A CORDIAL INVITATION TO JOIN THE

Pittsburgh Regional Center for Science Teachers (PRCST) for a

STEM EDUCATION SERIES

Science-Technology-Engineering-Mathematics

In collaboration with the Carnegie Science Center and with support from the PA DOE-Office for Environment/Ecology, Dr. Patricia Vathis, Advisor

"An increasing number of jobs at all levels – not just for professional scientists – require knowledge of STEM. In addition, individual and societal decisions increasingly require some understanding of STEM, from comprehending medical diagnoses to evaluating competing claims about the environment to managing daily activities with a wide variety of computer-based applications." (from *Successful K-12 STEM Education* – NRC, National Academies Press, Washington, DC)

Participation is invited to all interested in STEM education at the K-12 levels. Teachers may accumulate Act 48 professional development hours. A Kick-off event is scheduled for February 29, 2012 at the Carnegie Science Center. Register by emailing Jane Konrad: konrad@pitt.edu. Registration is free. Deadline for registration is February 24, 2012.

The STEM series is constructed to help K-12 teachers better understand STEM career tracks and to experience applications/results of these careers in the various areas.

What is involved in a STEM career track?

What are some options?

Where can it lead?

Why is this important?

This program will consist of two major parts, addressing the essential guestions:

Kick-off event with panels comprising outstanding leaders from the STEM areas:

- 1. Panel One: STEM area leaders Career venues and values
- 2. Panel Two: STEM in Action careers :addressing various STEM-based companies/organizations where teachers can experience real world application of STEM careers
 - 1. The kick-off event is to be held at the Carnegie Science Center (CSC) on February 29, 2012

- 4:30 pm Gathering light refreshments
- 5:00pm <u>Keynote Speaker</u>: *Bernard Goldstein,MD Professor of Environmental and Occupational Health, Graduate School of Public Health, University of. Pittsburgh

"Transdisciplinary Research and Sustainability: The Story of John Snow"

5:20pm - Panel - STEM Careers.

Moderated by *John Radzilowicz, Director of Science and Education - Carnegie Science Center

- *Science: John Murphy Ex. Dir. McGowan Institute for Regenerative Medicine
- *Engineering Mike Nowak, Senior Management and Technical Advisor, Office of Research & Development, National Energy Technology Laboratory (NETL)
- *Mathematics Jill Jones Director, Marketing and Product Management ,Fisher Scientific Engineering, data collection and analysis
- *Bill Bertrand Advisor PA DOE Office for Technology Education

5:40pm - STEM in Action: Panel

Moderated by *Justin Driscoll – Pittsburgh Technology Council, Dir. STEM Talent Acquisition - Workplace networks

- *Leah Smith Regional Coordinator, PASA Agriculture Practices Sustainability
- * Robin Shoop Director, Carnegie Mellon Robotics Academy Carnegie Mellon University
- *Joan Schanck Dir.Education and Workforce Development, Pittsburgh Tissue Engineering Initiative
- *Patricia Vathis Advisor, PA DOE, Office for Environment/Ecology Academic Standards
- 6:00pm Featured Speaker: Carolee Bull, Ph.D , Research Plant Pathologist Salinas, California

USDA-ARS plant pathologist, leader of a team of scientists working on a CLGRB-funded project screening resistant cultivars in the field and in the greenhouse as a defense against BLS.

"Growing Scientists in the Salad Bowl of the US"

- 6:30pm Dinner with the Speakers Cash dinner
 - 2. STEM in Action Mini-Workshops continuing professional development for K-12 Teachers; offered by area educational and business sites with utilization of STEM careers.

Each teacher will receive a stipend of \$100 for attending four of the workshops offered throughout the Spring of 2012.

Confirmed include:

Fisher Scientific: Engineering for the Future/Data Analysis

Pittsburgh Tissue Engineering Initiative – Biotechnology in Action

CCI, Inc. Energy Conservation

NETL – Energy research

PASA – Sustainable Farming

Suggested:

Westinghouse – Nuclear Technology

Pittsburgh Supercomputing Center

U.S. Steel Recycling – landfills

Children's Museum

CMNH

CMU – The Intelligent Workplace