

### For people with Cochlear Implants

Summer 2016

Issue 51



"Gaskell House garden"



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 Summer edition of Resound.

We are now well into the year and have already had three events since the AGM which were well attended as reported in this issue.

We have a full program set out as far as next year, the list was published in the last edition of Resound and is also displayed on our website and updated as new information is confirmed.

The website address for the events is :www.manchestercicada.org.uk/upcomingevents-2016/

For those without internet access, details will be posted out about a month before each event.

We have contributions in this issue, with articles from three members this month which I am sure you will find interesting, so if you have a story to tell no matter how small that you think would be of interest to

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other members please get in touch.

We have been working closely with various hospitals to try and reduce the communications difficulties that we sometimes face as out patients or when stayin in hospital and are making progress with several locally.

If you have had a communications issue when using any part of the NHS please let any of the EC know so that we can report back to NHS England

We are well into planning for next year and have booked the Liner Hotel in Liverpool for the XMAS meal and also next years AGM.

Once again everyone on the EC thanks you for your continued support and we look forward to seeing you throughout the year.

Kevin Williams Editor

# **EASY JET VERSUS SNCF: A SUMMER JOURNEY**

#### by John Newton

No contest! SNCF (Societe Nationale des chemin de fer francais plus a few accents) is the government owned French railways as most schoolboys know. My recent encounter with them started paradoxically in Barcelona the capital of Catalonian



Spain. The famous TGV (Train Grand Vitesse i.e. high speed train) which has reached speeds of more than 350 mph extends its services beyond the borders into Spain. Why I was in Spain requires a word of explanation.

My son and his friends keep a boat in Mallorca, "Mowgli"(see photo) lies in a small marina in the north of the island. Most of the time, as is the case with one. To combine a visit to this old friend with my dose of sunshine seemed like a good idea which was why I booked only a one way seat with Easyjet. The wonderful web revealed that I could get back from Mallorca to Buxton and my old friend via a ferry to Barcelona and the various trains to central France and from there, of course various trains home.

Which is why I presented myself to the ticket office in Barcelona's busy main railway station one sunny morning hoping to find a ticket clerk who spoke a bit more English than I did Spanish. My skills with that language are at about the level of the average football supporter and confined to ordering drinks. I had time to reflect that being a poor linguist in a foreign country is just like being deaf, you are aware that people are talking but you cannot make sense of it. Alas I chose a bad time. The French trade unions were having one of their frequent fall-outs with the government. On the following day, when I was committed to travel a general strike was promised. The TGV was going to run normally but it would get me only so far.

pleasure boats of all types, she sits idle and provides a convenient and cheap pied a terre (well a l'eau perhaps) for a poor pensioner pining for Mediterranean sun. So last May I booked a

flight from Manchester

via Easyjet to Palma Majorca. Now, as it happens, I have a very old friend who lives in central France, we met when we were both 18, I hadn't seen her for a few years during which time she has moved to the Cantal and built a house there, a wooden



When I got off it, no-one could tell me whether any other trains would run. Well I did get back to Buxton in one piece. The outward journey involved two airport buses and one flight, the return involved three taxis, one ferry and nine trains! (I try not to

think about the cost, in that sense the plane obviously wins hands down, but does anyone actually like flying? I don't count it as travel at all, it's more like teleportation "beam me up Scotty", being sealed up in a tube for 3 hours, not to mention the

interminable waiting). The train wins everytime. My friends were very hospitable and their house is beautiful but the bonus of the trip was alighting from the TGV in Nimes, in the south of France where my enquiries about connecting trains were met with shrugs and shakes of the head, it was obvious that I would not get any further that day. But Nimes is a beautiful and fascinating town and it was, of course, a splendid summer day. I found a room in a hotel next to the station and set off to explore the famous Roman remains and in the evening found a delightful restaurant straight out of Elizabeth David. The nine trains require a bit of explanation. France is a big country of course and unlike the UK there are almost always various

ways of getting from A to B by train. Every time I enquired about my chosen destinations which initially involved about 3 changes, I was given a different route! Resuming my journey after the strike day I was sent 100km back down the line the

