIH-format proposal. This is expected to be original work, not part of a previously submitted proposal or written by the mentor. Instruction will take place in both lecture format and small writing groups led by the course instructors. Students review each other's work weekly.

All enrolled students (both for credit and auditing) must have:

- A research mentor with whom they are actively working
- A research project already designed with the mentor's input

- Faculty, postdoctoral, or medical resident status (second year or later)
- Plans to submit a grant proposal in next 6-12 months

Introduction to Grant Writing, II: CLH 209

Winter – 2 units

This is the second in a two-quarter series (Prerequisite: CLH 208). Students finish writing the 6-page NIH-format grant application begun in Fall. At the end of Winter quarter, students participate in mock study sections, reviewing proposals of their peers, and gaining experience in providing feedback using NIH scoring criteria and structured templates.

Principles and Methods of Comparative Effectiveness Research: CLH210Y

Spring – 4 units

Comparative effectiveness research (CER) is the conduct and synthesis of research comparing the benefits and harms of different interventions and strategies to prevent, diagnose, treat, and monitor health conditions in “real world” settings. It is a priority for the physical and economic health of the nation. This course will provide an introduction to CER and methods for conducting CER. The course will cover four areas of research methodology:

- Design and Analysis of Randomized Clinical Trials
- Design and Analysis of Observational Studies and Large Datasets
- Research Synthesis, Systematic reviews, and Meta-analysis
- Economic Evaluations, Modeling, and Health Policy

Introduction to Stem Cell Biology: CLH 212

Fall – 3 units

This course will introduce students to Stem Cell Biology, including general concepts, stem cells in lower organisms, embryonic stem cells and cellular reprogramming. Lecture, speakers, and discussion of scientific literature and could be offered at either campus depending on type of student interests.

Clinical Trials in Medicine: CLH 215

Winter – 2 Units

The Clinical Trials course will provide the learner with fundamental information on the design, implementation, analyses and reporting of clinical trials. It will discuss the importance of clinical trials in improving health as well as the ethics of conducting such studies. The course will not only provide a deep exploration of the basic methods employed in clinical trials but will also explore specific advanced concepts. By the end of the course, the learner will have the necessary tools to design a protocol to conduct a clinical trial. This course is targeted for those who intend to design, lead, organize or otherwise participate in conducting a clinical trial. Learners should have appropriate prerequisites prior to this course (Epidemiology and Biostatistics). The course will be a combination of recorded lectures, in-person group discussions and assigned readings. Lectures will be pre-recorded and available to the learner prior to the in-class group discussion which will focus on aspects of that lecture. It is expected that the learner will have watched the week’s recorded lecture prior to group discussion for that week. Selected readings will be appropriate for and build on the weeks’ recorded lectures and in person discussion.

Clinical Research Implementation: CLH 216**Spring – 3 Units**

A step-by-step examination of the process of constructing and implementing a formal translational clinical research protocol, emphasizing evaluation of study feasibility, design of the formal clinical study protocol suitable for IRB review, and use of appropriate institutional resources to conduct human clinical trials. Each student will develop a formal clinical research protocol based on a topic of their choosing. The protocol will be based on the student's own research question.

Research Integration: CLH 240**Fall, Winter – 1 unit**

This course exposes students to successful researchers who will use their area of research as a platform to encourage discussion of the strengths, limitations, and extrapolation of translational research methods and results to treating human disease. Entrepreneurial research skills consistent with the iCORPS at NCTS training program will be introduced. Focus will be upon critical assessment of these translational research methods and techniques. The format for this course will be interactive and will require oral presentations.

Healthcare Delivery Science: CLH 298**Spring – 1 Unit**

This course provides participants with a foundational understanding of methods for moving evidence-based interventions into real-world settings through Healthcare Delivery Science. Despite acceleration in the pace of new discoveries and therapies, the quality chasm in health care and gaps between scientific evidence and clinical care delivery are of growing concern. Healthcare Delivery Science covers the continuum of dissemination, improvement, and implementation science. Dissemination science develops effective ways to communicate information on evidence-based interventions to health practitioners. Improvement science creates and sustains improvements in healthcare delivery, while implementation science studies methods to promote the systematic uptake of evidence-based practices into routine care to improve health outcomes.

