# ReSound

### For people with Cochlear Implants

Winter 2014 Issue 46



"Sunny Winter Morning"



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

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### **Editorial**

Welcome to the first Resound of 2015, we hope you had an enjoyable Christmas and New Year. It was lovely to see some of you at the Christmas lunch in Chester before Christmas and hope to see you at gatherings throughout the year.

We start the 2015 in an even better position financially than this time last year having gone through the turmoil and reorganisation that was involved in getting the charity set up. We will be using this new stability to extend the reach and type of activity over the coming year so as to be able to make it easier for more of you to be able to come to the events and meet ups that we organise.

We will be posting information on the website and facebook throughout the year as well as sending flyers out for those of you not yet connected to the internet.

The number and location of events will be updated throughout the year as details become known so do keep checking for updates.

In this edition we have story and letter contributions from some members for which we are grateful so if you have a story or event that you wish to share please send it to us. You can do so via email to editor@manchestercicada.org.uk, by filling in a form on the website or posting the article to my address on the back cover.

Kevin Williams Chairman

## Emergency service access for Deaf and Hard of Hearing people

Recently one of our members who has an implant, was looking after her grandchildren overnight while their parents were away for the weekend.

During the night one of the children was taken ill and she was not confident enough to try and phone the emergency doctor, and was so stressed that she had to contact her son to get them to come home.

She did not have internet access and although she had a mobile phone this did not have access either but did have an SMS (Short Message Service) facility.

Recently we met for lunch and during the meal she mentioned the event and we were able not only to tell her about the special service below but to get her registered with it from the restaurant.

The service is called 'emergencySMS' and lets deaf, hard of hearing and speech-impaired people in the UK send an SMS text message to the UK 999 service where it will be passed to the police, ambulance, fire rescue, or coastguard.

Simply by sending an SMS message to 999 you can call for help and the emergency services will be able to reply to you.

You will need to register your mobile phone before using the emergencySMS service. This is the link on the web if you want more information

#### http://www.emergencysms.org.uk/

otherwise follow the instructions below





To register using SMS text messages you must:

- 1. Send the word 'register' in an SMS message to 999
- 2. You will then receive SMS messages about the service
- 3. When you have read these SMS messages reply by sending 'yes' in an SMS message to 999

4. You will receive a SMS message telling you that your mobile phone is registered or if there is a problem with your registration

You can check your mobile phone registration by sending the word 'register' in a SMS message to 999.

You will receive a SMS message telling you if your mobile phone is registered or if there is a problem with your registration.

#### **Unable to Register**

If you try to register and do not receive an SMS message from the emergencySMS service please check with your mobile communications provider to make sure they support the emergencySMS service.

### ANOTHER MALLORCA?

### by John Newton

If you've been there, you know that the island is at least two different places, there's Magaluf,( it sounds like an electricity company doesn't it?) where young people go to try their hardest to prove that Darwin was wrong and we have not progressed from our primate ancestors. ( that must be unfair to harmless apes and monkeys!) And then there's the pretty Mediterranean island where you eat long lunches al fresco, sample the tapas and paella, admire the Spanish architecture and work on your tan and hope that you will meet the stag and hen parties bent on alcoholic oblivion only in the airport.

However there is another Mallorca which this photo illustrates. The boat is "Mowgli" a wooden sailboat built in Normandy in the 70s and recently lovingly restored by my son Simon and his friends and now based in Mallorca. Would you believe that this beautiful rocky cove is only a mile or two from the mayhem of Magaluf? It is completely unspoiled and undeveloped, no road goes near it and certainly no tattooed partygoers, which is of course why we chose it for an overnight stop during a week last September when Simon and I did a bit of father and son bonding while sailing around the island. We had discovered another Mallorca seen from seaward, an amazing rocky panorama, with precipitous cliffs in places 300 feet high. The whole coast is a continuous geology lesson illustrating the volcanic eruptions of the past which have twisted and folded the rock as though it were liquorice toffee. The only other coast as high and precipitous I

have seen are the vertical cliffs of the Isle of Arran in Galway Bay on the west coast of Ireland where you can lie on your stomach put your head over the edge and look straight down to the sea far below.

This beautiful cove in the photo is typical of that rugged coast which is this other Mallorca, and just about big enough for one boat to anchor but it proved to have a sting in its tail.

We motored into it one afternoon, carefully deployed the anchor so that we floated nicely in the middle of the cove and then did the things one does in such places, had a swim, had a beer, had some supper but mostly sat and looked at the calm water in the fading light. As the lights began to twinkle on the distant shore across the bay we retired happily to our bunks.

