

## EDITORIAL

Welcome to the second issue of the ASSTA Newsletter for 2009. I guess you must be all set for travel to participate and present your research first in Interspeech'09 Conference, to be held in Brighton, UK from 8 –11 September 2009, and then in several other satellite workshops and events thereafter that are related to Speech Science Technology. In this newsletter, we have all new things for you to read, especially the details of the revamped ASSTA Grants Scheme and the ASSTA-sponsored HCSNet Summerfest'09, and an exciting report from the Forensic Speech Science Committee sub-committee chair, Philip Rose.

Also, you will find a conference report from a successful travel grant award winner, Tristan Kleinschmidt, and a potential scholarship opportunity in experimental phonetics and phonology from LaTrobe University, Melbourne, Australia.

Thanks to those members who have sent me submissions for this issue. If you have received an ASSTA travel award, or you have a position or scholarship opportunity available, please be sure to send along your insert for the next newsletter issue. Remember, this newsletter is a forum for you to share information about your travels, research and labs. We look forward to your contributions in the next issue.

*Girija Chetty*

### ▶ Contents

President's Report	3
Small Grants Report	4
FSSC Report	6
Conference Report	8



## ASSTA INFORMATION

Australian Speech Science and Technology Association Inc.  
GPO Box 143, Canberra City ACT 2601

### ASSTA Executive

President: Denis Burnham  
[d.burnham@uws.edu.au](mailto:d.burnham@uws.edu.au)  
Fax: (02) 9772 6736

Secretary: David Grayden  
[grayden@unimelb.edu.au](mailto:grayden@unimelb.edu.au)

Treasurer: Shunichi Ishihara  
[Shunichi.Ishihara@anu.edu.au](mailto:Shunichi.Ishihara@anu.edu.au)

Member: Catherine Watson  
[c.watson@auckland.ac.nz](mailto:c.watson@auckland.ac.nz)

Member: Roberto Togneri  
[roberto@ee.uwa.edu.au](mailto:roberto@ee.uwa.edu.au)

### ASSTA Newsletter Team

Girija Chetty  
[girija.chetty@canberra.edu.au](mailto:girija.chetty@canberra.edu.au)

Roberto Togneri  
[roberto@ee.uwa.edu.au](mailto:roberto@ee.uwa.edu.au)

David Grayden  
[grayden@unimelb.edu.au](mailto:grayden@unimelb.edu.au)

### Contributions

Copy should be sent to the newsletter team via email as plain text or as an attachment in Rich Text Format (RTF) or Microsoft Word (DOC).

**Contributors:** Denis Burnham, Catherine Watson, Phil Rose, Tristan Kleinschmidt, Maria Tabain

### ASSTA Corporate Members

Appen Pty. Ltd.  
<http://www.appen.com.au/>

Cochlear Ltd  
<http://www.cochlear.com.au/>

CRC for Cochlear Implant and Hearing Aid Innovation  
<http://www.bionicear.org/crc>

Spectral Dynamics Pty. Ltd.  
<http://home.iprimus.com.au/elvoice/>

Visit ASSTA on the Web:  
<http://www.assta.org/>

# PRESIDENT'S REPORT

---



ASSTA Executive Member responsible for ASSTA Awards, Catherine Watson, has championed a review of the 10-year-old ASSTA Awards Scheme to make it more streamlined and suitable for today's needs. A report on the new scheme can be found on page 4 of this Newsletter. I wish to make an additional comment here concerning matters of financial support. Over and above the grant schemes that we run, ASSTA encourages its members to see ASSTA as a potential partner in competitive grant applications. In 2009 ASSTA pledged support for two different projects with ASSTA members as their Chief Investigators: a proposed Australian

Research Council (ARC) Linkage Project application, and an ARC Linkage Infrastructure, and Equipment and Facilities application. ASSTA Members are encouraged to approach the ASSTA President or any of the Executive Committee if they would like to discuss a project partnership arrangement with ASSTA. This is an ongoing offer, there are no deadlines, and potential applicants are encouraged to approach ASSTA well in advance of their application due date so that: the benefits of the project to ASSTA can be considered, the mechanics of the partnership can be developed optimally, and appropriate support and support letters and documents can be provided.

Speaking of ASSTA support, ASSTA is a financial sponsor of the ARC Research Network in Human Communication (HCSNet, <http://www.hcsnet.edu.au>). HCSNet is now in its fifth and final year. HCSNet has been extraordinarily successful in its brief of bringing researchers together who might not otherwise have met or collaborated, and Summerfest'09 this year (Monday November 30 - Friday December 4), subtitled the "Big