CRGG Practical Information

Selecting Mentors

Students should identify established researchers who have agreed to serve as mentors for the student by the time they apply to the program. In most cases, recommendation letters from mentors are expected as part of the student's application. . Should a need arise to change mentors or add a new mentor, please consult the program advisors or Chair.

Independent Study

CLH 299 is taken for a minimum of 3 units, and corresponds with the time a student is doing their research. These units are usually taken in the second year.

Plan II

This program does not require a thesis. In order to graduate, a student must complete a written and oral capstone during their final year. The oral capstone is a presentation on the students' research at the Annual CTSC Symposium (all students are required to attend; the symposium is scheduled in May or June and the written capstone is in the form of a grant proposal or manuscript (see degree requirements for details – appendix C).

Extra fees

In addition to the \$135 application fee, all students will be required to pay a \$150 document fee (<https://registrar.ucdavis.edu/tuition/doc-fee>) if they are new to UC Davis and a \$55 candidacy fee at the time of filing for graduation.

Student Participation in Committees

Students have the opportunity to participate as a non-voting committee member in one of the Graduate Group committees. For information on the committees, please see the bylaws (appendix D). To participate in a committee, please contact the program coordinator.

Health Center

Most matriculated students will be working professionals with healthcare provided by their employer. However, should a student require it, the UC Davis student health center information can be found here: <https://shcs.ucdavis.edu/>

Library

Currently registered UCD students, faculty, and staff automatically have library privileges with no activation needed. These users may immediately begin using all library services. The Blaisdell Medical Library is located on the Sacramento Campus: <https://www.library.ucdavis.edu/library/blaisdell-medical/>

Mentoring Guidelines

This guide is intended as a resource to assist mentors and scholars in assessing mentoring needs and developing the mentoring relationship. Given that mentoring is a relationship, it requires strong commitment from both the mentor and the scholar. This guide is meant as an aid to foster such commitment.

Mentors and scholars should:

- Negotiate a mentoring agreement that:
 - Establishes the roles of the mentor and the scholar
 - Discusses expectations of both the mentor and the scholar
 - Transforms the scholar's goals into a working plan (see sample worksheet)
 - Sets short and long term goals for the scholar's career development
 - Discusses the duration of the relationship, including a realistic and flexible stop date and a no-fault termination, if appropriate
- Recognize that the mentoring relationship is mutually rewarding and a reciprocal relationship.
- Provide trusted and confidential feedback to each other on agreed upon areas.
- Respect time limits available for mentoring.

Mentors should:

- Direct the scholar to appropriate channels for resolving conflicts and advancing professional issues.
- Advocate for the scholar and provide professional exposure and guidance without being authoritarian.
- Alert scholars of appropriate career opportunities in education, skills workshops, grant funding, etc.
- Help scholar establish professional networks.
- Help monitor the academic process of the scholar.
- Be open to the scholar's concerns about performance, interactions with colleagues, and the workplace environment (e.g. how to evaluate expectations of others, when to say "No")
- Be available and accessible to the scholar – consider setting up a system for regular or periodic communication and interchange.
- Offer valuable advice in areas important to the scholar's career development.
- Recognize the scholar's independence while providing guidance, and be generous with providing scholar credit for contributions.
- Ensure a positive and supportive professional environment for the scholar.
- Ask the scholar what he/she expects from the mentoring relationship.

Scholars should:

- Be willing to assume primary responsibility for his/her academic growth and development (understanding academic values, managing an academic career, establishing and maintaining productive work relationships with colleagues).

- Actively seek out career development opportunities and develop them with the mentor.
- Develop career autonomy.
- Take the initiative in identifying possible mentors recognizing that more than one mentor may be needed at different times or for different functions.
- Clarify his/her needs vis a vis the mentor and set priorities for accomplishing them.
- Communicate career development goals to mentor and develop these with the help of the mentor.
- Provide the mentor with feedback.

