

- **Workshop**, “Determining Sufficient Sample Size” at the Center for Statistical Consultation and Research (CSCAR) at the University of Michigan, Ann Arbor, MI, May 8, 2007.

Determining Sufficient Sample Size

May 8, 2007

Myra Kim and Ananda Sen, Instructors

This workshop outlines how to calculate an appropriate sample size (n) to address the objectives of a research project. Participants will be led through essential steps for the design of a study: specifying the outcome variable, outlining hypothesis tests, estimating the variance or other "nuisance parameters," determining power to detect particular differences, and balancing these considerations against cost to arrive at a final sample size.

Participants have hands-on instruction in a computer classroom, using two different sample size software applications (PASS and nQuery Advisor) to compute sample sizes and plot power curves. Information on additional software is given. (This workshop does not cover survey research designs.)

Sample size calculations to be covered include:

- comparisons of two means or proportions
- analysis of variance (ANOVA) designs
- repeated measures designs
- regression designs
- case-control study designs.

Special requests from those attending the workshop are welcome.

Instructors:

Myra Kim is an Associate Research Scientist at CSCAR and an Adjunct Assistant Professor in the Department of Biostatistics. She has taught biostatistics and collaborated with scientific investigators from many fields.

Ananda Sen is an Associate Research Scientist at CSCAR. He has extensive experience in survival analysis, industrial statistics, and reliability.

Audience:

Any scholar interested in submitting a research proposal or designing a scientific study.

Prerequisite:

Introductory statistics, even if several years ago.

Provisions:

Enrollees will receive lecture notes and sample size problem examples.

Date:

Wednesday, October 31, 2007

Time:

9:00 a.m. to 4:00 p.m.

Location:

Rackham Bldg, 2nd floor, North Alcove in the West Study Hall

Size:

Maximum of 15, 1 per computer.

Fee:**Registration until April 24, 2007:**

\$150 for University of Michigan affiliated faculty, staff and students
\$325 for others

Registration after April 24, 2007:

\$180 for University of Michigan affiliated faculty, staff and students
\$390 for others

Registration:

Call CSCAR at 734-764-7828. Enrollment is limited. Make check payable to CSCAR-- University of Michigan, or give the University of Michigan short code to be billed. Send check to CSCAR, University of Michigan, 3550 Rackham Bldg., 915 E. Washington St., Ann Arbor, MI 48109-1070.