

TO: Applicants for Fellowship in Cardiology at VCU Medical Center

FROM: Anthony J. Minisi, M .D.
Professor of Medicine
Director, Cardiology Fellowship Program
MCV Hospitals at VCU Medical Center
Associate Chief, Cardiology Section
Hunter McGuire V.A. Medical Center

Dear Applicant:

Thank you very much for your interest in the VCU Medical Center Cardiology Fellowship Program. Enclosed is additional information you may find helpful in your decision to apply.

All applicants must apply through ERAS and register with the National Resident Matching Program (NRMP). Along with your application, we require several documents that ERAS does not scan. They are: a copy of Virginia medical license (if you have one); ECFMG certificate; copy of your J1 or green card; medical school diploma (and translation where applicable); and a fourth reference letter. There is also a \$50.00 application fee for our program. Please make the check payable to "Cardiology Fellowship Program." Please mail, fax, or e-mail these directly to our program.

Our ideal candidate has completed three years of Residency in Internal Medicine in a university hospital. Attached is a letter outlining a few of the criteria for the program as well as some statistics regarding past year's applications. Please read the criteria carefully as it applies to you.

Once again, we appreciate your interest in our program and look forward to hearing from you.

Sincerely,
Anthony J. Minisi, M. D.
Professor of Medicine
Director, Cardiology Fellowship Program
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Associate Chief, Cardiology Section
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Dear Applicant:

Thank you for your interest in our Cardiology Fellowship program. Enclosed is a document describing the program and our expectations. This letter provides some additional advice.

A major aim of the Cardiology fellowship is to offer comprehensive training that will prepare fellows for careers in either academic medicine or clinical practice. We typically have five first year positions to fill; we interview 35-40 applicants for the five positions. As you are probably aware, fellowship programs are extremely competitive. The number of applicants is increasing each year. To help guide your decision to apply to us, some of our expectations follow:

1. Fellows must have U.S. citizenship or a permanent or J1 Visa. **YOU MUST POSSESS YOUR PERMANENT OR J-1 VISA AT THE TIME OF YOUR FELLOWSHIP APPLICATION. H-1 Visa will NOT be considered.**

2. Graduates of foreign (not U.S. or Canadian) medical schools should have three years of residency in internal medicine in the **primary** hospital of a university medical school in the U.S. or Canada. We cannot consider candidates without residency in a university hospital.

3. Personal statements should provide background information about you. We are interested in knowing why you have chosen Cardiology and what you plan to do after fellowship. We would also like to know what special interests you have during fellowship so we can include appropriate faculty among your interviews.

4. We judge you most heavily on what is comparable to other members of your cohort, e.g.:

- Class standing in medical school.
- Scores on USMLE examinations.
- The quality of your residency program.
- Research productivity.

Letters of recommendation are required. Please ask letter writers to objectively compare your work with that of your peers. The letter from the Chairman or Director of your residency program should summarize the scores of the latest evaluations of your work by the residency evaluation group, or in some way show where you stand among your peers.

CARDIOLOGY FELLOWSHIP PROGRAM VCU Medical Center

INTRODUCTION

The Cardiology Fellowship Program at VCU Medical Center and McGuire V.A. Medical Center is designed to provide comprehensive clinical cardiology training, to foster the development of investigative skills in basic science and patient oriented research, and to encourage and facilitate careers in either academic medicine or clinical practice. The goals of our clinical training program are to provide ample exposure to the many complex areas within our subspecialty, to teach the principles and practice of consultative cardiology, and to transmit the skills required to properly utilize, perform, and interpret the variety of noninvasive and invasive methods available in cardiovascular medicine. The goals of our research program are to assist in the development of research projects, to provide faculty supervision and protected time for investigation, and to guide interested fellows through the initial stages of research career development.

Responsibility for the management of the Cardiology Fellowship Program, and for the successful completion of appropriate training for each fellow, resides in the Division Chief, Dr. George Vetrovec, and the Program Director, Dr. Anthony Minisi. Major determinants of the structure of the Fellowship Program are the American Board of Internal Medicine subspecialty requirements for Cardiovascular Disease, and the American College of Cardiology/American Heart Association Bethesda Conference on Adult Cardiology Training.

