

ReSound

For people with Cochlear Implants

Summer 2024

Issue 82



Ladybower valley in the Peak District



This newsletter has been produced on behalf of Manchester CICADA

contents

1. Editorial

by Kevin Williams

2. U3 Summer School

by John Newton

3. Ring O'Bells meetup

by Kevin Williams

4. Recognizing Words

by National Institute of Health

6. Watch Word glasses

by Rebecca Withey

8. Safety

by Kevin Williams

12. Visiting History

by Kevin Williams

12. Implantable Microphones

by US University group

13. Lipreading Corner and The Wigan runner

thanks to Barbara Hitchins and Lynn Grimshaw

15. Out and about

Editorial

Welcome to the Summer edition of Resound for 2024.

In this edition I am once again very pleased to be able to report on more of our regular events after the disruption of recent years.

We are trying to organise events in various parts of our North West area to try and give as many people as possible a chance to come to at least one event a year.

If you have not been able to attend for whatever reason please get in touch so that we can try and be as inclusive as possible wherever you live.

It's rewarding to see so many of our crowd being involved in so many different activities to help others, from lipreading to raising money for charities and helping each other with our own technological issues!

However as John's article has shown, out there in the world at large we have to struggle sometimes to be able to be an inclusive member of other groups.

Very often it is us who have to be the driving force not only in raising awareness of the issues faced by our own hearing loss but also coming up with the solutions to the problems so that we can be a fully included and contributing member of the group.

Since the last edition we have also been developing our Facebook site so we can keep in contact easier and also be able to publicise and manage our events schedule quicker.

Further developments will see back copies of Resound and useful information about accessories there for your use.

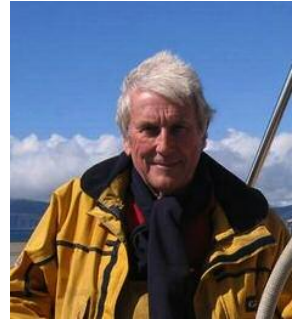
The Facebook page is called Manchester Cicada Club.

Our website is also still available for those without Facebook access for news, events and links to many helpful websites and organisations. The link is:
www.manchestercicada.org.uk

Enjoy this issue and as always feedback is appreciated. Kevin Williams - Editor

u3a Summer School by John Newton

I attended a Summer School recently run by u3a which used to be called The University of the Third Age, a self help educational and social group for older people. It was held in a beautiful residential training centre in the Yorkshire Wolds and was a wonderful experience except in one respect.



The provision for members with hearing loss was seriously deficient. Although the classrooms are modern and equipped with huge TV screens, there were no induction loops. I was able to hear about one third of our tutor's words and managed to follow the course only because he had numerous PowerPoint slides to illustrate his words.

It was a reminder that our declared responsibility to support our members should extend not only to personal advice but should also involve working to improve deaf awareness in other organisations. Personally, I have been telling people what we need as deaf people for so long, about how to talk to a deaf person, how to run an accessible meeting and such things that I have a tendency to assume that everything necessary has been said.

My experience in Yorkshire clearly illustrates that such is not the case. We have to carry on bending the public ear whenever we get a chance.

Reflecting on this, I have also realised that technical advances which help with hearing loss have grown beyond my personal experience and I need to get updated about what is available now in 2024.

When I ran weekend courses for Hearing Link, we ensured that everyone could hear everything by using both induction loops, a human Speech to Text reporter and BSL interpretation. This is very effective although expensive and cumbersome. An organisation like u3a which caters for a typical group of people would reasonably consider such an approach unjustified for the small proportion of deaf people in their company.

We need to find cheaper simpler solutions. My tentative search suggests that they are available.

Some members will be familiar with video conferencing apps such as Zoom and Teams which provide surprisingly accurate computer generated Speech to Text. I would like to find ways in which this clever software can be used in everyday situations. If you have any experience with this, please get in touch with me.

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Ring O'Bells meet up May 2024



Earlier in the spring we returned to an old favourite of ours at Daresbury. This is located very close to the Lewis Carroll exhibition.

These events have two advantages over the normal 'Social' meetings, enjoyable as they are.

