Onwards and upwards from a successful first year

Looking back over the first year of the newly refunded unit, I think we can all feel proud about our achievements so far.

Not only have we established new programmes of translational research, but in this past year alone £4 million external grant income is supporting new and on-going projects with external researchers as collaborators. An increase in this research activity has led to a greater number of students and young researchers working in our teams – an important factor which maintains a vibrant working environment and strengthens our links to clinical services.

One of the highlights of the year was the visit by Professor Dame Sally Davies in early March. It was a great honour for us to showcase the substantial progress that we have made during our first year. You can see more of Dame Sally’s visit in a number of short video clips on our website (www.hearing.nihr.ac.uk/about-us/our-research).

Our next major event was a formal review of our programme, where we were visited by a committee including representatives from NIHR, Department of Health and the Medical Research Council. Taking the opportunity to showcase our achievements, including closer working with the Nottingham MRC Institute of Hearing Research, we had a very successful meeting and ensured continued funding until March 2017 - great news for us all!

Throughout all of our research, we continually strive to make our questions address issues that matter to patients. Without your input (whether it’s participating in a study or getting involved with a research team), we couldn’t be successful without you. I sincerely thank you for your support.

“One of the treats of my job is to come and see how the money is being spent to help patients and how patients are being involved. The patients are thoroughly embedded in the programme here which makes it very special.”
Professor Dame Sally Davies, Chief Medical Officer.

Visit us at: www.hearing.nihr.ac.uk

Medical Research Council Centenary Event

To mark the Medical Research Council’s Centenary and celebrate 100 years of life changing discoveries, the Institute of Hearing Research (IHR) held a public event at Nottingham’s Broadmarsh Centre, in conjunction with NIHR Nottingham Hearing Biomedical Research Unit.

- The event was well attended by members of the public who found out about hearing research and how we can minimise the impact of hearing loss on daily life. They enjoyed taking part in fun, auditory activities demonstrating that what we hear results from the interaction between the ear and the brain.

“We are very satisfied with the progress made on the basis of the formal 12 month review undertaken. On this basis, I am pleased to confirm the continuation of the award for the full five years.”
Dr Mags Sara, NIHR Clinical Commissioning Facility

Professor Deborah Hall,
Director, Nottingham Hearing Biomedical Research Unit
NIHR fund further development of videos for hearing aid users

The HEAR IT study that has developed and evaluated seven interactive videos for new hearing aid users saw its final research participant in June. In all, 203 first-time hearing aid users from the Nottingham Audiology Services volunteered to take part in the largest study of its kind, funded by a £235K NIHR Research for Patient Benefit research grant. Early results suggest that the videos are useful and beneficial to new hearing aid users. An award of £9K from NIHR will allow the HEAR IT research team to make final adjustments to these videos, incorporating valuable feedback from study participants. The team aim to make the videos available to the wider public towards the end of the year.

To view sample video clips, go to the NHBRU website www.hearing.nihr.ac.uk

School entry hearing screen project on-track

A team from the NHBRU in Nottingham and the University of Exeter, with guidance from parent representatives, are making good progress in examining whether in-school hearing tests of reception-aged children is the best way of picking up hearing loss. They are investigating: What is the most accurate and user-friendly screening test?

The team are recruiting child participants for comparing the accuracy of two different screening tests (PTA and HearCheck) for diagnosing hearing loss. They will also be joining the Nottingham East school nursing teams as they conduct school health checks, to see how easily the screening tests are implemented.

What is the impact of early screening programmes?

In-school screening is not conducted nationwide. The team are comparing patient referrals to hearing services between Nottingham, which has a screening programme and Cambridge, which does not. They are also distributing questionnaires to parents examining the impact to the family that screening and subsequent follow-up referral causes.

Visit to the University of Sydney

In March this year I was fortunate enough to visit The University of Sydney and work closely with Professor Paul Mitchell and Dr Bamini Gopinath who led the Blue Mountains Hearing Study (BMHS). This is a very similar dataset to our UK Biobank dataset that we are currently analysing at NHBRU. Dr Gopinath has over 40 publications from the BMHS examining things such as risk factors for hearing impairment and/or tinnitus (diet, lifestyle, smoking, alcohol, exercise, noise exposure), effects of hearing impairment/tinnitus on quality of life, social engagement, and/or mental health. The opportunity to work closely with her has helped me understand how to get the most from large datasets and has enabled me to put together analysis plans for a number of different papers. The experience was a fantastic opportunity to network and enhance my research reputation, and potential to achieve my future career aspirations as an epidemiologist and public health researcher. Abby McCormack
As a postdoctoral research fellow, attending international conferences is a marvellous way to enhance your research reputation, to network, and to disseminate important research findings.