# Italian Orchard get together-May 2016



A group of us met up recently for the first event on the calendar after the AGM and conference. The Italian Orchard is a favourite meeting place for members who live in the north of the region and it was well attended. All enjoyed a delicious meal and a chance to get together to chat. One of the attendees had travelled all the way down from Carlisle which is why we are trying to vary the locations around the region.

way I had come the previous day! After my visiting, the Eurostar from Paris to London was planned as a highpoint of the home leg, I have never ridden it before! I'm afraid it proved a disappointment, the train itself seemed a bit dingy and tired and of course the amazing tunnel is just, well, a tunnel, (and dark!) And the last leg from Stockport to Buxton via the clickety click slow and ancient Northern Trains? Oh dear! When two or three deafened people get together we often talk about the everyday difficulties which our affliction brings, including problems with transport, trains, buses and planes. Many newly deafened people find such situations very difficult and stressful. I am happy to report that even with the language barrier apart from the problems cause by the striking French everything went smoothly for me. What amazed me was how many railway employees spoke passable English. I wonder how many British rail employees are comfortable in a foreign language?

# MRI scans - did you know...?

Magnetic Resonance Imaging (MRI) is one of the most important diagnostic imaging tools for healthcare professionals. MRI scans use powerful magnets to create detailed images of the inside of a person's body. Have you ever wondered just how powerful an MRI scan at 3.0 Tesla is? Did you know that a 3.0 Tesla MRI machine uses magnets up to 600 times stronger than a fridge magnet; that's strong enough to lift a car. With such a powerful magnet, it is important to ensure safety and comfort especially for people with a cochlear implant. This is why MED-EL has developed the SYNCHRONY cochlear implant with its revolutionary selfaligning magnet. MED-EL's SYNCHRONY implant allows MRI scans at 0.2, 1.0, 1.5, and now 3.0 Tesla, without the need for surgeries to remove / replace the implant magnet, no discomfort, and no hearing downtime.

# Rubies, Gold, and Platinum: What's Inside Your Cochlear Implant?

### by MED-EL

#### So what is a cochlear implant? How does it work?

MED-EL has been handmaking cochlear implants for over 25 years, so we know exactly what it takes to do it right. Now, you get the chance to see a break-down of the precision components and high-tech engineering which go into creating a cochlear implant.

### The Parts of a Cochlear Implant

We're going to strip a cochlear implant down to its very basics, so here are the five main parts:

- 1. The electrode array
- 2. The electronics
- 3. The titanium housing
- 4. The gold coil
- 5. The magnet

This is how these five parts all work together.

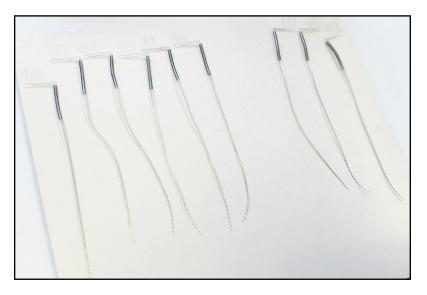
Now, let's dive in.

### The Electrode Array

An electrode array is what carries sound information to the cochlea. It is a long, soft, and flexible line of silicone which contains up to 24 ultra-thin wires made out of platinum and iridium.

One end is connected to the cochlear implant's electronics. The other end has contacts that sit right next to the delicate hair cells in the cochlea.

Only the very tip of an electrode array is actually inserted into the cochlea; the rest covers the distance from the implant, which rests under the skin just behind the ear, all the way to the cochlea.

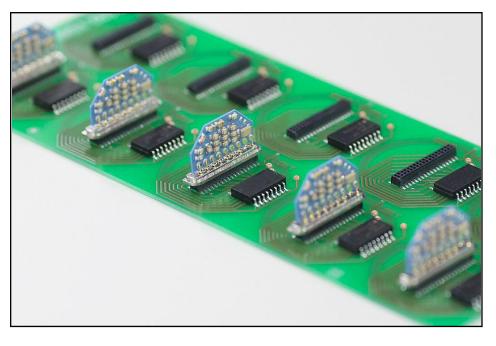


Cochleae come in many different shapes and sizes, so MED-EL electrode arrays do too. Some MED-EL electrode arrays are as short as 15 mm, while others are as long as 31.5 mm.