It enables us to improve our hearing with the implants in a more noisy environment that we tend to live in and also, apart from the rewarding company with friends, we can chat about issues with equipment and day-to-day problems we may have come across.

We also managed to get our usual table and enjoyed an early chat and get together.



The Church museum is well worth a visit to see the stained glass windows.



Researchers identify basic approaches for how people recognize words

New study involves participants with cochlear implants

Recognizing spoken words is a split-second competition, and a new study defines how people approach that competition and ultimately recognize words. The researchers identified three main approaches by which people of all ages -- including those who use cochlear implants to hear -- recognize spoken language.

In a new study with people who use cochlear implants to hear, the researchers identified three main approaches that people with or without hearing impairment use to recognize words, an essential building block for understanding spoken language. Which approach depends on the person, regardless of hearing aptitude or ability: Some wait a bit before identifying a word, while others may tussle between two or more words before deciding which word has been heard.

When a person hears a word, the brain briefly considers hundreds, if not thousands, of options and rules out most of them in less than a second. When someone hears "Hawkeyes," for example, the brain might briefly consider "hot dogs," "hawk," "hockey," and other similar-sounding words before settling on the target word.

While the brain operates quickly and differences in word-recognition strategies may be subtle, the findings in this study are important because they could open new ways for hearing specialists to identify word-recognition difficulties in early childhood or in older adults (who tend

to lose hearing) and more effectively manage those conditions.

"With this study, we found people don't all work the same way, even at the level of how they recognize a single word," says Bob McMurray, F. Wendell Miller Professor in the Department of Psychological and Brain Sciences and the study's corresponding author. "People seem to adopt their own unique solutions to the challenge of recognizing words. There's not one way to be a language user. That's kind of wild when you think about it."

McMurray has been studying word recognition in children and in older adults for three decades. His research has shown differences in how people across all ages recognize spoken language. But those differences tended to be so slight that it made it difficult to precisely categorise. So, McMurray and his research team turned to people who use cochlear implants -- devices used by the profoundly deaf or severely hard-of-hearing that bypass the normal pathways by which people hear, using electrodes to deliver sound.

"It's like replacing millions of hair cells and thousands of frequencies with 22 electrodes. It just smears everything together. But it works, because the brain can adapt," McMurray says.

The research team enlisted 101 participants from the Iowa Cochlear Implant Clinical Research Center at University of Iowa Health Care Medical Center. The participants listened through loudspeakers as a word was spoken, then selected among four images on a computer screen the one that matched the word they had heard.

The hearing and selection activities were recorded with eye-tracking technology, which allowed the researchers to follow, in a fraction of a second, how and when each participant decided on a word they had heard.

The experiments revealed that the cochlear-implant users -- even with a different way to hear -- employed the same basic process when choosing spoken words as normal hearing people.

The researchers termed three word-recognition dimensions:

- * Wait and See
- * Sustained Activation
- * Slow Activation

Most cochlear implant participants utilised Wait and See to some degree, the researchers found, meaning they waited for as much as a quarter of a second after hearing the word to firmly decide which word they heard.

Previous research in McMurray's lab has shown that children with early hearing loss have Wait and See tendencies, but this hasn't been

observed more generally.

"Maybe it's a way for them to avoid a bunch of other word competitors in their heads," McMurray says. "They can kind of slow down and keep it simple."

The researchers also learned that some cochlear implant participants tended toward Sustained Activation, in which listeners tussle for a bit between words before settling on what they think is the word they heard, or they utilise Slow Activation, meaning they're slower to recognize words. Importantly, every listener seems to adopt a hybrid, with a different degree of each strategy.

The dimensions match the patterns by which people without hearing impairment, from youth to older ages, tend to recognize words, as shown in a previous study by McMurray's team.

"Now that we've identified the dimensions with our cochlear implant population, we can look at people without hearing impairment, and we see that the exact same dimensions apply," McMurray says. "What we see very clearly with how cochlear implant users recognize words is also going on under the hood in lots of people."

The researchers now hope to apply the findings to develop strategies that may help people who are at the extreme ends of a particular word-recognition dimension. About 15% of adults in the United States have hearing loss, which could cascade into cognitive decline, fewer social interactions, and greater isolation.

