

Workshop on
Computer-Intensive Statistical Methods in Biology
University of Wyoming Conference Center
Grand Avenue, Laramie, Wyoming
March 12 to 16, 2012

General Information

The instructor is Dr Bryan Manly, a Senior Biometrician with Western EcoSystems Technology, Inc. and an Adjunct Professor of Statistics at the University of Wyoming. The workshop is based on the third edition of the book *Randomization, Bootstrap and Monte Carlo Methods in Biology* (Chapman & Hall/CRC, 2007) written by Dr Manly, and provides an introduction to computer-intensive approaches to statistical analysis (randomization, bootstrapping and Monte Carlo methods), with an emphasis on applications in biology and environmental science. Participants are assumed to be familiar with basic statistical methods including analysis of variance and regression, but no prior knowledge of computer-intensive methods is needed. By the end of the workshop they should be able to carry out standard analyses and some non-standard analyses using computer-intensive methods. Each day will consist of lectures and hands-on data analysis by the participants. Practical work will be done using the software Resampling Stats for Excel, some special purpose Windows programs and possibly using other software (SAS, R, S+, etc.) that participants are familiar with. For the practical work participants will need to have a Windows -based portable computer with them.

Materials Provided

The workshop overheads will be prepared as pdf files and made available to the participants. Coursework examples, some reference papers and other materials will also be provided in pdf files. Through a special arrangement, participants in the workshop will have free use of Resampling Stats for Excel for 60 days including the workshop week, and

will be able to purchase a copy of the program after that at the special academic rate.

Workshop Text

Copies of the book *Randomization, Bootstrap and Monte Carlo Methods in Biology* can be purchased with a 20% discount before the workshop. There is a special form for ordering the book with this discount that will be provided when people register for the workshop.

Timetable for the Workshop

The workshop will run from Monday afternoon to Friday morning. The timetable shown below will be followed as far as possible. On every day except Monday there is time set aside for participants to do the coursework examples.

Registration

The registration fee is \$600 for regular participants and \$300 for students with their status confirmed by a letter from one of their professors. Registration covers the workshop and materials other than the workshop text, refreshments during the workshop, and the evening reception on Monday. Lunches are not provided but are available at the Hilton Garden Inn and many other restaurants close to the conference center.

For additional information or to register, please contact Tia Farmer at

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