#### FORTHCOMING IASE CONFERENCES

## ISI-57 THE 2009 SESSION OF THE INTERNATIONAL STATISTICAL INSTITUTE Durban, South Africa, August 16 – 22, 2009



IASE sponsored Invited Paper Meetings for 57th Session in Durban are being organised by Helen MacGillivray (Australia, h.macgillivray@qut.edu.au). The IASE Programme Committee for ISI-57 has chosen the theme "Statistics Education for the Future."

IASE has nine IPM (Invited Paper Meeting) sessions, two of which include issues raised by the local organisers, and has two joint sessions with IAOS.

Session	Section	Title of Invited Paper	Organiser(s)
Number	representation	Meeting	
IPM15	IAOS	The challenge of building a	To be determined, c/o Nancy
	IASE	supply of statisticians for the	McBeth,
		future	Nancy.McBeth@stats.govt.nz
IPM36	IASE	The roles of statistical	Reija Helenius, Finland,
	IAOS	agencies in developing statistical literacy	Reija.Helenius@stat.fi
IPM37	IASE	Educating the public on how	Peter Wingfield-Digby,
	Local Hosts	to use official statistics.	pwdigby@loxinfo.co.th
IPM38	IASE	Challenges faced in Statistics	Delia North, South Africa,
	Local Hosts	Education in African	northd@ukzn.ac.za
		countries	
IPM39	IASE	Balancing the training of	Charles Rohde, USA,
		future statisticians for	crohde@jhsph.edu
		workplace and research	
IPM40	IASE	Exploiting the Progress in	Juana Sanchez, USA,
		Statistical Graphics and	jsanchez@stat.ucla.edu
		Statistical Computing for the	
		benefit of Statistical Literacy	
IPM41	IASE	Survey Research in Statistics	Irena Ograjensek, Slovenia,
		Education	irena.ograjensek@ef.uni-lj.si
IPM42	IASE	Research on Informal	Katie Makar, Australia,
		Inferential Reasoning	k.makar@uq.edu.au
IPM43	IASE	Teaching, Learning and	Neville Davies, UK,
		Assessing Statistics Problem	neville.davies@ntu.ac.uk
		Solving in Higher Education	
IPM44	IASE	Technologies for learning	Gabriella Belli, USA,
		and teaching in developing	gbelli@vt.edu
		countries	
IPM45	IASE	Virtual Learning	Adriana Backx Noronha Viana,
		<b>Environments for Statistics</b>	Brazil, backx@usp.br
		Education	and Pieternel Verhoeven,
			Netherlands, n.verhoeven@roac.nl

Statistics Education Research Journal, 8(1), 131-137, http://www.stat.auckland.ac.nz/serj © International Association for Statistical Education (IASE/ISI), May, 2009

-

The website http://www.statssa.gov.za/isi2009/ has information on all matters relating to ISI 2009, including important dates, and will be regularly updated as new information develops.

More information: Helen MacGillivray, h.macgillivray@qut.edu.au

## 2009 IASE SATELLITE CONFERENCE TO THE 57TH SESSION OF THE ISI "NEXT STEPS IN STATISTICS EDUCATION"

Durban, South Africa August 14-15, 2009 (Immediately before ISI 57 in Durban)

All submissions addressing the theme "Next Steps in Statistics Education" will be welcome. This theme has been chosen to particularly attract papers under the following headings:

- 1. What constitutes best practice for the curriculum beyond the "Introductory Statistics" course? What courses should follow on for those wishing to major in Statistics and what additional training should we offer to those in other disciplines?
- 2. What elements of our undergraduate curriculum specifically prepare our students for their careers post-graduation, either in the workplace or as masters/doctoral students? How can we improve these elements?
- 3. Now that more countries have school curricula that include substantial emphasis on data and chance, how can we better prepare teachers for implementing those curricula? What curricular materials and tools can we develop to improve students' learning of statistics at school level?
- 4. Since the 1949 formation of its precursor, the ISI Statistical Education Committee, the IASE has matured as an organisation. As we move towards ICOTS 8, we note that great progress has already been made in the field of Statistics Education but the challenge we face now is to consider the next steps that we must take. How can we build on past progress to raise the profile of our field so that it becomes a more visible and vibrant pursuit?

