It’s National Tinnitus Awareness Week 3-9 February 2014, so this issue highlights our tinnitus research and the UK’s leading charity on tinnitus, the British Tinnitus Association (BTA).

We have a close relationship with the BTA, collaborating on research and sharing expertise on the charity’s Board of Trustees (Prof Deb Hall) and Professional Advisory Committee (chaired by Dr Derek Hoare). Currently, the BTA is seeking three additional trustees. For more information, see www.tinnitus.org.uk/trustees-required.

Progression in the RESET2 trial! - novel devices for tinnitus

Sound-based technological innovations are commercially produced for the tinnitus market. However, their benefit in reducing the symptoms of tinnitus is as yet, unproven.

In 2012, we started a trial to evaluate the acoustic CR® neuromodulation treatment for tinnitus. The trial is funded by The Tinnitus Clinic which provides the treatment in the UK. During the study, the German device manufacturer (ANM Adaptive Neuromodulation GmbH) met with financial difficulties, but fortunately the trial has not been affected. The first phase of the study, completed in September 2013, randomly allocated people to receive the treatment or a placebo (‘dummy’) alternative. Follow up is ongoing and results, once verified and analysed, should be made public later this year. We’ll keep you updated!

Revealing ‘hidden’ hearing loss: major new study

In collaboration with hearing experts at the University of Manchester, our unit and the University of Nottingham have been awarded over £1 million to conduct a major 5-year programme on ‘hidden’ hearing loss.

Such damage does not affect our ability to hear quiet sounds, so it is undetectable using standard hearing tests. This makes it difficult to understand the scale of the problem and the impact it has on everyday listening. Our research will explore this ‘hidden’ problem and determine how it may be related to tinnitus and hyperacusis. We will also seek to develop the means to test for ‘hidden’ hearing loss and inform ways to prevent hearing damage and improve patient outcomes.

BTA Trustees, including our unit Director Professor Deb Hall (centre front).

PhD students furthering tinnitus research

We believe wholeheartedly in training leading tinnitus researchers of the future and have a number of PhD students, whose work touches all aspects of managing tinnitus.

Jeff Davies, Kathryn Fackrell, Kate Greenwell, Lucy Handscomb and Najibah Mohamad come from various backgrounds, including audiology, psychology and hearing therapy. They are exploring diverse topics including the physical brain mechanisms underlying tinnitus, questionnaires to map individual responses to treatment (Tinnitus Functional Index), tinnitus ‘self help’ programmes and cognitive aspects of tinnitus, including a model of tinnitus distress and impacts upon memory and attention.

Outcomes of this varied research will inform us on how best to use hearing aids to manage tinnitus, optimise individual treatment approaches and improve ‘self help’ programmes. It should also help build our understanding of the impact of tinnitus on people’s everyday lives.

We need participants to help with our research. Please contact us if you would like to be involved.
As part of Tinnitus Awareness Week, our PhD students are contributing to a number of events.
Kate Greenwell will be inviting feedback on her research at the Chesterfield and North Derbyshire Tinnitus Support Group on 7th February. To contact the group, tel. Joanne on 01246 380415, mail@tinnitussupport.org.uk, or visit www.tinnitussupport.org.uk.

Audiologist Jeff Davies will be running a free tinnitus research information session on Tuesday 4th February at Nottingham Audiology Services in Ropewalk House. Open to the public, the latest tinnitus research and opportunities to participate in studies will be highlighted. For bookings/information, email Jeff at msxjd@nottingham.ac.uk or tel. 0115 8232612.

Kathryn Fackrell will be attending tinnitus support groups across the country to share our research with tinnitus patients and their families. A full list of tinnitus support groups can be found on the BTA website: http://tinnitus.org.uk/directory

David Stockdale, BTA Chief Executive Officer

Engaging with the community
Our unit devised and hosted a successful clinical research development event on the 13th and 14th November 2013. Delivered by our staff and students, we helped clinicians in audiology and ear, nose and throat (ENT) disciplines to develop research ideas and build skills in project management and grant writing, qualitative and quantitative research methods and ethical issues. This is with the aim of increasing research activity within the clinical environment, building the NHS’s capacity for proposing and conducting research. A follow up event is planned for Spring 2014.