Bang Summerfest”, will continue and extend this facilitative role. As usual Summerfest will include 2 days (Mon, Tues) of Summer Schools (Tutorials), this year 16 different 3-hour sessions, including ‘*An Introduction to Experimental Phonetics*’ by Jonathan Harrington, and ‘*An Introduction to Speech Processing*’ by David Grayden. On Wednesday there will be Skills sessions in the morning aimed separately at Undergraduates, Postgraduates, Early Career Researchers and Faculty, and in the afternoon there will be the world-famous Speed Papers – 4 minutes and 4 slides to get your message across. On Thursday and Friday there will be a mixture of workshops and meetings that are conferences in their own right that HCSNet is facilitating. Of particular interest to Speechies are the 2nd International Conference on Music Communication Science (ICoMCS2); and ALAS, the 2009 Australian Language and Speech Conference, with a plenary (across all the parallel workshops and meetings) keynote by our beloved Jonathan Harrington. (See <http://www.sf09.hcsnet.edu.au> for more). Alas, this is the last year of HCSNet and double alas, Summerfest has never

encompassed our SST meeting (due to SST in New Zealand in 2006, and SST being rolled in with Interspeech in 2008), so get along to this final Summerfest and enjoy while you can the feast it provides, and help finish this ASSTA-sponsored network with a Big Bang of sufficient amplitude to echo for quite a few years to come.

*Denis Burnham*

---

## **ASSTA Grant Scheme 2009 to 2014**

**Catherine Watson**  
University of Auckland

For the last 10 years ASSTA has been running 5 different research awards: The New Researcher Award Scheme, PhD Study Awards, ASSTA PhD of the Year Award, Research Event Awards, and the ASSTA travel award. In the last 5 years ASSTA has given out 38 travel awards, 9 Research Event Awards, 16 PhD study Awards, 4 PhD of the year awards, and 5 New Researcher awards. These are a testimony to all the active speech



research going on in Australasia. The awards were funded out of the profit that ASSTA made from running the 1998 International conference on Speech Language Processing.

We have just completed a review of the ASSTA grants scheme. The reason for this is fourfold: first the previous scheme was only set in place for 10 years (1999 to 2009); secondly, we wanted to see which awards were well subscribed and allowed efficient management; thirdly, it was time to look again at whether the existing 5 different research awards adequately met the goals of these awards; and finally, the 2008 INTERSPEECH conference, run by ASSTA, did not provide ASSTA with sufficient funds to extend the existing scheme. Nevertheless, the scheme is still feasible and of course desirable and hence a new revised scheme.

The purpose of the ASSTA Grants Scheme is to encourage both new and experienced researchers, but the needs of these two groups are slightly different. In the new grants scheme we are offering three awards:

1. ASSTA Travel Awards,

2. ASSTA New Researcher Awards,  
and

3. ASSTA Research Event Awards.

The Travel Awards are fairly similar to the previous version; the major change is that they are now available only to postgraduate students and early career researchers (within 5 years of PhD completion). Most Australasian universities have conference funding for their academic staff now, so we felt the award would be better suited to helping new researchers attend international conferences.

The revamped ASSTA New Researcher Awards will be biennial awards for up to 6 recipients, it will be made every two years to coincide with the SST conferences. These awards are for the amount of \$750, and will additionally include the conference dinner. The award will be open to students undertaking postgraduate study in Australasia or those who have completed their postgraduate studies in Australasia within the last 2 years (i.e. between the SST conferences). This award is intended to encourage postgraduate students in speech research, and provide them with an opportunity to



mix with the ASSTA community. The final award is the ASSTA Research Events award. There will be 2 rounds each year, and one award made at each around. These awards are for amounts up to \$5000, and are targeted at experienced researchers to run research events.

We will post all the details of the new grant scheme on the web in a few weeks. If anyone has any queries or concerns please do not hesitate to contact me at [c.watson@auckland.ac.nz](mailto:c.watson@auckland.ac.nz).

---

## **ASSTA Forensic Speech Science Sub-committee Chairman's Report**

**Philip Rose**

Australian National University

One major event to report involving the FSSC-COM concerns New Zealand's David Bain trial. This was mentioned in the last report but details could not be provided at that time because the matter was still ongoing. As it has now been

resolved, we can report that three of the ASSTA FSSC members were crucially involved in the case.

The Bain case is New Zealand's most celebrated murder trial. David Bain was found guilty more than a decade ago of the murder of his whole family (mother, father and siblings). He was released after 12 years' imprisonment by order of the Privy Council, who upheld an appeal based on some crucial evidence that was for some reason not allowed. The Crown made the decision to push for a retrial, which was held between March 6 and June 5 2009. Part of the emergency phone call that Bain made in 1995 in response to his family's murder was heard as "I shot the p\*\*\*\*" (edited) and thus regarded by some in the Crown team as an admission of guilt. There were several opinions as to what was said, including that the disputed sounds were not even speech. The matter then became a typical disputed utterance case (did Bain in fact say something incriminating, or something anodyne?). The ASSTA FSSC-COM members Bronwen Innes, Bernard Guillemain and Phil Rose were independently asked for expert comment.

