

OVERVIEW

The University of Maryland, Baltimore County (UMBC) is recruiting Maryland high school science teachers for its comprehensive 2010-2011 professional development program in modern biology. Funded by the Maryland Higher Education Commission (MHEC) for the seventh year, the Teacher Quality in Biology (TQB) Program at UMBC will help teachers become highly qualified in biology through face-to-face and online instruction with UMBC faculty. The program is intended to enhance each participant's success in his or her own classroom. The laboratory workshop phase has been designed with exercises that can be easily repeated by participants in their classrooms and function to reinforce-knowledge of modern biology topics. An experienced education coordinator will help participants develop specific applications for course concepts and procedures.

Twenty-four Teacher Scholars will be selected to create the learning community for the TQB Program. The scholars will receive instruction in four Phases which provide a sustained professional development program aimed at expanding and fortifying their learning base in molecular and cell biology, genetics, biochemistry, evolutionary theory and laboratory skill development. This increased knowledge and skill base is very adaptable and can be immediately applied by the scholars to benefit their current and future high school students.

For additional program information or directions, visit the TQB Program at the UMBC website at:

<http://www.umbc.edu/TQB>

HOW TO APPLY

All public and private high school science teachers who teach in Maryland high school are eligible to apply. Applications will be accepted through January 15, 2010 or until the program is filled. Apply early for best consideration, as enrollment is limited.

Applicants are required to submit a completed application along with official college transcripts from all attended institutions, a resume that provides work histories as well as information about their current teaching assignments and a personal statement that addresses how the course will enhance their science instruction. A supporting paragraph on school letterhead from his/her school administrator or principal must accompany each application. This paragraph can be emailed but must be sent directly from the administrator or principal to be accepted. All applications additionally require the signature and contact information of the applicant's science supervisor. Participants will be selected based on a committee review of this information.

FACILITIES

The majority of 2010-2011 TQB Program activities including the "Hands-On" Laboratory Course will be held in: Department of Biological Sciences, UMBC 1000 Hilltop Circle, BS Bldg. Baltimore, Maryland 21250.

FOUR-PHASE PROGRAM

1) TQB PREPARATION COURSE - features eleven half-day Wednesday evening sessions of instruction in current biology with supplemental online instruction and meetings announced by course instructors. We will again also offer a remote-access learning experience to a selected group of applicants unable to commute to our campus during Phase I. Remote scholars will participate in real time through simulcast classroom interaction. The 2010 TQB sessions will be held from 4:30 to 7:30 p.m. All participants (including the remote-access positions), must participate in the first class for orientation:

February 17 (orientation) & 24, 2010

March 3, 10, 24 & 31, 2010

April 14, 21, & 28, 2010, and

May 5 & 12, 2010

Online meetings with the course instructors in the Blackboard Virtual Classroom will supplement the in-class training and be held during the Preparation Phase to provide additional opportunities to review course material, take online quizzes and reinforce concepts.

2) "HANDS-ON" SUMMER LABORATORY COURSE - features comprehensive laboratory instruction and lectures during the activity-based, ten-day session held:

June 21 to July 2, 2010, weekends excluded

Plus any or all of July 5, 6 and 7 may be added ONLY if LEA's extend the school year due to missed days.

Participants will have the opportunity to sequence their own DNA and receive workshop instruction focused on the following four laboratory procedures:

- DNA Protein fingerprinting • Protein Purification
- Bacterial Transformation • Forensic DNA Analysis

3) 2010 FALL WEDNESDAY EVENING SEMINAR – tentatively scheduled for October 13, 2010 from 4:30 to 7:30 p.m. The purpose of this evening is to review concepts, introduce technology driven lessons and provide feedback on the final projects of the TQB Teacher Scholars as well as share lesson plans based on program content.

4) 2011 SPRING GALA "SHARE OUR SUCCESS" – tentatively scheduled for Saturday, April 23, 2011 This seminar and poster session will be jointly attended by both the TQB and TQC scholars. It is the opportunity to showcase knowledge learned and how it was incorporated it into the classroom.

A condition of acceptance into the program requires that teacher scholars agree to participate in a comprehensive formative and summative evaluation of this program and their own classroom use of the course content, which includes a self-evaluation and academic year classroom visit by the education coordinator. Self-evaluations must be completed and submitted to the UMBC Department of Biological Sciences by May 31, 2011.

BENEFITS

Participants who successfully complete all the program requirements will receive the full stipend, all books and materials, and a total of three graduate credits in biology. Credits with the final grades will be posted at the end of the Spring 2011 semester.

STIPENDS

Teachers will receive attendance-based stipends of \$150 for full-day and \$75 for half-day participation in the TQB Program at UMBC, which may be supplemented by individual teacher's employing school systems. The stipend is paid in three increments. Thirty-five percent from each of the first two stipend installment payments is withheld until all program requirements are completed.

