

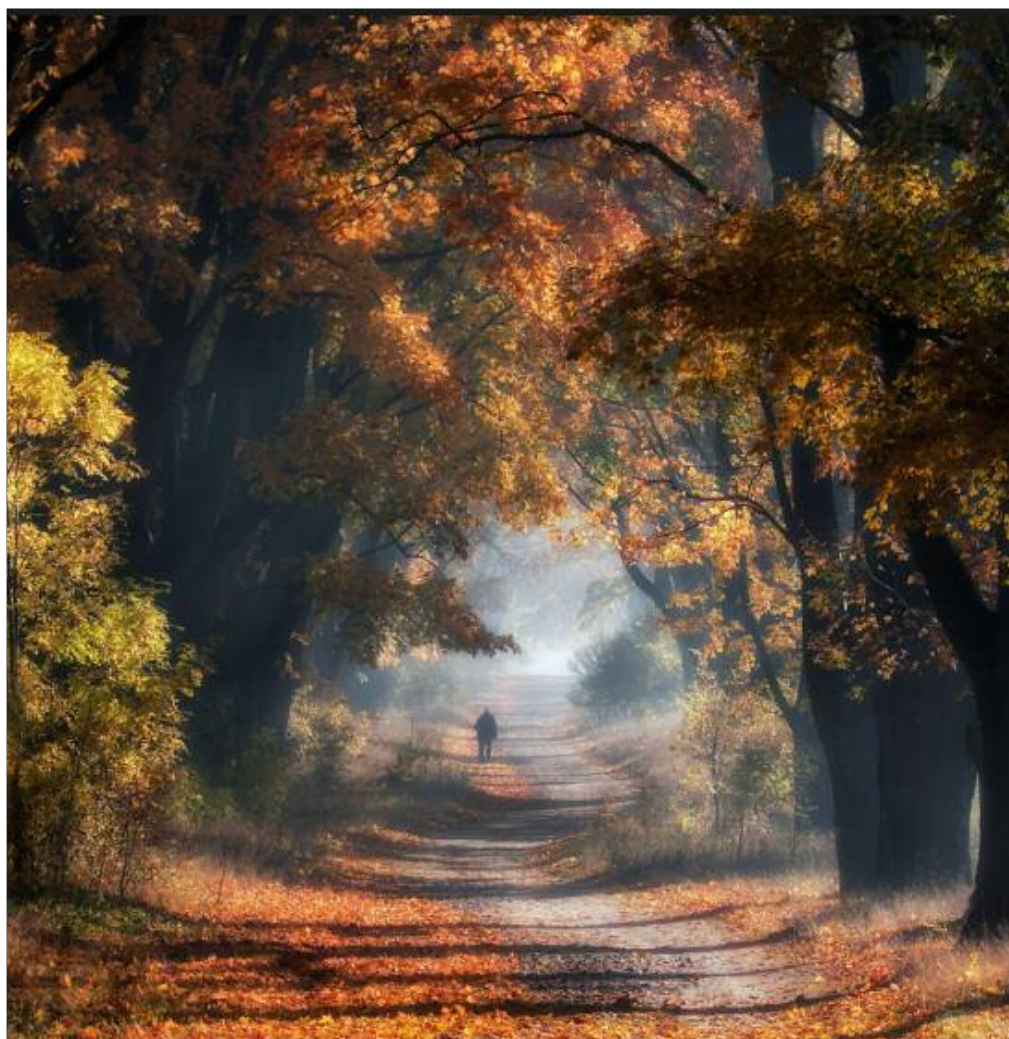
# ReSound


For people with Cochlear Implants

Autumn 2018

Issue 60

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**Manchester**  
**Cicada**  a charity supporting implant patients

This newsletter has been produced on behalf of the Manchester CICADA Charity

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## Editorial

Welcome to the Autumn edition of Resound.

As we move towards the close of the year and to the Christmas season it's good to look back on some of the highlights of the year. In this issue we have reports on three of the most recent events that were on our calendar taking place from one side of the region to the other.

We have now had events in Southport, Liverpool, Manchester, Chester, Stockport, Daresbury, Wilmslow and Oldham so hopefully at least one of the venues has been accessible from where people live.

It's fair to say that the events themselves have varied from looking at really old things (the Terracotta), last Century things at the Quarry Bank mill and more up to date venues for meals.

Next year however, as well as continuing to organise events in these areas, we want to vary the locations to try and help those of

us who live in far flung places, like Cumbria for example, to be able to join in, so those of you who have for whatever reason not been able to meet up get in touch with me and let's see what we can organise.

All of us on the EC thank you for your continued support throughout the year and look forward to seeing you at an event or meeting soon, the next organised event will be the AGM in March however in between now and then, especially in the new year when the turkey dinners have worn off, we will be looking to organise a start of the year gathering so keep an eye out for updates.

We hope you enjoy this issue and if you've any comments, or stories to send along please let me know.

