

# CICADA CHORUS

The Magazine of CICADA Queensland (Cochlear Implant Club and Advisory Association)  
Patrons: Dr Anthony Parker MBBS FRACS and Dr Christopher Que Hee, ENT

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## FEATURE STORY

# 2018 CICADA Queensland Cochlear Implant Recipient of the Year Award

The winner of our annual Cochlear Implant recipient of the Year Award is Penny Phillips, our Sunshine Coast Representative.



Penny has previously acted in various roles within the hearing loss community for a long time. She was responsible for the success and ongoing performance of the Sunshine Coast Better Hearing Branch until the Branch folded a few years ago. Penny performed many roles in the organisation and was a loyal and proactive member until the end. She was Secretary for 12 years.

Penny grew up in a small village in Devon, England, and upon leaving school worked as a telephonist in a local newspaper office. She married a journalist and it was after the birth of her first baby that she noticed a small deterioration in her hearing, followed by a mild dose of German Measles and after this her hearing got worse, she said.

Her next adventure was migration to Australia, and soon after the birth

of her second son her hearing levels again dropped and she was advised that perhaps she shouldn't have any more children (it was never really confirmed that birth was the reason for her hearing loss).

She worked for the NSW Department of Education in Sydney and joined Better Hearing Australia to learn lip-reading and coping skills. She found this confronting as it made her realise she really did have a hearing loss problem as for so many years she bluffed her way through. After so many years she realised she could no longer cope in that work environment and so she resigned. She was later fitted with hearing aid in her other ear.

In 2012 she had a big drop of hearing in one ear and a visit to a ENT specialist resulted in her being asked "Why haven't you had a cochlear implant?" She thought long and hard about this and it took her a good 18 months to decide if she really wanted an implant, and so on March 14, 2014 she joined the world of the cochlear implant recipient, and hasn't looked back since and says she is glad she never missed out on the journey.

Penny is now our Sunshine Coast Representative and her hard work and get go has seen the Branch grow from just 4 to incredibly some 24 members. She is a valued and popular member of the CICADA Queensland committee, with all of us saying she is very proactive and an inspiration. Penny's future plans—a second implant and upgrade processor in 2019. Congratulations Penny!

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## ANNOUNCEMENT

This year we turn 30! In 1989 a small group of the first Queensland CI recipients met for an informal BBQ at a then popular Brisbane picnic spot... two years later saw the birth of our first newsletter... haven't we come a long way in 30 years?





*"One cochlear implant is great, but two is fantastic...  
Now I'm not looking back, I'm never looking back."*

– Geoff Read, Sutherland

# HEAR THE WORLD IN STEREO

**Do you have one ear with a cochlear implant or Baha® device?  
Ever thought about getting your other side implanted?**

- Do you have significant problems hearing in noise?
- Do you find you need to position people on your implant side to hear?  
e.g at the dinner table

If this sounds like you, reach out to your hearing health professional to discuss the benefits of a second implant.

For more information visit [www.cochlear.com](http://www.cochlear.com)

Please seek advice from your health professional about treatments for hearing loss. Outcomes may vary, and your health professional will advise you about the factors which could affect your outcome. Always read the instructions for use. Not all products are available in all countries. Please contact your local Cochlear representative for product information. Views expressed are those of the individual. Consult your hearing health provider to determine if you are a candidate for Cochlear technology. Outcomes and results may vary. Cochlear, and the elliptical logo are either trademarks or registered trademarks of Cochlear Limited. © Cochlear Limited 2019.



## President's Pen

Welcome CICADA Queensland members, families and friends, to 2019.

Here is a quick reflection on what CICADA Queensland has achieved as a Club in 2018. It was the Club's best year yet for income and this was achieved by donations, members supporting raffles at functions and the purchasing of batteries. The 2018 year was also a year for change.

New ideas were instigated to help people who are Deaf. First came the Medical Alert! USB wristband that has been accepted by all ranks of Medical facilities all over Australia.

Then came the book on "Everything you need to know about Cochlear Implants" which was launched at our Christmas function. This booklet was the brainchild of our Sunshine Coast Representative and Cochlear Implant Recipient of the Year Penny Phillips, and produced by Josie McMahon and Shirley Edwards. An updated brochure was also launched at this event.

