





54th Annual Conference of the South African Statistical Association

Workshops: 5 and 6 November, 2012 Main Conference: 7 – 9 November, 2012 Venue: NMMU Summerstrand South Campus

SASA2012 Conference Report

The 54th annual South African Statistical Association (SASA) conference was held on the South Campus of the Nelson Mandela Metropolitan University (NMMU) from 5 November to 9 November 2012. The conference was hosted by the NMMU Statistics Department and was a resounding success for all involved.

From initial registration to workshops and presentations, every aspect of the conference provided those who attended (both younger and older) the opportunity to showcase, learn and share their ideas and research with one another. The chance to network with those from all over the world was taken by all as delegates met between sessions, during tea – and lunch times and social evening functions. The Statistics Department also saw the opportunity to expose our post graduate students who could not afford to officially attend the conference, to delegates by appointing them as assistants.

The conference was officially opened by the 2012 President of SASA, Dr Gary Sharp after which the Dean of the Faculty of Science, Prof Andrew Leitch welcomed all the delegates. The Statistics Department catered to every need of those attending which culminated in a spectacular gala dinner held at the Willows. Entertainment for the evening was provided by the NMMU Music Department's very own John Edwards Trio. The gala dinner was a huge success with perfect weather, great food and entertainment and a fabulous master of ceremonies, Mr Warren Brettenny from the Statistics Department.

The diversity of those who attended was very evident with a total of 213 delegates attending the conference from 9 different countries (including South Africa). A very encouraging fact was that 42 (19.7%) students attended the conference of which 8 were studying at NMMU. A total of 129 delegates also attended the five workshops on offer.

An impressive 112 presentations were made of which 10 were accepted for peer reviewed publication available in the conference proceedings (ISBN: 978-1-86822-621-4) (A conference booklet containing all the abstracts and the complete program is available on request). The two invited guests, Prof Jeffrey Racine from Canada and Prof Nick Fisher from Australia, both also presented plenary sessions. The seminars presented at the SASA2012

conference, including those presented by students, were of a very high standard as was also indicated by Prof Jeffrey Racine. Prof Jeffrey Racine wrote: "I must say that I was so very impressed by the poise and delivery of the presenters, particularly those given by students. I have never attended a conference where the caliber of presentations was uniformly as high among the student presenters as it was during SASA 2012" (for the full report, please see the attached appendix).

Both Prof Racine and Prof Fisher also commented on the state of Statistics in South Africa as well as on the SASA2012 conference in general:

Prof Racine wrote: "In summary, the SASA organizers made efficient use of my time, provided multiple opportunities to interact with students and faculty, and left me with a sense of how talented and eager the students and faculty are in SA. This is even more remarkable given the resource constraints they face, mounting pressure on a falling number of Professors, and challenging demographics surrounding the age cohort of many faculties. You are to be congratulated on your dedication, spirit, and achievements of which you have the right to be most proud.

Thank you all for your generous and warm hospitality and for the wonderful opportunity. It was truly a pleasure to witness the superb range of talent and interests showcased during my visit, and I look forward to crossing paths with many of you in the not too distant future".

Prof Fisher wrote: "I was particularly struck by the large number of enthusiastic young statisticians, both in universities and in business and industry. Numerically, they dominated the audience in all my presentations, they were interested in what I was discussing in spite of the somewhat off-beat nature of the topics I presented, and asked good questions. This is a very healthy state of affairs.

- ... In contrast, what one might call the mid-career 'leadership' cohort is (numerically) understrength, as is the case in Australia. This wasn't simply an isolated observation by me: it was a point stressed by Herrie van Rooy in a report to the SASA Conference based on survey results. As with the Statistical Society of Australia, this constitutes a matter calling for expeditious action by the professional society and other interested parties such as major employers of statisticians.
- ... The annual SASA conference proved to be a heroic effort by Gary Sharp and his colleagues, together with a large number of ubiquitous, very friendly and helpful students who were always on hand to point a confused Australian in the right direction. Running conferences is a demanding business, as I can personally attest, so I trust that they feel rewarded for their efforts. The scientific program featured a wide range of stimulating contributions, and the sessions I attended featured healthy but good-natured discussion. The catering for meals and social events was excellent and beyond the combined capability of the attendees to exhaust."

In summary, the SASA2012 conference was a resounding success which enabled those attending to learn, share and connect with statisticians from far reaching parts of the world.