Kevin Williams - Editor

# An afternoon in the past

by Kevin Williams



In August a group of members visited the Quarry Bank Mill which is in Styal near Wilmslow. The site is extensive and includes not just the mill itself, a prime example of a working water powered mill, but also a variety of other buildings including the Apprentice house, the Mill owner's house and many other buildings of interest. The staff at the centre who conduct the guided tours were all dressed in the period costume and our guide around the Apprentice House was also an excellent lipspeaker which made the presentations easy to follow.

The tour began in the classroom, everyone was fully equipped with a slate and a selection of fine chalks with which to try their hand at creative writing!





Up in the bedroom, yes those are wooden beds with straw mattresses for three children, our knowledgeable guide explained the Victorian way to assess a child's age by getting them to raise one arm above the head.

If the arm rested across the top of the head then they were old enough to work in the mill.



*Everyone was fascinated by the stories about the children who spent their early lives at the mill.*



In the next room we were shown the star attraction of the building, the medical facilities.

We were all introduced to the family of leeches which are actually commercially bred on site for use in certain medical procedures, not exactly a petting attraction!

Once through the bedrooms we went down a very narrow staircase we emerged into a nice warm kitchen which brought back memories for some of our team. It's been a while since I've seen a washing mangle and a washing dolly.

Following the tour of the apprentice house we all went for a meal in the mill followed by a tour of the grounds before departing after a visit to the gift shop of course!



*Not to be outdone and always looking for a bargain our intrepid treasurer came across this handy Victorian device which apparently was environmentally friendly and needed no batteries to operate!*

# Hearing Dogs for Deaf People

by John Newton

I've been a volunteer for the deaf charity Hearing Link for some years now who, just over a year ago merged with another deaf charity Hearing Dogs for Deaf People (HDFDP) which was why I found myself recently enjoying a sunny weekend in the beautiful Berkshire countryside at the HQ of that organisation and marvelling at the whole business, of providing those helpful canines for deafened people.

I have never owned a dog or shared a house with one although I used to be a big fan of "One man and his Dog" and, like most have huge respect for working dogs so learning about the minutiae of hearing dogs has been a revelation for me.



Some readers of Resound will know about Hearing Link, it's a national outfit with branches in all four of our united kingdoms and focusses on people who lose their hearing as adults.

They have always made their primary concern helping people who lose their hearing as adults, anyone who has suffered hearing loss will know how devastating the condition is to one's confidence.

The rehabilitation courses Hearing Link runs focus on restoring this lost confidence. An important factor in this is the therapeutic effect of meeting others in the same boat and the fact that the courses are run exclusively by volunteers who are themselves deaf, many of them "graduates" of the rehabilitation courses. I

have been involved with running these events for some years now, certainly long enough to be perfectly convinced of their value in turning people around.

HDFDP and Hearing Link share a distinguished patron, none other than her Royal Highness The Princess Royal. I don't know whether that was a factor in promoting this merger but it must have helped somewhat although the main factor was the recognition that the interests and skills of the two organisations were complimentary. Put crudely HDFDP know about dogs and HL know about people!

The HQ of HDFDP is a former farm in pleasant countryside a few miles from High Wycombe. (There is another, very similar facility in the countryside south of York) The immediate impression it gives is size. It has an extensive range of buildings which include two restaurants, pleasant gardens, offices which now include a Hearing Hub, a room dedicated to assistive devices on the same lines as the drop in centre at the Richard Ramsden, and a big range of training rooms and spaces both indoors and out. These include some rather



cosy "holiday chalets" where new owners train with their dogs to accustom both to the domestic settings which they will share.

The whole process of getting a hearing dog takes about 18 months minimum. The dogs are bred by the charity from parents of proven skills and the puppies after they are weaned are boarded out to local people for

about a year, volunteers called "puppy socialisers" who get them used to a wide range of situations, such as trains buses and shops as well as the home environment. Periodically they return to the centre for formal training with professional trainers. Later they are joined up with their potential owners at the centre who stay in the "holiday chalets" and train with them.

It's a complex and meticulous process which relies on a cohort of volunteers as well as the professionals at the centre.

The end result is a dog who acts as ears for the deaf person alerting them to the various noises which they would otherwise miss such as door bell, smoke alarm, alarm clock. Having met a few hearing dogs, the first impression is of how well behaved they are but what becomes very obvious too is that they are much more an emotional and psychological support for the deafened person.

The relationship between dog and person is very close. Dog owners will, I am sure



understand this well.

Most people would agree (confess) that a very common reaction to hearing loss is denial. One tends to blame everyone but oneself, the BBC, people who mumble, piped music in public places and so on. To get a hearing dog you have to admit that the hearing loss is real and anyone who has been through the process knows that admission is an important milestone on the road to recovering one's self respect and equanimity.

Another inescapable fact which I took away from the weekend is that it's a lot easier to get people to part

with their cash with pictures of pretty puppies than of middle aged old humans! HDFDP is large and well financed, a reflection of the lifetime love affair which the British people have with dogs. Who's complaining?