Approaching and Selecting a Mentor:

- Be as specific as possible in stating your needs, skills you want help with, and time commitment you expect (e.g., help in understanding the promotion process, grant writing, networking within the field, introduction to potential collaborators, setting priorities, time management, being effective in a group or committee, etc.)
- Interview a number of potential mentors to find the right working relationship for you. Recognize that one individual may not be able to fill all roles and more than one mentor may be needed.
- State implicitly and explicitly that as the reciprocal relationship develops you will contribute to the mentoring relationship and recognize the contributions of the mentor to your career development.
- Consider if the mentor is available, successful, approachable, well-connected within and outside the institution, and willing to invest the time you need.

Sample Worksheet for Mentor/Mentee Career Development Planning

Expectations	What Scholar Can Do	What Mentor Can Do
<ul style="list-style-type: none"> • Improve Communication 	<ul style="list-style-type: none"> • Be open to feedback • Observe mentor in action 	<ul style="list-style-type: none"> • Provide honest feedback • Serve as a role model
<ul style="list-style-type: none"> • Organizational Involvement at Higher Levels 	<ul style="list-style-type: none"> • Volunteer to help with a project • Help with a presentation at a meeting 	<ul style="list-style-type: none"> • Enlist scholar to help with a project • Invite scholar to executive meetings • Introduce scholar to others at an academic meeting
<ul style="list-style-type: none"> • Improve Grant Writing 	<ul style="list-style-type: none"> • Obtain information on and read potential grants • Prepare grant application 	<ul style="list-style-type: none"> • Refer scholar to a grant writing seminar • Critique the grant and provide basic didactics

Mentoring Guidelines

<https://communication.ucdavis.edu/graduate/handbook-and-guidance/grad-mentor-guidelines>

Individual Development Plan (IDP) and Progress Reports

All students are encouraged, but some may be required, to submit an IDP and progress report to their respective mentor(s) and Mini-Advisory Committee (MAC). The mentor and the MAC will review the report and offer pertinent research and career development feedback based on the student's research and career development plan.

IDPs provide a planning process that identifies both professional development needs and career objectives. The IDP can also serve as a tool to help facilitate communication between mentees and mentors.

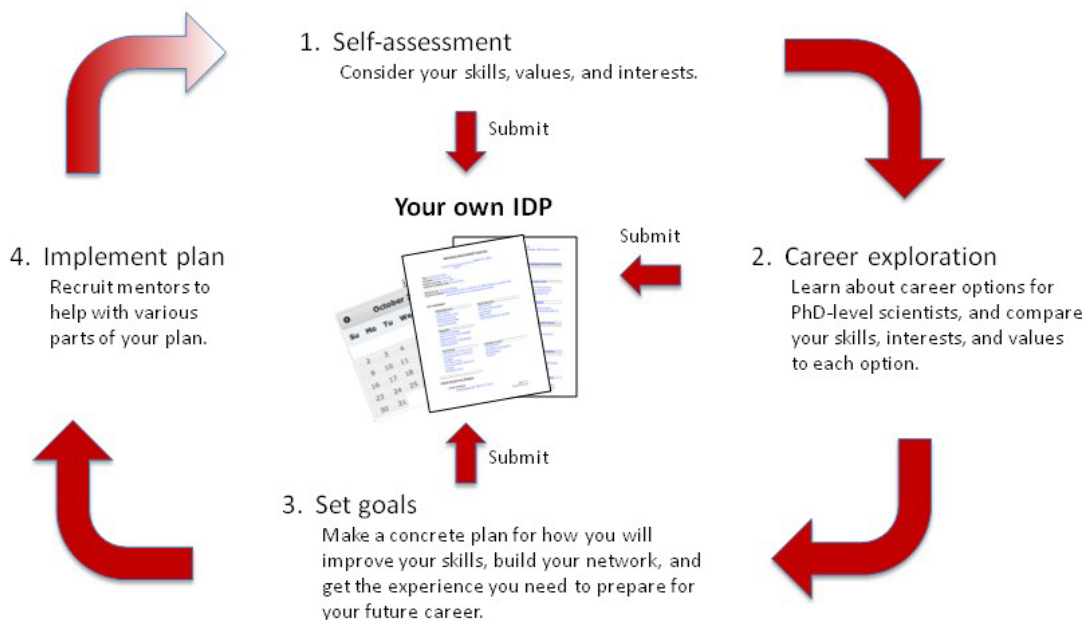
An IDP is one component of a broader mentoring program. Specifically, it helps students:

