### FORTHCOMING IASE CONFERENCES

### 1. IASE 2004 RESEARCH ROUND TABLE ON CURRICULAR DEVELOPMENT IN STATISTICS EDUCATION

Lund, Sweden, June 28 - July 3, 2004

The International Association for Statistical Education (IASE) and the International Statistical Institute (ISI) are organizing the 2004 Roundtable on Curricular Development in Statistics Education, which will be held at Lund Institute of Technology at Lund University in Lund, Sweden from 28 June to 3 July 2004. The Roundtable will bring together a small number of experts, representing as many different countries as possible, to discuss one another's views and approaches to curriculum for teaching statistics. The Roundtable Conference will provide opportunities for developing better mutual understanding of common problems and for making recommendations concerning the statistics curriculum. A main outcome of the Roundtable will be a monograph containing a set of papers, which have been prepared for and discussed during the conference. The monograph will present a global overview of the conference that can serve as starting point for further research on issues related to the statistics curriculum.

The need for processing the increasing amount of data people receive in the course of their work and lives has made it imperative that students leave elementary and secondary schools prepared to make reasoned decisions based on sound statistical thinking. Countries and communities have approached this problem in different ways. The Roundtable will provide the opportunity for sharing what works and to highlight the challenges and potential solutions researchers and teachers have faced as they design and implement curricula to produce statistically literate citizens. The Roundtable will be held immediately prior to the Tenth International Congress on Mathematical Education to be held in Copenhagen, Denmark in 2004, July 4-11.

The IASE Scientific Program Committee will prepare the program and schedule for the Roundtable. The Committee has agreed on a list of topics that will form the basis of the discussions and invites those interested to send in a three-page summary of their proposed paper. The major topics to be addressed at the primary, secondary, tertiary, or inservice levels are: Relationship between curriculum and assessment; Role of research in shaping curriculum; Impact of technology on the statistic and probability curriculum; Innovative curricular practices; Teacher preparation and Statistical literacy.

- Theoretical papers should include; a) the statement of the problem, b) background or appropriate previous work, c) discussion of main arguments, d) implications for curricular development, e) references.
- Descriptions of experimental research should include; a) the statement of the problem b) background or appropriate previous work; c) methodology, data analysis and discussion of main results; d) implications for curricular development; e) references.
- Descriptions of curriculum innovations should include; a) focus and philosophy of the curriculum, b) background and development process, c) description, d) pilot and implementation results, e) sources and references.

Lena Zetterqvist (lena@maths.lth.se) and Ulla Holt will be local organisers. More information from Gail Burrill (Division of Science and Mathematics Education, College of Natural Science, Michigan State University), (burrill@msu.edu).

Web site: http://hobbes.lite.msu.edu/~IASE 2004 Roundtable/

# 2. STATISTICAL ACTIVITIES AT THE 10<sup>TH</sup> INTERNATIONAL CONGRESS ON MATHEMATICS EDUCATION Copenhagen, Denmark, July 4-11, 2004

As a part of the 10<sup>th</sup> International Congress on Mathematical Education to be held in Copenhagen, Denmark July 4-11, there will be a set of sessions set aside in TSG-11 to address issues related to research and development in the teaching and learning of probability and statistics, as well as the series of Regular Lectures in Statistics Education.

The ICME-10 venue will be the Technical University of Denmark, located in a northern suburb of Copenhagen. Chair International Programme Committee: Mogens Niss (ICME10-IPC@ruc.dk). Chair Local Organising Committee Morten Blomhøj (ICME10-LOC@ruc.dk). Web page: http://www.icme-10.dk/

### 2.1. TSG-11 RESEARCH AND DEVELOPMENT IN THE TEACHING AND LEARNING OF PROBABILITY AND STATISTICS

Team Chairs: Li, Jun, Department of Mathematics, East China Normal University, China; Joseph M. Wisenbaker, Educational Psychology, University of Georgia, USA

Team Members: Dani Ben-Zvi, Faculty of Education, University of Haifa, Israel; Manfred Borovcnik, Mathematics, Economics and Informatics, University of Klagenfurt, Austria; Maxine Pfannkuch, Mathematics Education Unit, Department of Mathematics, The University of Auckland, New Zealand.