At their widest, electrode arrays are approximately 1 mm wide, and at the very tip they are as thin as 0.3 mm. Here's what some just-finished electrode arrays look like.

The electrode arrays deliver sound signals directly to the cochlea, but where do these complex signals come from?

That's where the electronics come in.



#### **The Electronics**

The electronics receive information from the audio processor, and converts it into electrical pulses that the cochlea understands as sound.

The power of a cochlear implant's electronics is measured by how much of this information it can send to the cochlea. The latest MED-EL electronics, those

used in implants like the SYNCHRONY, are able to send 50,704 pulses per second across 12 channels.

MED-EL electronics have 12 individual power sources, so they can send this information to different parts of the cochlea at the same time. That's like the difference between playing a piano just one finger at a time, or being able to play with both hands for full and resonant chords.

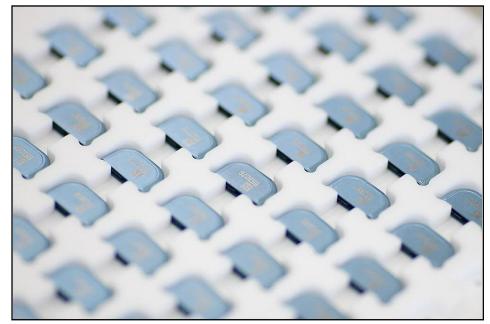
These twelve power sources are each insulated with ruby crystals for the highest sound quality. Here are the electronics for five cochlear implants. These ones are connected to a circuit board that we use to test their performance before they're incorporated into a cochlear implant.

The electronics are kept safe inside a robust titanium housing.

#### **The Titanium Housing**

A single-piece titanium housing is responsible for protecting the electronics, which are inserted into this housing and then laserwelded shut.

We use titanium because it's an incredibly strong metal, and doesn't react to magnetic fields like those of an MRI. A MED-EL cochlear implant is only 4.5 mm thick, and the titanium housing itself is just fractions of a millimeter thick, but titanium is so strong that it can withstand impacts of up to



2.5 Joules—strong enough to protect you from falls, impacts, and other surprises you might encounter during your life.

Here's a tray filled with housings that will become cochlear implants.

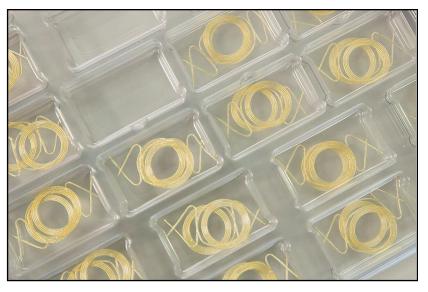
### The Coil

The coil is what picks up the sound signals from the audio processor. The information is sent through electrostatic induction, and

works in a way that is similar to wireless charging.

Each coil is made of approximately 50 cm of pure, 24 karat, gold wire. We use gold because it is both naturally corrosion resistant and highly conductive, which means that the electronics receive only the highest-quality signal.

Each of the coils starts as a straight wire and is wound by hand into a spiral. Here's what coils look like just after being wound. Later, they'll be welded to a cochlear implant's electronics.

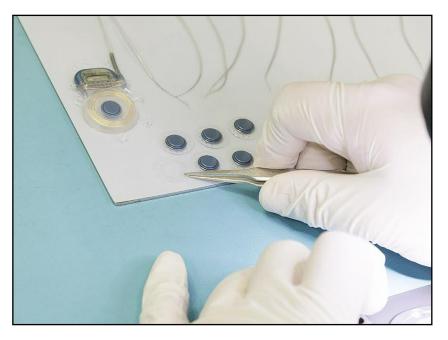


The implant coil and audio processor coil need to be perfectly aligned to send sound information, so they're connected by magnets.

