

## **MIROWSKI-MOSS CAREER DEVELOPMENT AWARD**

**For Clinical Cardiology Research  
In the  
Heart Research Follow-up Program  
University of Rochester Medical Center  
Rochester, New York**

The Goal of the Mirowski-Moss Career Development Award (MMCDA) is to promote the clinical research activities of promising cardiology investigators. An Award (MMCDA) will be granted every two years to an outstanding young researcher committed to advancing the science of cardiology, with particular focus on patient-oriented research such as risk stratification, intervention trials, ventricular repolarization, and phenotype-genotype associations in genetic cardiovascular disorders. The Awardee will receive an appropriate two-year academic appointment to work in the Heart Research Follow-up Program of the Cardiology Unit at the University of Rochester Medical Center, Rochester, NY during the period of the award. The spirit of the award is embedded in the background of Drs. Mirowski and Moss.

### **BACKGROUND**

Dr. Michel Mirowski, the pioneering physician who invented the implantable defibrillator, survived the Nazi Holocaust as a young teenager. After World War II, he immigrated to France from Poland to study medicine. He completed his post-doctoral training in Israel, and became the chief cardiologist at Asaf Arofe Hospital where he focused his research on abnormal heart rhythms. In the late 1960's, his former mentor and chief of medicine died of recurrent ventricular tachyarrhythmias. This event marked a turning point in Dr. Mirowski's career. It inspired him to design an effective strategy for the prevention of sudden cardiac death and led him to conceptualize the automatic implantable defibrillator. Unable to pursue his goal of developing this technology in Israel, Dr. Mirowski went to Sinai Hospital of Baltimore to direct the new Coronary Care Unit. In conjunction with his colleague, Dr. Morton Mower, he developed the first prototype of the implantable defibrillator in 1969 while at Sinai Hospital. The first surgical implant of the defibrillator occurred in 1980 at the Johns Hopkins Hospital. Dr. Mirowski led the way for the clinical use of the implantable defibrillator despite enormous obstacles from within the medical profession and in defiance of many leading physicians in the field who said the implantable defibrillator had no clinical utility. It was his steadfast commitment to the concept of the implantable defibrillator and the goal of introducing it into clinical cardiology in his lifetime that allowed him to see some of the fruits of his vision and his labors before his premature death in 1990 from multiple myeloma.

Dr. Arthur J. Moss, a leader in the field of cardiology, has been on the cutting edge of clinical and experimental cardiac research throughout his career in medicine.

He was born in White Plains, New York in 1931 and was educated at Yale University and Harvard Medical School. Dr. Moss began his cardiology research activity while serving his two-year appointment in the U.S. Navy in between his Internship and Residency in Medicine at the Massachusetts General Hospital. Following his fellowship in cardiology at the University of Rochester Medical Center, Dr. Moss committed himself to a life-long career involving both investigative and clinical cardiology, with particular focus on heart rhythm disorders. Dr. Moss, in addition to his long-term research interest into the Long QT Syndrome and the mutant ionic channels responsible for this disorder, initiated and successfully completed the first randomized clinical trial with the automatic implanted cardioverter defibrillator. The trial conclusively showed the life-saving benefit of the implanted defibrillator in high-risk coronary patients.

Drs. Mirowski and Moss first met in 1969 and subsequently maintained a close, long-term, personal and professional relationship. Their mutual respect for each other's commitment to the understanding and treatment of cardiac diseases led to this special friendship. Following the death of Dr. Mirowski in 1990, the Moss family, with the support of the Mirowski family, established the Mirowski-Moss Career Development Award program in the Heart Research Follow-up Program at the University of Rochester Medical Center to advance the science of clinical cardiology.

## **CANDIDATES FOR THE AWARD**

Applicants for the MMCDA must be medically or scientifically qualified with an M.D. or Ph.D. degree, or both, and have an academic appointment at an accredited medical center, within or outside the United States. Applicants must have completed a cardiology fellowship or a doctoral Ph.D. degree and must have a faculty appointment at or below the non-tenured rank of Associate Professor. The applicant need not have received training at the University of Rochester Medical Center to qualify as an applicant for the Award.

The applicant must apply for and be willing to take a two-year research position in the Heart Research Follow-up Program of the Cardiology Unit at the University of Rochester Medical Center. One Award will be made every two years to a promising young investigator of exceptional merit and potential who seeks to undertake clinically-related cardiac research in the Heart Research Follow-up Program of the Cardiology Unit at the University of Rochester Medical Center. Each Award will be for a non-repeatable two-year period.

## **RESEARCH TOPIC**

Applicants may propose any research topic that fits in with the research activities of the Heart Research Follow-up Program that might advance clinical cardiovascular science. Such research topics might include, but are not limited to, cardiovascular risk stratification, analysis of data from prior Heart Research Follow-up Program studies, epidemiologic studies of cardiovascular disorders, non-invasive electrocardiology, relevant biomedical engineering, ventricular repolarization, and phenotype-genotype

associations in genetic cardiovascular disorders. The scope of the research may be broadly or narrowly focused, but it should be hypothesis driven.

