# DESCRIPTION OF INSTITUTIONAL ENVIRONMENT AND COMMITMENT TO TRAINING (two page limit)

Document a strong, well-established research program related to the candidate's area of interest. Describe opportunities for intellectual interactions with other individuals in training and other investigators, including courses offered, journal clubs, seminars, and presentations. Indicate the facilities and other resources that will be made available for both career enhancement and the research proposed in this application. Refer to the resources description in F.220 - R&R Other Project Information Form, Facilities and Other Resources, and information provided in the Sponsor and Co-sponsor Statements attachment.

**Equipment**

**Office Space.** Dr. Vaccarino’s office is located in the Rollins School of Public Health (RSPH). RSPH has recently completed an expansion project with the construction of a new state-of-the art 10-story building (CNR), which is adjacent to the pre-existing 10-story building (GCR); the two facilities are connected through a bridge. Both buildings are within the Emory main campus, next to the School of Medicine and close to the Emory Hospital. The new CNR building houses various departments and laboratories, including the Department of Epidemiology and, within it, Dr. Vaccarino’s office. RSPH also houses EPICORE, which include Dr. Vaccarino’s research staff and post-docs. Within the EPICORE facility, databases are stored in a dedicated server. Data are entered into the databases using the TELEFORM application and Web-based systems. Dr. O’Neal will have his own computer at the RSPH, in proximity to his sponsor’s office, with access to printers and to the RSPH and EPICORE database servers. Patient examination for ongoing studies is conducted in the nearby Woodruff Memorial Research building, in a facility entirely dedicated to cardiovascular clinical research. The applicant will be provided office space with RSPH and have access to the above facilities.

**Computing Environment.** Computer Services. The core of our compute services at the Rollins School of Public Health is provided by a Sun SunFire V1280, which has 12 1.2GHz UltraSparc IIIci processors and 24G RAM. Storage is provided through our SAN (storage area network) over a fibre channel network, with 1 terabyte of RAID-protected storage dedicated to the compute server. The server hosts analysis and programming tools including: SAS, SPlus, Fortran 77/90, C, C++, Gauss, Java, R, and IMSL. Database Services. Our main database server is a Dell PowerEdge 2650 with dual Pentium 4 Xeon processors and 8G RAM, running Windows 2003 and MS-SQL Server. The SAN provides access to 265G of RAID-protected storage. Web access to this database is provided by Macromedia's ColdFusion application server, which runs on a Dell PowerEdge 2650 (dual P4 Xeon, 4G RAM) running RedHat Enterprise Linux. Network  
Environment. The RSPH network consists of Fast Ethernet hardware running TCP/IP. Gigabit Ethernet provides high speed transmission to each of 10 floors and across three buildings. Ethernet provides high speed (10 Mbps) access to most desktop computers and peripheral devices. The network terminates at over 900 locations. The RSPH network is connected to the Emory Campus backbone via a 100 Mbps Ethernet. The applicant will have access to the above computing environments.

**Facilities and Other Resources**

Emory University provides an outstanding institutional environment for the multidisciplinary training and research plan the applicant has devised. This includes the synergistic combination of resources at the Rollins School of Public Health and the Emory University School of Medicine.

**Rollins School of Public Health**

The Department of Epidemiology in the Rollins School of Public Health at Emory University provides an environment that emphasizes research and scholarship across six departments (Behavioral Sciences and Health Education, Biostatistics and Bioinformatics, Environmental Health, Epidemiology, Health Policy and Management, Hubert Department of Global Health). Housed in two state-of-the-art research and teaching buildings totaling 330,000 square feet, Rollins is ranked sixth among schools of public health by U.S. News and World Report, ranks second for units within Emory University for research funding ($74 million annually in funded research), and ranks tenth nationally in total federal funding among all schools of public health.

Rollins School of Public Health has seen substantial growth in the past 15 years (currently 185 full-time, 125 jointly appoint, and 350 adjunct faculty) as has the Department of Epidemiology which currently has 29 full-time faculty, 46 jointly appointed with other departments in the School of Public Health, School of Medicine and Graduate School, and over 80 adjunct faculty. In any given year the School has approximately 970 Master’s degree seeking students and 125 doctoral students, with 175-225 Master’s students in the Department of Epidemiology, and 40-50 doctoral students at various stages of training within the Department. This graduate program provides a pool of well-trained research assistants in areas ranging from genetics, cancer surveillance, and reproductive health and technology, to geographical information science, interventional and implementation science, and population science. There is a high level of interaction and collaborative research among the faculty and Ph.D. students in Epidemiology and with other departments.