More at

<https://www.hearinglink.org/>

and

<https://www.hearingdogs.org.uk/training-our-puppies/>

## Snippets!

**galleryoldham**  
**Gallery Talk**  
**Peace and Plenty**

A British Sign Language accessible Gallery event.  
 Thursday 15 November 2pm

Join staff from Gallery Oldham to explore this new exhibition. Your chance to find out what life was like in Oldham during the First World War.

No need to book - Meet in the exhibition Gallery 3

Gallery Oldham, Cultural Quarter, Greaves Street, Oldham OL1 1AL. E: [glenys.walsh@oldham.gov.uk](mailto:glenys.walsh@oldham.gov.uk)

We have been invited to an event at the Gallery Oldham which is putting on an exhibition tour especially for hard of hearing and deaf people providing neck loops for groups like ours. Full details are on our website at

**>> StageTEXT**  
 Every word counts

Stage Text Events coming up

**Tue 13 Nov 2018, 7:30pm**

Matilda, The Musical (Tour) Manchester Palace, Theatre, Manchester

**Wed 14 Nov 2018, 6:30pm**

Talk RCN Defence Public Lecture, Imperial War Museum North, Manchester

**Wed 14 Nov 2018, 7:30pm**

Dracula (TC), The Grand Theatre, Blackpool

**Thu 15 Nov 2018, 7:30pm**

Death of a Salesman, Royal Exchange Theatre, Manchester

**Thu 29 Nov 2018, 7:30pm**

Kinky Boots, Manchester Opera House

<http://www.manchestercicada.org.uk/events-2018/>



## Cochlear CI SmartPhone developments

People with a Nucleus® 7 Sound Processor can now benefit from monitoring and direct control functionality on any compatible Android smartphone via the Nucleus Smart App\* with a new

'ForwardFocus' that feature allows users to 'switch off' background noise behind them to focus on a conversation

Cochlear Limited has announced the release of the Nucleus® Smart App for Android™, offering greater connectivity than

ever before for people in the UK living with disabling hearing loss.

Users of the Nucleus 7 Sound Processor can now control their hearing with the Nucleus Smart App\* from a compatible Android device.

Users may also access a range of new features such as the ability to 'switch off' distracting background noise and focus on the conversation in front of them. From locating a lost or misplaced sound processor using the Find My Processor feature, through to confidently tracking progress with the Hearing Tracker feature, users can experience unprecedented connectivity and performance.

Jan Janssen, Chief Technology Officer, Cochlear explained that since the Nucleus 7 Sound Processor was first launched in 2017 as the world's first Made for **iPhone** cochlear implant sound processor<sup>1\*\*\*</sup>, Cochlear has been working to extend the benefits of its industry leading technology

to **Android smartphone users**, and bring new features to existing users.

"Embracing digital technologies that enhance the experience and hearing

performance for people who rely on our products is a key focus of our product innovation. With the launch of the Nucleus 7 Sound Processor last year, we were the first in our industry to introduce a Made for iPhone cochlear implant sound processor, still the



only one to offer direct streaming from a compatible Apple device. Now we're pleased to offer Android users the ability to use the Nucleus Smart App to track their hearing and access new features. We are committed to giving people who are living with disabling hearing loss greater choices when it comes to controlling their hearing experience," said Janssen.

The results of a UK survey\*\* released today revealed that 58% of baby boomers (age 55 and over) would manage disabling hearing loss through technological intervention. The Nucleus 7 Sound Processor was created to meet this demand for seamless and convenient management of hearing loss through hearing performance features and enhanced connectivity.

Along with the release of the Nucleus Smart App for Android, Cochlear has added a first-of-its kind control feature called ForwardFocus. This user-activated control

feature allows the wearer to hear better in challenging listening environments such as a busy restaurant. When switched on, ForwardFocus reduces distracting noise coming from behind a person so they can more easily enjoy a face-to-face conversation.

*“ForwardFocus is designed for users who want to manage their hearing in very noisy situations, and enhance it in situations where even people without hearing loss would struggle. It's anticipated that this will resonate with the 62% of the baby boomers surveyed who say the enhancement they would most want from their hearing technology is the ability to block out or 'switch off' background noise and focus in on a specific sound. ForwardFocus allows users to listen to a specific sound source near them - such as hearing a friend across the table in a noise restaurant,”* Janssen said.

Additional insights from the survey include baby boomers' concerns about how hearing loss could negatively impact them:

- Nearly two-thirds of baby boomers (63%) felt age related hearing loss could negatively impact their ability to socialise with their friends and family
- More than half (58%) of respondents reported concern that age related hearing loss could negatively impact their experience of everyday sounds (e.g. the sounds of nature such as birdsong, chatter/laughter etc.)

*“These survey results suggest disabling hearing loss is something baby boomers are aware of and they are prepared to consider technology interventions appropriate for their needs. This is very positive as hearing loss is often not thought of as debilitating issue. In fact in adulthood, it is associated with greater unemployment, increased risk of poor health and depression,”* Tracey Twomey, Consultant Clinical Scientist, Nottingham

Auditory Implant Programme and Chair of the British Cochlear Implant Group.

