



Program/Track

Cardiovascular Medicine

Synopsis/Background

The Division of Cardiovascular Health and Disease within the Department of Internal Medicine at The University of Cincinnati College of Medicine is pleased to offer one medical student per year a focused educational experience in Cardiovascular Medicine. The student will have the opportunity to work with and be mentored by one or more faculty members in the Division of Cardiovascular Health and Disease as well as to participate in specially selected educational experiences within the division. The details of the four year experience are outlined below.

The Department of Internal Medicine has 300 full time Faculty members of which 42 of these reside within the Division of Cardiovascular Health and Disease. The Division of Cardiovascular Health and Disease provides patient care in both the hospital and ambulatory settings and takes great pride in offering services for common, complex, and rare medical conditions, including but not limited to, coronary artery disease, cardiology critical care, advanced heart failure, arrhythmias, adult congenital heart disease, structural heart disease, valvular heart disease, pericardium disease, cardiovascular-oncology, peripheral vascular disease, and inherited and acquired blood clotting disorders.

The Division has facilities in the UC Heart, Lung, & Vascular Institute, University of Cincinnati Medical Center, Cincinnati VA Medical Center, West Chester Hospital, Medical Arts Ambulatory Center, and the UC Health Office Building at West Chester Hospital.

Goals and Objectives

This educational experience begins with strong mentoring in the early years of the student's education. The mentoring relationship will help to direct the student's curriculum with a carefully chosen sampling of the clinical and didactic opportunities and activities that are a part of the life and career of an academic cardiologist. During the clinical years, the Division of Cardiovascular Health and Disease already has a strong presence in years 2, 3 and 4, in which the applicant can be immersed. The exclusive fourth year elective in the cardiac diagnostic disciplines, clinical services, and Cardiovascular Intensive Care Unit will provide the capstone for this unique experience.

Program Personnel

Faculty mentor:

Richard C. Becker, MD
Professor of Medicine
Director: Heart, Lung and Vascular Institute

Track Coordinator:

LeAnn Coberly, MD
Professor of Clinical Medicine
Director of Medical Student Education

Richard Becker, MD
Professor of Medicine
Director: Heart, Lung and Vascular Institute

Financial Support

Financial support of up to \$3000.00 is available for summer research projects on review of a 2-3 page proposal and identified mentor.

Enrollment/Admission Criteria

Eligible students should have a strong interest in pursuing a residency in Internal Medicine. Highly motivated students will be interviewed by Internal Medicine and Cardiology faculty. Special consideration will be given to students who have already exhibited an interest in the field and who have demonstrated independent learning skills. Research experience is a plus, but not a requirement.

Application Process

A CV and personal statement must be submitted.

To apply: click the following link to MedOneStop www.medonestop.uc.edu . Once logged in, the application can be found under the **Extracurricular** tab named Medical Student Scholars Program (MSSP).

Applicants will be reviewed and all candidates will be interviewed by Dr. Becker.

Criteria for Ongoing Participation

The faculty in the Department of Internal Medicine and the Division of Cardiovascular Health and Disease are hoping to work with one or two students. We are seeking highly motivated students with a special interest or background (not required) in the field of cardiovascular medicine or internal medicine. The student should be a self-starter who will direct his/her own educational experience under the guidance of the faculty mentor. The success of this educational experience will begin with engagement and attendance in the first two years. The student is encouraged to meet and interact with as many faculty and fellows as possible to establish further mentoring relationships which may lead to innumerable opportunities in the division and the department.

General Description & Curricular Overview

Year 1

The student will meet monthly with his/her faculty mentor. Dr. Richard Becker, Professor of Medicine will serve in this capacity for students in the MSSP. Together, the student and Dr. Becker will outline a plan for an enriched experience in cardiovascular medicine that augments the student's first year of study. Depending upon the student's schedule, s/he may attend the weekly cardiac catheterization, heart failure, transplant, structural heart or electrophysiology conference at UCMC. A more didactic option would be attendance a weekly Cardiovascular Disease Grand Rounds. There are once or twice monthly seminars held by the Heart Center. The monthly Morbidity and Mortality conference is also an option (a discussion with Dr. Becker should be undertaken in advance).

Summer: Each student is offered the option of working with one of our clinical, population health or translational researcher faculty.

Year 2

The student(s) will continue to meet quarterly with Dr. Becker. Depending upon the student's schedule, s/he may attend the weekly cardiac catheterization, heart failure-transplant, or electrophysiology conference at UCMC. A more didactic option would be attendance a weekly Cardiovascular Disease Grand Rounds. There are once or twice monthly seminars held by the Heart Center. The monthly Morbidity and Mortality conference is also an option (a discussion with Dr. Becker should be undertaken in advance).

Year 3

Student(s) will continue to meet bi-annually with Dr. Becker who will provide advice and support for the preparation of a review article, original investigation paper, poster presentation or abstract. The student may also submit an abstract to be submitted to the Ohio State American College of Physicians (ACP) meeting in October of each year. The Department of Internal Medicine has been successful in mentoring students through the state abstract competition for almost a decade – winning either the gold or silver medals as a department for each of the last 3 years. It is hoped that the relationship between the student and mentor will result in a letter of support for residency applications.

The clinical and didactic conferences above will remain an option. There is a 2 week clinical “selective” in Year 3 in the Cardiovascular ICU. This student will be given a priority for this elective if desired by the student.

Year 4

The student(s) will continue to meet with Dr. Becker. The student will participate in a specialized clinical elective in year 4 with rotation time in the cardiac diagnostic laboratories at UCMC. This opportunity

includes time in the cardiac catheterization laboratory, echocardiogram laboratory, cardiac stress laboratory, advanced cardiac CT and MRI imaging laboratory, and electrophysiology suite.

Students are required to take Research 101 prior to their summer research experience.

Also available for elective rotations in year 4 are the Cardiovascular ICU (CVICU), General Cardiology Service, and the Cardiology Consult service at UCMC or the VAMC if the student chooses. The student may opt for his/her elective acting internship to be performed in the Cardiovascular ICU.

Curriculum Timeline by Academic Year

See above for detailed breakdown. Outcomes listed below.

1. Nurture a mentoring relationship with a cardiology attending as well as fellows and internal medicine residents.
2. Explore the field of cardiology as a possible career path and begin to understand the depth and focus of a subspecialty in internal medicine.
3. Develop communication skills and become proficient in the use of specialized clinical vocabulary used in cardiovascular medicine.
4. Gain exposure and beginning facility with the specialized procedures and clinical technology used primarily in cardiovascular medicine.
5. Enrich the clinical experience in Internal Medicine with experiences focused on the care of the patient with cardiovascular issues.
6. Complete a scholarly project in a chosen area of cardiovascular medicine under the mentorship of a faculty member in the field.
7. Develop a foundation for conducting research.

Evaluation

This experience is a mentored, self-directed learning experience. It is assumed that the student who embarks on this experience has given careful consideration to his/her ability to complete enrichment activities outside of the required college of medicine curriculum and thus no attendance accountability is planned as part of the adult learning process. Students will meet regularly with the faculty mentor, provide a written summary of activities since the last meeting, and provide verbal feedback on the opportunities that s/he participated in. The yearly requirements for the MSSP should be documented on the College of Medicine MedOneStop website.

Withdrawal Procedure

Participating students must show continued interest and active engagement with available activities, including conferences and quarterly face-to-face meetings, to remain in the Cardiology MSSP.