Additional determinants of program contents include the career plans and special needs of individual fellows, the requirements for adequate clinical exposure to ensure clinical excellence, and the needs of the Fellowship program and the Division of Cardiology. Ordinarily, fellows are accepted for combined clinical and research training for a period of three or more years. However, the backgrounds, previous training, and career plans of our fellows are diverse, and their individual needs may be met by tailoring the fellowship experience. Based upon these factors and the needs of the MCV program, fellows may be accepted for any period of clinical, research, and/or advanced subspecialty training.

The Fellowship Program includes major involvement at both the VCU Medical Center (VCU) and the McGuire V.A. Medical Center (MVA). In general, about 60% of clinical rotations are at VCU, but this may vary according to sources of funding, institutional needs, and fellows' preference for specific rotations. The VCU and McGuire MVA faculties are equally involved with, and equally available to, the cardiology fellows. Research opportunities are available at both institutions, which together present broad and complementary clinical and research faculties.

CLINICAL TRAINING

The complexity of our subspecialty requires extensive experience to ensure clinical excellence. For this reason, and because it is an ABIM requirement in order to sit for the subspecialty board exam in Cardiovascular Disease, a minimum of 24 months of clinical training will be performed. In some situations, overall clinical training, and particularly the distribution of clinical rotations, may be modified as appropriate for the previous training and career plans of individual fellows. Clinical training will include all areas of adult critical care, cardiac catheterization and interventional cardiology, consultative cardiology, electrophysiology and pacemakers, cardiac transplantation, inpatient and outpatient cardiology, and all aspects of noninvasive cardiology. Standard clinical rotations, and the approximate amount of time allocated to each, include the following:

Rotation	Months
VCU CCU	2-3
MVA/CCU	2-3
VCU Cath Lab	3-6
MVA Cath Lab	2-4
VCU Consult Service	2-4
VCU Echo Lab	2-6
MVA Echo Lab	2-4
MVA/MCV EP Lab	1-2
VCU/MVA Stress Labs	2
VCU/MVA Heart Failure-Heart Transplant Team	1-2
Cardiac CT/MRI Imaging	1-2
Peripheral Vascular Disease	1
Pediatric Cardiology	1
Cardiac Surgery ICU	1
VCU Cardiology Ward Service	2

Other important components of the clinical training program include instruction in ECG interpretation, and participation in cardiology ambulatory care clinics. ECG training occurs as part of the Cardiology Consultation rotations and by means of biweekly ECG reading sessions with cardiology faculty members.

All fellows attend Cardiology Clinic one-half day per week. First year fellows have clinic at VCU and second and third year fellows have clinic at MVA.

RESEARCH TRAINING

We offer two training tracks in Cardiovascular Diseases—a Clinical Track (3 years) and a Research Track (4 years). The major difference between these two training pathways will be the emphasis on research training. We anticipate that the Clinical Track will be appropriate for the majority of our fellows, whether their career plans are to enter practice or stay in academics as a Clinician-Educator. We recommend the Research Track for fellows who aspire not only to stay in academics, but also who plan on devoting the majority of their professional effort to research activities as a Physician-Scientist.

In the Clinical Track, fellows will spend a minimum of four months during their second year of training involved in a research project with a faculty mentor. Given the limited period of time, we anticipate that most of these projects will be clinical research involving existing databases. Our expectation is that the efforts of every fellow will result in the submission of at least one abstract for presentation at a national or regional meeting and we would like all of our fellows to be first author on a manuscript that is submitted to a peer-reviewed journal. A formal curriculum is presented to provide fellows with basic fundamental knowledge about clinical Cardiovascular Research. In addition, formal instruction in biostatistics is provided as part of this research training.

As mentioned above, the Research Track is aimed at fellows who plan investigation-based careers. The duration of research training in this pathway will be 20-21 months in order for fellows to acquire sufficient skills and an adequate record of performance to be competitive for obtaining academic faculty positions and for securing extramural grant support for their research programs. In the Research Track, the timing of each fellow's research experience within his/her overall training is flexible. For practical reasons, the initial fellowship year is usually clinical and fellows are encouraged to begin research in the second year. However, various permutations of clinical and research years are possible depending upon individual circumstances.