The book has now been received in Audiology practices all over Australia. The book is free because it is supported by cochlear implant manufacturers, but CICADA Queensland asks for a donation towards administrative costs in producing the book. You can email [secretary@cicadaqld.com.au](mailto:secretary@cicadaqld.com.au) if you would like to have a copy or two sent to you by snail mail.

Now to 2019—we are starting the year with a great committee where every member has their own area of expertise be it Finance, IT, and so on. The whole committee is an asset to our CICADA Queensland Club.

The North Coast committee representative Penny with a little help from other committee members is finalising a Hospital pack to help Deaf and hard of hearing people communicate with staff during their stay in hospital.

I would like to remind members about the Smoke Alarm Legislation. From 1 January 2017 when replacing smoke alarms, they must be of a photoelectric type that complies with Australian Standards. If you are over 60 years. Home Assist can help with the installation. Home Assist Services is a government body helping people stay in their homes. Another place to get information from is the Queensland Fire and Emergency Service Community Safety Smoke Alarm section.

Finally, I congratulate CICADA Queensland on turning 30 this year!

Until next time...

Stephen Willis,  
President



We are now registered for returns of cans and bottles, and the good news is our account is now activated!

To find out where your nearest drop off point for the cans and bottles are, visit <https://www.containersforchange.com.au/where-can-i-return> and enter your postcode.

The magic number you need is C10055414—keep a note of this number in your purse or wallet of this number so that it is always handy.

## MARKETING PERSON URGENTLY NEEDED

CICADA Queensland is constantly expanding therefore we are in need of a marketing person to promote our organisation.

Tasks include all areas of marketing and promotion of our events and services. Experience is preferred but not essential as we are willing to train the right person who can develop a marketing strategy that works for us.

To apply, please send your resume, references and a proposal on how you can promote us to [secretary@cicadaqld.com.au](mailto:secretary@cicadaqld.com.au).

This is a fantastic opportunity to gain real field experience for your resume. The committee you will be working with are a positive, dedicated, happy bunch and great to work with.

If you would like to know more about this position please email the secretary at [secretary@cicadaqld.com.au](mailto:secretary@cicadaqld.com.au) who will send you a position description on request. For more information about our charity, visit [www.cicadaqld.com.au](http://www.cicadaqld.com.au)



Pictured right are some who attended and enjoyed the Northside Christmas Party at Fish on Flinders Cafe, Sandgate.



Pictured left are some of the 22 people who attended the Sunshine Coast celebrations on 27 November at the Sunshine Castle. Everyone left with a Christmas gift and a great time was had by all.



The main Christmas Party and Awards function was held on 1 December at the Ship Inn, Southbank. The Christmas lunch buffet was delicious and enjoyed by all. Everyone had a great time catching up and thoroughly enjoyed themselves. All were delighted to receive two gift bags of goodies to take home.

Two guest speakers, CICADA Queensland Patron, Dr Chris Que Hee and Dr Tracey King from Oticon Medical, were present. Dr Que Hee shared his personal experiences of implanting patients over the years and seeing their lives change as a result and Dr King from Oticon Medical gave a presentation on new CI products available from Oticon Medical.

Three awards were given out to worthy recipients. Firstly, the Cochlear Implant Recipient of the Year 2018 Award was presented to Penny Phillips, our Sunshine Coast Representative. It was Penny who instigated the idea of having a single information resource on cochlear implants for anyone considering them. We have since received many requests from audiology clinics all over Australia for copies of this resource.

The second award went to Josephine McMahon (Magazine Editor) who was unexpectedly awarded the Unsung Hero Award, with the third award going to a very surprised Shirley Edwards (Secretary) who was presented with a Certificate of Appreciation for her hard work over the years. Raffle prizes were drawn and one person won 4 times! Thanks to Cochlear and MED-EL for contributing to our prizes bank. All the winners went home happy!



All the 2018 Raffle winners!



Guest speaker Dr Tracey King, Oticon



Certification of Appreciation for Shirley



Guest speaker Dr Que Hee



*Christmas Function 2018*



*Michael & Jenny Wishart*



*Two attendees hamming it up!*



*Unsung Hero Award, Josephine McMahon*



*Laura Dickson & Carol-Anne Greensill*



*Cochlear Implant Recipient of the Year, Penny Phillips*



*Product Information display*



*Dr Tracey King & Shirley Edwards*



*A sumptuous feast and conversation enjoyed by all!*



*Raffle prizes display*



*Serial raffle winner spoils!*



Three important areas of research reported in the Bionic Ear Institute Annual Report of 2017-2018 (*Transforming lives*), the first of which reveal that Dr Rachael Richardson and colleagues are using an exciting new research tool called 'optogenetics' to activate the auditory nerve with light, which can be focused more precisely than electrical stimulation.