When the case went to trial, the NZ

High Court decided on the evidence of the experts involved (including that of Innes, Guillemain & Rose) to suppress the incriminating recording as its prejudicial nature outweighed its probative value. Bain was acquitted after a very short deliberation. The NZ media then sought for the injunction to be lifted. The High Court complied, with the predictable media feeding frenzy of which we were a part. You can probably still view Phil Rose's television interview at:

<http://www.3news.co.nz/TVShows/CampbellLive/Dr-Philip-Rose-on-the-Bain-111-call---what-did-Bain-say/tabid/817/articleID/108238/cat/861/Default.aspx>

Rose's report, which has all the details, has been posted at:

<http://forensic-voice-comparison.net/>

It explains that the correct question to ask is not "what did Bain say?", but "what is the probability of getting the acoustic evidence under the various competing hypotheses?". By evaluating the probability of the evidence under the competing hypotheses using the acoustics from the rest of the recording, and straightforward phonetic knowledge,

one can pretty easily demonstrate that the evidence is far more likely assuming he had said I can't ... than I shot.

On another matter, Helen Fraser has spent some time in York with Peter French working on the vexed, but important problems of (Asylum Seekers') Language Identification. As she explains in a recent email:

"the last two years there has been discussion at IAFPA's AGM about language analysis in asylum cases, in relation to IAFPA's Interim Resolution on this topic. This year the topic will be taken up again, with important decisions to be made on what to do about the Interim Resolution".

There is a view among certain scholars that native speakers must be used to help decide such cases. Helen is playing a leading role in the debate.

She has recently written "The role of 'educated native speakers' in providing language analysis for the determination of the origin of asylum seekers". This will appear shortly in the *International Journal of Speech Language and the Law* 16 (1).

Volume 16(2) of the same journal will contain papers by two FSSC members Yuko Kinoshita and Phil



Rose (and the ASSTA Executive Treasurer, Shunichi Ishihara) on Long Term F0 as a forensic discriminator; and by Phil Rose and ASSTA member Geoff Morrison critiquing the *UK Position Statement on Forensic Voice Comparison*. Phil (and independently Geoff) also recently formulated a response to the UK Law Commission Consultation Paper on admissibility and reliability of expert evidence in criminal cases.

---

## Conference Report

**Tristan Kleinschmidt**  
Queensland University of  
Technology

During the week of 19 - 24 April 2009, I attended the 34th IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP) held in Taipei, Taiwan. ICASSP is the world's most prestigious conference focusing on signal processing and its applications and this was my first opportunity to be involved in such a gathering to present research I have been involved in.

The conference proper began with a

welcome reception on the Monday evening (after 2 days of tutorials) at the Grand Hyatt Hotel. We were presented with traditional Taiwanese dance and martial arts whilst we quickly adapted to eating with chopsticks!

On Tuesday (the first day of oral and poster presentations) I presented my work on the collection of "The Australian English Speech Corpus for In-Car Speech Processing". There was considerable interest from researchers both within Australia and other countries in our work, and will hopefully lead to extensive use of this speech resource as well as extensions to the existing data set.

Despite ICASSP being a conference encompassing many facets of signal processing such as speech, image, video, communications, data retrieval and education, there was a considerable amount of research in speech processing-related research. Whilst there were only a few presentations in my direct line of research (speech enhancement for ASR), it was good to talk to people working in similar areas and try to leverage ideas from one domain to another. I concluded the technical program by presenting the research of a colleague from Queensland University of Technology (QUT)

Of the four plenary talks that took place during the main program, one on cognitive user interfaces was of particular interest to me. This talk was given by Steve Young who most in the speech community will know as the creator of the HTK Toolkit which many of us use extensively in our research. His discussion revolved around the present interfaces seen in modern devices like the iPhone and how this can and should be made to learn user behaviour to provide completely adaptable and personalised interfaces.

The social program (aside from the welcome reception) consisted of a traditional Chinese banquet held at the Grand Hotel – an icon of the Taipei skyline. The initial round of food (of which there were 7!) was delivered in very dramatic style to a drum and lights show. After this we were able to enjoy the remaining courses along with our colleagues to the sound of a Taiwanese neo-classical orchestra, and were entertained by more dancing. All in all a very pleasant evening even if it did end a too quickly due to messages lost in translation!

I would like to take this opportunity to thank the organisers of ICASSP for putting on such a well-run

conference, and to ASSTA, the AutoCRC and QUT for providing funding to enable my travel to Taipei. I would also like to congratulate a colleague of mine at QUT – Mitchell McLaren – on his being awarded a rarely-presented IEEE Spoken Language Processing Young Research Travel Grant Award which was presented to him during the Opening Ceremony of ICASSP.

---

### **PhD Scholarship in experimental phonetics and phonology**

The linguistics program at La Trobe University in Melbourne, Australia, is offering PhD scholarships in experimental phonetics and phonology.

Applications close 31st August, 2009. Please contact Dr. Marija Tabain ([m.tabain@latrobe.edu.au](mailto:m.tabain@latrobe.edu.au)) for more information, and see [http://www.latrobe.edu.au/rgso/Early\\_Bird\\_Schol/index.html](http://www.latrobe.edu.au/rgso/Early_Bird_Schol/index.html) for application guidelines.