Dr John Kane Speaks at the Dublin Artificial Intelligence Meetup

The latest Dublin Artificial Intelligence meetup (http://dublin.ai) was held on the 9th of November 2017 at Dogpatch Labs (http://dogpatchlabs.com), a leading co-working space for scaling technology startups, located in the historic CHQ Building and in the heart of Dublin's Digital Docklands. The event featured three speakers:

CLCS alumnus Dr John Kane (VP of Signal Processing and Data Science at Cogito), Professor Anil Kokaram (Head of Electrical Engineering at TCD and Oscar winner in 2007) and Marie Wallace (the Lead Architect at IBM Watson Health). Dr Kane provided an overview of the main machine learning developments in the

area of emotion recognition from voice, touching upon some of the most recent trends: the application of image processing techniques involving convolutional neural networks to the processing of audio signals, as well as deep learning approaches using multi-task learning and 'end-to-end' models.



Dr John Kane is the Vice President of Signal Processing and Data Science at Cogito Corp., Boston, Massachusetts. At Cogito he leads the research and development of machine learning algorithms to enable real-time processing of audio, speech and other behavioural signals. John remains an active member of the speech research community, contributing as a reviewer for leading journals and conferences and he continues to maintain open source speech processing tools at https://github.com/covarep/covarep. John received the MPhil degree in Speech and Language Processing in 2008 followed by the PhD degree in 2013, both from TCD. His PhD thesis 'Tools for analysing the

voice: developments in glottal source and voice quality analysis' as well as his MPhil dissertation were supervised by Professor Christer Gobl of the Phonetics & Speech Laboratory in CLCS.



Professor Naoko Aoki Convenes International Symposium in TCD



CLCS was delighted to welcome alumna Professor Naoko Aoki back to Trinity for a

few days in November 2017. Naoko Aoki was appointed professor at the Graduate School of Letters, Osaka University, in 2004. Her work focuses on Japanese as a second language pedagogy and language learner autonomy. She completed her Ph.D. at CLCS under the supervision of Professor David Little in 2003. Her thesis was entitled "Learner autonomy, teacher autonomy

and the process of becoming a pro-autonomy teacher: theoretical perspectives and life stories of six teachers of Japanese as a second language" – a digital version is available in TCD's online TARA repository! Professor Aoki returned to College as a co-convenor of the joint Trinity College/Osaka

University international symposium in Japanese Studies, along with Dr Lorna Carson, Director of the Trinity Letters to join Irish Centre for Asian Studies. Professor Aoki brought a

team of senior colleagues and postgraduate students from the Graduate School of researchers of Japan in a three-day event spanning

Japanese history, social studies, language teaching, linguistics, art history, translation and philosophy.

Clinical Speech and Language Studies

Staff Updates

In June 2017, the department said farewell to Dr Vania D'Aguair who has taken up a post at Johns Hopkins University in Baltimore, USA and welcomed Dr. Julie Regan into a new full time Assistant Professor position in the department. In September, Jennifer Moloney joined the staff on a part time basis to help coordinate the postgraduate diploma programme in dysphagia. Suzanna Dooley, who was on secondment from the HSE to complete a HRB funded research project in dementia returned to her Senior SLT post in St Columcille's Hospital, Loughlinstown, Dublin in December 2017.

Visitors to the Department

In the autumn, a number of international researchers visited the department with associated Continuing Professional Development (CPD) events. Professor Tammy Hopper from the University of Alberta, Canada spent a week with us in November 2017 working on a collaborative international research project in dementia. A one day seminar with Professor Hopper on 'Better Conversations in Dementia' was organized in TCD for disciplines involved in clinical research in dementia.

Mr. Simon Gobler, Speech and Language Therapist and Laura Graham Physiotherapist from the Homerton Hospital, London, UK delivered a very successful 1 day workshop on respiratory function and dysphagia to speech and language therapists also in November.



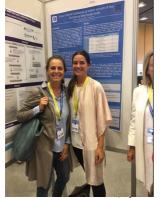
Dr Maria Garraffa (left), from Heriot-Watt University, Edinburgh presented a seminar on *Minority languages: Integrating context of use with linguistic variables* that was well attended by school teachers and speech and language therapists

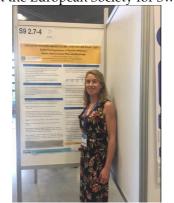
Student Achievements

Undergraduate student Jessica McNamara (B.Sc. 2017) was awarded "Best undergraduate presentation" at the European Federation of Psychology Students annual Junior Researcher Project conference held in Trinity in August 2017. Supervisors were Dr. Margaret Lawler and Dr. Caroline Jagoe (see photo below).



Ten M.Sc. and PhD students (pictured below) travelled to Barcelona in September to present their research in dysphagia at the European Society for Swallowing Disorders Congress







Suzanna Dooley (PhD student) presented her research at the Alzheimer's Association

International Conference in London in July 2017 (photo below).





Astero Constantinou (pictured left) graduated with a PhD in November 2017

Staff Awards and Achievements

Dr. Kathleen McTiernan's was awarded a certificate of merit at the Psychological Society of Ireland's Annual Conference in November for her poster on "Sourcing Coping Mechanisms from the Past: Using the Life Histories Archive as a Resource for Building Resilience in Today's Uncertain World".



Dr. Francesca La Morgia was selected as one of five candidates in Dublin City to proceed to the finals of the "Ireland's best young entrepreneur awards", a competition held throughout Ireland by Local Enterprise offices. Her idea is to develop an online platform that allows families with bilingual children to better understand their children's linguistic development, and to access live support in a language of their choice.

Dr. Julie Regan and Margaret Walshe's October 2017 article on dysphagia in the Irish Medical Times was selected as one of the best clinical articles for 2017 and included again in the Irish Medical Times annual clinical supplement for 2017.

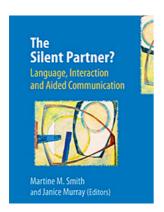
Innovations

In November, Dr. Francesca La Morgia was awarded the Equality Fund for a collaborative project with Science Gallery, the New Communities Partnership and the School of Education. The project consists of a series of five science workshops in five different languages. The workshops hosted at the Science Gallery and coordinated by international scientists, who will showcase their research in fun and engaging ways, using their own mother tongue. A first pilot of a lab in Italian ran during Science Week and it was a huge success!

Publications

It's been a busy year from a publication point of view also.

Books



The Silent Partner? Language, Interaction and Aided Communication edited by Martine Smith and Janice Murray was published recently and explores the role that aided communication plays across development and within interactions. The Dean of the Faculty of Arts Humanities and Social Sciences launched the book, in an evening that also celebrated the launch of the IASLT Guidelines for Practice in Augmentative and Alternative Communication.

Forthcoming titles in early 2018:

Walsh, I.P. & Jagoe, C. (in prep). *Professional Identity: Social interaction in Healthcare Education*, Studies in Social Interaction Series. Edinburgh: Edinburgh University Press. Jagoe, C. & Walsh, I.P. (in prep). *Communication and mental health disorders: Developing theory, growing practice.* J&R Press.

Walshe M & Huckabee ML (in prep) Clinical Cases in Dysphagia. London: Routledge.

There was a wide range of journal publications from staff over the year too, and Dr. Irene Walsh and Dr. Caroline Jagoe were guest editors of an issue of *Journal of Interactional Research in Communication Disorders*.