Brief Bio and (PR)²: Problems & Pitches – Rants & Raves by Jim Onken

Self Introduction



Dr. James Onken is currently an analyst in the Office of Research Information Systems (ORIS), a component of the NIH Office of Extramural Research. He is responsible for analysis and presentation of data on NIH research programs and research personnel for use in program evaluation and policy studies. He also is program manager for a new NIH Research Portfolio Online Reporting Tool (RePORT) web site at <u>http://RePORT.nih.gov/</u>. Prior to working for ORIS, Jim worked at the National Institute of General Medical Sciences (NIGMS) for over 17 years, most recently as NIGMS's Planning and Evaluation Officer and

Assistant Director for Resource Allocation and Analysis for NIGMS's Division of Extramural Activities. Earlier in his career he conducted research on human information processing, cognitive performance, mathematical models of decision-making; performed decision analysis for several federal agencies; and designed and developed computerized decision support systems. Jim holds M.S. and Ph.D. degrees in psychology from Northwestern University, and an MPH with a concentration in biostatistics from George Washington University.

Publications

Rogers, M.E. and Onken, J. (in press). The NIGMS Glue Grant Program: Evaluation of NIGMS Large Grant Programs. Chapter in *Science on the Internet*, Olson, G., Zimmerman, A., and Bos, N. (Eds.), MIT Press.

Onken, J., Hastie, R., and Revelle, W. (1985). Individual differences in the use of simplification strategies in a complex decision making task. *Journal of Experimental Psychology: Human Perception and Performance*, 11, 14-27.

Onken, J. and Revelle, W. (1984). ANATEST: A program to generate geometric analogy problems varying in number of elements and number of transformations. *Behavior Research Methods, Instruments, and Computers, 16*, 313-314.

http://grants.nih.gov/grants/oer.htm and http://report.nih.gov/

General Questions

- 1) What is (are) your main interest(s) in attending the workshop?
 - I have a long-standing interest in data visualization and methods for communicating complex numerical information and statistics to a broad range of users. I also have an interest in the application of these methods more specifically in the assessment and development of policies related to science administration.
- 2) What information/knowledge management expertise do you have?
 - My expertise is in data analysis and presentation to support policy development and management decision-making, drawing on a background in multivariate statistics, behavioral decision theory, and program evaluation.
- 3) What is the most insightful visualization of static or dynamic phenomena you know?

This image, from Graham Wills' Exploratory Data Visualizer shows an animation of data on baseball players' fielding performance. The top panel is a triplot of the variables Errors, PutOuts, and Assists. Players who have an exactly average ratio of the three variables to each other will be drawn in the center of the triangle. If they have more of one variable, then they will be closer to that variable's corner of the triangle. The bottom panel is a bar chart coding player's fielding positions.



What would you like to learn / achieve at the workshop?
I'd like to learn how to take better advantage of large, complex data sets and explore new tools for data visualization and analysis.