#### The Magnet

And finally, we have the magnet. It's the magnet which keeps the external audio processor coil securely in place, so that the implant can receive the all-important sound signals.

One of the main considerations when designing a magnet is MRI. MRIs interact with all magnetic materials, and can be strong enough to lift a car, so it's important to have a magnet that can



withstand this strength.

The SYNCHRONY Cochlear Implant features our most revolutionary magnet design ever. It has a unique diametric magnetization, and freely rotates within its own laserwelded titanium housing.

That means it can withstand high-power, 3.0 Tesla, MRIs without needing to be surgically removed, unlike any other cochlear implant available.

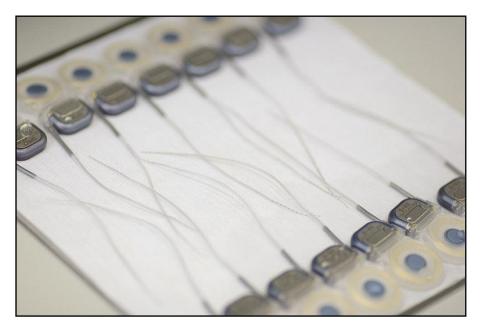
And, it's held firmly in place thanks to a polymer stiffening ring, which protects it against

being accidently dislodged during MRIs or other activities.

Each of these blue discs is a magnet that will go into a cochlear implant:

#### The Completed MED-EL Cochlear Implant

Here's what a tray of brand-new MED-EL cochlear implants looks like, before they're sent on their way from our Austrian headquarters.



Once all of these parts are put together, they're sealed up in a silicone form for protection.

The completed cochlear implants are packaged in a sterilized kit, sent to hospitals and clinics around the world, and implanted to help hundreds of thousands of people regain their ability to hear.

### **A chance Meeting**

by Norah Clewes

I was in Chester on July 2 when the city was commemorating the centenary of the Battle of the Somme. From the Bridge Street Row I had a grandstand view of the regiment of soldiers marching back to the Castle from a service in the Cathedral.

I think this is the first time since my implant I have seen a march like this live as opposed to television and hearing the live band and found it very moving especially as one of my uncles was killed on the Somme.

Afterwards, I was hurrying along Eastgate Street

when someone stopped me – it was Brian Johnson who had his implant the same year as I did, in 1996. I have not seen him for quite a few years though we were among the early members of Cicada.

Brian has a way of speaking that I understand

very easily so I enjoyed catching up on all his news. He now lives in Harrogate and has transferred to the C I centre in Bradford. Due to an infection he had to have his implant replaced and has found his new one gives him better perception of music. Now he has got out

his violins and is playing again.

We spent some time catching up other news, life in general, and our old friends from the early days of Cicada. All this, standing in Eastgate Street with a flow of shoppers and visitors surging around us! Luckily, buses are now

excluded from that part of the city so traffic noise was low but I am still amazed to have such a good chat there and then before I had to dash for my bus - Thanks Brian! (Brian is on the right of the picture with a blue jumper at a CICADA XMAS meal in Chester)

### **The Gaskell House tour**



84 Plymouth Grove, now known as Elizabeth Gaskell House, is a grade II listed neoclassical villa in Manchester which was the residence of William and Elizabeth Gaskell from 1850 until their deaths in 1884 and 1865 respectively. Elizabeth Gaskell was a noted literary figure in Victorian times and was associated with Charles Dickens and Emily Bronte among others. The house style is rare in Manchester and many other buildings from the same time have since been knocked down. The house fell into disrepair due to neglect but was saved by the Manchester Historic Buildings Trust and the restoration project was completed in 2014.

In late June we organised a private tour of the house and gardens finishing off the tour with



tea and cakes. We began the tour outside the house because the weather forecast was for rain and a soggy start to the visit would not have been enjoyable. The guide explained how the process of restoration was not just about refubishing the building but was also about returning the gardens to look as they would have done over a hundred years ago. This meant amongst other things trying to grow plants and flowers that we don't see very much these days.