More information can be found on conference webpage: http://www.ucd.ie/statdept/2009\_iase\_satellite.html Conference Email: IASE Satellite@maths.ucd.ie

#### SRTL-6

## THE SIXTH INTERNATIONAL RESEARCH FORUM ON STATISTICAL REASONING, THINKING, AND LITERACY

The Role of Context and Evidence in Informal Inferential Reasoning Brisbane, Australia, July 10 - 16, 2009



The sixth in a series of International Research Forums on Statistical Reasoning,

Thinking, and Literacy (SRTL-6) is to be held in Brisbane, Australia from July 10 to July 16, 2009. The School of Education at The University of Queensland, will host the Forum. The Forum's focus will build on the work presented and discussed at SRTL-5 on informal ideas of statistical inference. Recent research suggests an important role for developing ideas of informal types of statistical inference even at early educational levels. Researchers have developed instructional activities that encourage students to infer beyond samples of data and use technological tools to support these informal inferences.

The findings of these studies reveal that the context of the data and the use of evidence may be important factors to study further. The role of context is of particular interest because in drawing (informal) inferences from data, "students must learn to walk two fine lines. First, they must maintain a view of data as 'numbers with a context' (Moore, 1992)." At the same time, "they must learn to see the data as separate in many ways from the real-world event they observed" (Konold & Higgins, 2003, p. 195). That is, they must abstract the data from that context. The role of evidence is also of particular interest because in learning how to make data-based claims (argumentation), students must consider the evidence used to support the claim, the quality and justification of the evidence, limitations of the evidence and finally, an indication of how convincing the argument is (Ben-Zvi, Gil, & Apel, 2007).

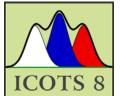
Based on SRTL-5, we characterize Informal Inferential Reasoning (IIR) as the cognitive activities involved in drawing conclusions with some degree of uncertainty that go beyond the data and having empirical evidence for them. Three principles appear to be essential to informal inference: (1) generalizations (including predictions, parameter estimates, and conclusions) that go beyond describing the given data; (2) the use of data as evidence for those generalizations; and (3) conclusions that express a degree of uncertainty, whether or not quantified, accounting for the variability or uncertainty that is unavoidable when generalizing beyond the immediate data to a population or a process (Makar & Rubin, 2007).

An interesting range of diverse research presentations and discussions have been planned and we look forward to a stimulating and enriching gathering. These papers will address the role of context and evidence when reasoning about informal inference at all levels of education including the professional development of elementary and secondary teachers.

The structure of the scientific program will be a mixture of formal and informal sessions, small group and whole group discussions, and the opportunity for extensive analysis of video-taped research data. There will also be a poster session for exhibiting current research of participants on additional topics related to statistics education. The Forum is co-chaired by Dani Ben-Zvi (University of Haifa, Israel) and Joan Garfield (University of Minnesota, USA), locally organized by Katie Makar and Michael Bulmer (The University of Queensland), and planned by a prestigious international advisory committee. Conference attendance is by invitation only.

For more information, visit the SRTL website at: http://srtl.stat.auckland.ac.nz/ or email SRTL2009@gmail.com.

## ICOTS-8 DATA AND CONTEXT IN STATISTICS EDUCATION: TOWARDS AN EVIDENCE-BASED SOCIETY Ljubljana, Slovenia, July 11-16, 2010



The 2010 International Conference on Teaching Statistics will be held in the city of Ljubljana, Slovenia, July 11-16. It is being organised by the IASE and the Slovenian Statistical Association. The venue will be the Ljubljana Cultural and Congress Centre.

Statistics educators, statisticians, teachers, and educators at large are invited to contribute to the scientific programme. Types of contribution include invited papers, contributed papers, and posters. No person may author more than one

Invited Paper at the conference, although the same person can be co-author of more than one paper, provided each paper is presented by a different person.

