



# The Towson University Center for STEM Excellence

[www.towson.edu/cse](http://www.towson.edu/cse)

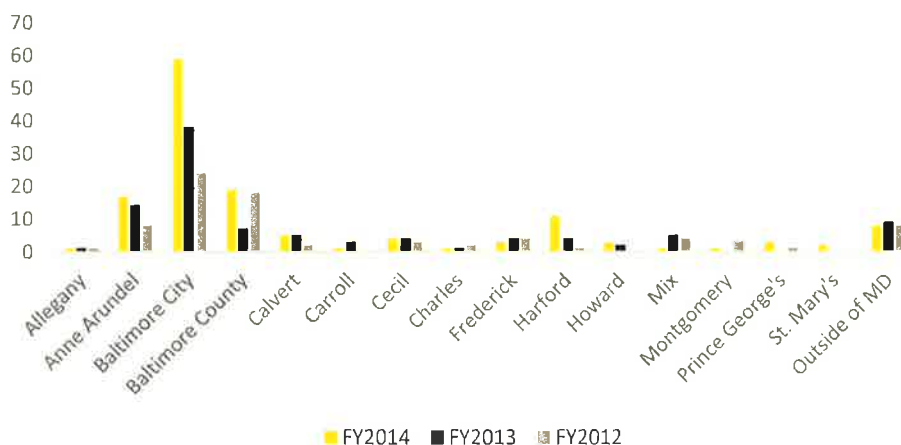


The Towson University Center for STEM Excellence, housed at the Columbus Center in Baltimore's Inner Harbor, is committed to serving Maryland K-12 STEM students and teachers through a variety of innovative and engaging programs.

## SciTECH STUDENT LEARNING LAB

Our student learning lab, **SciTech**, is a field-trip destination that offers hands-on laboratory experiences to middle and high school students. Our expert instructors offer engaging, learner-centered science activities focused on real-world issues. We serve over 2,500 students each year at our on-site facility and reach hundreds more at community events throughout Maryland.

SciTech Visits by County

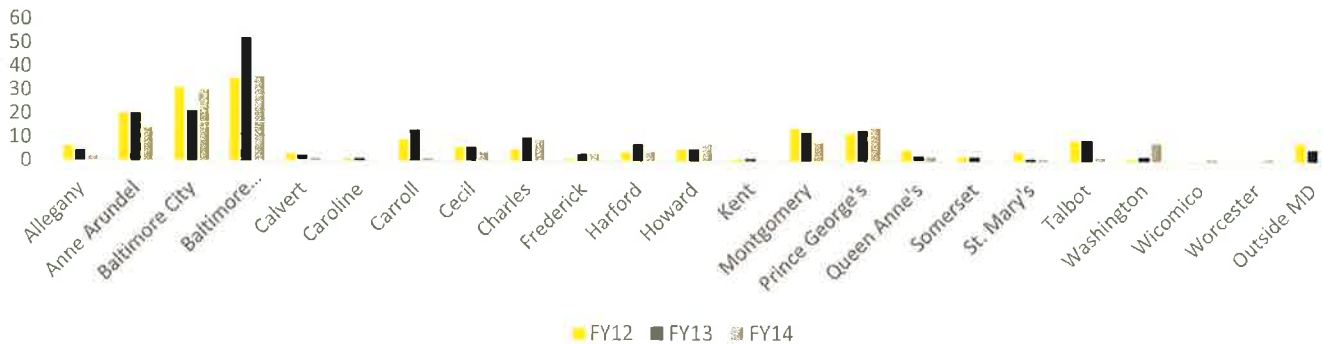


## MARYLAND LOANER LAB PROGRAM

Through our highly successful [Maryland Loaner Lab](#) program, eligible teachers receive complete science lessons (including equipment, reagents and curriculum materials) by mail, allowing them to perform an array of bioscience investigations in their classrooms. These activities, aligned with state curriculum standards, serve classrooms in all 24 school systems in Maryland and directly benefit over 8,000 students and teachers each year.



Maryland Loaner Lab Usage by County



## BIOSCIENCE TECHNICAL TRAINING WORKSHOPS

Every month we offer an [evening workshop](#) for secondary science educators focused on building the technical skills necessary to effectively utilize the Maryland Loaner Lab (MDLL) program. During these hands-on workshops, education and outreach staff guide participants through a selection of the lab modules offered by MDLL. Each lab is discussed briefly and specific techniques are performed by participants ensuring teachers are comfortable using the array of equipment found in our MDLL activities.



## PROFESSIONAL DEVELOPMENT PROGRAMS



TUCSE offers a variety of [professional development programs](#) for middle and high school science teachers designed to increase teacher effectiveness in the classroom. All of our teacher workshops focus on evidence-based teaching strategies and best practices that emphasize a student-centered learning environment. Two of our most popular teacher professional development opportunities include the ExPERT and BEST programs, which place teachers in intensive summer research experiences, coupled with a year-long learning community that allows them to implement what they learned over the summer in their classrooms. Our most current workshop offerings focus on the new Next Generation Science

Standards (NGSS), recently adopted by the state of Maryland. The NGSS are built around a new 3-Dimensional model of teaching and learning that is vastly different from current science standards and science teaching. Our professional development programs provide teachers with the information and skills they will need to successfully implement NGSS in their classrooms.