TOTAL TQB STIPEND PAYMENT POSSIBLE:

Preparation Phase:

11 half-day sessions @ \$75 = \$ 825.00*

Summer Laboratory Course:

10 full-days @ \$ 150 = \$ 1,500.00*

12 Follow-up sessions including preparation:

1 half-days and 2 full-days** = \$ 375.00*

TOTAL POSSIBLE TQB STIPEND = \$ 2,700.00*

Stipends may be supplemented by employing school systems

** - 35% will be withheld and paid only if TQB Program is completed*

*** - optional full day participation in Spring TQB V SOS 2010;*

COURSE MATERIALS

Participants will receive course textbooks and notebooks/manuals to support laboratory exercises that are filled with ideas for incorporating modern biology knowledge into the classroom.

TUITION

Each scholar will enroll for one graduate credit in summer 2010 and two graduate credits in Fall 2010. The entire cost of instruction at UMBC associated with this enrollment will be paid by UMBC through grant support funded by the Maryland Higher Education Commission.

Campus housing will be provided at no cost to a limited number of participants who live over 40 miles from UMBC and/or demonstrate need for this support.

SPONSORSHIP

This course is supported by the Departments of Biological Sciences and Education at UMBC and the Maryland Higher Education Commission through an Improving Teacher Quality State Grant: Teacher and Principal Training and Recruiting Fund Partnership Grant Program (Public Law 107-110 (No Child Left Behind Act of 2001))

For more information, contact the TQB Program Administrator, Cynthia Hollis at **(410) 455-8071** or by e-mail: **chollis1@umbc.edu**

Teachers who currently do not meet the criteria for "highly qualified" as well as those who teach in high-need districts are strongly encouraged to apply.

APPLICATION TO THE TQB PROGRAM AT UMBC

APPLICATIONS WILL BE ACCEPTED THROUGH JANUARY 15, 2010 OR UNTIL THE PROGRAM IS FILLED. Please print or type legibly. Be sure to complete both pages of the two-page application. Apply two easy ways: FAX your application to Cynthia Hollis at (410)455-3875 or use the postage paid on the reverse side of this form and return via post mail. Fold the application so that the Business Reply Mail in on the outside and seal WITH TAPE. Do NOT use staples. **VERY IMPORTANT:** Your application is NOT considered COMPLETE until we receive all official college transcripts and the endorsement from your LEA Supervisor.

I have access to a computer and the Internet and am able to check my account daily for messages: YES NO

I will be available to participate at the following activities:

- Preparation Course held Wednesday evenings from February 17 to May 12, 2010 YES NO
- "Hands-On Laboratory" training June 21 to July 2, 2010, weekends excluded YES NO
- Plus July 5, 6 and 7, ONLY if LEA's extend school year due to missed days. YES NO

I live more than 40 miles from UMBC and am interested in residing in a UMBC campus dormitory during the nine-day summer laboratory course. I understand that a limited number of rooms will be available to eligible participants. YES NO

I. GENERAL INFORMATION

Name _____

Position/Title _____

School Name _____ County Name _____

School is (check one): Public Private Parochial

School Address _____

Street _____ City _____ State _____ Zip _____

Home Address _____

Street _____ City _____ State _____ Zip _____

Email Address: _____ Alternate email address: _____

Home Phone: _____ Work Phone: _____ Cell Phone: _____

Contact me at: Home Work By phone By email Best time to reach me _____

II. SCHOOL INFORMATION

Is the school where you teach classified as High Need? YES NO Are you teaching out-of-field?: YES NO

Are you a probationary teacher? YES NO Estimated total student enrollment: _____ Grades: _____ to _____

Please estimate the following for the 2010-2011 academic school year:

Total number of students you will instruct: _____ Classes and grades levels you will teach: _____

III. PERSONAL HISTORY

A. EDUCATION: Official college transcripts are required from all attended institutions

List all institutions attended: _____

Highest degree earned: _____ Name of Degree Granting Institution: _____

Degree Award Date: _____ Discipline: _____

B. EMPLOYMENT: Science Supervisor Name: _____ Title: _____

Science Supervisor Address: _____ Phone Number: _____

Current Employer (LEA): _____ Science Supervisor Email: _____

Other Supervisor: _____ Start Date for Current LEA: _____

C. EXPERIENCE: Years of teaching experience: _____ List areas of certification: _____

IV. SIGNATURE OF SUPPORT FROM LEA SUPERVISOR

All applications must include the signature from a central office supervisor of your LEA. An e-mail of support sent directly from a central office supervisor will be accepted in lieu of a signature on the application. (TQB Participants are required to pay the cost of three graduate credits of tuition at UMBC and then seek reimbursement through traditional tuition remission benefit procedures.)

Supervisor Name (please print): _____ Title: _____

Signature: _____ Email Address: _____