Fellows in the Research Track will be expected to choose a hypothesis-driven project with one of our faculty members involved in Basic Science Research. Each fellow will receive training in grant writing and will be expected to submit a research proposal to a major funding source, such as the American Heart Association. Enrollment in formal Biostatistics course offered at Virginia Commonwealth University will be required. Other expectations for fellows in the Research Track will be that they present the results of their work in abstract form at a national meeting and submit a manuscript for publication in a peer-reviewed journal.

Regardless of which pathway a fellow chooses, our minimal expectation is that this research experience will teach our fellows new ways of independent thinking to be applied throughout their lifetime to evaluate novel medical developments in a rational and critical manner.

CONTINUING EDUCATION

A major component of our program is our commitment to scholarship. Elements of our educational program included a great deal of self-learning, a variety of interactive conferences at VCU and MVA, opportunities to attend national and regional conferences, a structured cardiology core curriculum, didactic materials distributed by the clinical rotations, a written curriculum, formal and informal ECG interpretation, and a variety of other traditional and electronic educational tools present in a library dedicated for use by the Cardiology fellows. Additional educational opportunities include conferences within the Departments of Medicine and Pediatrics, and the Division of Cardiac and Thoracic Surgery.

The cardiology core curriculum has the goal of providing didactic presentations on state-of-the-art clinical topics as recommended by the Accreditation Council on Graduate Medical Education, the American College of Cardiology, the American Heart Association, and the American Board of Internal Medicine.

EVALUATION OF FELLOWS PERFORMANCES

Pursuant to ABIM requirements, and consonant with our responsibility to ensure optimal individualized fellowship training, the VCU program employs a standardized format for the evaluation of fellows' clinical performances that is competency based. The attending cardiologist on each clinical rotation evaluates each fellow's performance in a variety of prescribed categories, appending additional comments as desired. On certain rotations, fellows are also evaluated by medical housestaff and nurses/nurse practitioners (360⁰ evaluations). These evaluations are distributed electronically and reviewed regularly by the Program Director. They are maintained in each fellow's file, and are also available online for review.

Attending cardiologists are encouraged to discuss their evaluations with the fellows, particularly in cases of suboptimal performance. Fellows are encouraged to seek feedback from the attendings, both during and at the end of rotations. Problem areas emerging from evaluation will be addressed expeditiously, in order to remedy deficiencies and facilitate improved performance. At least semiannually, all fellows meet with the Program Director to review performances and progress.

Certification of clinical competence is required before fellows are eligible to sit for the Cardiovascular Disease subspecialty examination, and the ABIM requires certification of satisfactory performance in every individual evaluation category. The ABIM also requires certification of procedural skills, and it is therefore mandatory that fellows maintain a verified procedural log.

FELLOWS' EVALUATION OF THE CARDIOVASCULAR TRAINING PROGRAM

Fellows are encouraged to express their opinions regarding all aspects of the fellowship program. We conduct a constant self-review, and the input from our fellows is a major component of that review. The fellows meet annually with the Program Director to review the program as a group. In addition, an annual anonymous comprehensive survey of the fellowship program is performed by the fellows individually. Their comments, conclusions and recommendations are forwarded to the Program Director, who then reviews the findings and works with fellows and faculty to improve the quality of the VCU program. This process has led to important advances in our program, such as the development of the core curriculum, the initiation of formal ECG training, structural changes in clinical rotations, and the inclusion of elective rotations.

SALARY AND BENEFITS

Clinical fellowship salaries are determined annually by the Department of Medicine, and have historically approximated the mean internal medicine subspecialty salaries for this geographical region. Health insurance and malpractice insurance are provided to all clinical fellows. Individual salary and benefit packages may vary slightly, according to funding sources (i.e. VCU vs. MVA). Three weeks of annual vacation is allotted, which must be scheduled without disruption of clinical services. Income supplementation by moonlighting is permitted as long as this does not compromise coverage or performance or lead to violations or work hour restrictions.