Teachers at all levels find that teaching statistics and probability is immensely challenging. Not only are there new developments in and approaches to the subject matter, but there are constantly opportunities afforded by access to new instructional materials and methods and more advanced educational technology. At the same time, the difficulties that students have in learning statistics and probability pose major difficulties to teachers. While developments in statistical software and hand calculators have eliminated much of the computational burdens associated with applying statistics and probability, the difficulties posed by the basic worldview inherent in those subjects are just as challenging as ever. This session will address some of these issues by concentrating on research and developments in the teaching and learning of probability and statistics. Our TSG is intended to represent the diversity of the work being done with students of all ages and contexts, and that advances our knowledge of the possibilities and challenges facing us as educators. Papers and supporting materials for all presentations and papers chosen for presentation by distribution are available on the TSG-11 website at http://www.icme-organisers.dk/tsg11/.

### 2.2. ICME-10 REGULAR LECTURES IN STATISTICS EDUCATION

The following three Regular Lectures in Statistics Education will be delivered at ICME-10.

Rolf Biehler, University of Kassel, Germany, Variation, co-variation, and statistical group comparison. Some results from epistemological and empirical research on technology supported statistics education.

Margarida Cesar, Universidade de Lisboa, Lisboa, Portugal, Come away with me: Statistics learning through collaborative work.

Jane M. Watson, University of Tasmania, Hobart, Tasmania, Australia, Assessment in Statistics education: Obstacle or Opportunity?

## 3. IASE ACTIVITIES AT THE ${\bf 55}^{\rm TH}$ SESSION OF THE INTERNATIONAL STATISTICAL INSTITUTE

Sydney, Australia, April 5-12, 2005

Chris Wild is the IASE representative at the ISI Programme Co-ordinating Committee for ISI-55<sup>th</sup> Session, to be held in Sydney, Australia, April 5-12, 2005. The sessions approved for ISI 55 in Sydney that were sponsored or co-sponsored by IASE are as follows (titles may change slightly). More information from Chris Wild at c.wild@auckland.ac.nz.

- Reasoning about Variation.
- The use of Simulation in Statistics Education
- Teaching Statistics Online
- Statistics for Life: What are the Statistical Ideas or Skills that Matter most and why?
- Research in Statistical Education
- Teaching Bayesian Statistics
- Challenges in the Teaching of Survey Sampling
- Using History of Statistics to Enhance the Teaching of Statistics
- Promotion of Statistical Literacy among Students
- Quality Assurance in Statistics Education
- Educating the Media on how best to Report Statistics
- Ethical Standards in Statistics Education

## 4. IASE SATELLITE CONFERENCE - STATISTICS EDUCATION AND THE COMMUNICATION OF STATISTICS

Sydney, Australia, April, 2005

This conference focused on Statistics Education and the Communication of Statistics is jointly organised by the IASE and the Victorian Branch of the Statistical Society of Australia and will immediately precede the International Statistical Institute Session in Sydney. The approach will be non-technical, suitable for both a specialist and non-specialist audience who would like to learn how to better communicate the statistical ideas which occur in their everyday and working lives. This meeting is intended to be of interest to a wide cross section of society including teachers, educational administrators, researchers in statistical education and in probabilistic reasoning and others who want to gain a better grasp of how to communicate statistics in general and who would like to broaden their knowledge of statistics applications. It should also be of interest to people concerned with interpreting sociological, economical, political, scientific or educational reports, predicting sports results, by policy makers, journalists, health professionals and others from the general population. More information from Brian Phillips, bphillips@swin.edu.au. Web site:

http://www.stat.auckland.ac.nz/~iase/conferences.php?show=iase2005

# 5. SRTL-4 THE FOURTH INTERNATIONAL RESEARCH FORUM ON STATISTICAL REASONING, THINKING AND LITERACY Auckland, New Zealand, April 2-7, 2005