I had the opportunity to attend the Association for Research in Otolaryngology (ARO) 36th Annual Conference in Baltimore, Maryland this year. I presented data from a large epidemiological study called UK Biobank, in which we have examined the relationship between tinnitus severity and mental health in adults aged 40-69 years.

Through attending this conference I was also able to meet other epidemiologists who have conducted similar research, who were very keen to learn more about my work. The knowledge that I gained at the conference has helped me think of further possible ways to analyse the UK Biobank database and add to the literature on the epidemiology of hearing impairment and tinnitus and associated risk factors. Abby McCormack

Prof Deb Hall with PhD students, Jeff Davies and Kathryn Fackrell, recently attended the Tinnitus Research Initiative Conference in Valencia, Spain.

This meeting was titled “Tinnitus: a treatable disease” and focused on diagnosing and treating subtypes of tinnitus. Prof Deb Hall gave talks on tinnitus research findings and hearing risk factors of tinnitus, and presented on the organisation of the National Institute for Health Research (NIHR). Jeff Davies presented his first year’s PhD work, using functional Magnetic Resonance Imaging (MRI) to compare resting brain activity of participants with and without tinnitus. Kathryn Fackrell presented a poster on her work so far, validating the clinical use of the Tinnitus Functional Index questionnaire, developed by an international team in 2012.

Researchers from the BRU presented findings on cognition in hearing and tinnitus at the 2nd International Cognitive Hearing Science for Communication conference, which was held in the beautiful city of Linköping in Sweden, 15-20th June.

The bi-annual conference is hosted by Linköping University, the Swedish Institute for Disability Research and the Linnaeus Centre for HEaring And Deafness (HEAD), which was formed in 2008, with funding from a major 10-year grant from the Swedish Research Council.

The conference brought together researchers from different backgrounds with a common interest in the cognitive processes involved in hearing and listening. Highlights included a pre-conference meeting for students to present their research, presentations from experts in the field and of course some fantastic entertainment and Swedish cuisine!

Visit us at: www.hearing.nihr.ac.uk
Focus Group on the Effects of Background Sounds on New Hearing Aid Users

If you are a new hearing aid user, you may find it strange to be hearing sounds you haven’t heard for a long time. We wish to invite you to participate in a focus group which will help us learn how hearing aids affect your perception of background sounds in your daily life.

You must:
- Have had a hearing aid for less than 3 months or will be receiving one;
- Be willing to commit up to 3 hours of your time.

You will be in a group with 6-10 other new hearing aid users. Your feedback on how you adjust to hearing new sounds with your hearing aids is vital to developing research that addresses important problems for hearing aid users.

We will pay £30 inconvenience allowance and reimburse travel expenses up to £10. For further information, please contact Dr. Brian Gygi (T. 0115 823 2603 E. Brian.Gygi@nottingham.ac.uk).

New Combination Hearing Aid for Tinnitus

Our tinnitus team is about to undertake an industry funded short feasibility study assessing individual experiences with a new type of combination hearing aid device (with amplification and sound generation) for tinnitus. We will ask experienced combination hearing aid users to try the new device and tell us if it provides a similar relief from tinnitus as their existing solution and if the new sounds used in the device are pleasant and useful.

You can register your interest with Sandra Smith at Sandra.Smith@nottingham.ac.uk.

Sharing advances in research into glue ear and ear infections

In June, six NHBRU researchers attended the 7th Extraordinary International Symposium on Recent Advances in Otitis Media (middle ear infections) in Stockholm.

We presented our clinical research examining adherence to national guidelines on the management of Otitis Media with Effusion (OME or Glue Ear) in clinical practice. This included how well doctors explored the patient’s medical history and discussed management options with parents of children with glue ear. We also presented our research into the sterilisation of antibiotic drug pellets that can be inserted into the ear, and the effectiveness of antibiotic enhancers in removing resistant slimy films of bacteria (biofilm).

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