"We aim to have a more refined way than simply asking them, 'How well

are you listening; do you struggle to perceive speech in the real world?" McMurray says.

The study, "Cochlear implant users reveal the underlying dimensions of real-time word recognition," was

published online Aug. 29 in the journal Nature Communications.

The National Institutes of Health and the U.S. National Science Foundation funded the research, as part of its 30 years of funding the Iowa Cochlear Implant Clinical Research Center.

A Review - WatchWord smart glasses technology

by Rebecca A Withey

Earlier this year QUAD cinema in Derby announced that they would be the first cinema in the UK to participate in a trial of WatchWord, a new technology which aims to make film more accessible to deaf and hard of hearing people.

Trials of the WatchWord closed captioning solution moved onto Chesterfield's Cineworld in March and they now continue at the Odeon Cinema at Milton Keynes Stadium.

I went along to a screening of Migration at the Cineworld in Chesterfield to try out the WatchWord smart glasses for myself.

The glasses in question have been developed principally for deaf and hard of hearing cinema goers. It's an add-on, free of charge accessibility service that aims to ensure people who need captions can attend any movie screening they want with friends and family and simply wear the glasses to access the film's captions.

As a hearing aid wearer and someone who wears glasses to read captions, it was reassuring to find out that the WatchWord smart glasses have been designed to be worn over normal glasses and alongside hearing aids and cochlear implant processors.

The glasses were slimmer than I expected but with slightly heavy processor packs on each side. Whilst the WatchWord glasses sat comfortably in front of my own glasses, the weight of the technology did mean I found myself adjusting or pushing up the smart glasses throughout the film.

What was really fascinating for me to discover was how the actual captions appear on the glasses lens instead of being fixed on the screen. You can even look away from the screen and still see the captions on your glasses!

Accompanying the WatchWord glasses is a small controller which you can use



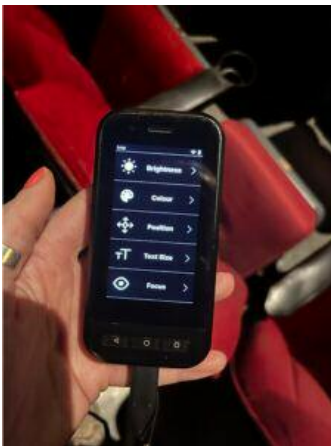
to adjust the captions' size, location, colour and brightness depending on your own preferences.

This personalisation feature is fantastic and really offers the wearer an individual experience based on their own likes and dislikes. I chose a simple white font in the middle of the screen and opted for a slightly larger size.

The controller is incredibly easy to navigate and can be worn comfortably on a strap around your neck so that you're not hunting for it in the dark.

Admittedly it did take time for my eyes to adjust to this new technology, as I wasn't used to captions that move along following my own head movements. But if you're able to stay still throughout the film, the captions will remain in the same place as you're viewing the film.

The captions themselves were superbly accurate with all songs and background noises included too. There was no time delay or jilting at all and overall it felt like this was a very reliable piece of technology to use.



On the whole, I was impressed to see how easy to use and accurate the WatchWord glasses were and I can really see this benefitting a whole range of deaf and hard of hearing people who enjoy subtitled cinema.

I must add, however, that there is a slight chance these glasses won't suit everybody. After 20 minutes of watching the film I felt my eyes begin to feel tired and my head became sore – it was the familiar disorientation I personally feel when wearing 3D glasses.

So if you're anything like me, you may not take too well to wearing these glasses for long because of how close the captions are to your actual eyes and the constant refocusing of your eyes to not only read the captions but also watch the action on screen.

But you might be one of the lucky ones!

After the trials at Derby Quad, the general feedback was that 74% of respondents "strongly agreed" that they wanted to use the glasses again and 84% "strongly agreed" that they would prefer to use the glasses than not be able to see a film at all.

The fact that WatchWord are offering deaf and hard of hearing people the option of watching a movie at a time of their own choosing is really to be applauded. The company believe that closed captions should always be offered alongside rather than instead of open captioned screenings, but their goal is simply to provide more choice.

