
DATA ANALYSIS FOR SCIENCE FAIR PROJECTS

Friday, October 10, 2003

10:00am – 2:00 pm

Capital Area Intermediate Unit

Summerdale, PA

Susquehanna Room

A workshop for junior 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.

New for 2003:

Weekday schedule for school-sponsored field trips (individual participants still welcome!)

Small group consultation about specific projects or ideas (by appointment - please call)

Sponsored by

The American Statistical Association,
Harrisburg Chapter (cs.hbg.psu.edu/asa-hbg/)

Indiana University of Pennsylvania,
Mathematics Department

Capital Area Institute for Mathematics and Science
Capital Area Intermediate Unit

In cooperation with

Capital Area Science and Engineering Fair
York County Science and Engineering Fair

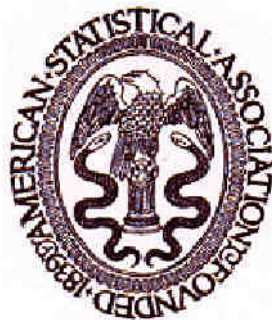
THE WORKSHOP

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.



DIRECTIONS TO CAIU

www.caiu.org ("About Us")
Just off I-81 at US 15, Summerdale

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

Editor, Journal of Statistics Education
(www.amstat.org/publications/jse)

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

**Teachers - bring
your students!**

REGISTRATION

There is no charge to attend this workshop, but pre-registration is required. To register, please email the teacher's name and school, and a list of attending student's names by grade to:

JohnMRinehart@alumni.pitt.edu

no later than September 26, 2003.

For further information call: (717) 292-1636