The House was rented for the grand sum of  $\pounds 150$  per year and in its time was actually in the countryside on the edge of Manchester as it was then and provided the wind was not in the wrong direction, it was relatively smoke



free! Once the outside tour was complete we were given comprehensive tour of the house and a few explanations of what life was really like in those days. There were as you can imagine lots of examples of antique furniture and a collection of books that would have done justice to an episode of bargain hunt.



Each room had fascinating items in it and the attention to detail was impressive. Who would have thought for example that when laying out a table for dinner the spoons would have been placed with the back of the spoon uppermost, to keep out the soot!

The tour came to an end with a delicious tea with generous helpings of cake.

# **Twenty Years later**

#### by Marion Leeming

It was quite something to realise that it has been 20 years since Roy had his cochlear implant.

Whatever happened to all those years? Yes, it sounds like a long time, and maybe it is when you're young and looking ahead. But when you're older and looking back it's passed before you



realise it!

We were working with a Mission in Central Africa, building a hospital, seeking to help people who desperately needed help in quite a remote area. I call it "Central Africa" because it was always changing its name. Then, it was the Republic of Zaire, it changed its name to Congo, then to the Democratic Republic of Congo, and it could always change again, who knows? When we went there originally it was the Belgian Congo until Independence in 1960.

You think of building something, going to a builder's merchant, ordering bricks, cement, wood, roofing materials, etc. Not so! Need bricks? Make them! Find suitable soil clay (ants know just how to build, so find a good big anthil!).

Make moulds, find a good stream running downhill, make a detour to bring water into the brick making area, and get making them! When you have dried a good few thousand in the sun, make them into a kiln. Cut the wood to burn the kiln... Tons of it! Organise trustworthy workers to stay awake night and day whilst the kiln is burning, and until the fire comes through the top.

Incidentally if you can get any coffee, this is where your wife provides flasks of it - sweet and strong - to keep the night workers awake! Sixty or seventy thousand bricks take seven to nine days to burn through.

That is only the bricks. Need sand or gravel for mixing the cement? - when you've done an arduous 900 Mile round trip to the one and only cement works in the whole area - find sand, find gravel, build a road in order to reach them, go out with the lorry to go and get them.

Well that's how it goes. Incredibly hard work. Need wood for lintels, roofing trusses? Go and find suitable trees and chop them down. Provide the tools etc. to make planks, beams etc. Somehow get those trees to the roadside where they can be picked up and brought in for sawing.

That was where the tractor came in handy. Dragging those huge trunks to where the lorry could reach them. The roofing iron sheets had to be bought in our big town and transported on the lorry. Two days to get there, could even take longer in the wet season, and two days back home. Thirty to forty hours driving a four-wheel drive five ton Bedford on unimaginable roads.

How does this fit in with a cochlear implant? Well, Roy had lost his hearing in one ear, possibly due to an infection and we did not have enough antibiotics to treat it. Then, suddenly the other ear began to cause problems. He couldn't hear at all. I was writing everything for him. Oh, yes, learn to lip read, in which language? English, French, Kiluba? Then he was out on a road with a group of workers, repairing a huge metal drain which had collapsed. He had taken large sheets of metal to rebuild the drain, dug up the road all around it, and with the generator they were welding the new sheets in place. Roy stood up on the drain, not knowing that one of the workers had his fingers trapped, holding the sheet in place. Of course he couldn't hear the shouts at all. The poor guy's hand was a mess. Had to stitch his wounds, it was awful.

Roy came home deeply distressed, and kept saying: "We'll have to go home, I can't continue like

this!" We were due for furlough, so shortly after that incident we came home to try to get some help.

At first Roy just had two huge hearing aids, they did little to help, just distorted everything. Then we were having a meal with a friend who was a doctor. We picked up a magazine in her living room - The Lancet? - and read an article about cochlear implants. Roy became excited, "That's what I need!" So we eventually persuaded the ENT department to refer him to the cochlear implant program at the Manchester Royal Infirmary, who were fantastic and immediately came up with the possibility of giving him an implant.