Alas, about 4am the weather brewed up and the wind began to blow hard straight into the bay, "Mowgli" swung to her anchor and the stern bumped one of the many rocks near the shore and brought her crew sharply awake and on deck in their underpants. It was, of course, black dark, raining hard and with a big swell pushing into the cove. Poor old "Mowgli" was tugging at her anchor chain as her bows reared up and down, she was making it plain that she wanted out of there! Any delay and she would drag further back onto the rocky shore which would be very unkind to her relatively frail wooden construction.

We definitely had to leave, and smartly, no

discussion was necessary! This was fortunate because in such circumstances with the wind, the rain and the dark it is very difficult to communicate at all even if you are not deaf. Simon had started the engine and was on the foredeck hauling up the anchor, I could see him only if I shined my torch at him which is not very helpful because with a torch shining in his eves he would not be able to see anything at all. In this situation the bloke at the back (me) has to coordinate the steering and the throttle to help the bloke at the front (Simon) to get up the anchor even if you cannot see each other. After several fraught minutes we recovered the hook and I could point the bow into the blackness which was the open sea and open up the throttle to the full.

while I tried to do some navigation. We both confessed later that we were praying that the engine would keep going. If it stopped before we could get clear of the shore, we would be lost. A mile or so offshore, we would then have enough time to set some sail before we drifted back into the rocks.

Thankfully the engine did not stop, although the electronic chart showed us making very slow progress at first, half a knot or even less and that essential mile took a long time. Painfully slowly we crawled clear of danger, and slowly started to relax, first finding a jacket each to cover our nakedness and then to turn to that universal solution to all British problems, to boil a kettle and make a cup of tea, very



Mowgli is not exactly a speedboat under engine. At the time she was built, the serious yachtsman who commissioned her like most dedicated sailors of his era and a good few today, considered that in a sailboat an engine is just something you needed to get in and out of harbour in calm water, a necessary evil and the smaller the better. She will do about 5 knots in calm water. Ploughing into the wind and a big swell with solid water coming over the bow, progress was very slow indeed. Having stowed the anchor Simon regained the cockpit and took the helm

comforting in the circumstances. And then it got light, the wind began to drop and Mallorca turned back into the sunny Mediterranean island they show you in the holiday brochures. We headed north to the fleshpots of the capital Palma just a few miles away.

A few days later we flew home. The airports at both ends, were again busy with stag and hen parties. "Poor things" we thought, "they don't know what they are missing". If they did, I wonder what they would think of us?

## MRI scans and your cochlear implant MED-EL's SYNCHRONY leads the field in MRI safety

### **MED**<sup>©</sup>EL

For the first time ever, cochlear implant users can undergo high-resolution MRI scans without the need for repeat surgeries to remove and replace the implant magnet. MED-EL's new cochlear implant system, the SYNCHRONY, features a revolutionary magnet that means MED-EL users have the highest level of MRI compatibility currently available.



#### What is an MRI Scan?

MRI stands for Magnetic Resonance Imaging. An MRI scanner uses a strong magnetic field and radio waves to provide detailed pictures on a computer screen of structures inside the body. The technique is used across a broad range of medical specialities to assist in diagnosis and planning treatment.

### When might I need an MRI scan?

Your clinician may decide you need to undergo an MRI scan when it is the best technique to gain information for diagnosis or treatment. A 3.0 Tesla MRI image is a particularly high-resolution scan and gives a clearer view of the scanned area.

### MRI scan with a cochlear implant The extremely strong magnetic field used by MRI scanners can potentially interact

with medical devices containing a magnet or metal, or affect their function. This is why MRI compatibility is such an important issue for cochlear implant users. Until now, in some cases the magnet of the cochlear implant has to be surgically removed before an MRI scan above 1.5 Tesla can take place. Following an MRI scan, the magnet then has to be surgically replaced.

### Superior MRI safety without the need for surgery

Due to its unique and patented internal magnet, users of the new SYNCHRONY implant can undergo MRI scans up to 3.0 Tesla, the current UK MRI standard for high resolution scans, (provided certain precautions are taken), without the need for repeat surgeries to remove and then replace the magnet. This represents the highest MRI compatibility on the market, and makes medical check-ups much more comfortable, quicker, and safer for cochlear implant users of all ages.

In some cases, the implant magnet can cause distortion of the image – so if a detailed scan of areas near the implant is required, the implant magnet can also be easily removed if required.