Regarding the comfort issue I described with the glasses slipping slightly, WatchWord have reported back that they are communicating with EPSON about how the experience can be improved and they are also looking into adjustments that they can make to the glasses that might improve the weight

distribution.

The development and success of WatchWord relies greatly on the feedback of those who have trialled the smart glasses for themselves. During a trial you will be able to choose from many screenings of different films every day. You can then customise your experience by choosing the colour, size, and position for the captions to suit you perfectly.

WatchWord told me:

"There is a lot of work still to do, of course, and we won't stop in our pursuit of a better audience experience, but for the people who get on well with the glasses, we are pleased that WatchWord will offer them something which they have been missing out on for too long."

WatchWord closed captions will be available on most screenings at Milton Keynes Odeon during the trial period of Friday 8th March – Sunday 24th March.

Safety -- (by Kevin Williams)

Recently one of our members had an incident at home early one morning, when the fire alarm for her house went off, incorrectly as it happens, but this put into effect a series of events that happened all of which deserve to be discussed.

When we talk about 'Safety' it's such a general term that we need to try and focus on the different issues depending on the situation at the time of the incident.

In broad terms, the circumstances that we find ourselves in, determines the type of problems to be overcome and that means that no single solution can cover every eventuality.

For example, issues that arise at home such as fire and smoke, illness, accidents such as falls, kitchen incidents such as scalds, cuts that need emergency service support etc. can generally be addressed with equipment and procedures that are readily to hand and have been pre-installed.

However, accidents and sudden illness away from home, such as those involving the car, whilst travelling on public transport, or in public places both in and out of doors need a different approach.

At home

Generally there are two categories of help required, the first is warning or alerting someone who has not been incapacitated, of such things as fire and smoke alarms, doorbell lights, telephone alerts etc and the second is the post trauma help needed to summon assistance.

The Fire service provides alarms, smoke monitors, vibrating alerts for beds so they are the first port of call for support to respond to these alerts.

The next item on the list is personal pendants or alarm watches. These are generally not supplied by the council or other service, although in some cases in conjunction with agencies such as Age UK may be provided free with a limited range of services, if not they will need to be purchased privately.

The costs vary as you can imagine but usually consist of a basic purchase cost plus a monthly service charge for the 'extras'.

The pendants do not need a mobile phone to link to in order to make calls, they can communicate directly, they can provide fall monitoring as well, so activating immediately and will notify the listed contacts in the event of an occurrence.

They can support GPS services so if you make a call from anywhere the recipient can see where you are calling from, these pendants can also communicate also with a Family and Friends smartphone app so the nominated friends and family can use their mobile phones to see where you are and alert the emergency services as appropriate. This is especially useful if you are not able to hear a voice call to your pendant of course. So you need to tailor your needs to the costs of each package of services.

Plan an escape route

Think about all possible escape routes in case there's a fire. It is a good idea to practice an escape so that you feel confident you could do it day or night.

Keep a phone in your bedroom in case you need to make an emergency call. If it's a mobile, keep it charged.

Make sure exits are kept clear and well lit.

Make sure you know how your house or personal alarm works, including any passwords or codes.

Keep keys where you can find them in case you need them in a hurry.

Suppliers of equipment

Social services for the Deaf - Door alarms with flashing light facility

Commercial organisations

RNID, <https://rnid.org.uk/information-and-support/technology-and-products/>

Suresafe, <https://personalalarms.org/products>

Connevans, <https://www.deafequipment.co.uk/catalogue/122/Alerting-Devices>

When out and about

Here we have different problems from being at home of course but some situations are similar, for example, when travelling on public transport, at a public event or a public location such as a restaurant or shopping centre, the common thing is that there are people immediately on hand and able to give assistance.

On the other hand in a motor driving scenario you could be on your own in a car or with one or two passengers but when you have reached the side of the road or the hard shoulder of the motorway for safety you are presented with a different set of problems including the noise of passing vehicles and the danger from them as well.

This would make it impossible for example, to have a conversation on a mobile phone or via a pendant which means having to use other means to communicate.

There are a few ways to contact emergency services if you are deaf or hard of hearing, including:

999 BSL - A service that allows deaf people to make emergency calls using British Sign Language (BSL) through an app or website.