In this second report it is said that 1 in 1000 babies are born with permanent hearing loss in Australia. The ability to hear in early life is crucial for the development of brain networks than that are involved in language perception and speech. Many children with a hearing disability will start their educational journey a long way behind their classmates—a gap that starts at infancy and puts them at a life-long disadvantage.

The creation of a new clinical system that will change children's lives—EarGenie is an exciting development. EarGenie aims to optimise language development in deaf infants by using several measures of brain activity, including a technique called functional near-infrared spectroscopy (fNIRS), to provide a detailed hearing assessment. Using the new technique provides a non-invasive way to image



brain activity using light sources and detectors which are placed in a cap on the head. This method allows researchers to see how infant's brains are responding to speech sounds in more detail than offered by current clinical tools.

At diagnosis EarGenie will enable a more comprehensive hearing assessment so that an appropriate hearing device can be confidently selected and programmed. It will allow clinicians to confirm if an infant can hear through their hearing device and adjust to their individual needs. The outcome of this research will greatly assist audiologists to establish the optimal settings of infants' hearing devices.

The third report involves hearing loss due to noise damage. In Australia alone, the economic cost of hearing loss is estimated at \$33.3 billion a year—a cost that is rising with the ageing population. Hearing loss not only impacts our ability to communicate with loved ones but is associated with cognitive decline, social isolation and depression. The need to develop a therapeutic intervention to treat hearing loss is a high priority and most effective strategy would be

to repair cochlea damage before it becomes a debilitating condition.

Cochlea damage can result from noise exposure throughout life and the consequence is typically noticeable in noisy situations, such as a crowded restaurant. Unfortunately, this condition is likely to worsen as more hair cells and their connections are lost. Once established, such hearing loss is a permanent impairment and hearing devices are the only treatment option available.

*Exciting times ahead in the field of research which bodes well for future treatment of hearing loss*

The team of researchers are working on different drug delivery methods and have developed a way to administer neurotrophins by 'loading' them into tiny particles created through nanoengineering. Preclinical studies are now being conducted to determine how well this therapeutic system works in repairing cochlea damage.

Source: 'Transforming Lives' Annual Report 2017-2018 Melbourne

**QSC** has released a new accessibility product for the cinema. Called the USL CCR-100, this is a wireless device similar to CaptiView.

The rectangular box is connected to a flexible arm which clamps onto your seat's cup holder rather

than sitting in it. The text is green on a black LED screen.

The device is designed with



custom optics which displays the captions as a virtual image to assist viewers in focusing between the captions and the screen. The unit can be used in any seat in the cinema.

USL also has a glasses product similar to Sony. A demonstration of this device is available on YouTube at <http://bit.ly/2MBGmlH>

*Editors Note: this option is not considered as optimum as having open captions displayed on the main screen.*

Source: <http://bit.ly/2rXMod2>



## A BIT ABOUT CAPTEL ...

It doesn't matter which provider you use, whether Telstra, Optus, Vodafone or TPG, all offer a range of phone and internet bundles (packages). It's like looking for a new car; there are so many car companies to choose from.

A basic package (or bundle) for a phone and internet connection costs \$59 per month. For consumers requiring large amounts of internet a more expensive bundle is needed (typically over \$150 per month).

The CapTel doesn't download large videos or pictures, it just displays text on a screen. The CapTel does not require a lot of internet so the



'basic' package is enough if customers are unsure about which one to purchase. New customers do not have to be with Telstra. TPG, iiNet and Optus are other providers that can use the phone.

*Are there plans for a return of a representative? We get enquiries about who to contact!*

At present, Accesscomm is not hiring more staff in Brisbane. New customers can contact 1300 107 546 or email [info@accesscomm.com.au](mailto:info@accesscomm.com.au) to place an order. Phones can be delivered from Accesscomm's Gold Coast premises. Our technical support department is available for any IT issues.