MED-EL users also have peace of mind knowing they have exceptional hearing performance, outstanding reliability, AND unmatched MRI safety.

For more information about the SYNCHRONY cochlear implant system, including the new SONNET audio processor, or the RONDO single-unit processor, visit www.medel.com.

### Out of the mouth of Babes!

### by Alan Corcoran

Many years ago I did a lot of DIY work, especially when my daughter moved house. I helped do plastering, plumbing, tiling, decorating, in fact most things. However, I could not be bothered with the hassle of buying them and wearing overalls for such jobs, but instead would wear my old clothes, which, shall we say, were well past their "use by date".

At that time I had not been fitted with my cochlear implant, but wore a rather large body worn hearing aid. My two grandchildren were about 5 or 6 years old at the time and my daughter felt it was time to introduce the idea of deafness to them, and that Grandpa was just deaf rather than say daft!

She decided she would first see if they had in fact noticed that I was "different" in that I

had a hearing aid.

"What has Grandpa got" she asked them one day, "that NOBODY else has got?"

Their faces went blank as they studied thie question, then suddenly they lit up, arms shooting into the air they shouted "I know, I know" "Ask me, ask me". "Yes dears" my daughter said. "What has Grandpa got that nobody else has got"? "Dirty old clothes" they enthusiasticlly shouted. Stunned silence! - "Ahh - yes! - but anything else"?

I am pleased to report that my hearing greatly improved after I had my cochlear implant, unfortunately, I cannot say that same regarding my sartorial elegance!

#### **EDITOR**

But did they notice that you wore hearing aids?

### Facebook scam targets deaf people

Deaf people are being targeted in a scam which has seen a Fife man lose a five figure sum.

The 'advance fee fraud' starts with a message from a hacked Facebook account claiming that an allowance is being given by the Government and Deaf Commission Action on Hearing Loss to deaf people.

The poster tells the fraud target that their name is on a winners list and that they have won £120,000 and a laptop. In order to claim the prize they have to send personal information and pay a sum of money up-front through a money transfer service.

The scam continues with delays and excuses as to why more money needs to be sent and this goes on until the victim becomes suspicious and finally discovers they have been defrauded.

PC Shirley Buttercase, equalities officer with Fife Division, said, "This is a despicable fraud aimed at vulnerable members of our society which plays on their disability and the trust they place in others.

"It is a variation of a type of fraud which goes on all the time and our advice is always never to engage in anything which asks for money up-front and if something sounds too good to be true, it almost always is.

"I would urge anyone who is targeted by this type of fraud, or knows of a Deaf person, to be alert to this fraud and if they suspect anything is amiss to contact us on 101 or send information to Crimestoppers on 0800 555 111."

(this article appears in the Hearing Times)

### MED-EL UK Announces the 2014 Music Grant Winners

### **MED**<sup>©</sup>EL

It is with great pleasure that MED-EL UK announces the winners of the 2014 MED-EL UK Music Grants. Our two lucky MED-EL implant users have each received £500 towards the purchase of an instrument, £30 for sheet music and weekly music lessons for one year.

The under 19s Music Grant goes to 13 year old William from Peterborough who has been deaf since birth. William received his first cochlear implant at the age of two at Addenbrooke's Hospital, Cambridge.

William's zest for life is limitless: he is a top scoring football player for Hampton Football club, and he is making his acting debut in a film, "Dreaming of Peggy Lee".

William has purchased a new electronic drum kit with his grant. The choice of instrument is no surprise to his dad. Andy comments: "William loves playing the drums and is committed to it. He has loved the drums since he was very small. Indeed, it was probably the first sound he ever heard."



The FineHearing technology of his cochlear implant helps William appreciate the subtle

differences between sounds including music, which William is able to enjoy, particularly his favourite song "Day Dream Believer" by the Monkees. His own dream is to play drums in a band and to perform on stage in front of audiences, just like his drum teacher Chris.

Mature student Paul from Shipley is the winner of the over 19s grant. Paul's hearing loss was first diagnosed when he failed an army medical at the age of 16 and was issued with hearing aids. Over the years his hearing deteriorated, until he no longer gained sufficient benefit from his hearing aids and started to rely on lipreading.

Life changed for Paul when a registrar suggested he might be a suitable candidate for a cochlear implant. After passing the assessments surgery took place in 1998 at the Yorkshire Auditory Implant Service, Bradford.

Thanks to the 19s and over MED-EL UK Music Grant he has now started guitar lessons and in the future he hopes to play together with his Church Worship group. Paul was delighted to win this year's music grant and is looking forward to the challenge of learning to play the guitar.