EmergencySMS - A service that allows deaf, hard of hearing, or speech-impaired people to text 999 in an emergency. You can register your phone for this service by sending a text message that says "register" to 999.

Relay UK - A service that allows deaf, hard of hearing, or speech-impaired people to contact emergency services by calling via a relay assistant.

NHS 111 - You can contact NHS 111 using Typetalk, a textphone, or the BSL interpreter service

999 Text SMS Emergency Service!

D/deaf, deafblind and hard-of-hearing people can contact police, ambulance, fire rescue or coastguard by text 999

First you need to register your mobile...

STEP 1. Text 'REGISTER' on your mobile and send it to 999

STEP 2. Then after you get a text back (Terms & Conditions) - you text back 'YES'.

Then you are ready! In emergency only, please text the 3Ws:

Which emergency service? (Police, Ambulance, Fire or Coastguard)

What wrong?

Where? Address, place, road etc.

Important - if you got a new mobile, please register again on your new mobile! Of course once you have contacted the appropriate authorities/service there is the inevitable wait for rescue to arrive.

There are several things that you need to do for safety as well as keeping occupied.



Firstly establish if the damage is terminal

Then find a place of safety off the road on a grassy picnic friendly bank.

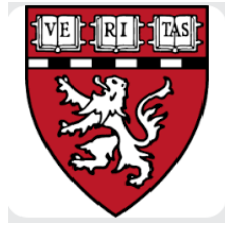
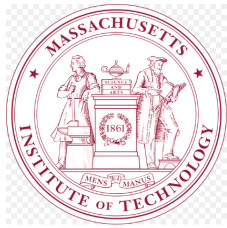


Of course if there is a long wait for assistance then it can be depressing!

Unless of course if one of the passengers happens to be the most famous magician in England!



Implantable microphone could lead to fully internal cochlear implants



This tiny, biocompatible sensor may overcome one of the biggest hurdles that prevent the devices from being completely implanted

Cochlear implants, tiny electronic devices that can provide a sense of sound to people who are deaf or hard of hearing, have helped improve hearing for more than a million people worldwide, according to the National Institutes of Health.

However, cochlear implants today are only partially implanted, and they rely on external hardware that typically sits on the side of the head.

These components restrict users, who can't, for instance, swim, exercise, or sleep while wearing the external unit, and they may cause others to forgo the implant altogether.

On the way to creating a fully internal cochlear implant, a multidisciplinary team of researchers at MIT, Massachusetts Eye and Ear, Harvard Medical School, and Columbia University has produced an implantable microphone that performs as well as commercial external hearing aid microphones.

The microphone remains one of the largest roadblocks to adopting a fully internalized cochlear implant.

This tiny microphone, a sensor produced from a biocompatible

piezoelectric material, measures miniscule movements on the underside of the ear drum.

Piezoelectric materials generate an electric charge when compressed or stretched. To maximize the device's performance, the team also developed a low-noise amplifier that enhances the signal while minimizing noise from the electronics.

While many challenges must be overcome before such a microphone could be used with a cochlear implant, the collaborative team looks forward to further refining and testing this prototype, which builds off work begun at MIT and Mass Eye and Ear more than a decade ago.

"It starts with the ear doctors who are with this every day of the week, trying to improve people's hearing, recognizing a need, and bringing that need to us.

If it weren't for this team collaboration, we wouldn't be where we are today," says Jeffrey Lang, the Vitesse Professor of Electrical Engineering, a member of the Research Laboratory of Electronics (RLE), and co-senior author of a paper on the microphone.

The research is published today in the *Journal of Micromechanics and Microengineering*.

Lip reading corner



There have been some good meals with Cicada recently. It helps that everyone understands the challenges that having a hearing loss presents. From time to time in the lipreading session, we talk about what might help in difficult situations. Going out for a meal in a restaurant can be challenging. So here are a few tips:



If it's a big group, circular tables help you to see everyone, with more chance of understanding what is being said. It's always worth asking for a quiet corner, some restaurants can be very helpful.

Having a wall behind you might help, though if everyone has a hearing loss, that isn't possible.

Don't feel awkward about looking at people. One of our new members felt reassured, and able to say to their partner, that they did need to look at their lips.