## ANOTHER HANDY TIP...

As we all know, it is difficult to wear caps and hats due to the external magnet. A member told us that prior to his surgery, he asked his surgeon to place the magnet lower so he could wear a hat.

A good idea!!

## IN CASE YOU NEED TO KNOW ...

Processor release dates:

- Nucleus 5 in 2009;
- Nucleus 6 in 2013;
- Nucleus 7 in 2018.

## BLUETOOTH ACCESSORIES...

Costco has advised that the purchase of a Bluetooth / streaming accessory such as a Phone Clip is possible even without aid purchases for members at Costco. The approximate cost is around \$300.

What may be required with the Cochlear Nucleus programming (or any other Resound or manufacturer's aid) is some sort of "auto relate" or



applying settings in the software to the aid's Bluetooth program settings. The member would need to seek that programming assistance from their original provider.

Costco only requires a full test of the equipment if needed given the individual circumstances of the member.

Costco will book a pickup appointment of 30 minutes to exchange signatures, but the member may have to return to their original provider for

any adjustments to "autorelate" or apply programming settings to their streaming programming as indicated. Pairing should be completed during the pickup appointment.

Please do not hesitate to contact the clinic if you want to book an appointment or have any queries.

Loura Oosthuizen, Centre Audiometrist  
 Phone: (07) 3482 8631  
 Email: [W05106-hearingaid@costco.com.au](mailto:W05106-hearingaid@costco.com.au)  
 Website: [www.costco.com.au](http://www.costco.com.au)

## CAPTIONED!

Kudos to Strathpine Library for showing subtitles on their in-house television (sighted 3 November 2018)

The APT9 Cinema at the Queensland Art Gallery of Modern Art is hosting a Bollywood Film Festival until 27 April—all films have English captions and are free. Visit <http://bit.ly/2MhDqAx> for information on movie titles and session times.

An awareness campaign called CapThat! has provided a listing of all online educational and entertainment video services with embedded captions on their website: [www.capthat.com.au](http://www.capthat.com.au)

[com.au/find-captioned-content/](http://www.capthat.com.au/find-captioned-content/)

Microsoft has recently announced the introduction of subtitles to their Skype and PowerPoint software. Yay!

How do you get subtitles on Skype? It's easy! Here's how:

- Select Settings (3 dots next to your name on left hand side).
- Select Callings.
- Select 'show subtitles for all voice and video calls'.

What about on YouTube? First do a general search of the key terms of the video or type of video

you want to watch.

- From the search results page, click on 'Filter'.
- Under 'Features' select the 'Subtitles/CC' option.
- Videos with closed captions will have 'CC' indicated after its description on the results page.

**Q:** Why did the computer crash?  
**A:** It had a hard drive!  
 ☺  
**Q:** Have you heard the joke about the deaf person?  
**A:** Neither have I!

## LITHIUM BATTERY WARNING

As of 15 January 2018, the lithium batteries that power your phone, laptop, camera and sound processor under the 100 watt-hour (Wh) rating can only be transported in your carry-on luggage when flying.

If you're also carrying spare batteries, these must also be transported in your carry-on baggage only.

## HANDY TRICK...

*How to tell if a battery is fresh or old?*  
Pick up both batteries and drop at the same time.

If one bounces, it is old, so dispose of that one.



## TRAIN STATION HEARING LOOPS:

In most train stations around Brisbane, there are now hearing loops. If you would like to know which station has a loop, you can obtain a free copy of the Station Access Guide from any train station.

This guide also provides information about other accessibility features such as help phones, lifts and wheelchair access.

## GOING TO THE GOLD COAST?

All trams are now equipped with hearing loops. For those with a 'T' switch on their devices this is welcome news.



## DID YOU KNOW?

At a temperature of 20°C, sound travels at 343 meters/sec. This is the same as traveling at 1,217 km/hour. As temperature rises, the speed of sound gets faster.

It is also a fact that our hearing and balance is closely related.

In the inner ear is a semicircular canal with 3 fluid-filled canals and hair cells that are aligned at right angles to each other. When the head is moved, the fluid in the canals moves the hair cells and a nerve impulse is generated in the vestibular nerve.

