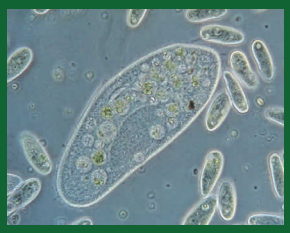

2015 Summer Biotechnology Institute for Elementary Teachers

Microscopy and Microlife: Studying Microscopic Organisms in the Elementary Classroom

Hagerstown Community College is proud to offer its seventh annual Summer Biotechnology Institute for teachers. Elementary teachers (K-6) will spend four days exploring the habitats and life cycles of microscopic organisms. The goal of the institute is to provide elementary teachers with extended practice with microscopes within the context of examining the basic needs of microscopic life. The institute will be hands-on with an emphasis on the development of grade level/content appropriate lessons that infuse microscopy into the existing elementary science curriculum and align with Next Generation Science Standards. Instructors for the institute will include Rebecca Beecroft, MS, Terrie Biddinger, MS and Cindy Dove, PhD, Kristen Lennon, PhD and Judith Peisen, PhD, from the Science, Technology, Engineering and Math Division of Hagerstown Community College.

Participants will:

- Explore the use of dissecting, brightfield, phase-contrast, fluorescence and scanning electron microscopy in the study of microlife.
- Explore habitats and basic needs of microscopic organisms utilizing microscopy and other technologies
- Learn how to culture and maintain microscopic organisms for use in the classroom
- Determine optimal physical and environmental requirements for microscopic organisms
- Explore laboratory techniques for counting microscopic organisms and estimating population size
- Practice microscopy skills to allow for optimal visualization of microscopic organisms
- Capture digital microscopic images and use them to create an original poster for their classroom
- Develop appropriate lesson materials that incorporate the use of microscopes into their respective grade and content level instruction
- Learn about resources for the use of microscopy in the classroom
- Attend field trips and hear presentations by guest experts
- Network with teachers with similar interests
- Earn $400.00 stipend for participating
- Have the option to earn continuing education units from their respective school systems
- Have the option to earn Frostburg State University graduate credits with concurrent

HAGERSTOWN COMMUNITY COLLEGE

DATES

June 22— June 25, 2015
Monday—Thursday
8:30 a.m.—4:30 p.m.

LOCATION

Hagerstown Community College
11400 Robinwood Drive
Hagerstown, MD 21742

Fully equipped biotechnology facility in the Science, Technology, Engineering, & Math (STEM) Building

TO APPLY

Submit application by March 15, 2015 by mail or fax to:

Summer Biotech Institute for Teachers
c/o Robin Thomas
STEM Building
11400 Robinwood Drive
Hagerstown MD 21742
rethomas@hagerstowncc.edu
240-500-2268
Fax: 301-393-3694

Subject line:
BSI for Teachers 2015

www.hagerstowncc.edu/biotech

This workshop supported by the National Science Foundation ATE Grant #12-5050