

## PROGRAM REQUIREMENTS

- MDC students must attend the HS/MDC transition course at UM the summer before enrolling at MDC.
- Students must attend the Emerging Scholar's Workshop from 2:30-5:00pm every Monday at UM (Coral Gables Campus) during their first year.
- Students must take a biotechnology course in the biology department and a chemical instrumentation course in the chemistry department at MDC in the summer after the first.
- During the second year, students will take a special HHMI introductory biology lab in the fall and spring semesters at UM which will substitute for the MDC biology lab. However, students will get credit for the course at MDC.
- Students must take a genetics course at UM during the summer of the second year. This course is a UM credit course.
- Students are required to do a minimum of two semesters of research in a UM lab before graduating from MDC with an AA degree.
- Students are required to write a scientific paper based on their research experience. The results will be presented in a PowerPoint presentation at the end of the second year.
- Students must maintain a minimum 3.5 GPA while in the program.

## THE PARTNERS

**MIAMI DADE COLLEGE** is a two-year state supported community college with six campuses and numerous outreach centers. It's one of the largest community colleges in the country and it is also one of the best.

Founded in 1926, the **UNIVERSITY OF MIAMI** is the largest private research institution in the southern United States. UM is positioned to become a model of excellence in the recruitment, education and graduation of minority students in the biomedical sciences.

## HOW TO APPLY

Students must complete an application, submit high school transcripts and include two letters of recommendations from former teachers and/or counselor. To download an application and for further information visit <http://www.miami.edu/undergraduate-research/> and click on "Disadvantaged/Underrepresented Student Information" or contact:

### **Miami Dade College**

InterAmerican Campus  
Ms. Jennifer Bravo (305) 237-6910

Kendall Campus  
Ms. Loretta Adoghe (305) 237-2148

North Campus  
Dr. E. Carter Burrus, Jr. (305) 237-1107

Wolfson Campus  
Ms. Virginia Fullerat (305) 237-7353

### **University of Miami**

Dr. Michael Gaines (305) 284-5058

# Bridge to the Future Program

## A PARTNERSHIP BETWEEN: Miami Dade College and the University of Miami

*Sponsored by:*

*National Institute of  
General Medical Sciences*

*and*

*Howard Hughes Medical Institute*



## BRIDGE TO THE FUTURE

The University of Miami and Miami Dade College have collaborated on the "Bridge to the Future Program" since 1994. The long-term goal of the program is to encourage students from **underrepresented minorities to enter research careers in the biomedical sciences**. Further, it is designed to improve the academic competitiveness of minority students at Miami Dade College (MDC) and facilitate their transition into the biomedical sciences at the University of Miami (UM).

The Bridge to the Future Program is funded and supported by the Howard Hughes Medical Institute (HHMI) and the National Institute of General Medical Sciences (NIGMS). This funding provides students with research experiences while at MDC and scholarships to UM. The three key components of the Bridge Program are:

- \* Research Experiences
- \* Faculty Mentoring
- \* Special Courses

### Student Benefits

Through the Bridge to the Future Program students will receive college credit for courses taken at UM while at MDC, be paid for the time that they spend doing research in a UM lab, participate in seminars and other special presentations, and lastly, have the opportunity to compete for HHMI transfer scholarship to UM if they maintain a 3.75 GPA or better at MDC.

### Who Is Eligible To Apply

Applicants must be U.S. citizens or have permanent residency status. In addition, students must be members of an underrepresented minority. The National Institutes of Health (NIH) defines underrepresented minorities as Hispanic, Black, Pacific Islander, and Native American.

## SPECIFIC ACTIVITIES FOR BRIDGE STUDENTS

### Research Experiences & Faculty Mentoring

The best way to learn science is by doing it. All bridge students are required to do research with a UM faculty mentor beginning their second year. The faculty mentor is responsible for guiding students through the research process. At the end of this year, students submit a paper and present their research at a mini-symposium, which is attended by faculty, parents, and friends.

### Special Courses, Seminars & Workshops

#### **High School/MDC Transition Course**

This three-credit chemistry course is team taught by a UM and a MDC faculty member. Bridge students take this course on the UM campus in the summer before they enroll at MDC. Not only does the course give bridge students a competitive edge, it also gives these students a taste of university life.

#### **Biotechnology & Instrumentation Courses**

These courses are taken in the summer between the first and second year. All bridge students must take a biotechnology course in the biology department at MDC. They also enroll in an instrumentation course in the chemistry department at MDC. These courses provide state-of-the-art equipment for lab experiments and an opportunity for students to spend time on a MDC campus that is different from where they normally take courses. This creates more bonding within the group.

#### **Emerging Scholars Chemistry Workshop**

First-year students attend a two and a half-hour workshop in chemistry once a week on the UM campus. The workshop is led by a UM chemistry professor. Students work cooperatively in small groups to solve problems that are more demanding than those encountered during typical class assignments.

#### **Pathways to Research Careers Seminar**

First-year students attend this 50-minute seminar once a week before the Emerging Scholars Chemistry Workshop. Biomedical scientists from academia and industry discuss their career choices. The seminar speaker is generally a minority person who will discuss how he/she became interested in science and some of the challenges facing minorities in the profession.

#### **Genetics Course**

Second-year students take this three-credit lecture course during their last summer at MDC on the UM campus. This sophomore course is required of all UM biology majors

#### **HHMI Introductory Biology Lab**

This special HHMI introductory biology lab is taken at the UM campus in the fall and spring semesters of the second year. Students work in small research groups and design their own experiments.