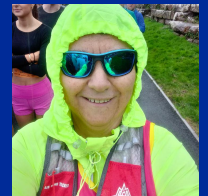
Trying to eat and maintain a conversation is difficult. Chewing can be noisy, and you have to look away to choose your next mouthful. Some people may prefer to concentrate on eating, and then talk.

Find a restaurant with good light levels. It's very difficult to follow a conversation if you can't see the other person's face.

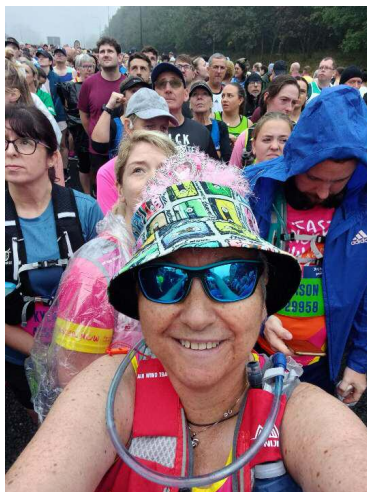
And enjoy your meal!

The Wigan Runner updates

by Lynn Grimshaw



Latest exertion at the Great North run in Newcastle and South Shields. Very damp from the looks of things!



And just to prove that not only is no city is safe from the Wigan runner, no building is either!



Out and about - recent events



The Netherton Hall was the venue for our June event. A chance for a good chat and catch up with things putting the world to rights.



For some of course it's an opportunity to get help with the more technical side of things especially when it comes to applications controlling processors!



July saw us heading for the northern part of our patch to the Italian Orchard near Preston. Having been told off for asking for chips with it ... they still let us in to have a meal! Outside was a very old Italian car, not a Bugatti, Lamborghini or Ferrari...but a Fiat !



Notes

We would welcome any feedback or suggestions for events, articles for Resound especially if you have been through a situation and have come through it and have knowledge that might help others.

Either email
secretary@manchestercicada.org.uk

Or write to me at the address below, all submissions are welcome.

The next event is on 25 September at the Griffin Inn in Widnes 184 Warrington Rd, Bold Heath, Widnes WA8 3XT Meet at 12:30

CICADA

Website: www.manchestercicada.org.uk

Facebook group: Manchester CICADA club

Secretary direct contact: Text 07533217730

Main contacts for Cicada listed at the bottom of this page.

Manchester Implant Centre

The Richard Ramsden Centre for Auditory Implants, Peter Mount Building, Manchester Royal Infirmary, Oxford Road, Manchester, M13 9WL

Main Contact Details:

Tel: 0161 701 6931 (Appointments)

Tel: 0161 276 8079 (repairs and spares)

<http://www.manchestercicada.org.uk/implant-clinic/>

National Support organisations

British Tinnitus Association:

<https://www.tinnitus.org.uk/>

Hearing Link:

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

RNID (Action on Hearing Loss):

<https://www.actiononhearingloss.org.uk/>

Disabled Travel Advice:

<http://www.disabledtraveladvice.co.uk/>

Meniere's Society:

<http://www.menieres.org.uk/>

National Deaf Children's Society:

<http://www.ndcs.org.uk/>

National Association of Deafened People

(NADP): [http:// www.nadp.org.uk/](http://www.nadp.org.uk/)

Equipment Suppliers for Deaf People

Sarabec: <https://www.sarabec.com/>

Connevans: <http://www.connevans.co.uk>

Hearing Link UK: <https://www.hearinglink.org/>

RNID (Action on Hearing Loss):

<https://www.actiononhearingloss.org.uk/>

Accessory help

The accessory help page has links to videos about how to connect your processor to different accessories, such as remote microphones, TV support etc. that may be supplied to you by the implant centre.

Also if anyone is going into hospital and wants one of the Hearing support cards to show staff how you prefer to communicate then please let me know.

If you have printing facilities then the card is in PDF format at this link at the bottom of the page:

<https://www.manchestercicada.org.uk/accessory-help/>

If you need a laminated copy write to me or email at the link below.

Chairman	Honorary Treasurer	Hon Secretary
John Newton	Alan Corcoran	Kevin Williams
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