We saw Professor Ramsden on the 14th April 1996 and he said he would do the operation subject to a satisfactory scan. I think he was touched by the fact that we were building a hospital in Africa, and needed to get back there. When we asked how soon it could be done, he said, "The end of the month!" It wasn't actually, because the person who authorised the scan

was on holiday, but the operation took place on Roy's birthday, May 16th! And all went well apart from a reaction to the antibiotics.

Of course there had to be hitches. The big one was finance. In those days the NHS did not fund implants. The hospital would apply to one's local authority for the funding, which in those days was circa £25,000. The fact that we didn't have a fixed address in the UK, we were only in this country for a few months, meant that we didn't have a local authority What? The bursar at the Hospital thought we were foreign visitors! Not so, we explained, we are local people and all our contributions are up to



date. Eventually he said perhaps we can get help for you from another source. Just two days later we saw Deborah Mawman, who waved a fax at us and said, "Yes, the funding is through". We had half the world praying for this to happen, who says God doesn't answer prayers?

It should have been 4 weeks to switch on, but this was shortened to two weeks to enable us to get back to Africa sooner. Fabulous! Roy could hear straight away. Said we all sounded like chipmunks, but so what? He heard just what I said even when he couldn't see me!

When we walked outside immediately he could hear a blackbird singing. It was unbelievably exciting. Things he thought he'd never hear again! All of a sudden my arm recovered - I'd had a tennis elbow from constantly writing, filling notebook after notebook with my scribbles trying to keep Roy in touch with what was being said. Yes, there were things that didn't sound right. He hated the hissing of the pressure cooker, and scrunching tin foil was, and still is, another hate, rustling plastic bags another thing, and water running into a stainless steel sink sounds like a big road drill! But he hears on the telephone and can often tell who the caller is, and recognise accents even of strangers!

Roy adds ... After 13 years some of the electrodes in the original implant stopped working properly resulting in a loss of clarity. I was re-implanted with a new device which has worked wonderfully well since day one. The second implant itself was a much simpler procedure than the first with a much smaller incision behind the ear. See the photo above.

The transition was seamless apart from, I might add, the awful silence I endured in the week or so between the operation and the new switch on. Before the original implant I had a small amount of hearing, but after the second implant 'deafening' silence. Whoever said that silence was golden? At times during the day when my batteries fail and silence descends, I find myself saying, "It must be awful to be deaf"





Calif.--(BUSINESS WIRE)--Advanced Bionics (AB) and Phonak announced today the introduction of the new Naída bimodal hearing solution featuring the Phonak Naída™ Link, the world's first hearing aid offering full-bandwidth, bidirectional audio streaming with the Naída CI sound processor from AB.

Using shared technology co-developed by AB and Phonak, the Naída devices are able to communicate with each other in a way no other hearing aid and cochlear implant combination can match.



"This breakthrough in bimodal hearing means we can deliver better hearing to more people affected by significant hearing loss and that's always our goal" "After years of combined efforts in audiology, R&D and product management, we are delivering a game changer in technology. Two Naída devices — a CI and hearing aid can now use the same advanced automatic technology and stream the audio signal from one side to the other. This means they can respond and adjust the same way to changing listening situations, as if they are one system," said Dr. Hans Mülder, Marketing Director at Phonak Communications AG. "It is very rewarding to see AB and Phonak delivering on the expectations that were raised when the two companies came together."

By transmitting audio information as well as sharing automatic features, controls, and the wireless Roger<sup>™</sup> system, the AB and Phonak Naída devices make it easier to hear with them together.

Studies show that this provides a proven advantage for hearing in noise and greater listening comfort compared to using a cochlear implant and any other hearing aid.

Approximately 40% to 60% of cochlear implant recipients are considered "bimodal", which means they wear a hearing aid on one ear in combination with using a cochlear implant on the other.3 "This breakthrough in bimodal hearing means we can deliver better hearing to more people affected by significant hearing loss and that's always our goal," said Hansjuerg Emch, President of Advanced Bionics and Group Vice President of the Sonova Medical Division.