The Fourth International Research Forum on Statistical Reasoning, Thinking, and Literacy, to be hosted by the Department of Statistics, The University of Auckland, New Zealand, July 2–7, 2005. This gathering offers an opportunity for a small, interdisciplinary group of researchers from around the world to meet for a few days to share their work, discuss important issues, and initiate collaborative projects. Having emerged from the three previous forums, the topic and focus of SRTL-4 will be *Reasoning about Distribution*. The Forum is co-chaired by Dani Ben-Zvi (University of

Haifa, Israel) and Joan Garfield (University of Minnesota, USA), co-organized by Maxine Pfannkuch and Chris Wild (The University of Auckland, New Zealand), and planned by a prestigious international advisory committee.

Based on the SRTL tradition, we plan to keep the number of participants small to facilitate a working research forum. There are three possible roles for participants in this Forum. The first role is to present current research on reasoning about distribution, the second is to discuss and react to research presentations, while the third is to be a small group moderator, which is ideal for doctoral students who are not yet ready to present research but want to participate. Participants will be strongly encouraged to use videotape and written transcripts of students in classroom and interview settings to provide illustrations of what the researchers are learning about how students reason about distribution. As with the previous SRTL Research Forums, we encourage the participation of young promising scholars. One outcome of the Forum will be a publication summarizing the work presented, discussions conducted, and issues emerging from this gathering.

The SRTL-4 Research Forum organizers invite anyone interested in participating in this forum to contact them as soon as possible. The first deadline for submission of interest is June 1, 2004. More Information from Maxine Pfannkuch, m.pfannkuch@auckland.ac.nz.

Web site: http://www.stat.auckland.ac.nz/srtl4/.



## 6. ICOTS-7: WORKING COOPERATIVELY IN STATISTICS EDUCATION Salvador (Bahia), Brazil, July 2-7, 2006

The International Association for Statistical Education (IASE) and the International Statistical Institute (ISI) are organizing the Seventh International Conference on Teaching Statistics (ICOTS-7) which will be hosted by the Brazilian Statistical Association (ABE) in Salvador (Bahia), Brazil, July 2-7 2006

The major aim of ICOTS-7 is to provide the opportunity for people from around the world who are involved in

statistics education to exchange ideas and experiences, to discuss the latest developments in teaching statistics and to expand their network of statistical educators. The conference theme emphasises the idea of *cooperation*, which is natural and beneficial for those involved in the different aspects of statistics education at all levels. Some examples are given below.

- Cooperative learning in statistics education. Recent trends in educational psychology emphasise the role of student activity and social interaction in learning. These developments are particularly important in the case of statistics where students are taking a more active role in working on cooperative projects and studies.
- Cooperation between statistics teachers and researchers. Real life applications generated by working with a researcher in another area help motivate the teaching of statistics. The subject is more enjoyable for students when a teacher can call on such real applications. At the same time, teachers are an essential part of a research team in statistics education, since they collaborate both in collecting data from the students and in helping with the design and evaluation of action-research programs.
- Cooperation between statistical agencies and statistics educators. Statistical agencies need the cooperation of the population at large when collecting their data. They are also interested in improving the statistical literacy of their citizens. Consequently, the agencies are communicating statistical ideas to their populace as well as providing official data for research on different topics, including teaching. Statistical offices and educators collaborate in the development of teaching resources based on official data and set up workshops and conferences on the teaching of statistics.

