

COP-033

**Lehigh Valley Partnership to Enhance Science, Technology, Engineering and Math
(STEM) Education through G4-12 Teaching Fellows**

William M. Pottenger

Assistant Professor, Department of Computer Science and Engineering,
Lehigh University

Henry U. Odi

Director, Academic Outreach at Lehigh University

Glenn D. Blank

Associate Professor, Department of Computer Science and Engineering,
Lehigh University

Graduate Student(s)

Kelly Cafflin, Chemistry, Lehigh University
Jesse Wolfgang, Computer Science & Engineering, Lehigh University
Rene Waterman, Earth Science & Environmental, Lehigh University
Patrick Gorman, Math, Lehigh University
Sally Moritz, Computer Science & Technology, Lehigh University
Donna DeMarco, Computer Science & Technology, Kutztown University,
Steven Sweeney, Physics, Lehigh University

Undergraduate Student(s)

Tracy Vrablik, Chemistry, Lehigh University
Jessica Simons, Chemistry, Lehigh University
Nicole Roskowski, Computer Science & Engineering, Lehigh University
Tim Cunningham, Computer Science & Engineering, Lehigh University
Melodie Kent, Earth Science & Environment, Lehigh University
Jeanine Hoff, Math, Lehigh University
Adrian Ramsay, Computer Science & Technology, Lehigh University
Jonathan Morgan, Computer Science & Technology, Northampton Community College
Nina Fink, Physics, Lehigh University, nmf2@lehigh.edu

Industry Participants

Binney & Smith, Inc., Air Products & Chemicals Inc., PP&L Corporation, Agere
Systems, Insaco Inc., Discovery Center for Science and Technology

Abstract

The Lehigh Valley Partnership to Enhance STEM Education through G4-12 Teaching Fellows project puts graduate and undergraduate college students in grade four through twelve classrooms where they help to teach hands-on lessons about science, technology, engineering and math. Teachers, students, professors and industry partners work together to develop real world applications that supplement each classroom's curriculum. The project has three primary objectives: to increase interest and learning in STEM

disciplines for women and under-represented minority G4-12 students; to instill in our Teaching Fellows a life-long awareness, appreciation and advocacy for G4-12 educational issues; and to provide our G4-12 STEM Teachers with training and resources to develop professionally by for example incorporating inquiry-based learning methods in STEM education.