Source: Neuroscience for Kids website

“ There are now 550,000 cochlear implant recipients globally. ”

## NEW IMAGING SYSTEM IN QUEENSLAND X-RAY CLINICS

*EOS is a new imaging system, evolved from a Nobel-prize winning invention.*

For the first time ever, it allows radiologists and orthopaedic surgeons to obtain life-size, full body images of a skeleton in 3D. The standing position is the position we live in, as opposed to the position we may be operated in, which is important for diagnosis and treatment planning.

EOS is especially helpful in situations where patients want to minimise their exposure to radiation and where long-length, weight-bearing images are needed.

Why would I have an x-ray using the EOS scanner? EOS uses a lot less radiation than traditional x-ray or CT scans, which is particularly important for children with paediatric scoliosis, a condition involving curvature of the spine or other conditions

requiring regular or repeated x-ray exams.

Things to know: Queensland X-Ray not only has the first EOS Scanner in Brisbane, but also the only EOS chair (giving us the ability to scan patients in a seated position) in Australia! A seated position is ideal for older or frail patients, and makes the imaging of smaller children easier.

Micro Dose is an EOS feature allowing very low dose radiation in paediatric imaging. This provides doctors with the safest imaging technology possible to monitor disease progression such as scoliosis follow-ups.

The automatic dose adjusters and detectors allow the scanner to ad-

minister just the right amount of radiation per patient. It's this specificity that guarantees a low-dose exposure, all the while maintaining image quality.

What happens during examination? You are asked to step inside the scanner and remain still. The scanner moves vertically and will pass from head to toe. The scanner will not touch you. Two perpendicular x-ray tubes and detectors take images from front and side views simultaneously. These scans allow doctors to create precise life-size 3D models of your skeleton.

It takes about 4 minutes to set the scan up. The actual scan takes approximately 20 seconds. The x-ray will be conducted by an experienced Radiographer.

Source: <http://bit.ly/2MeyQTW>



## KATE OBERMAYER

Kate Obermayer is the Global Customer Engagement Coordinator at Cochlear Ltd. She has a degree in Communications, Journalism and New Media from the University of Technology in Sydney, and over the past decade has worked in several major global organisations in Digital Marketing and Online Management, including Zurich Financial Services, commercial law firm Freehills Herbert Smith, and global media agency Carat Media.

She has also been very active in the non-profit disability sector, and was one of the founding members of the Australian mentoring program for deaf teenagers, Hear For You. She has served as a Director on several non-profit boards—including Director on the board of Hear For You; Deputy Chair of the Australian Communications Consumer Action Network (ACCAN); Deputy Chair of the Deafness Forum of Australia.

In 2009, Kate was awarded the Australian Human Rights Community Award for her work in advocating for accessibility in media for deaf and blind people, and affordable hearing health care. Kate went profoundly deaf in her early 20s due to an unexplained progressive hearing loss. When she was 29, after a decade of lip-reading and some sign language, she received her first cochlear implant. In June 2017 she received her second cochlear implant.

## MY STORY

My hearing loss was picked up when I was 11 years old, in a routine primary school hearing test. My family and I had no idea about it, and we were really shocked. It was a mild to moderate loss, but the ENT surgeon who investigated said he thought it would be a progressive type loss, and I would probably be profoundly deaf in my 40s.

And so began my journey into deafness—I was prescribed with hearing aids, but because I was just coming into my teens I refused to wear them.

I started to have difficulty hearing on the telephone, and the TV. I stopped going to the movies. I had difficulties

with hearing in group situations, and developed intense social anxiety. I never talked about my hearing loss and I hid it, and the impact it was having on me, from everyone, even my family.

When I was 21 years old, and saddled with a huge hearing aid bill, about to leave university, and realising my job options were limited, I seriously considered suicide.

But in a life-changing moment, I decided against that choice, and instead embraced deafness, and I learnt to lip-read, and some sign language, and I started talking about it.

Life improved and I learnt strategies to deal with my hearing loss that made everything a lot easier.

But I still could barely hear well, so I started looking into cochlear implants.

At the age of 26, I had met with an ENT surgeon, who told me I might benefit from cochlear implants. He was the first person I had heard say this, and I didn't really believe him. He booked me in for surgery. And 2 weeks before the surgery, I cancelled.

Why? I was afraid. Terrified. And did not believe that it would really work. I hadn't met anyone that I really trusted that had a good outcome.

Then when I was 29 years old, I decided to look into it again because I was worried about being able to hear my children if I decided to start a family.