The Phonak Naída Link hearing aid will be available starting this summer in the United States and Europe.



# Pets can be deaf as well

My wife swears I have gone deaf at times, but somehow I can always hear my neighbour open a beer next door and call me over for some garage time. We all experience progressive hearing loss over the years and some of us adapt better than others. The same hearing loss is experienced by our pets — dogs more so than cats. Deafness interferes with our pets' interactions with us and their environment, and can take some time for adjustments, particularly if that deafness happens suddenly. Dogs and cats hear at low frequencies similar to us, but can

detect sounds at much higher frequencies than humans. Cats especially have a very wide range of hearing. Sound waves travel through the outer and middle ear to the cochlea within the inner ear.

The cochlea is a very complicated organ, but essentially contains very tiny hair cells that processes sounds and sends the information to the brain. Some deafness is congenital, meaning the pet is born deaf. This is common in white cats, and also in dogs with various types of colourdiluent genes. However, most dogs and cats that experience deafness do so later in life.



There is also selective hearing loss, which apparently only occurs in the human male, so I've been told. Later onset deafness is either "conductive" or "sensorineural."

Conductive deafness results in sound waves not able to reach the inner ear. This can happen with ear infections (otitis), growths in the ear, and gradual deterioration of the little bones in the middle ear. Ear infections are usually associated with itchiness, redness, and a bad odour, but some middle or inner ear infections may only have pain or a head tilt as a sign.

Sensorineural deafness occurs when the tiny hair cells in the cochlea are damaged. This can occur with loud sounds; I am sure many of us have had hearing loss from rock concerts in the past. For pets, the use of loud equipment, particularly for landscaping, farming, and hunting can lead to hearing loss very quickly. Dogs used for military purposes and those that live in large noisy kennels are also susceptible to this type of deafness.

Sensorineural deafness can also occur as a side effect to some drugs and anesthetic in both people and pets. If a medication that your pet needed caused deafness then discontinuing the product may allow a gradual return of hearing. Post anesthetic deafness is rare and the speculated causes remain to be confirmed.

Here is a great word: presbycusis. This refers to degeneration of the structures of the inner ear with age and thus eventual deafness. We usually don't detect hearing loss in pets until it is almost gone, and so we often think it is sudden. Dogs and cats respond to visual stimuli, vibrations and smell, so they accommodate for deafness much more than humans. However, there are signs of deafness that owners can pick up on. If the pet does not know the direction a sound is coming from, or does not rouse from sleep without physical contact, deafness is very likely.

To determine if your pet is deaf, your veterinarian can conduct a physical exam and evaluate the outer ear up to the ear drum. But there is no way to see the middle or inner ear without the use of imaging such as MRI.

However, observing the movement of a pet's ear flaps to sound can be a simple clue to determine if hearing is present or not.

A neurologist can conduct tests such as the **BAER** (brainstem auditory evoked response test)

and otoacoustic emissions tests to further evaluate the degree of hearing loss.

Although there is research into hearing aids for pets, none are readily available, and it is difficult to get dogs and cats to tolerate them. Deaf dogs should always be on a leash and in a fenced yard and not be allowed to roam freely. As well, people should be cautioned not to startle deaf animals, or the pet may bite when roused suddenly.

There is information on the internet on how to use visual hand signals for "talking" to your pet—sort of like sign language 101 for dogs and cats, if you may (

http://www.lsu.edu/deafness/Hand%20Commands.htm

or https://www.youtube.com/watch?v=uUcWNnaoniw ).

The old adage that you can't teach old dogs new tricks just isn't true, especially with a lot of love and patience. Our pets are tougher than us and they can adapt to hearing loss (and loss of sight) within weeks to months, and function and interact with their owners as well as before.

Additionally, they are great at reading our facial cues and interpreting what we want. Unfortunately though, I must point out that there isn't much hope for improvement from "selective hearing loss" in the human male.