*“We know that people with disabling hearing loss can withdraw in social situations when they find it difficult to hear and feel unable to participate. That is why advances in technology that may help them to feel confident in situations that may be otherwise challenging are welcome,”* added Ms Twomey.

Increasingly, evidence is showing cochlear implants for adults as an effective intervention for a much wider group of candidates than had previously been thought.

The Nucleus 7 Sound Processor is now available for the first time to people with a Nucleus 24 Series Implant. This means thousands more people from all over the world living with disabling hearing loss will be able to choose a Nucleus 7 Sound Processor for the first time.

For additional information about the Nucleus 7 Sound Processor please visit [www.hearyourway.com](http://www.hearyourway.com)

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#### Notes:

\* The Nucleus Smart App is compatible with iPhone 5 (or later) and iPod 6th generation devices (or later) running iOS 10.0 or later.

\*\*To use the Nucleus Smart App for Android, your device will need to run Android 5.0 (Lollipop) or later and support Bluetooth 4.0 or later. For a list of verified devices visit <http://www.nucleusmartapp.com/android>

\*\*\* The Nucleus 7 Sound Processor is compatible with iPhone X, iPhone 8 Plus, iPhone 8, iPhone 7 Plus, iPhone 7, iPhone 6s Plus, iPhone 6s, iPhone 6 Plus, iPhone 6, iPhone SE, iPhone 5s, iPhone 5c, iPhone 5, iPad Pro (12.9-inch), iPad Pro (9.7-inch), iPad Air 2, iPad Air, iPad mini 4, iPad mini 3, iPad mini 2, iPad mini, iPad (4th generation) and iPod touch (6th generation) using iOS 10.0 or later



# Terracotta Exhibition Liverpool

by Kevin Williams



The Liverpool museum has been exhibiting a collection of artefacts from the Terracotta Warriors so we, in company with thousands of others, decided to pay them a visit recently.



We met first for lunch in our own room at the St George's Hall restaurant which is close by and enjoyed a get together with people we had not met for a while.

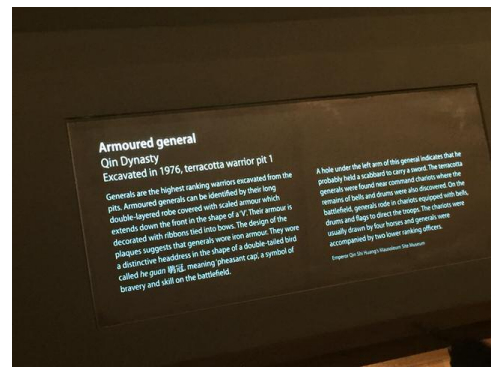


Having our own room meant we could enjoy a catch up without the usual background noise that is always there in public areas and then be able to move off in an organised group. As we were expecting the event to be really busy we had managed to pre-book as a group which made getting in a lot easier. However there were so many people there that the organisers had to only let batches of people in at a time!



Only Six of the Warriors made it across the sea from China but they brought lots of other exhibits with them!

We considered at first having a guided tour but in the event the staff said that the exhibits were all well documented as can be seen here



The detailed work on the armour was special



There were of course lots of other exhibits from carvings to ornaments as well as the warriors



This horse drew a lot of attention as well as you can appreciate

Here is one 'Genuine Chinese antique', well thats what they told me, which now takes pride of place at home. All in all a memorable day for everyone who came along.

### THE GOLDEN HORSE OF MAOLING

This gilded bronze horse is the largest ever found in China. It was discovered at Maoling, near the mausoleum of Emperor Wu 汉武帝 (141 – 87 BC), the fifth ruler of the Western Han Dynasty. It has been suggested that the burial pit in which the horse was found, belonged to Princess Pingyang 平阳公主 who was the elder sister of Emperor Wu. The slender body of the horse and its strong muscles suggest it represents one of the finer breeds of horses Emperor Wu imported from Uzbekistan and Kyrgyzstan.

These tall and beautiful horses were probably the ancestors of the modern Akhal-Teke and Turanian breeds, well known for their speed, endurance and intelligence. They are famous for their shimmering coats, often golden in colour which has led them to be known as 'golden horses'.

Emperor Wu was obsessed with these strong and swift 'heavenly horses' as he believed they could help him defeat the nomadic tribes of the north and also bring him immortality.



# News from abroad

## Discovery of inner ear function may improve diagnosis of hearing impairment

Results from a research study show how the inner ear processes speech, something that has until now been unknown.

Results from a research study published in Nature Communications show how the inner ear processes speech, something that has until now been unknown. The authors of the report include researchers from Linköping University, Sweden, and Oregon Health & Science University, United States.

A collaboration between researchers in the U.S., Sweden, Denmark, the U.K. and India has now revealed how the inner ear processes speech. The discovery is an important addition to our understanding of how the inner ear and our sense of hearing function. The results have been presented in an article published in the scientific journal Nature Communications

*"The sound of speech has two components in the inner ear. One component consists of high frequency variations in the speech sound. The other component, known as the 'envelope', describes the outermost pattern of the speech sound,"* says Anders Fridberger, professor of neuroscience at Linköping University, and one of two principal authors of the article.