### **TERMS OF THE AWARD**

The Awardee will be funded as part of a two-year academic appointment at the University of Rochester Medical Center. The Award will be for an amount appropriate for the level of training and experience of the Awardee utilizing the established standards at the University of Rochester School of Medicine & Dentistry. The Award is allocated exclusively for the Awardee's direct salary and fringe benefits, and the funds may not be used for travel, equipment, support of ancillary personnel, or indirect cost reimbursement to the University of Rochester. The Awardee may not be a concomitant recipient of an active career development award or an established investigator award from other sources, but may be a recipient of a National Institutes of Health investigator-initiated research grant (R-01). The Awardee must spend at least 80% of his/her time in active research related to this Award.

The Award will be funded through the endowed Mirowski-Moss Scholars' Program Fund. Distributions shall be made from the endowment in the manner and amount provided for in the policies established for such endowment funds. The investment, management, and expenditure of all funds shall be in accordance with University policies. Income not used for the purpose of the Fund during any fiscal year will be added to the principal of Mirowski-Moss Scholars' Program Fund.

### **APPLICATION PROCESS**

The written application of the proposed research should follow the specifications of Public Health Service form 398, rev 5/95 (or updated version) under Research Plan (Items a-d), but with the Research Plan text limited to no more than 3 pages, single-spaced, 12-point size, Arial font inclusive of tables, graphs, figures, diagrams, and charts, but exclusive of references. A budget is not required. A complete curriculum vita and bibliography of the applicant are required with the application. Two letters of recommendation (one from outside his/her parent institution) from individuals familiar with the applicant, the merits of the proposed research, and the potential of the applicant to become a leader in cardiology are also required. Complete applications must be received by 4 months in the year prior to the July start date of the Award. Applicants will be informed of the decision regarding the Award within three months after the deadline for receipt of the application.

### **SELECTION COMMITTEE**

The Selection Committee that reviews the applicants and selects the Awardee will be composed of the following three members in order to guarantee a fair and competitive selection process:

1. The Chief of Cardiology at the University of Rochester Medical Center;

2. The Chair of the Department of Biostatistics and Computational Biology at the University of Rochester Medical Center;
3. Dr. Arthur J. Moss or a family member designated by Dr. Arthur J. Moss or by his wife, Mrs. Joy F. Moss, if she survives Dr. Moss. When both Dr. Arthur J. Moss and his wife are deceased, then the family member designate will be from their progeny for four subsequent generations as indicated in the wills of Dr. Moss, Mrs. Moss, or from the wills of the progeny who serve as a member of the Selection Committee.
4. Ex-officio, Dean of the University of Rochester School of Medicine & Dentistry

The Chairperson of the Selection Committee will be rotated every two years between the Chief of Cardiology and the Chair of the Department of Biostatistics. The Selection Committee will select an Awardee every two years. The Chair of the Selection Committee may invite a non-voting, ad hoc physician or scientist to temporarily join the Committee to assist in the review of applications that require special expertise. In the selection process, emphasis will be placed on innovative, imaginative, and creative research that is likely to have a major impact on cardiology. The Selection Committee will rank order the top four applicants, and will select one applicant for the two-year award. Decisions of the Selection Committee will be by unanimous vote, and all decisions are final. If no applicant qualifies for an Award in a specific year, the selection process will be delayed for an entire year. Minutes will be kept of the selection process and will be distributed to all members of the Selection Committee including the Dean of the University of Rochester School of Medicine & Dentistry.

#### **STEWARDSHIP**

Upon designation of the award, a detailed description of the educational background and proposed research project of the Awardee will be sent to Dr. Arthur J. Moss, or his family member who serves on the Selection Committee. Family members will also be invited to visit the University of Rochester Medical Center to meet the Awardee.

The Awardee will provide a yearly progress report to the Chair of the Mirowski-Moss Career Development Award's Selection Committee on his/her research activities and accomplishments on each of the two anniversary dates after activation of the Award. All research publications related to this Award must include a statement that, "This research was carried out while Dr. \_\_\_\_\_ was a Mirowski-Moss Career Development Awardee at the University of Rochester Medical Center."

#### **AMENDMENT**

This agreement may be amended only by the mutual consent of the Dean of the University of Rochester Medical Center and the unanimous agreement of the Selection Committee. If there is a two-year period for which no Award is made, the family member designate on the Selection Committee may direct the unawarded funds to an activity or function of his/her choice within the University of Rochester. In the event that no progeny of the family of Dr. Arthur J. Moss are alive or after the progeny of four subsequent generations of Dr. and Mrs. Arthur J. Moss have served on the Selection

Committee, whichever comes first, then the University may redesignate the purpose of the endowment constituting this Award, and the distributions there from, provided the amended terms shall adhere as closely as possible to the donors' original intent.

**APPLICATION PROCESS FOR THE TWO-YEAR MIROWSKI-MOSS CAREER DEVELOPMENT AWARD AT THE UNIVERSITY OF ROCHESTER MEDICAL CENTER**

Start Date: July 1, 2011

Period of Award: July 1, 2011 – June 30, 2013

Amount of Salary Award: The amount of the Award will be appropriate for the level of training and experience of the Awardee and commensurate with the Awardee's academic appointment utilizing the established standards at the University of Rochester School of Medicine & Dentistry.

Cardiac Research Location: The Heart Research Follow-up Program of the Cardiology Unit, University of Rochester Medical Center

Application Due Date: Receipt by March 1, 2011

E-mail Application To: [heartajm@heart.rochester.edu](mailto:heartajm@heart.rochester.edu)

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