DATA ANALYSIS FOR SCIENCE FAIR PROJECTS

Saturday, October 29, 2005
1:00 – 5:00 pm
Penn State - Harrisburg
Middletown PA
Olmstead Bldg Auditorium

A workshop for junior (and senior) high school students and their teachers who want to learn more about data analysis, statistical methods, and data presentation techniques for improving science fair projects.

THE WORKSHOP
So you’re planning your science fair project, identifying the hypotheses, planning your experiments (with replication, of course!), and anticipating your data.

Statistics can play a role both in the design and the analysis for your experiment. Planning a careful study, analyzing the data, critically evaluating the hypotheses, and preparing the results for presentation can all be rewarding parts of your project.

At this workshop, you will learn about the nature of uncertainty in experimentation, and how to plan for it, measure it and account for it in interpreting your results. You will learn about statistical methods for comparing data and testing your hypotheses. You will see examples and learn how to present your data accurately and effectively.

There is no math prerequisite for this workshop. What you learn here will enable you to explore these tools and techniques on your own, at your own level. Whether this is your first project or you are a veteran researcher, this workshop will be a great opportunity. The reward is a more complete and convincing science fair project.

THE PRESENTER
Dr. Thomas H. Short
Associate Professor
Mathematics Department
Indiana University of Pennsylvania

Co-founder and Organizer, Pennsylvania Statistics Poster Competition (www.math.iup.edu/PAposters/)
Judge, George Washington Carver Science Fair Philadelphia, PA, 1999 through 2002
BS in Mathematics with a minor in Probability and Statistics from John Carroll University, MS and PhD in Statistics from Carnegie Mellon University
Active in presenting and organizing workshops about statistics for K-12 teachers and college mathematics faculty

Students – ask your teachers to come along!

REGISTRATION
There is no charge to attend this workshop, but pre-registration is required. To register, please email your name, school, and grade level to:

JohnMRinehart@alumni.pitt.edu

Confirmed registration due by October 15, 2005.

For further information call: (717) 292-1636

DIRECTIONS TO PENN STATE-HBG
www.mathscience.psu.edu/activities/map.htm