Voluntary refereeing procedures will be implemented for ICOTS-8. Details of how to prepare manuscripts, the refereeing process and final submission arrangements will be announced later.

#### **INVITED PAPERS**

Invited Paper Sessions are organized within 10 Conference Topics as follows.

#### **Topics and Topic Convenors**

- Data and Context in Statistics Education: Towards an Evidence-based Society. Brian Phillips (Australia) bphillips@swin.edu.au Irena Ograjensek (Slovenia) irena.ograjensek@ef.uni-lj.si
- 2. Statistics Education at the School Level.

Mike Shaughnessy (USA) mikesh@pdx.edu Doreen Connor (UK) doreen.connor@ntu.ac.uk

3. Learning to Teach Statistics.

Katie Makar (Australia) k.makar@uq.edu.au Joachim Engel (Germany) engel@math.uni-hannover.de

4. Statistics Education at the Post Secondary Level. Elisabeth Svensson (Sweden) elisabeth.svensson@esi.oru.se Larry Weldon (Canada) weldon@sfu.ca

5. Assessment in Statistics Education.

Beth Chance (USA) bchance@calpoly.edu Iddo Gal (Israel) iddo@research.haifa.ac.il

6. Statistics Education, Training and the Workplace.

Gabriella Belli (USA) gbelli@vt.edu

Peter Petocz (Australia) peter.petocz@mq.edu.au

7. Statistics Education and the Wider Society. Richard Gadsden (UK) R.J.Gadsden@lboro.ac.uk Oded Meyer (USA) meyer@stat.cmu.edu

8. Research in Statistics Education.

Arthur Bakker (The Netherlands) a.bakker@fi.uu.nl Tim Burgess (New Zealand) t.a.burgess@massey.ac.nz

9. Technology in Statistics Education.

Deborah Nolan (USA) nolan@stat.berkeley.edu Paul Darius (Belgium) paul.darius@biw.kuleuven.be

10. An International Perspective on Statistics Education.

Delia North (South Africa) northd@ukzn.ac.za

Enriqueta Reston (Phillipines) edreston@usc.edu.ph

Session themes within each Topic are currently being discussed. The themes and Session organizers with email contact are available on the ICOTS-8 web site http://icots8.org/, under "Scientific Programme." Those interested in submitting an invited paper should contact the appropriate Session Organiser before December 1, 2008.

#### **CONTRIBUTED PAPERS**

Contributed paper sessions will be arranged in a variety of areas. Those interested in submitting a contributed paper should contact either Gilberte Schuyten (Gilberte.Schuyten@UGent.be), John McKenzie (mckenzie@babson.edu), or Flavia Jolliffe (F.Jolliffe@kent.ac.uk) before September 1, 2009.

#### **POSTERS**

Those interested in submitting a poster should contact Mojca Bavdaz (mojca.bavdaz@ef.uni-lj.si) or Alesa Lotric Dolinar (alesa.lotric.dolinar@ef.uni-lj.si) before January 15, 2010.

#### **GENERAL ISSUES**

More information is available from the ICOTS-8 web site at http://icots8.org/ which will continue to be updated over the next three years, or from the ICOTS IPC Chair John Harraway, (jharraway@maths.otago.ac.nz), the Programme Chair, Roxy Peck (rpeck@calpoly.edu), and the Scientific Secretary, Helen MacGillivray (h.macgillivray@qut.edu.au).

#### OTHER FORTHCOMING CONFERENCES

# USCOTS 2009 UNITED STATES CONFERENCE ON TEACHING STATISTICS "LETTING GO TO GROW" Columbus, OH, USA, June 25 - 27, 2009

The third biennial United States Conference on Teaching Statistics (USCOTS 09) will be held on June 25-27, 2009 at the Ohio State University in Columbus, Ohio, hosted by CAUSE, the Consortium for the Advancement of Undergraduate Statistics Education. The target audience for USCOTS is teachers of undergraduate and AP statistics, from any discipline or type of institution. Teachers from two-year colleges are particularly encouraged to attend.