Oticon is one of the three largest companies worldwide offering hearing solutions. In December 2013, Oticon employees gathered at their headquarters in Smørum near Copenhagen for a two-day Master Class in the latest research on tinnitus mechanisms and management. Our Research Fellow, Dr Magdalena Sereda opened the event with her talk on the neurophysiologic basis of tinnitus.

The Masterclass covered topics including devices for tinnitus treatment, Cognitive Behavioural Therapy, Progressive Tinnitus Management, counselling as well as new ideas in development. Magda commented “Oticon was most hospitable and offered an inspiring environment for knowledge exchange, discussions and developing new ideas for collaborations.”

Oticon A/S headquarters and development facility in Smørum.

Our links with industry: Tinnitus Master Class

Oticon A/S headquarters and development facility in Smørum.

Building research capacity within the NHS

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Excellence in glue ear research

Through our partnership and collaboration with Ear, Nose and Throat (ENT) surgery clinicians and research groups within the University of Nottingham and beyond, we are becoming recognised for our work exploring potential new treatments for glue ear (Otitis Media with Effusion), a leading cause of hearing impairment in children.

ENT Registrar Miss Emma Hoskison, has won the prestigious Xomed-Treace Prize from The Otorhinolaryngological Research Society. Emma is studying for her PhD within the Otitis Media Research group at the University of Nottingham, which receives support from our unit. Her award-winning work assessed the safety of antibiotic-laden pellets for treating glue ear. Led by principal supervisor Professor JP Birchall, Emma worked jointly with ENT surgeon and Clinical Research Fellow, Mr Matija Daniel and Professor Roger Bayston of the University’s Biomaterials Group. She was co-supervised by Dr Mike Mulheran, an expert in ear toxicity at the University of Leicester.

Katie Belfield, a member of the Biomaterials-related Infection Group at the University of Nottingham, recently graduated with a Distinction in her Master’s degree in Microbiology. This is thanks to her outstanding work into treating bacteria that produce and grow within their own slime. Known as biofilm, bacterial slime offers resistance to antibiotics and may play a role in glue ear.

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Can hearing aids make a difference? Hear what the people of Nepal think!

Nepal is a poor country, with high unemployment and limited medical facilities. Here, having the gift of hearing care can mean the difference between someone living on the streets or being able to earn a living and be self-sustainable.

In September 2013, I embarked on a journey to offer my audiology expertise to Hearing Project Nepal (www.hearingprojectnepal.org), a charity-funded hearing clinic seeking to address Nepal’s lack of hearing care. As part of this mission I trained staff so that they were better equipped to understand and manage the breadth of patients entering the clinic. Although I had a lot of expertise to pass on, I also had a lot to learn from a culture completely new to me!

The encounter between clinician and patient was remarkable: patients removed shoes before entering the clinic and appointments took place with an open door policy, allowing new patients to interrupt freely to announce their presence – much more informal than what I am used to! Waiting times were not an issue - patients were content to stay all day in order to get their hearing assessed. Whole families would travel together when only one person required treatment, and complete strangers would share the communal bottle of water on the waiting room table. All of this, combined with patients’ reactions when fitted with a hearing aid, made me realise the far reaching impact of hearing loss and the steps people are willing to take to help their situation.

I was truly privileged to be welcomed into the clinic and receive such gratitude from the patients – and clinicians – when actually it was their high level of motivation that in part held the key to their being able to live well with hearing loss. Holly Thomas

Nineteen people were fitted with hearing aids, and they demonstrated a high level of motivation to ensure the success of hearing care.

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To complement our research into single-sided deafness (SSD), the Nottingham Otology Network hosted a study day on the causes, impact, and management of SSD at the National College for School Leadership.

The topics included binaural (two-eared) hearing and localisation, the impact of SSD on the auditory brain, clinical management of SSD and the experience of bone-anchored devices and acoustic hearing aids. Clinical outcomes after cochlear implantation, the challenges for pitch perception and an overview of our trial of cochlear implantation in SSD were also covered. The sold-out meeting attracted presentations from experts from around the world. It provided an excellent opportunity to share the very latest research and strengthen international ties. Pádraig Kitterick

NIHR Nottingham Hearing Biomedical Research Unit
Ropewalk House
113 The Ropewalk
Nottingham NG1 5DU
Tel: 0115 823 2600
www.hearing.nihr.ac.uk