This time I met with a woman who had a cochlear implant, and she became my mentor. This was Professor Jennie Brand-Miller, former Head of Human Nutrition at Sydney University, and author of over 30 books on the GI Index—and bilateral cochlear implant recipient. She was the first person that I met that I really believed what she was telling me—that I would not regret this decision, and it would change my life.

So I got my first cochlear implant when I was 29 years old. With the Freedom Processor, it took me 7 months to re-learn to hear, but it was an incredible journey. I went from using a telephone typewriter (TTY) to hearing very well on the phone, even with voices I didn't understand.

Six years later, I discovered the Wireless Accessories, which re-introduced me to music and the radio, and talking on the phone got even easier.

Many times, I have said to myself. "My hearing is pretty good now. It can't get any better."

And many times, I have been proven wrong. I've had the N5, N6, and now the N7 processor.

The Nucleus 7 processor was so good, it made me decide to get a second cochlear implant! Last year I received my second one, and it's taken me about a year to get used to it.

▶▶ *Continued next page*

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But I've taken up piano lessons, and I am playing Grade 3 pieces already—and thoroughly enjoying the music again!

The biggest difference between the N6, Kanso, and the N7 is the Made for iPhone Connectivity.

Firstly, the Made for iPhone Feature means that I can connect to my phone now without using any accessories, cords, cables, chargers or remotes. Completely cord free. This is life-changing. It means when the phone rings, it rings directly in my processor. I can set it so that no one else will hear the ring.

I now make all my conference calls through the mobile, because it's so much clearer for me when it's going direct.

There is also the N7 App, which you download to your phone, and acts like your remote control. Now I can check

my battery power on the App, I can adjust the volume, and best of all, I can "Find My Processor" if I lose it. It shows the last known location of the processor on a map.

It has also caused me to discover podcasts.

So life is pretty good now. I work for Cochlear in Sydney as their Global Customer Engagement Coordinator, and I have two kids, and a very understanding husband Ben, who has been with me through my very deafest years, and stuck by me all the way through this amazing hearing journey.

I love being a member of CICADA NSW, and if I can leave CICADA QLD's members with one final comment, it would be to remember to be open and honest about the challenges you face with your deafness, and brave enough to share your hearing journey story with others, because you never know whose life you are going to change. ●

Based on self-reported data from the Australian Bureau of Statistics 2014-15, over 3 million Australians (14%) had at least one long-term hearing disorder.

This proportion increased with age, from 3% of children aged 0-14, to 49% of people aged 75 and over. After adjusting for differences in the age structure of the population, it showed that hearing disorders were more common amongst males (18%) than females (11%)

Source: MED-EL Special Report No 2 Revised Edition 2018

## Persistence, perseverance and patience pays off for New Zealand Recipient

ROTORUA'S ROSE MURFIT, 12

Rotorua's Rose Murfitt and her family are living, breathing examples of the benefits of fighting for what you believe in. Ten years ago the Rotorua Daily Post highlighted the case of then 2-year-old Rose, whose family was expected to find \$20,000 for speech therapy and audiology services because her cochlear implant operation was conducted in the United States.

Rose became the face of a campaign

by her grandmother Jennifer Minty for better public funding for all deaf children with cochlear implants. Minty's efforts were never just about her own granddaughter—the family turned down an offer to publicly fund some of Rose's treatment, because the Ministry of Health would not extend the offer to other children in the same situation. Their persistence paid off as the law around funding was changed and now included all children who received implants overseas.

"We took the Government to task and we won. We changed the law. I was thrilled, I really was. It was a big deal." Minty said.

Ten years later the pair continue to proudly support the cause. Being unable to hear can be a huge barrier to learning and socialising, but with her implants Rose, now 12, is excelling at school and enjoying a life of inclusion.

"Everything's going pretty good." Rose said—a modest answer from a girl who is in the accelerated programme at Kaitao Intermediate School.