The envelope, which varies relatively

slowly, can be considered as the overall structure of the speech signal. Researchers have previously shown that the envelope is most important for understanding what someone is saying. Until now, the way the inner ear decodes the envelope of the speech signals has remained elusive.

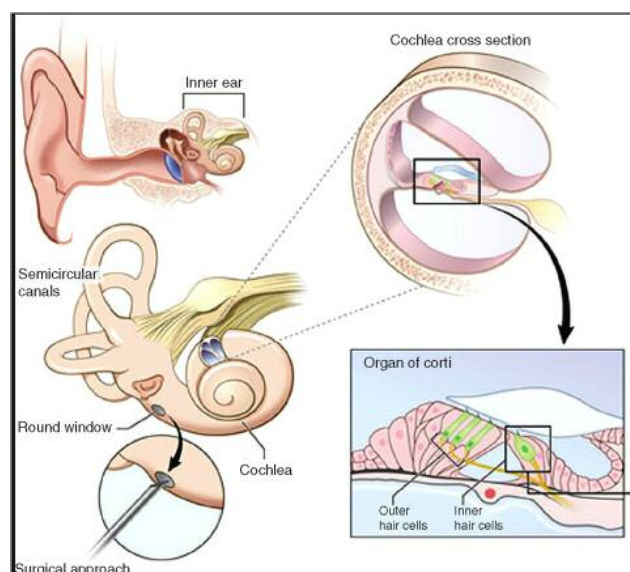
The inner ear produces tiny electrical currents whenever sound enters -- it converts sound to electrical impulses.

These are led through the auditory nerve to the brain. By placing small electrodes into the ear canal of experimental subjects, and placing electrodes close to the cochlea of patients who have undergone surgery, the researchers have been able to record the way in which the inner ear codes speech-like sound.

*"Our study shows how the inner ear separates out the slow, speech-important component for subsequent transfer to the brain,"* says Alfred Nuttall, professor of otolaryngology at Oregon Health & Science University and director of the Oregon Hearing Research Center.

The results have led the researchers to the understanding that speech gives rise to a particular form of electrical signals sent to the brain. These signals differ from those that arise in response to other forms of sound.

*"It is remarkable that the coding of speech*



Inner and Outer hair cells in the cochlear

*information relies on certain unique biophysical properties of the specialised inner ear cells that detect sound.," says Alfred Nuttall.*

The discovery is an important addition to our understanding of how the inner ear functions. The inner ear is embedded in the thick bone of the skull, which makes it difficult to access and study it. Thus, diagnosing the exact location of damage to the inner ear is currently difficult.

Story Source:

Materials provided by Linköping University. Note: Content may be edited for style and length.

## Older adults fitted with cochlear implants exhibit poor brain function

Older adults fitted with a cochlear implant to compensate for severe hearing loss have significantly poorer cognitive function than their normal-hearing counterparts, reveals a new study. Hearing loss is a risk factor for cognitive decline and dementia, so this new finding suggests cochlear implants cannot fully compensate for this deterioration in brain function.

Publishing in *Frontiers in Neuroscience*, the study authors suggest that rehabilitation should be adjusted to the cognitive profile of the cochlear implant patient. Moreover, further long-term studies are vital for determining the impact of cochlear implants on cognition and its decline.

*"Even when we took differences such as age, sex and education level into account, elderly adults fitted with a cochlear implant performed significantly lower in a cognitive function test than those with normal hearing,"* says Dr Annes Claes, who carried out this research at the Department of Otorhinolaryngology, Antwerp University Hospital, Belgium.

Professor Griet Mertens, who coordinates the cognitive hearing project at the Antwerp University Hospital continues, *"Cochlear implants may have a positive effect on the cognitive functions of these patients. Nevertheless, our results point out that cochlear implant recipients do not*

*align with their normal-hearing peers in the longer-term after cochlear implantation."*

Hearing loss is a risk factor for accelerated cognitive decline and dementia in older adults. As age-related hearing loss is very common in the aging population, it means a lot of older people are at risk of brain-function decline. Moreover, the more severe the hearing loss, the higher the risk for dementia. This has stimulated research into whether treating hearing loss by means of hearing aids or cochlear implants could improve cognition in older adults

*"The economic and social burden of dementia is enormous and there is currently no cure,"* explains Professor Dr. Paul Van de Heyning, co-author, also based at Antwerp University Hospital. *"The first studies with cochlear implants were promising, indicating an increase in cognition after implantation. However, long-term conclusive information about cochlear implant effects are not yet available, simply because it takes many years to collect these data."*

In the current absence of long-term data, Claes and her colleagues devised a study to examine whether severely hearing-impaired individuals fitted with a cochlear implant had age-expected cognitive function.

To do this, they compared cochlear implant recipients over the age of 55, who had one or up to eighteen years of experience with the device, to a group of normal-hearing similar-aged adults using a specialized cognitive function test.