"My taste in music is very eclectic." says Paul. "My favourite classical piece is the Planet Suite by Gustav Holst, as it is so atmospheric. Other than classical and jazz, I enjoy country, folk, ballads and I love listening to Gospel music the most."

Cassandra Brown, Managing Director of MED-EL UK states: "We have been overwhelmed by the number and quality of the applications for the music grants again this year. Helping people of all ages to improve their music appreciation, both with familiar and unfamiliar musical pieces,

is as important to us as it is to our implant users. We wish both Paul and William every success with their new instruments and lessons over the coming year." Apply now for 2015, application forms and terms and conditions are available online at <a href="https://www.medel.com/uk/musicgrant">www.medel.com/uk/musicgrant</a> or by email to conferences@medel.co.uk.

### Cicada Christmas Meal - 2014

by Kevin Williams

Members met up recently for our annual Christmas meal, which took place at the Westminster Hotel in Chester.



A recently refurbished private room was set aside for us where we could meet and talk before the meal without the background noise and disturbance, which is generally found in large public restaurants.

The service was excellent and the hotel staff communicated well. After a generous and tasty three-course meal we had our prize draw for the raffle after which many people stayed on in Chester for the afternoon.



This was the third time that we have had our Xmas meal in Chester and so we will be looking for somewhere different next year to try and allow as many people as possible to attend. If you would like to suggest a different location please let use know and we can start the process of selecting a suitable venue.

Edna Clayton, below on the right of the picture, who at 94 is Cicada's oldest member spent her Christmas at Ross on Sea.





As you can see from the photographs a good time was had by all!

### News from across the pond!



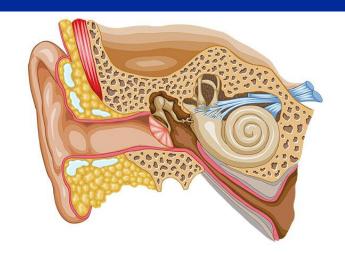


A cochlear implant that can be wirelessly recharged would use the natural microphone of the middle ear rather than a skull-mounted sensor.

Cochlear implants — medical devices that electrically stimulate the auditory nerve — have granted at least limited hearing to hundreds of thousands of people worldwide who otherwise would be totally deaf. Existing versions of the device, however, require that a disk-shaped transmitter about an inch in diameter be affixed to the skull, with a wire snaking down to a joint microphone and power source that looks like an oversized hearing aid around the patient's ear.

Researchers at MIT's Microsystems
Technology Laboratory (MTL), together
with physicians from Harvard Medical
School and the Massachusetts Eye and Ear
Infirmary (MEEI), have developed a new,
low-power signal-processing chip that
could lead to a cochlear implant that
requires no external hardware. The implant
would be wirelessly recharged and would
run for about eight hours on each charge.

The researchers describe their chip in a paper they're presenting this week at the International Solid-State Circuits Conference. The paper's lead author — Marcus Yip, who completed his PhD at MIT last fall — and his colleagues Rui Jin and Nathan Ickes, both in MIT's Department of



Electrical Engineering and Computer Science, will also exhibit a prototype charger that plugs into an ordinary cell phone and can recharge the signalprocessing chip in roughly two minutes.

"The idea with this design is that you could use a phone, with an adaptor, to charge the cochlear implant, so you don't have to be plugged in," says Anantha Chandrakasan, the Joseph F. and Nancy P. Keithley Professor of Electrical Engineering and corresponding author on the new paper. "Or you could imagine a smart pillow, so you charge overnight, and the next day, it just functions."

#### Adaptive reuse

Existing cochlear implants use an external microphone to gather sound, but the new implant would instead use the natural microphone of the middle ear, which is almost always intact in cochlear-implant patients.

The researchers' design exploits the mechanism of a different type of medical device, known as a middle-ear implant. Delicate bones in the middle ear, known as ossicles, convey the vibrations of the eardrum to the cochlea, the small, spiral chamber in the inner ear that converts acoustic signals to electrical. In patients with middle-ear implants, the cochlea is functional, but one of the ossicles — the stapes — doesn't vibrate with enough force to stimulate the auditory nerve. A middle-ear implant consists of a tiny sensor that

detects the ossicles' vibrations and an actuator that helps drive the stapes accordingly.

The new device would use the same type of sensor, but the signal it generates would travel to a microchip implanted in the ear, which would convert it to an electrical signal and pass it on to an electrode in the cochlea. Lowering the power requirements of the converter chip was the key to dispensing with the skull-mounted hardware.