Tiffany said her daughter "lived in both worlds". "The implants make a huge difference. Even if she just takes off the external device, she's completely deaf. Without them, she wouldn't have been able to learn how to speak with clarity and she'd be reliant on sign language. It's not a cure for deafness at all, but it's a tool. She's still part of the deaf community, but she's also part of the hearing community. She is fully integrated and main-streamed, like every other kid her age, and we're looking at high schools for next year." ●

*Editor's Note: For returning adult New Zealanders who have had their CI surgery overseas, public funding is not available to them, despite being New Zealand citizens.*

Source: New Zealand Herald September 2018





## Making speech clearer for cochlear implant recipients like myself

to the University of Sydney under the supervision of Professor Gregg Suaning—a global leader in implantable bionics—and Dr Brett Swanson, a research scientist at Cochlear.

Receiving my own CI in my left ear earlier this year has been a life-changing experience. My hearing has

significantly improved, and the concentration required to understand speech has dramatically reduced.

People with CIs often learn to understand 90% or more of speech in ideal conditions. With background noise or multiple people speaking, speech perception is much worse. I'm experiencing these challenges firsthand as I learn to hear again with my left ear. Restaurants, family gatherings and business meetings have all been challenging to navigate.

Sound processor improvements, that might make speech clearer, are typically tested by playing recorded sentences to experienced implant recipients under a range of test conditions. The recipients repeat the sentence and a score, determined by the accuracy of the repetition, is assigned.

Alternatively, a mathematical model (or metric) could be used to predict speech intelligibility. With this approach, sound processing improvement ideas could be evaluated by computer simulation and then the most promising ideas tested with recipients. The metric could possibly be used to optimally configure an implant for an individual. The problem is that, while many such metrics have been proposed over the years, few of them have been specifically designed for CIs.

My research is investigating a metric called “Output Signal to Noise Ratio” (OSNR) and how well this predicts speech intelligibility for CI recipients. In a typical listening situation, people hear speech and background noise such as chatter or traffic noise. We call the ratio of speech to noise the Signal-to-Noise Ratio (SNR). When a CI recipient’s sound processor converts sound to nerve stimulation waveforms, the SNR that is heard by the recipient is changed. The idea of the metric is that the recipient’s level of speech understanding will be determined by the SNR that they actually hear—the OSNR.

To date, I’ve shown that OSNR is an accurate predictor in many situations, including more complex scenarios where other metrics fail. The next step is to take existing hearing test data for one test condition, and to use OSNR to predict intelligibility under a different test conditions. If this is feasible, it will open the door for the development of CI algorithms and configurations that are optimised for an individual’s hearing abilities.

As an engineer I apply my technical skills to find solutions to real-life problems. My passion for biomedical engineering lies in applying sophisticated theoretical concepts to develop innovative healthcare solutions that change peoples’ lives.

I was asked recently if being able to hear with my CI had made a difference to my life. Before I could answer, my wife jumped in and said, “it has been amazing”. If my research can change the lives of people with hearing disability by improving how they understand speech, this will be even more amazing. ●

*Biomedical engineer Greg Watkins received his cochlear implant on 31 August 2018*

*Greg Watkins, a PhD student in biomedical engineering at the University of Sydney, is profoundly deaf. Now with his own cochlear implant, Greg is developing new metrics to improve how recipients hear speech. This is his inspiring story.*

**N**o-one could explain to me why, in my 50s, I was profoundly deaf. My hearing had started to deteriorate in my early 40s and while my mother had bi-lateral cochlear implants (CIs), I was told the condition was not necessarily hereditary.

Even with hearing aids, speech became increasingly difficult for me to understand, but even more so when there was background noise. I could comprehend less than 50% the speech with my right ear and almost nothing with my left ear—this was frustrating for me but also for family, friends and work colleagues.

As my hearing deteriorated, I wondered if my 30+ years’ technical knowledge as an Electrical Engineer in the telecommunications industry and my personal experience of hearing disability might provide new insights into the challenges facing CI recipients.

Inspired by a desire to make a real difference, I started a PhD research degree in 2014 and then later transferred

Advanced Bionics (AB) announces FDA Approval of their HiRes™ Ultra 3D Cochlear Implant.

Built on the HiRes™ Ultra platform and developed by the internal Research and Development Team at AB, the new implant is the Hassle Free and Pain Free choice for recipients undergoing MRI examinations. Even for high resolution MRI examinations there is no need to remove the magnet and no requirement for head bandaging, meaning no hearing downtime for the patient.

Hansjuerg Emch, Group Vice President Cochlear Implants (CI), Sonova says, "After many years of research and development, the new magnet technology in our cochlear implants will improve the quality of life for our many

recipients due to our hassle free and pain free magnet. We are leading the way and ensuring our recipients have the best possible experiences with our advanced technology. It's a powerful innovation and makes our efforts so rewarding for patients."