- Create annual plans to reach their career goals
- Establish target dates for academic and research milestones
- Set goals for the next year, including discussions about how to allocate time
- Define in detail the approach they plan to take in order to obtain the specific skills and knowledge needed, and anticipated time frames for obtaining those skills

An Individual Development Plan (IDP) is a structured planning tool designed to help you:

- identify **long-term career goals** that fit with your unique skills, interests, and values,
- make a plan for **improving your skills**,
- set goals for the coming year to **improve efficiency and productivity**, and
- structure productive **conversations with your mentor(s)** about your career plans and development.

This module will guide you through the process of creating an IDP:



IDP Process

Step 1: Conduct a self-assessment of your skills

Using the CTSC Self-Assessment Form, or you may take advantage of other relevant assessment tools. You will take a realistic look at your abilities. This is a critical part of career planning and development that will help guide your education and training goals. It can be helpful to ask your mentor and/or colleague to review your skills assessment with you or ask them to complete the assessment from their view of your current skills.

Step 2: Prepare your Annual IDP

The IDP maps out the general path you want to take over the next year to achieve your research, educational, and professional development goals, and to acquire the necessary skills and knowledge to do so. For each of these areas, set goals, define approaches, and establish a timeline for achieving your goals. Your IDP is a *changing document*, since needs and goals will almost certainly evolve over time.

Step 3: Review and Discuss your IDP

Set an appointment with your mentor. Discuss your IDP with your mentor. Revise your IDP if appropriate.

Step 4: Implement your IDP

Complete the steps outlined in your IDP. Revise and modify (repeat step 3) as needed. You will be required to review and revise your IDP annually while you are participating in a CTSC affiliated career.

Mentors: The mentor's role in the IDP process is as follows:

- Review mentee IDP and help revise if necessary. Provide honest feedback – both positive and negative – to help mentees set realistic and relevant goals. Assess mentee time allocation needs, and provide advice on addressing time distribution challenges and barriers.
- Help mentee review and revise the IDP as needed. Annual review and revision will be required, but the IDP may be revised at any time as goals and skill needs change.

To access the Templates:

Individual Development Plan (IDP) – See Appendix B

Helpful Resources

Clinical Research Graduate Group Website:

<https://health.ucdavis.edu/clinicalresearch/index.html#>

UC Davis Graduate Student Resources:

Grad Studies Main Page:

<https://gradstudies.ucdavis.edu/>

Grad Studies Student Resources:

<https://grad.ucdavis.edu/resources/resource-guide>

Career Development:

Mentoring Academy:

<https://health.ucdavis.edu/ctsc/area/education/mentoring-academy/>

Faculty Development:

<http://www.ucdmc.ucdavis.edu/facultydev/>

CTSC General Information:

Biomedical Informatics:

<http://www.ucdmc.ucdavis.edu/ctsc/area/informatics/index.html>

Biostatistics:

<http://www.ucdmc.ucdavis.edu/ctsc/area/biostatistics/index.html>

Clinical Trials Education and Training Resources:

<https://health.ucdavis.edu/ctsc/area/clinical-trials/cto-resources>

Community Engagement:

<http://www.ucdmc.ucdavis.edu/ctsc/area/engagement/index.html>

Investigator Resources:

<https://health.ucdavis.edu/ctsc/area/investigator-resources/>

School of Medicine Office of Research:

Grant Facilitation Services:

<https://health.ucdavis.edu/medresearch/grants-facilitation/>

IRB Administration:

