INTEGRATING MEDICINE INTO BASIC SCIENCE

The UC Davis HHMI Integrating Medicine into Basic Science (IMBS) program provides an innovative, cost-effective, and sustainable model for training a new cadre of Ph.D. biologists who will have productive careers in clinically relevant basic research. The program is a Howard Hughes Medical Institute-sponsored Med into Grad initiative.

IMBS is a key component of UC Davis Health System’s institutional strategy to create a groundbreaking translational research program that embraces cross-disciplinary teamwork. The program develops IMBS scholars into scientific leaders who will participate, with clinical colleagues, in the translation of basic research discoveries into high-impact clinical applications.

The IMBS program is an excellent career development opportunity for UC Davis graduate students. National Institute of Health and the Howard Hughes Medical Institute have targeted the national need to fund research in ways that accelerate the translation of basic discoveries into novel therapies and clinical practices. The strong skill sets in team/translational science provided by IMBS training will give its participants a strong foundation for successful careers in academia or industrial/pharmaceutical settings.

A one-year multifaceted IMBS curriculum builds upon the basic Ph.D. training through clinical experiences and rotations; newly created courses and interactive training opportunities with medical students, basic scientists and physician-educators.

Earn a Master of Advanced Studies in Clinical Research or a Designated Emphasis in Translational Research.

Specific aims
- Fundamentally influence the scholars’ research careers, orienting them to pursue studies that can substantially improve human health
- Provide the requisite skills, knowledge and abilities for conducting such research
- Immerse IMBS scholars in team-oriented approaches with multiple collaborators, including clinicians
- Provide a strong foundation for evaluating the potential impact and opportunities of new basic science discoveries on human health

Programmatic core
- Didactic instruction
- Clinical medicine-basic science learning groups
- Special experiences

Didactic instruction
- Intensive summer institute, including an innovative “Doctoring” course
- Core curriculum
- Elective courses

Special experiences
- Collaborative mentoring
- Clinical rotations
- Workshops
- Field trips

- Seminars
- Peer advising/networking
- General Clinical Research Center clinical study
- Quarterly breakfast meetings with the UC Davis deans
- Annual retreats

Multi-layered
- Intensive five-week summer institute
- Doctoring/rotation courses
- Core/elective courses
- Special experiences

Cross-disciplinary
- School of Medicine
- College of Biological Sciences

Purpose
- To build strong skill sets in team/translational science (NIH Roadmap)
- To train a new cadre of Ph.D.s for productive careers in clinically relevant basic research
- To train scientific leaders who will participate, with clinical colleagues, in the translation of basic research discoveries into high-impact clinical applications
- To prepare UC Davis doctoral students for competitively funded independent research
Eligibility criteria

- Strong academic credentials, strong interest in translational biomedical research and good communication skills
- Basic biological research with the potential to be broadly applied to cardiovascular disease, including diabetes, obesity, heart failure, stroke, etc., is valuable but not required.
- Completion of the first-year of a UC Davis Ph.D. graduate program (open to 2nd-5th year students)
- Faculty member/student participation in the Clinical Medicine-Basic Science Learning Groups
- Enrollment for five weeks (approximately 80% time) in the Summer Institute: Introduction to Clinical Medicine (August-early September)
- Additional review criteria: diversity of scholars’ backgrounds, interests, career aspirations in biomedically-relevant research

Funding

- Stipend and tuition will be covered for one calendar year (50-75% level).

Application

- Application deadline is May 1 for full consideration
- Apply on line at: www.ucdmc.ucdavis.edu/imbs/applications.html

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