CMST introduced in 2009, CMST provides multi-disciplinary teaching materials— including lectures, animations and lesson plans— as ready-to-use on-line modules and DVDs. Produced with high-quality, biologically realistic 3D animations, the modules are geared to teach students at all levels, from high school to post-school, toward an integrated understanding of biology, chemistry, physics, math and computation.


FREE CMST MODULES: www.nibic.or.kr/CMST

From “Enzyme Structure and Function,” the CMST virtual laboratory tool includes a specrophotometer, tank, microplate and other common lab equipment used in WPI simulations of an experiment illustrating enzyme kinetics. In the CMST module, also depicted is a cross section of a hepatic lobule from the liver (bottom). Blood vessels [red] radiate outward from the central vein toward the hepatic arteries and hepatic portal veins at the periphery. Amongst the vessels are hepatocytes [brown], the primary cells of the liver.

BEST Region is now by invited, better Educators for Science for Tomorrow (BEST) among high school teachers to a bioinformatics curriculum adapted from an NIBIC program called BEST (Biology Access to Research Careers) to undergraduate and graduate science students. Drafed and implemented through classroom visits over three years by an interdisciplinary group of high school teachers representing physics, chemistry, biology, mathematics and technology, the BEST curriculum offers ready-to-use lessons plan for single-year or multi-year use of bioinformatics subject in high school.

During the 2009-10 academic year, no-pilot piloted BEET an experiment using a curriculum for a southwest Pennsylvania high schools. Four high school teachers from those piloting schools completed a summer BEST Summer Research Internship Program in Bioinformatics. PSC guided by MBioD scientists from PSC. Their teachers prepared the results of these internships in November at the 2010 PSE Education Resource Fair in New Orleans.

Two additional schools participated in the recent BEST Summer Workshop and will offer the BEST curriculum in the upcoming school year. “I am excited to see what challenges there,” said Matt Muhle, a biology teacher at Beaver Valley High School. “We hope to inspire students who love biology but lack physics, so we can provide an extra with a better tool for contemporary positions in the science job market.”

MORE INFORMATION ON BEST
www.psc.edu/en/612/sums.php

SAFE-NET, an Internet program to protect personal information from unwanted intrusions. How can you be sure if someone on-line is who they say they are? Does anti-virus software really protect your hard drive?

To help parents, educators, students and individuals with these questions and many others associated with media usage, the Internet, PSC, in an introduction to SAFE-NET, a program funded by the US Congress's Cyber Security Awareness. Through SAFE-NET, PSC presents workshops that train counselors and provide materials for classroom learning – developed in collaboration with the CERT (Computer Emergency Response Team) Program of CMU's Software Engineering Institute. These materials address cyber threats, measures of protection, and questions of cyber ethics that arise as a result of social networking and other new uses of the Internet.

“Many Internet users lack an understanding of common threats to their accounts,” says Regina. “It is very important that their child is safe when using the Internet.”

In 2011, PSC held a Train-the-Trainer workshop introducing SAFE-NET to 11 Pittsburgh-area educators. Through a multimedia, interactive, web-based, and awareness application with CMU's Information Security Office, counselors with 50-60 educators at six school districts in western Pennsylvania titled “The Internet is a Place to Safe Computing,” the three-hour interactive program highlighted how cybercriminals can raise awareness about cyber security and safety in the schools.

The SAFE-NET website provides free information, including classroom and parent materials about cyber security issues, www.psc.edu/en/612/sums.php.

SAFE-NET WEBSITE (FREE MATERIALS)
http://cs.cmu.edu/u549

Finding for these PSC educators and outreach programs have come from Pittsburgh-area foundations, The Buhl Foundation, Grable Foundation and Helen Endowments — and from the Pitt among with additional support from the Commonwealth of Pennsylvania and the NSF-funded program.