<http://research.ucdavis.edu/policiescompliance/irb-admin/>

SOM Office of Research:

<https://health.ucdavis.edu/medresearch/>

Appendices

Appendix A

Graduate Group in Clinical Research UC Davis – M.A.S. Degree Application Checklist

- Contacted program for information Submitted official
- application
- Uploaded all transcripts (undergrad + grad) Letter of
- recommendation 1
- Letter of recommendation 2
- Letter of support from Department Chair (MCRTTP only) Uploaded
- resume / CV
- Uploaded writing sample (research proposal)
- Provided additional documents as needed for clarification or for training program purposes
- Provide TOEFL scores if needed

Appendix B Individual Development Plan (IDP) Template

UC Davis Clinical and Translational
Science Center
Individual Development Plan (IDP)

Name: _____
 Academic Title: _____
 Department: _____
 Career Development Program(s): _____
 Primary Mentor: _____
 Other Mentors: _____

What are your long-term (3-5 years) career goals? (expand space if needed)

Current Career Track

- Ladder Rank
- In-Residence
- Adjunct
- Clinical X
- Salaried Clinical
- Other _____
- PostDoc
- Grad/Med Student

Terminal Academic Rank

- Assistant
- Associate
- Professor
- Other _____

What are your research, professional development, and educational goals for the next year? Please list these goals in the following sections. Add additional rows to tables, and expand white spaces as needed.

- **Scientific Question:** What are the **scientific questions** that you will be working toward answering in the next year? These may be individual papers (or figures within a single paper) that you aim to publish.
- **Experimental Approach/Method:** What are the experimental approaches that you are currently pursuing? (e.g., epidemiological, laboratory, randomized clinical trial, observational, etc.). How are you going to answer this scientific question?" (e.g. collect and analyze patient samples, conduct a randomized clinical trial, administer surveys to patients, use dna microarrays to identify gene targets, etc.)

Goals: Research Projects (copy table as needed to add more scientific questions)

Scientific question: _____

Experimental Approach/Method (current and potential)	Target Completion Date	Anticipated Products (manuscripts, grants, presentations, patents)

Scientific question: _____

Experimental Approach/Method (current and potential)	Target Completion Date	Anticipated Products (manuscripts, grants, presentations, etc.)

What further research-related (e.g. study design and analysis, laboratory, clinical) skills do you need to be successful in this area of your career?

Goals: Writing and Presentation Projects

Project (manuscript, grant application, poster, slide presentation, etc.)	Target Journal or Conference	Target Completion Date

Goals: Professional Development What further development do you need in the areas of grant and manuscript writing, oral and visual presentation of your work, mentoring, or being a better mentee?

Goals: Leadership and Management What further development do you need in the areas of leadership, project management, time management, and interpersonal skills?

Goals: Education and Training (include your plans for addressing your knowledge and skills goals in the areas of research, professional and leadership development)

Knowledge Area	Method for Knowledge Development (e.g. coursework, certifications, self-study, discussions)	Target Completion Date

Time Allocation

Estimate how you allocated your time last year (July 2021-June 2022) and indicate how you will change this time distribution for the coming year (July 2022-June 2023) to accomplish all the goals stated in your IDP. Indicate any barriers you perceive to making time allocation adjustments:

Area of Effort	% Time 2021-22	% Time 2022-23	Potential Barriers
Research			
Patient Care			
Teaching, training or mentoring others			
Administration			
Service			
Self-Development (coursework, seminars, workshops, skills training, etc.)			
Other:			
Total % Time	100	100	

Date IDP Completed: _____

Date IDP Discussed with Primary Mentor: _____

Signature of Primary Mentor: _____

Date(s) IDP Revised: _____

Reason(s) for Revision:

- End of year; time for annual revision
- Mid-year adjustment; goals adjusted because:

Appendix C:

CRGG Degree Requirements

<https://programs.gs.ucdavis.edu/api/doc/3608>

Appendix D:

CRGG Bylaws

<https://programs.gs.ucdavis.edu/api/doc/3624>