Claes explains, *"If we used a regular cognitive test, the hearing-impaired individuals would have been at a disadvantage. We developed the RBANS-H test, which provides both auditory and visual information to the recipient, instead of just an auditory presentation."*

Their findings from this comparison were quite clear, showing a large difference in the cognitive function of each group. Even after taking differences such as age, sex and education level into account, the elderly adults fitted with cochlear implants performed significantly lower in the cognitive function test.

*"More studies are needed to ultimately assess in which way cochlear implants influence the natural cognitive decline. We have some preliminary results from a*

*collaborative multi-center study showing there is a cognitive improvement after cochlear implantation but no normalization. This is in line with our current findings that imply a cochlear implant is not able to keep the older adults with a severe hearing loss at an age-expected level of cognition or to completely restore the level of cognition,"* says Mertens.

*She concludes, "Additional rehabilitation in the long-term after implantation, tailored to the cognitive profile of individuals, may be appropriate for cochlear implant patients."*

Story Source:

Materials provided by Frontiers. Note: Content may be edited for style and length.



## News from across the pond



### Study points to possible new therapy for hearing loss

Researchers have taken an important step toward what may become a new approach to restore the hearing loss.

In a new study, out today in the European Journal of Neuroscience, scientists have been able to regrow the sensory hair cells found in the cochlea -- a part of the inner ear -- that converts sound vibrations into electrical signals and can be permanently lost due to age or noise damage.

Hearing impairment has long been accepted as a fact of life for the aging population -- an estimated 30 million Americans suffer from some degree of hearing loss. However, scientists have long

observed that other animals -- namely birds, frogs, and fish -- have been shown to have the ability to regenerate lost sensory hair cells.

"It's funny, but mammals are the oddballs in the animal kingdom when it comes to cochlear regeneration," said Jingyuan Zhang, Ph.D., with the University of Rochester Department of Biology and a co-author of the study. "We're the only vertebrates that can't do it."

Research conducted in the lab of Patricia White, Ph.D., in 2012 identified a family of receptors -- called epidermal growth factor (EGF) -- responsible for activating support cells in the auditory organs of birds.

When triggered, these cells proliferate and foster the generation of new sensory hair cells. She speculated that this signaling pathway could potentially be manipulated

to produce a similar result in mammals.

White is a research associate professor in the University of Rochester Medical Center (URMC) Del Monte Institute for Neuroscience and lead author of the current study.

*"In mice, the cochlea expresses EGF receptors throughout the animal's life, but they apparently never drive regeneration of hair cells,"* said White.

"Perhaps during mammalian evolution, there have been changes in the expression of intracellular regulators of EGF receptor family signaling. Those regulators could have altered the outcome of signaling, blocking regeneration.

Our research is focused on finding a way switch the pathway temporarily, in order to promote both regeneration of hair cells and their integration with nerve cells, both of which are critical for hearing."

In the new study, which involved researchers from URMC and the Massachusetts Ear and Eye Infirmary, which is part of Harvard Medical School, the team tested the theory that signaling from the EGF family of receptors could play a role in cochlear regeneration in mammals. The researchers focused on a specific receptor called ERBB2 which is found in cochlear support cells.

The researchers investigated a number of different methods to activate the EGF signaling pathway. One set of experiments involved using a virus to target ERBB2 receptors. Another, involved mice

genetically modified to overexpress an activated ERBB2. A third experiment involved testing two drugs, originally developed to stimulate stem cell activity in the eyes and pancreas, that are known activate ERBB2 signaling.

The researchers found that activating the ERBB2 pathway triggered a cascading series of cellular events by which cochlear

support cells began to proliferate and start the process of activating other neighboring stem cells to become new sensory hair cells.

Furthermore, it appears that this process not only could impact the regeneration of sensory hair cells, but also support their integration with nerve cells.

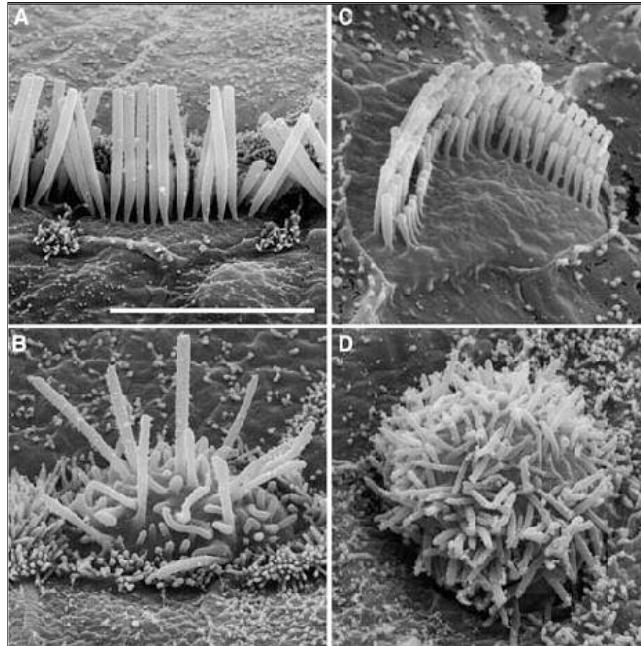
*"The process of repairing hearing is a*

*complex problem and requires a series of cellular events,"* said White. "You have to regenerate sensory hair cells and these cells have to function properly and connect with the necessary network of neurons.