The theme for USCOTS 09 is Letting Go to Grow. "Letting Go" has many interpretations, such as letting go of some classic course content in order to better align with course goals, letting go of some old ideas about pedagogy in order to use more effective methods, or letting go of old notions about the students we teach in order to better facilitate their learning. USCOTS is a "working conference" with many opportunities for hands-on activities, demonstrations, networking, sharing ideas, and receiving the latest information on research and best practices in teaching statistics. Leaders in statistics education and assessment will give plenary talks, including Dani Ben-Zvi (Haifa, Israel), George Cobb (USA), Peter Ewell (USA), Ronald Wasserstein (USA), and Chris Wild (Auckland, New Zealand).

Details are available at USCOTS web page: http://www.causeweb.org/uscots

### INNOVATIVE APPROACHES TO TURN STATISTICS INTO KNOWLEDGE Washington, D.C., USA, July 15 – 16, 2009

This two-day seminar and a plenum should contribute to the development of tools to help people transform statistics into knowledge and decisions. A first condition for statistics to be used this way is that relevant statistics become known, available, and understood by wider audiences. The seminar is held in the context of the OECD Global Project on "Measuring the Progress of Societies." It should contribute to one of the goals quoted in the Istanbul Declaration: "Produce a broader, shared, public understanding of changing conditions, while highlighting areas of significant change or inadequate knowledge."

The seminar can be seen as a continuation of the previous seminars organized in Rome and Stockholm and of the first International Exhibition on "Innovative Tools to Transform Information into Knowledge," organised during the second OECD World Forum on "Statistics, Knowledge and Policy" (Istanbul, 27-30 June 2007).

We want to look at tools and applications for making statistics more popular, while avoiding the pitfalls of populism, over-simplification, or propaganda. We want to base all these initiatives on scientific standards, observing the basic principles of objectivity and good communication. We would therefore welcome experts in statistical methodology, cognitive science, and communication as active participants in the workshop.

Details are available at seminar web page:

http://www.oecd.org/progress/ict/statknowledge

#### 10TH INTERNATIONAL CONFERENCE OF THE MATHEMATICS EDUCATION INTO THE 21ST CENTURY PROJECT MODELS IN DEVELOPING MATHEMATICS EDUCATION Dresden, Saxony, Germany, September 11 – 17, 2009

ME (21)

The Mathematics Education into the 21st Century Project was founded in 1986 and is dedicated to the planning, writing and disseminating of innovative ideas and materials in Mathematics

and Statistics Education. You are invited to attend our 10th anniversary project conference to be held in the historic city of Dresden, Germany. The conference is organized in full cooperation with the Saxony Ministry of Education. All our conferences have a string Statistics Education component. You are warmly invited to attend our conference in the heart of the historic city of Dresden.

#### INTERNATIONAL ORGANISERS

Dr. Alan Rogerson, Coordinator of the Mathematics in Society Project (Poland), Prof. Fayez Mina, Faculty of Education, Ain Shams University (Egypt)

#### CHAIR OF THE LOCAL ORGANISING COMMITTEE

Prof. Dr. Ludwig Paditz, Dresden University of Applied Sciences.

Further information: Alan Rogerson, arogerson@inetia.pl Website: http://math.unipa.it/~grim/21project.htm

### 2009 JOINT STATISTICAL MEETINGS Washington, D.C., USA, August 1-6, 2009

JSM (the Joint Statistical Meetings) is the largest gathering of statisticians held in North America. It is held jointly with the American Statistical Association, the International Biometric Society (ENAR and WNAR), the Institute of Mathematical Statistics, and the Statistical Society of Canada. Attended by over 5000 people, activities of the meeting include oral presentations, panel sessions, poster presentations, continuing education courses, exhibit hall (with state-of-the-art statistical products and opportunities), career placement service, society and section business meetings, committee meetings, social activities, and networking opportunities.

More information: jsm@amstat.org

Website: http://www.amstat.org/meetings/jsm/2009/