As Chairman of the SASA2012 Organizing Committee, I would like to thank our sponsors, SAS (Platinum Sponsor), Casio (Conference bags), Quintiles (Exhibitor), The NMMU Faculty of Science (Lanyards) and the Department of Statistics (eco friendly note books). I would also like to thank my committee, Warren Brettenny, Chantelle Clohessy and Rae Vincent – Le Roux for their invaluable contribution. I also like to extend my thanks to the HOD of the

Statistics department, Gary Sharp, as well as Professor Andrew Leitch (Dean of the Faculty of Science), Professor Geoff Booth (Director of the School of Mathematical Sciences), Professor Jean Greyling (Computer Science) and Jean Rademakers (Computer Science).

Johan Hugo

Chairman: SASA2012 Organizing Committee

Appendix

Prof Jeffrey Racine Visitors Report

I am sitting in my office at McMaster University here in Hamilton, Ontario, Canada reflecting on my recent experience in SA when I was hosted as an invited speaker at SASA 2012. To provide some sense of contrast, it is -13C outside and I wore three jackets while biking to work this morning so you are entitled to a smug, sunny smile.

The invitation to visit SA for the 2012 SASA Conference and, while there, to visit NMMU, Wits, and UP arose from a five-day series of lectures and computer labs held Nov. 3-7 2008 organized by Steve Koch (Professor and Head, Economics, UP). Attendees at this workshop included David Friskin and Gary Sharp (my host for SASA 2012). It was during this workshop that I was first impressed by the caliber of the attendees (attendees included both graduate students and faculty), the seriousness with which they approached their studies, and their genuine excitement when studying non-classical approaches towards estimation and inference.

Fast forward to Nov. 25 2011 when I received an email from Gary Sharp inviting me to give a talk at SASA 2012, hold a workshop, and visit a number of campuses in SA over a two week period. The clincher for me was his finishing his email with "PS Since your course I have switched to R as the software of choice." I was hooked - the opportunity to evangelize on two of my favourite topics, nonparametric statistics and open source software, was impossible to pass up.

Having arrived in PE the evening of Nov. 2, my 2012 visit to SA started with a short workshop on nonparametric methods for categorical data held in Tsitsikamma at the Storms River Guest House Nov. 3-4 where I experienced the beautiful giant ferns, Yellowwoods, tree-top zip-lining and the warm hospitality of many of the local SASA organizers (Johan Hugo, Chantelle Clohessy and Warren Brettenny) and volunteers (Melnick and Erin).

SASA 2012 for me began by attending the one-day course on Functional Data Analysis, a wonderful way to immerse myself in the week's offerings. Day two allowed me to meet and discuss projects with participants in my workshop on Nonparametric Instrumental Variable Methods, while days three-five gave me to opportunity to sit in on a range of talks.

I must say that I was so very impressed by the poise and delivery of the presenters, particularly those given by students. I have never attended a conference where the caliber of presentations was uniformly as high among the student presenters as it was during SASA 2012.

Saturday was spent with Gary and family (daughter Sarah and spouse Cathy) relaxing at Addo and having a picnic at the fabulous park facilities (hat tip to SANParks!), then afterwards enjoying a braai hosted by NMMU faculty Debbie Lee and spouse Mario Du Preez.

Sunday involved a short flight to Johannesburg where I was met by Peter Fridjhon of Wits University and then had a wonderful three day visit where I gave two talks then had the pleasure to discuss work with a number of students and faculty (special thanks to the local committee of Mark Dowdeswell, Paul Fatti, and Jacky Galpin). Tuesday afternoon I was driven to Pretoria by Jacky and along the way was given a wonderful overview of the history and state of academia in SA.

Wednesday was spent giving a workshop in the Department of Statistics at UP hosted by Inger Fabris-Rotelli (Spline Methods with Categorical Covariates), and Thursday my visit came full circle when I gave a talk in the Economics Department at UP hosted once again by Steve Koch.

In summary, the SASA organizers made efficient use of my time, provided multiple opportunities to interact with students and faculty, and left me with a sense of how talented and eager the students and faculty are in SA. This is even more remarkable given the resource constraints they face, mounting pressure on a falling number of Professors, and challenging demographics surrounding the age cohort of many faculties. You are to be congratulated on your dedication, spirit, and achievements of which you have the right to be most proud.

Thank you all for your generous and warm hospitality and for the wonderful opportunity. It was truly a pleasure to witness the superb range of talent and interests showcased during my visit, and I look forward to crossing paths with many of you in the not too distant future.

