



# SUMMER TRAINING PROGRAM IN BIOTECHNOLOGY AND MICROBIOLOGY

## Teacher Professional Development Workshops at the University of Mississippi Medical Center

**FUNDING SOURCE** The Base Pair/SOAR program at the University of Mississippi Medical Center has a long history of funding from the Howard Hughes Medical Institute for the advancement of pre college education in underserved public school systems. With funding extending until 2012, the program is sponsoring two workshops for middle and high school science as well as AP science teachers.

**PROGRAM DESCRIPTION** This summer teacher training component of the Base Pair/SOAR Program will include two (2) one-week workshops: a microbiology and a biotechnology focused session. The Teacher Professional Development Workshops will include teachers from the public schools as well as undergraduate students from Millsaps College who are interested in gaining hands-on experience with up-to-date laboratory exercises for use in middle and high school science classes.

During the workshops, participants will employ a number of commercially available kits designed to correlate with five of the eight core topics required for biology. These include 1) Science as Process, 2) Evolution, 3) Continuity and Change, 4) Regulation, and 5) Science, Technology and Society. Teacher participants will be provided with materials for implementation of these laboratory exercises in their classroom.

Grants are an increasing source of support for classroom activities, and each teacher participant will be required to prepare a small grant for submission. Our previous experience in extramural funding for participants in our HHMI sponsored summer programs has been exceptional, with over 75% of grants prepared by high school teachers funded. Teachers will be given guidance by a number of local science coaches and members of the UMMC faculty for the preparation of these small grants. Time and computer resources will be set aside for that purpose during the session.

**PROGRAM DATES** Both the microbiology and biotechnology workshops will run concurrently. In order to allow a maximum number of participants, workshops will be offered two times during the summer: Session I June 8-12, 2009 and Session II June 29-July 3, 2009. Thus, it is possible for one individual to participate in the biotechnology workshop during Session I and still have the opportunity to participate in the microbiology workshop during Session II.

**ELIGIBILITY** Middle and high school teachers who are committed to teach in the 2008-09 school year are eligible. Teachers from the tri-county area are encouraged to apply since housing is not available on campus and no residence can be provided.

**STIPEND** Teacher participants will receive a stipend at the level of approximately \$10.50/hr (\$425/week).

**HOUSING** No housing allowance is available. Teachers must secure their own housing.

**CRITERIA FOR ACCEPTANCE** Participation in the Teacher Professional Workshops is granted on a competitive basis. Applicants from middle and high school teachers who currently teach biology/AP biology courses and who are committed to teach in the 2008-09 school year will be accepted based on faculty recommendations and teaching goals as outlined in the application.

### **PROGRAM REQUIREMENTS**

1. Participants are required to attend all program meetings. This includes mandatory attendance at the program's orientation and UMMC required orientation.
2. Participants are required to satisfy the conditions of employment for UMMC.
3. At the end of the program, participants must submit a small grant application for extramural funding of their classroom activities.
4. Teachers and college students will be required to participate in pre- and post-workshop surveys that track their basic knowledge of laboratory techniques.
5. Teachers will be required to complete pre- and post-workshop evaluations of their teaching plans.

**HOW TO APPLY** Teacher application packets must include the completed Application Form, a letter from their school administration certifying their employment, and a letter of recommendation. Millsaps College students must comply with the requirements for enrollment in the designated course through the Registrar.

### **CONTACT INFORMATION**

#### **For Teacher Applicants:**

Dr. Donna C. Sullivan, Division of Infectious Diseases  
University of Mississippi Medical Center  
2500 North State Street  
Jackson, MS 39216-4505

[dsullivan@medicine.umsmed.edu](mailto:dsullivan@medicine.umsmed.edu)

Phone: 601-984-5561 (Office) or 601-259-2574 (Cell) Fax: 601-984-5565

Ms. Gail Howell, Administrator, Department of Pharmacology and Toxicology  
University of Mississippi Medical Center  
2500 North State Street  
Jackson, MS 39216-4505

[gahowell2@pharmacology.umsmed.edu](mailto:gahowell2@pharmacology.umsmed.edu)

Phone: 601-815-1269

**HOWARD HUGHES MEDICAL INSTITUTE** and the  
University of Mississippi Medical Center Sponsored  
Program  
**SUMMER TRAINING PROGRAM IN  
BIOTECHNOLOGY AND MICROBIOLOGY  
APPLICATION**



Name:
Address:
City, State. Zip:
Work/Cell Phone:
E-mail Address:
Major:
Career Plans:
References: