



Hagerstown Community College BIOTECHNOLOGY

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*A Semi-Annual
Biotechnology
Newsletter*

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HCC's biotechnology program is pleased to welcome Dr. Rick Ulrich, PhD to our team! Dr. Ulrich will be leading InnovaBio-MD, a student research and internship program that is based out of HCC's Technical Innovation Center.

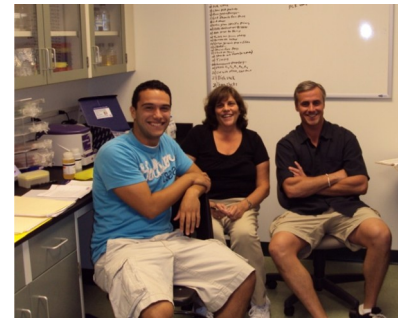
InnovaBio-MD is the first partner community college to replicate Salt Lake Community College's InnovaBio Program. InnovaBio-MD is a partnership of corporations and educators working to support Maryland's biotechnology industry. HCC offers a low risk environment for organizations wishing to develop a product or wanting to explore new ideas using our well-equipped biotechnology labs, a qualified scientist and student

interns. The challenging research completed by our interns creates a valuable talent pool for Maryland biotechnology companies.

The overall goal of the contract research organization, InnovaBio-MD, is to create flexible industry-based research internship opportunities available to both high school and college students. InnovaBio-MD contracts projects from regional biotechnology agencies and interns conduct the work. The research projects are performed on-campus at the Hagerstown Community College's and supervised Dr. Ulrich. Students receive credible research experience

and internship credit, as well as effective communication, problem solving, and leadership skills.

**Welcome to HCC Biotech,
Dr. Rick Ulrich!**



Dr. Rick Ulrich works with both high school students and college students in the InnovaBio-MD laboratories.



Dates to Remember:

- February 1, 2010 - HCC Biotechnology Open House for prospective students & parents
- February 1, 2010 - Biotechnology Summer Institute applications become available
- March 19, 2010 - Biotechnology Summer Institute application deadline

InnovaBio-MD Laboratories and Equipment



InnovaBio-MD's equipment is funded by a National Science Foundation Advanced Technology Education grant.

Biotech Team Attends the Annual National Science Foundation ATE Conference

Five members of HCC's Biotech team attend the 2009 Advanced Technological Education (ATE) Principal Investigators Conference which was hosted in Washington, D.C. by the National Science Foundation. The conference featured faculty, staff, students, and presenters from



Judy Peisen, Mylynh Nguyen, Melanie Ulrich, Joe Mason, and Rick Ulrich (not pictured) attended the ATE Principal Investigators Conference in Washington, D.C.

diverse disciplines of science. The HCC team was able to network with several colleges with similar initiatives in biotech as well as learn about up-and-coming areas of technology that are currently being piloted and incorporated on community college campuses.

HCC shared some of its "Pathways to Biotechnology and Bio-manufacturing Careers" program achievements by hosting a booth during one of the conference's showcase sessions.



Melanie Ulrich shares information about HCC's biotech program at the conference showcase booth.

Biotechnology Student Success Story: Richard "Rhet" Troxell, MedImmune

Rhet Troxell is a May 2009 A.A.S. graduate from HCC's Biotechnology program. Prior to enrolling in the Biotechnology program Rhet completed an A.S. degree in Biology from HCC and a B.S. in Biology from Shippensburg University. He returned to HCC to obtain specialized training in the field biotechnology and have the

opportunity to complete an internship to gain hands-on experience. Rhet was accepted into an internship at MedImmune in their Quality Control lab and after completion was awarded a full-time position. He currently serves as a Quality Control Micro Analyst.

"The skill sets and knowledge that I was able to acquire through both the internship and the Biotechnology program at HCC were invaluable, as they led me to a great career in the ever growing Biotech industry. The challenges of my days at work are always fresh and exciting...much like the Biotech program at HCC." -Rhet Troxell

"Community Colleges Can" National Peer Mentoring Conference Hosted at HCC

In November 2009, HCC hosted nine community colleges from across the country for a 2-day conference to share their experiences with a college mentoring program funded by the U.S. Department of Education: Community Colleges Can (C3).

Teams from each college focused on a project for one year in

one of three areas: Career Pathways, P-20 Educational Partnerships, and Innovations in STEM. The conference gave participants an opportunity to share their projects, develop action plans to continue their work, discuss strategies for col-

laboration in the future and build networks of practice.



9 colleges from across the nation sent representatives from their schools HCC to share and collaborate with other participants in the Community Colleges Can Network.

High School Science Teachers Granted Biotech Supplies from HCC and NSF



High school science teachers who participated in the 2009 2 week hands-on Biotechnology Summer Teacher Institute

Information for the 2010 Teacher Institute will be available in February

High school teachers who participated in the 2009 2-week Summer Biotechnology Teacher Institute were pleasantly surprised to learn that they would be receiving teaching supplies for their own high school classrooms. Teachers had an opportunity to choose micropipeters, mini-centrifuges, and biotechnology laboratory kits. High schools in Washington County that were not represented in the 2009 Biotechnology Summer

Teacher Institute were also provided with supplies for their science classrooms. In collaboration with the local high school teachers, our hope is that there will be more awareness and student interest for biotechnology careers with the incorporation of biotechnology topics and laboratory exercises for their students. The supplies for the high school teachers were funded by the National Science Foundation ATE grant.

Biotechnology Team Visits to Local Area High School Science Classrooms

In an effort to expand the Career and Career Transitions (CCTI) pathway, the biotechnology team has visited several area high schools to speak with students about the Biotechnology program and the unique opportunities the program has to offer to students at the high school level.

Students who are enrolled in the Biomedical Sciences Academy at Washington County Technical High School have an opportunity to earn dual credit at HCC for BTC 101, Introduction to Biotechnology. Students from other high schools may also take BTC 101 as ESSENCE. Qualified students from any local

high school are also eligible to enroll in BTC 102, Introduction to Applied Biotechnology, where they will gain valuable hands-on experience working with Dr. Rick Ulrich on scientific research projects in InnovaBio-MD. If you are interested in having an HCC biotech member visit with your class, please contact Mylynh Nguyen.

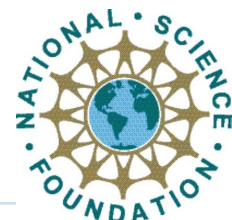
HCC Professor, Joe Mason, Offers Math Support for High School and College Students

HCC professor, Joe Mason, has joined the HCC Biotechnology team to serve as a mathematics specialist for the National Science Foundation grant projects. Mr. Mason will be working with the BTC program coordinator to supplement biotechnology courses with mathematics curricula that will incorporate applications in science and technology.

Mr. Mason will also be working with fellow math and science instructors at HCC to align the instructional content and pedagogy of math and science courses.

High school students and college students who are in the BTC pathway will have opportunities to obtain math support from Mr. Mason in

order to help each student achieve their goal of a career in biotechnology. Math XL software will be installed in local area high schools to help students transition seamlessly into the HCC math courses.



Contact Us:

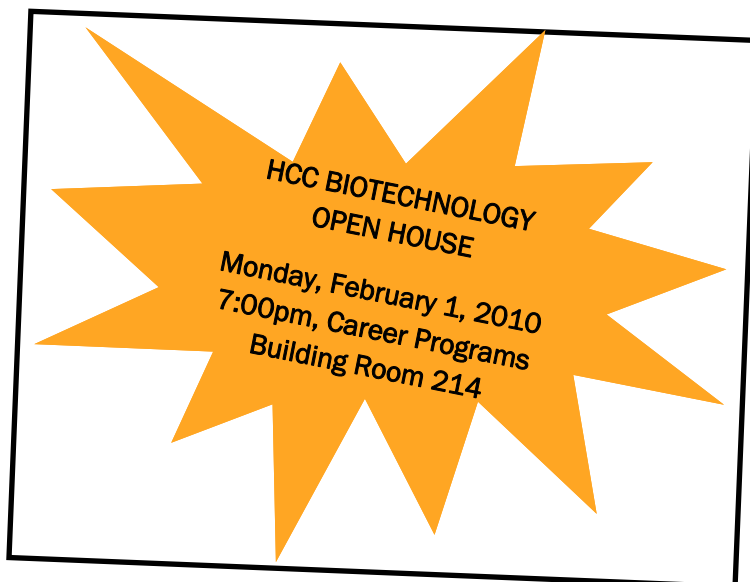
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*Using biological products to
improve life and solve problems.*

Visit our Website:

[http://www.hagerstowncc.edu/
academics/divisions/math-science/btc](http://www.hagerstowncc.edu/academics/divisions/math-science/btc)



Biotechnology Summer Institute Applications: February 1, 2010 - March 19, 2010

Hagerstown Community College is proud to offer its second annual Biotechnology Summer Institute (BSI) for local area high school students. The 2010 BSI will offer a very unique learning opportunity for students who are interested in advancing their education in a field related to biotechnology. This competitive program will offer 20 select students a chance to earn 7 college



credits during the 8-week summer institute. Tuition and fees will be funded by HCC's ESSENCE program and a National Science Foundation grant. The summer institute will be held on the campus of Hagerstown Community College between June 14, 2010 and August 9, 2010.

Qualified students will have an opportunity to: Earn 7 free college science credits*, explore careers in biotechnology, gain valuable hands-on laboratory experience, participate in Q&A sessions with guest speakers from diverse areas of biotechnology, and go on field trips to biomanufacturing facilities and state-of-the-art scientific research labs.

*Tuition and fees covered for in-county residents; reduced tuition for

out-of-county residents. Students will be responsible for purchasing their own textbooks.

Interested students should complete an application form and essays and submit it to Hagerstown Community College Science Division by March 19, 2010. Eligible applicants must be 16 years or older at the start of the summer institute.