Rom Mergl is a veterinarian with a practice in Niagara Falls Source: Postmedia network

### Animals used to prove a somewhat tenuous theory

It seems that research groups will go to extraordinary lengths to prove a "scientific fact" using animals as guinea pigs. Try this one for the "smell the coffee test" A coffee may seem like just the trick to soothe your head after a night clubbing or wailing along to a concert. But that allimportant latte could have a devastating impact on your hearing, a new study claims.

According to research by McGill University in the United States, daily consumption of caffeine blocks the ears from recovering after temporary hearing damage. Ears usually recover from exposure to construction noise, loud music or airplane sound within 72 hours.

However, experts at McGill warn regular coffee could hamper that recovery - even making the damage permanent. 'Our research confirmed that exposure to loud auditory stimuli coupled with daily consumption of 25mg/kg of caffeine had a clear negative impact on hearing recovery,' says Dr Faisal Zawawi, an Otolaryngologist and member of the McGill Auditory Sciences Laboratory. 'When the ear is exposed to loud noise, it can suffer from a temporary hearing reduction, also called auditory temporary threshold shift. 'This disorder is usually reversible in the first 72 hours



after the exposure, but if symptoms persist, the damage could become permanent.'

Dr Zawawi's team tested the theory on animals, exposing them to a sound of 110 dB - similar to the noise of loud concert - for one hour. Half the animals had a daily dose of caffeine, the other half had no caffeine.

After the first day, there was no difference between the two groups' hearing recoveries. But after eight days of tests, the group consuming regular doses of caffeine showed significant hearing impairment compared to the other half.

The maximum recommended intake of caffeine is 3mg/kg a day - the same as three 8oz cups of coffee. Many sodas wildly exceed that guideline, containing more than 200mg per can.

Source: Daily Mail -- 'Poor animals I say' (Ed)

### A Visit to the Lakes

#### by Kevin Williams

A group of us recently took a coach trip to Coniston in the Lake District to cruise on the steam ship Gondola. This was a victorian steamship that had once been a derelict vessel in Coniston water and had been raised and restored by the National Trust.

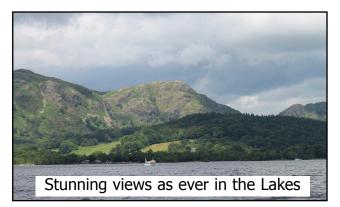
As can be seen from the photographs below, the restoration work has been very successful and the boat is as it would have been in the last century. We all enjoyed a cruise up and down the lake and once back at the jetty we all enjoyed a delicious meal. After a stroll around to take in the stunning views we set off back home.













### Video Relay service in Scotland

The UK's first ever national Video Relay Service (VRS), contactSCOTLAND-BSL, has been commissioned by the Scottish government to run for the next three years.

Thousands of deaf people in Scotland stand to benefit from the free service.

ContactSCOTLAND-BSL is a ground-breaking Video Relay Service delivered by Sign Language Interactions in close partnership with InterpreterNow and nWise AB. Deaf people can call over 130 public organisations and thousands of third sector and voluntary organisations in Scotland via a video call to a sign language interpreter.

Organisations that can be called include Scottish government departments, councils, health boards, hospitals and GPs, as well as the NHS24 and Police Scotland 101 nonemergency lines. The award of the contract, after an open tender competition, follows a highly successful year-long pilot that was funded and evaluated by the Scottish

government.

Over 6,000 calls were made by deaf people during the pilot and this number is expected to substantially increase over the next three years.

The service can be accessed through any internet-connected computer with a webcam, as well as free apps on Apple and Android smartphones and tablets. Deaf people can make a call to a fully gualified British Sign Language (BSL) interpreter who will phone a service or organisation on their behalf. The interpreter will sign to the deaf person via the video link, speak with the hearing person over the telephone and relay the conversation back and forth.

Using the service gives deaf people the opportunity to make a video call in their first language; a smoother and faster experience for all call participants compared to text-based relay services.

### **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

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.

A big thank you to contributers to this issue, NorahClewes, John Newton and Marion Leeming.

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