- Interdisciplinary cooperation for research. Interdisciplinary research is natural both in applied statistics and statistics education. Many central statistical concepts and procedures arose from research problems in other subjects. At the same time the researcher, whatever subject he or she is working in, benefits by having problems actually solved. Statistics education is based on many different disciplines, such as psychology, pedagogy, statistics and sociology, which all contribute in their own unique way to the study and solution of teaching problems.
- International cooperation in statistics education. Global communication and increasing interest and respect for complementarity in education are leading to an increasing number of successful international research or educational programs at different levels: e.g., Large scale statistical literacy comparative studies; Regional, National or International funded projects; International statistical education centres; International training programs or conferences in statistics education.
- Globalization and diversity in statistics education. Cooperation requires both global and local approaches to research and teaching. There is a contrast and a complementarity of global and local approaches in statistics education; e.g., large sample, quantitative studies versus qualitative and ethnographic research; the need to recognise global tendencies, and at the same time being sensitive to specific difficulties or talents of special and gifted students, minorities, etc.

The Conference will include keynote speakers, invited speakers, contributed papers, workshops and forums, demonstration lessons, roundtable sessions, poster sessions, book and software displays. People interested in organising a session or in presenting a paper are encouraged to contact the appropriate Topic Convenor. More information is available from the ICOTS7 Web page at http://www.maths.otago.ac.nz/icots7/ and from Carmen Batanero, batanero@ugr.es.

### 6.1. TOPICS AND TOPIC CONVENORS

- Topic 1. Working cooperatively in statistics education. Lisbeth Cordani, lisbeth@maua.br and Mike Shaughnessy, mike@mth.pdx.edu
- Topic 2. *Statistics Education at the School Level*. Dani Ben-Zvi, benzvi@univ.haifa.ac.il and Lionel Pereira, lpereira@nie.edu.sg
- Topic 3. Statistics Education at the Post Secondary Level. Martha Aliaga, martha@amstat.org and Elisabeth Svensson, elisabeth.svensson@esi.oru.se
- Topic 4. *Statistics Education/Training and the Workplace*. Pedro Silva, pedrosilva@ibge.gov.br and Pilar Martín, pilar.guzman@uam.es
- Topic 5. Statistics Education and the Wider Society. Brian Phillips, BPhillips@groupwise.swin.edu.au and Phillips Boland, Philip.J.Boland@ucd.ie
- Topic 6. *Research in Statistics Education*. Chris Reading, creading@metz.une.edu.au and Maxine Pfannkuch, pfannkuc@scitec.auckland.ac.nz
- Topic 7. *Technology in Statistics Education*. Andrej Blejec, andrej.blejec@uni-lj.si and Cliff Konold, konold@srri.umass.edu
- Topic 8. Other Determinants and Developments in Statistics Education. Theodore Chadjipadelis, chadji@polsci.auth.gr and Beverley Carlson, bcarlson@eclac.cl
- Topic 9. An International Perspective on Statistics Education. Delia North, delian@icon.co.za and Ana Silvia Haedo, haedo@qb.fcen.uba.ar
- Topic 10. *Contributed Papers*. Joachim Engel, Engel\_Joachim@ph-ludwigsburg.de and Alan McLean, alan.mclean@buseco.monash.edu.au
- Topic 11. Posters. Celi Espasandín López, celilopes@directnet.com.br

### **6.2. LOCAL ORGANISERS**

Pedro Alberto Morettin, (Chair; pam@ime.usp.br), Lisbeth K. Cordani (lisbeth@maua.br), Clélia Maria C. Toloi (clelia@ime.usp.br), Wilton de Oliveira Bussab (bussab@fgvsp.br), Pedro Silva (pedrosilva@ibge.gov.br).

#### 6.3. IPC EXECUTIVE

Carmen Batanero (Chair, batanero@ugr.es), Susan Starkings (Programme Chair, starkisa@vax.sbu.ac.uk), Allan Rossman and Beth Chance (Editors of Proceedings; arossman@calpoly.edu; bchance@calpoly.edu), John Harraway (Scientific Secretary: jharraway@maths.otago.ac.nz), Lisbeth Cordani (Local organisers representative; lisbeth@maua.br).