Office space and computers will be provided to this postdoctoral candidate. There is also state of the art information technology support, administrative support within the Epidemiology Department for routine teaching and research needs, support for preparation and submission of grant proposals, post-award management support, and research compliance services available to the applicant.

**Emory University School of Medicine** is one of the top biomedical research institutions in the nation, ranking among the top 20 schools of medicine in NIH research funding, at $218 million in 2008. Emory has more than 2,500 faculty members. Emory Healthcare, which includes Emory’s own or affiliated clinics and hospitals, is the largest service provider in Georgia. The clinics and hospitals, with almost 3,000 inpatient beds and more than 2 million annual outpatient and emergency visits, create an exceptional environment for patient-oriented research. Emory physicians also provide a major portion of the city’s indigent and public health care. It is considered to be the premier institution for cardiology and cardiac surgery care in the Southeastern United States. Atlanta has also one of the largest African American populations of any city in the U.S. and approximately 30% of all patients in Emory Healthcare hospitals and clinics are African American in origin.

**The Epidemiology Program in Outcomes Research (EPICORE)** is led by Dr. Vaccarino (**sponsor**), and also is a multidisciplinary cooperative research group engaged in a wide range of research, including clinical and population epidemiology, outcomes research, clinical trials, and translational research, with a focus on cardiovascular disease. Many MD and PhD students rotate through EPICORE, which has conducted several studies, including the MIMS parent study and the Emory Twins Studies. The applicant will have direct contact with the research core and will develop other projects in addition to that in this training grant.

**The Emory Clinical Cardiovascular Research Institute (ECCRI)** is a 7,300 square foot clinical and translational research center that is co-directed by Dr. Arshed Quyyumi. Investigators at this institute have been engaged in numerous multi-center clinical trials, including the NIH Heart Failure Clinical Trials Network and the ISCHEMIA study. ECCRI’s full-time faculty researchers include Dr. Quyyumi, as well as other leaders in the field of cardiovascular (CV) research, including Leslee Shaw PhD and Peter Wilson MD. ECCRI also houses post-doctoral fellows, research coordinators, technical personnel and secretaries to assist in the daily conduct of the multiple patient-oriented research protocols. The ECCRI facility consists of 25 fully furnished offices, 2 clinic rooms, and one conference room. ECCRI is located on the Emory University Campus, within walking distance of the Emory University Hospital and Clinics, and the Clinical Interactions Network. This applicant will have the opportunity to work directly with investigators at this center.

**Training Programs:** Emory University is actively involved in training researchers through multiple pathways: 1) the Master of Science in Clinical Research (MSCR) Program, directed to clinical fellows (MD’s) and junior faculty; 2) the NIH-sponsored Institutional Training Grant in Academic Cardiology (T32) in the cardiology division, which supports cardiology fellows; 3) the KL2-Emory Mentored Clinical Research Scholars (EMCRS) Program, which supports fellows and junior faculty, including the applicant; and 4) the graduate program in epidemiology and public health at the Rollins School of Public Health, which trains and supports PhD students. The institute provides a strong collaborative and training milieu across Emory, Morehouse, and GA Tech. This applicant will have the opportunity to take advanced coursework at the Rollins School of Public Health in advanced epidemiological methods and grant writing to prepare for his future career as an academic cardiologist.

**Emory Library System**: The Libraries of Emory University include the Robert W. Woodruff Library and libraries for health sciences, law, theology, business, and Oxford College. Holdings total approximately 3.7 million volumes. The Libraries also provide access to thousands of electronic information resources, including more than 56,000 e-journal titles. The Health Sciences Center Library serves public health, medicine, and nursing students, faculty, and other eligible users with a collection of more than 210,000 volumes, 2,400 current periodicals, a computer laboratory, databases, and audiovisual materials and facilities. In addition to traditional reference services, the Health Sciences library conducts information retrieval seminars and teaches library users to perform their own online literature searches. This applicant and all members of the research team will have full access to the electronic and print resources that are available through the Emory library system. These resources will be used to maintain up-to-date reviews of the literature relevant to the proposed project.