This research demonstrates a signaling pathway that can be activated by different methods and could represent a new approach to cochlear regeneration and, ultimately, restoration of hearing."

Story Source:

Materials provided by University of Rochester Medical Center. Note: Content may be edited for style and length.



A & B Inner Cells, C & D Outer Cells

# End of season meet up

By Kevin Williams



Our newly created 'End of Season' meet up took place recently at the Ring O'Bells establishment in Daresbury.

We have been here before and decided to come back as it was so popular last time.

We arranged to have a section of the pub reserved just for us and were treated to a three course meal (well some of us went the extra mile to sample the sticky toffee pudding!)

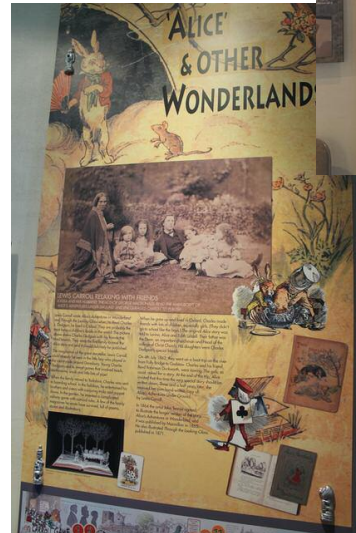


Once again our guest of honour was here to join in and with her carer and her family and friends made for a great party.

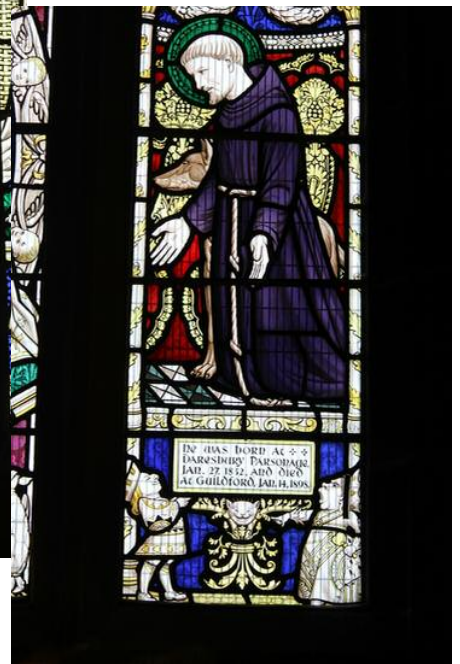
Everyone enjoyed the meal and the company including the four legged friend whose name I forgot to ask.







After the meal, those of us with enough energy left decided to take a stroll across the road to Daresbury church where the Lewis Carroll exhibition is kept. As well as the Alice in Wonderland books apparently Lewis Carroll was a highly talented early photographer as well.



The church windows in the distance, have a section showing characters from Alice in Wonderland if you want to see more visit this link <http://daresburycofe.org.uk/tourism/alice-window/>

By Melanie Lough (Research Audiologist)



Here at ManCAD, in the University of Manchester, we always have a number of hearing research projects on the go. Projects are looking at the prevention, diagnosis and

treatment of hearing conditions. Some of these projects involve participants with clinically normal hearing, some concern hearing aid wearers, and some involve those who have (or are about to have) auditory implants.

ManCAD is the ideal place to conduct hearing research. The newly created Hearing Device Research Centre (HDRC) is based here. This is a multi-disciplinary grouping of people and equipment where we can test out near-market features of new hearing devices. Our team comprises audiologists, ENT consultants, health psychologists, engineers and geneticists. The Bio-Medical Research Centre (BRC Manchester) in Hearing, which is a partnership between various NHS Trusts and the University of Manchester, is also based in ManCAD. The BRC has been given £28.5m funding for 5 years, and Hearing Health is one of seven research themes that is receiving this funding.

## Speech-ABR measures of Cochlear Implant effectiveness

One of our recent studies that may be of interest to the Resound readership was led by Ghada Binkhamis (Postgraduate Research Student). The study looked at a new way of assessing the effectiveness of cochlear implants.

The new assessment is called the 'Speech-Auditory Brainstem Response' (or Speech-ABR). Speech-ABR is a brain wave response recorded from sensors stuck onto the scalp when speech sounds are played into a person's ear/s via a cochlear implant.

Conventional ABR testing is difficult in cochlear implant users due to the electrical artefacts that are generated by the implant. Ghada investigated a new way of identifying and remove these electrical artefacts.

The Speech-ABR could be an important objective measure of how well cochlear implants are working. Having a reliable objective measure of cochlear implant function would be very important for checking cochlear implant function in people who cannot give verbal feedback, for example, in babies and children.

Ghada was able to successfully record Speech-ABRs in two adult cochlear implant users without the electrical artefact.

Ghada is now working hard to develop the Speech-ABR recording technique.