Prof Nick Fisher's Visitors Report

I have just returned to Sydney from a most enjoyable second visit to South Africa, this time courtesy of the South African Statistical Association and the universities of Witwatersrand, Pretoria and Cape Town.

My earlier visit in 2009 involved participating in two conferences: the ISI Session in Durbin and an ISBIS Satellite meeting that I was involved in organising in Stellenbosch. Neither event gave me a clear impression of what was happening with Statistics in South Africa, nor did I see any of the country. This time, my schedule took me to Johannesburg, Pretoria, Cape Town for seminars and to Port Elizabeth for a one-day workshop and a conference presentation and I did see a bit of the beautiful countryside. Here are some brief observations.

- 1. I was particularly struck by the large number of enthusiastic young statisticians, both in universities and in business and industry. Numerically, they dominated the audience in all my presentations, they were interested in what I was discussing in spite of the somewhat off-beat nature of the topics I presented, and asked good questions. This is a very healthy state of affairs.
- 2. In contrast, what one might call the mid-career 'leadership' cohort is (numerically) understrength, as is the case in Australia. This wasn't simple an isolated observation by me: it was a point stressed by Herrie van Rooy in a report to the SASA Conference based

on survey results. As with the Statistical Society of Australia, this constitutes a matter calling for expeditious action by the professional society and other interested parties such as major employers of statisticians.

- 3. I had interesting discussions with a number of senior statisticians about some of the broader statistical issues that have been consuming much of my time over the last decade or so:
 - the value of having a strategic planning process that provides a basis for focussing a professional society's efforts in specific areas
 - promoting the importance of professionalism in the practice of Statistics to the wider community, government, business and industry
 - professional accreditation [certification]
 - Statistics education at schools

These issues are clearly engaging the minds of past and current SASA Presidents, and there may be opportunity to collaborate with a number of national statistical societies in other countries, where increasing cooperation has been mutually beneficial.

4. The annual SASA conference proved to be a heroic effort by Gary Sharp and his colleagues, together with a large number of ubiquitous, very friendly and helpful students who were always on hand to point a confused Australian in the right direction. Running conferences is a demanding business, as I can personally attest, so I trust that they feel rewarded for their efforts. The scientific program featured a wide range of stimulating contributions, and the sessions I attended featured healthy but good-natured discussion. The catering for meals and social events was excellent and beyond the combined capability of the attendees to exhaust.

These visits are quite demanding of time and energy: I prepared and presented 6 formal and informal talks at three different universities during the first week of my visit, then conducted a one-day workshop and gave a keynote address in the second week. So I was very grateful for the fact that the organisers of the visit allowed time for some sight-seeing. I was shown parts of Johannesburg and Pretoria, had the chance to climb Table Mountain, visit a winery and Kirstenbosch National Botanical Gardens, and make one-day tours to the South West Cape area and to Addo Elephant National Park. These provided very necessary and very enjoyable breaks from the professional activities.

I would to thank Tim Dunne, for proposing me as SASA Visitor and the SASA Executive for selecting me for this privilege; and Roelof Coetzer and Gary Sharp for arranging my visit. Also, I am very grateful to Peter Fridjhon (University of Witwatersrand), Wynand Breytenbach (University of Pretoria), and Francesca Little (University of Cape Town) for their generous hospitality while hosting me.

More generally, I'd like to thank all the people I met for the genuinely warm welcome they gave me as a visitor to South Africa (and for the many solicitous enquiries I received about the health of the Australian Rugby and Cricket teams). I thoroughly enjoyed the visit, and the opportunity to renew friendships from 2009 and make new friends. I hope we meet again soon.

SASA2012 Conference Pictures













Dr Vince Micali and Prof Nicholas Fisher





Port Elizabeth: windy city? NO - friendly city!

Dear SASA2012 Delegate

On behalf of the SASA2012 Organising Committee and the NMMU Statistics Department, I would like to thank you for attending the SASA2012 conference in Port Elizabeth and helping us to make it a huge success. Thank you also to everybody who contributed by presenting seminars.

You would also have noticed that many pictures were taken during the week of the conference. If you have a Facebook account, these pictures can be viewed at the following link:

http://www.facebook.com/pages/NMMU-Statistics/308108532580715 Kind Regards

Johan Hugo - Chair: SASA2012 Conference Organising Committee ■