The goal of the P-12 STEM Education program at Purdue University’s Discovery Park is to organize and support programs that revolutionize learning in the STEM disciplines (science, technology, engineering, and mathematics). The program collaborates with Discovery Park research centers to increase the numbers of U.S. students interested in science, engineering, technology and mathematics.

**Center for Learning and Teaching in Nanoscale Science and Engineering**

The guiding theme of NCLT is learning and teaching through inquiry and design of nanoscale materials and applications. High School teachers work with NCLT faculty and staff to develop learning modules, implement them in their classrooms, and assess student learning outcomes.

www.generation-nano.org

**Indiana Interdisciplinary GK-12: Bringing Authentic Problem Solving in STEM to Rural Middle Schools**

This program offers a unique one-year fellowship for doctoral students in the STEM disciplines (Science, Technology, Engineering, and Mathematics) to serve as “visiting scientist” in a program designed to instill the excitement of learning science into middle school classrooms. Teamed with 6th, 7th, and 8th grade science and math teachers, fellows develop lesson plans and teach interdisciplinary-focused experiments that support and extend the science curriculum.

www.purdue.edu/dp/gk12/

**Standards-Based Integrated Science Instruction for the Middle Grades**

This program provides intensive professional development and long term support to assist teachers at IPS and other education agencies to use the Indiana Curriculum Framework to align classroom curricula with Indiana’s Academic Standards to better utilize authentic, inquiry-based instruction, to prepare for the ISTEP assessment, and to increase their knowledge of science and mathematics content and pedagogy.

**Howard Hughes Medical Institute: Electronic Field Trips in Comparative Biology**

This project will develop a series of electronic field trips aimed at instilling the excitement of science in middle school students. Using the electronic field trip format students will be able to visit Purdue University and observe and interact with leading scientists in real time without leaving their schools. This project is particularly geared toward providing access to Purdue research for rural schools and has a primary goal of interesting girls in science.

www.purdue.edu/dp/learningcenter

**Purdue Homeland Security Institute**

**Purdue University Regional Visualization and Analytics Center PK-12 Educational Initiatives**

Since 2005 the Purdue Homeland Security Institute and PURVAC have partnered with two middle school teachers from the Penn Harris Madison School Corporation in Granger, Indiana, to create modules for middle school students that teach the concepts of Homeland Security and Visualization Analytics. Module topics have included causes of terrorism, affect of climate and geography on people, sensor technologies that address real world problems, and visualization of data to show cause and effect.

www.purdue.edu/dp/phsi
www.purvac.org

Look for information about Discovery Park tours for schools and other information on the Discovery Park website: www.purdue.edu/dp