## Difficulties accessing health information by hearing device users

Another recent research activity which received a lot of interest from our hearing research volunteers, was a focus group for people who are users of hearing assistive devices including cochlear implants and hearing aids. This was part of a study run by Rebecca Morris (Research Fellow in Health Services Research and Primary Care) and Sheila Fidler (Senior Lecturer in Audiology) called, "I know you're talking but I don't know what you're saying."

Users of hearing devices shared their difficulties with accessing health information via NHS services and GPs.

The researchers will use this information to develop better ways of supporting users of hearing devices in accessing health care information and improving NHS services for users of hearing devices.

## Checking auditory nerve function before cochlear implant surgery

Andrew Causon (Clinical Scientist, Manchester University NHS Foundation Trust) recently completed a study looking at ways of checking the function of the auditory nerve before cochlear implant surgery. Andrew compared 3 different techniques for recording Auditory Brainstem Responses (ABRs), prior to cochlear implantation.

Pre-implant ABRs can be helpful to check that the auditory nerve has good function and that the cochlear implant surgery would be worthwhile. ABRs were recorded from just outside the cochlear and also within the cochlear. Andrew concluded that ABR recordings just outside the cochlear were the best way to check the function of the auditory nerve. The results will ensure

that people who are about to receive a cochlear implant can be more certain of the benefit they will get from the implant.

We are always looking for more people to volunteer for our research. The best way to do this is to join our Hearing Research Volunteer Database.

To join, simply go online to <http://research.bmh.manchester.ac.uk/audiologyvolunteers>

The database is managed by Helen Whiston (Research Audiologist) and myself.



So, if you would like more information to help you decide whether or not you wish to be involved, please email us at:

**[hearingresearch@manchester.ac.uk](mailto:hearingresearch@manchester.ac.uk)**



## MRI clinic advice

### Spares and repairs

We operate a drop in service for spares and repairs. This is open: 9am – 3pm, Mon-Fri (closed on bank holidays). We also see patients 3 - 4pm but for pre-booked repairs only. Please be aware that this is for equipment problems only, a full appointment may be required with an audiologist at another time if no faults are found with the equipment.

If you are coming into the clinic for a routine appointment and you know you have an equipment issue or need spares you may want to attend 15 minutes earlier so that you can try and have it resolved before you see your clinician.

### Postal spares/repairs

If you are unable to attend the drop in clinic but have faulty equipment we can organise a postal repair. If the main processing unit is at fault we can still swap

it through the post but due to the high cost we need it to be sent special delivery.

We cannot send a replacement processor without the special delivery tracking number (given by the post office). This will mean you will be without your equipment for up to 24hrs. We will also return the new processor to you special delivery. Please note our last post for special delivery is 2:00pm so please get the tracking number to us by 1:45pm or it will mean a delay in returning the replacement.

We can also post out dry bricks, mic covers and leads etc. so please try and keep up to date with your spares. Changing a lead can solve most problems and may prevent you having to come in to the centre.

For spares and repairs please contact Angela Fuller/Andrew Cooper on:

Tel:**0161 276 8079** Text:**07580 822867**

Email: **[auditory.implant@mft.nhs.uk](mailto:auditory.implant@mft.nhs.uk)**

# Notes for the diary

The 2019 AGM will take place on Saturday 23rd March at Gaskell House in Manchester, starting at 10:30



We have chosen this location close to main transport facilities in Manchester and because of its unique facilities.

After the AGM which includes lunch there will be a guided tour of Gaskell House just for our group so it will be like having two

events in one.

The address is below and although we have not sent out details yet if you would like to come or have any questions please let me know.

Elizabeth Gaskell's House

84 Plymouth Grove, Manchester M13 9LW, UK

## And finally ...



The next issue will be in the spring so on behalf of the EC thank you all for your contributions and ideas over the year, have

a Merry Christmas and a Happy New Year!



## Resound Notes Section

We welcome contributions from members on any subject that would be of interest to others, (including your CI experiences) your recent experiences with the health service, meet ups, activities or other news about yourself.

If you have something that you think may

be of interest to others email it to:

[editor@manchestercicada.org.uk](mailto:editor@manchestercicada.org.uk)

or fill in the form online at

<http://www.manchestercicada.org.uk/resound-2/>

or write to:

Kevin Williams, 107 Manchester Road, Hyde, Cheshire SK14 2BX.

<b>Chairman</b>	<b>Honorary Treasurer</b>	<b>Hon Secretary</b>
John Newton 32 Queens road Buxton Derbyshire SK17 7EX	Alan Corcoran 45 Polefield Road Prestwich Manchester M25 2GN	Kevin Williams 107 Manchester Road Hyde Cheshire SK14 2BX
<a href="mailto:chairman@manchestercicada.org.uk">chairman@manchestercicada.org.uk</a>	<a href="mailto:treasurer@manchestercicada.org.uk">treasurer@manchestercicada.org.uk</a>	<a href="mailto:secretary@manchestercicada.org.uk">secretary@manchestercicada.org.uk</a>