



The National Research Center for Statistics and the Environment

The University of Washington
February 10, 1999

RECOGNITION AND AWARDS

Conquest

Loveday Conquest is serving as the Chair of the ASA Statistics and the Environment (ENVR) section for 1999.

Guttorp

Peter Guttorp is a recipient of a twentieth century distinguished service award for his outstanding contribution to the synergistic development and direction of statistics, ecology, environment and society. The awards ceremony will be in April at the ninth Lukacs Symposium at Bowling Green State University.

New Center Member

Thomas S. Richardson, Assistant Professor of Statistics, was elected as a member of NRCSE by the Executive Committee on February 1. He works in graphical modeling, and is currently involved in projects with Peter Guttorp on biological indexing and with former Center visitor Allan Marcus on graphical modeling of environmental data.

Papers Submitted by Center Members

Conquest

Mode, N., L. Conquest, D. Marker. 1999. Ranked set sampling for ecological research: accounting for the total costs of sampling. *Environmentrics* 10, in press, 15 pp.

Nicolle Mode is receiving graduate RA support from NRCSE; Loveday Conquest is her graduate advisor and has also received NRCSE support, as has David Marker of WESTAT. EPA collaborator on this project is Barry Nussbaum.

Hughes

Hughes JP, Guttorp P, Charles SP (1999) A non-homogeneous hidden Markov model for precipitation occurrence. *Applied Statist.* 48:15-30.

Charles SP, Bates B, Hughes JP (1999) A spatio-temporal model for downscaling precipitation amounts and occurrences. *J. Geophys. Res.*, accepted.

Charles SP, Bates BC, Whetton PH, Hughes JP (1999) Validation of downscaling models for changed climate conditions: case study of southwestern Australia. *Climate Res.*, accepted.

Note that the last two articles resulted from the Charles and Bates visit to NRCSE in June, 1998.

Center Member Publishes Book

Cullen

Center member Alison Cullen and H. Christopher Frey of North Carolina State University have recently published a new book entitled *Probabilistic Techniques in Exposure Assessment: A Handbook for Dealing with Variability and Uncertainty in Models and Inputs*. The book contains a presentation of tools for addressing variability and uncertainty in exposure assessment. If you are interested in ordering a copy, contact the publishers, Plenum Publishing at www.plenum.com.

WORKSHOPS/SEMINARS

Society of Risk Analysis Meeting

December 6-9, 1998

There were many Center-affiliated presenters at the Society for Risk Analysis Annual Meeting in Phoenix, Arizona in December, 1998. Here are a list of the talks:

Scott Bartell, "An Index of Harm for Exposure to a Combination of Radiation and Chemical Pollutants". This talk had additional authors.

Samantha Bates, "A Bayesian Synthesis Approach to Assessing Exposure to PCBs in New Bedford Harbor". This talk had additional authors.

Alison Cullen, "Developing Distributions of Annual Average Concentration with Dependency Among Daily Values". This talk had additional authors.

Alison Cullen, "US-Slovak Cooperation in Environmental Health Risk Assessment: Personal Exposure to Particles and NO₂ in Banska Bystrica, Slovakia". This talk had additional authors.

Model Assessment Workshop

The Model Assessment Workshop will be held at the UW on September 7-10, 1999. David Ford is the Center organizer for this event. Watch our web site for any new information.

Elaine Faustman "New Approaches to Temporal Issues in Human Health Risk Assessment".

Rafael Ponce "Implications of Uncertainty for Establishing Protection Standards for Beryllium". This talk had additional authors.

1999 Winter Weekly Seminar Schedule

Tuesdays, 3:30 to 4:30 p.m., Bagley Hall, Room 425

January 12 Peter Guttorp, Department of Statistics, University of Washington. "Displaying Uncertainty in Contour Lines".

January 19 David Poole, Department of Statistics, University of Washington. "Bayesian Inference for a Non-invertible Deterministic Model for Bowhead Whales".

January 26 Jeremy York, Cartia Inc. "Analyzing Textual Data using a Map Metaphor".

February 2 Jerry Galt, Hazardous Materials Response Division, NOAA. "Statistical issues encountered when dealing with hazardous materials accidents"

February 9 John Yearsley, EPA. "Temperature Inputs of Dams on the Columbia and Snake Rivers".

February 16 Brian Mar, Emeritus Professor, Environmental Engineering, University of Washington. "Uses and Abuses of Environmental Engineering Models"

February 23 Ed Rykiel, Washington State University. "Validating Ecological Models: What's Scale Got To Do With It?"

March 2 Scott Ferson, Applied Biomathematics. "Why probability is insufficient for handling uncertainty in risk analysis"

March 9 Bruce Beck, University of Georgia. "Assuring the Quality of Models Designed to Fulfill Predictive Tasks".

FROM THE DIRECTOR

Welcome to the second issue of the NRCSE newsletter. I have three things on my mind: a thank you, an outreach plan, and a plea for information.

First the thank you. Gerald Van Belle has served for two years on our Executive Committee, and the Center has benefited greatly from his experience and sage advice. Gerald is spending much of this year at a desk in our space in Bagley, much to the benefit of all the Bagleyites.

Second, we are planning to send groups of Center members and research assistants to several different EPA locations over the next few months. The purpose is twofold: to inform EPA scientists of what we are doing up here in the Pacific Northwest, and to solicit further problems that EPA scientists would like to see us work on. We will try to tailor the groups to the interest of the particular EPA group we will be talking to. These visits are crucial to our efforts to become useful to a variety of EPA groups, and thus in the long term to our chances of getting continued funding.

Finally, while putting together the annual report (available on our web site; have you noticed the new layout?) I realized how much work has been done which does not show up on our web pages. There are three ways we can display our talents: on the **Members** page there is an option to enter research interests (about 1/3 of the members have submitted text for that). On the **Research** page we have two sections: the **Projects** page, where currently funded projects are listed and can be described (4 out of 22 projects have a description); and the **Papers** page, where NRCSE technical reports are listed. I would like submitted papers to also be put out as technical reports. This is standard procedure in many departments, and I do not know of any difficulties related to publishing that result from displaying the paper on the web. The project and papers pages are among the most visible parts of the Center web sites, and keeping them updated is a high priority. Let me know if you have any questions about these things.

EXECUTIVE COMMITTEE NEWS

The NRCSE Executive Committee members are elected for staggered three year terms. The terms for Paul Sampson and Gerald Van Belle expired last year while Alison Cullen and David Ford have one more year on their terms.

Mary Lou Thompson and Paul Sampson were recently elected to the Executive Committee for the next three years. The current committee consists of Peter Guttorp, Alison Cullen, David Ford, Mary Lou Thompson and Paul D. Sampson.

On a meeting on 2/1, the executive committee discussed the request for internal funding proposals, approved Thomas Richardson from Statistics as a new member (proposed by members Paul Sampson and David Madigan) and discussed contacts with EPA sites (see the Director's column).

NOTICES

Publications

A copy of all papers that are a result of NRCSE funding must be on file in the main office, 415 Bagley Hall. Please send these to the attention of Gerri at Box 351720.

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