Chandrakasan's lab at MTL specializes in low-power chips, and the new converter deploys several of the tricks that the lab has developed over the years, such as tailoring the arrangement of low-power filters and amplifiers to the precise acoustic properties of the incoming signal.

But Chandrakasan and his colleagues also developed a new signal-generating circuit that reduces the chip's power consumption by an additional 20 to 30 per cent. The key was to specify a new waveform — the basic electrical signal emitted by the chip, which is modulated to encode acoustic information — that is more power-efficient to generate but still stimulates the auditory nerve in the appropriate way.

### Verification

The waveform was based on prior research involving simulated nerve fibres, but the MIT researchers tailored it for cochlear implants and found a low-power way to implement it in hardware. Two of their collaborators at MEEI — Konstantina Stankovic, an ear surgeon who co-led the

study with Chandrakasan, and Don Eddington — tested it on four patients who already had cochlear implants and found that it had no effect on their ability to hear. Working with another collaborator at MEEI, Heidi Nakajima, the researchers have also demonstrated that the chip and sensor are able to pick up and process speech played into a the middle ear of a human cadaver.

"It's very cool," says Lawrence Lustig, director of the Cochlear Implant Centre at the University of California at San Francisco. "There's a much greater stigma of having a hearing loss than there is of having a visual loss. So people would be very keen on losing the externals for that reason alone. But then there's also the added functional benefit of not having to take it off when you're near water or worrying about components getting lost or broken or stolen. So there are some important practical considerations as well."

Lustig points out that the new cochlear implant would require a more complex surgery than existing implants do. "A current cochlear-implant operation takes an hour, hour and a half," he says. "My guess is that the first surgeries will take three to four hours." But he doubts that that would be much of an obstacle to adoption. "As we get better and better and better, that time will shorten," he says. "And three to four hours is still a relatively straightforward operation. I don't anticipate putting a lot of extra risk into the procedure."

### **LETTERS**

My brother was relating a conversation from a man who dealt with hearing dogs. He had to go to a meeting (not related to the dogs) and asked for people to speak up as he could not hear. They were not impressed and snubbed him for the rest of the meeting. So when the meeting ended he made a point of letting people know how "Out of it" he felt. He then asked them to block their ears, whereby he carried on talking, and they

began to understand, and from that day things improved.

I think we have all, at some time. asked people to repeat what they have said, and they have replied that it didn't matter! I for one find this infuriating, maybe if we protest more people might become more aware.

#### **Beryl Hardman**

#### **AGM**

The 2015 AGM will be held at Stockport College on Saturday 28th March 2015. The meeting will be held in Conference Room A at the college and a buffet lunch will be available. The theme for the conference is "Communications Support" and the guest speaker will be Paul Hanmer who has been working with BT on the development of the Next Generation Text Service (NGTS) which replaces TypeTalk. There will be a practical demonstration of the service as well as the opportunity to chat to Paul who is a member of NADP (National Association of Deafened People) and wears HA's.

More details including menus and booking forms will be sent to members closer to the time. Non members are welcome to attend the conference part of the proceedings but may only observe at the AGM.

#### Articles

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. You don't have to be a professional reporter or news writer, we are here to help.

If you have something that you think may be of interest to others either email it to editor@manchestercicada.org.uk or fill in the form online at

http://www.manchestercicada.org.ik/resound -2/ or write to: Hedy Williams, 107 Manchester Road, Hyde, Cheshire SK14 2BX

### Events / Meet ups

This year we want to involve members more in the planning of events very much in line

with the recent meal that we had at Preston where it was a member that suggested the restaurant in the first place. As well as the EC planning larger events we are keen to encourage smaller groups of people to get together from within a smaller geographical area. For exmple if you want to go to visit somewhere or visit a place of interest let us know and we can spread the word to see if others are interested. Just let us know what you are planning and when and we can publicise it. Just send an email to chairman@manchestercicada.org.uk or drop me a line at home see Hedy's address.

#### Facebook

Those of you that have a facebook account are more than welcome to let us know what you are doing by posting on our facebook page. Either search for Manchester Cicada or use the link below:

https://www.facebook.com/groups/10342480 9721314/

### **ReSound Publication Dates**

We are increasing the number of ReSound magazines to 4 per year after this Winters' edition. If you have an article you would to send us then these are the closing dates for submission:

**Spring Edition** 

Closing Date 29th March 2015

**Summer Edition** 

Closing Date 28th June 2015

**Autumn Edition** 

Closing Date 27th Sept 2015

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