The new magnet design provides alignment with an external magnetic field in any direction. This allows cochlear implant recipients to move freely around in the strong magnetic field of an MRI machine without feeling pain or discomfort, and without restrictions to the orientation of the head.

MRI examinations are already a standard of care for health care professionals and with this in mind AB developed new magnet technology that is compatible with MRI screenings, allowing patients'

peace of mind for any future health issues that necessitate an MRI examination.

Previously, patients and surgeons had to contend with the strong magnetic field from MRI machines exerting force on the magnet, causing torque and subsequent pain if the magnet remained in situ, even with head bandaging. Therefore it was common to remove the magnet for high resolution MRI examinations, requiring out-patient surgery and interrupting the patient's hearing during the healing process. And with the future in mind the new technology has been designed to undergo heavy usage of MRI procedures without any loss of magnetic strength or mobility of the magnet components.

Source: <https://advancedbionics.com/>

Nurotron Biotechnology is a medical device company that designs, develops and markets neurostimulation systems. The company's flagship product is the Venus Cochlear Implant System.

The Venus Cochlear Implant System from Nurotron is a safe, proven solution for adults and children suffering from severe to profound hearing loss.

From a rapidly developing leader in implantable device technology, the Venus system incorporates advanced U.S. engineered technology to deliver hearing performance in diverse hearing environments. Nurotron has helped

more than 6,000 individuals hear more and live better with the Venus system.

Thin, Ergonomic, Titanium Implant Package: Designed with patient in mind, to minimize overall height and bone well depth



Advanced Microchip Design: Provides high stimulation rates with ability to support future advances in sound processing

Two Extracochlear Electrodes: For different stimulation modes and more effective neural response monitoring



VENUS Cochlear Implant System

Platinum-Banded Electrodes: Industry-leading 24-electrode array

Removable Magnet: Allows patients access to MRI scans up to 1.5 Tesla with minimum artifact

Soft Electrode Design: Protects delicate cochlea structures for improved residual hearing

Symmetrical Lead Exit: Proven design facilitates efficient surgical placement of the Venus cochlear implant.

Editors Note: Our next issue will feature an article about progress made by MED-EL in developing a cochlear implant that is MRI friendly—stay tuned!

Source: <http://nurotron.squarespace.com/>



In order to keep customers "on the air", Cochlear has traditionally provided loaners while the broken device is being repaired. Cochlear has recently started a new Premium Exchange service for patients at the Mater Cochlear Implant Clinic.

This is a replacement service where the customer sends their broken device to the clinic, and instead of receiving their "own" device back, they receive a replacement device instead.

The replacement device comes from a "Premium Exchange pool" of new and as-new refurbished devices. All Premium Exchange stock, whether

new or refurbished, has been verified to meet the same quality standards.

An advantage of this service is a reduction of time spent 'off-air' and a reduction of the number of visits to the clinic on service requests. This service will be extended to other patients over time.

# The Sound Shirt: A New Innovation that Helps People “Hear”

*There are some people who claim to see sound as colour. But now a company has made a shirt that allows people to ‘feel’ music. Of course, music has always been felt—anyone who has stood next to the speaker during a dubstep concert can attest to this! But now it is being taken to a deeper level with the Sound shirt.*

**B**elieving that everyone has the right to experience music, London-based tech-fashion pioneers CuteCircuit has partnered with Junge symphoniker Hamburg orchestra to develop a piece of wearable sound technology. The product of six months of work, the garment allows deaf people to feel classical music concert performances.

This is the latest invention from CuteCircuit and is a variation of its ‘hug shirt’, which was called one of the best inventions of the year by Time magazine. The company has also crafted wearable technology for artists like Katy Perry.

The sound shirt is the latest iteration of 100 prototypes of tech-shirts over the last decade. Looking like a flashy high-tech swimsuit from the future, the shirt allows deaf people to feel a concert through vibrations. A recent promotional video for the product showed deaf members at a classical music concert clearly felt each note as it was being played. Their expression becomes more joyful with each song. This tactile full immersion in music is something that truly allows live music to be finally shared by everyone.

## HOW IT WORKS

First microphones are placed all over the stage to pick up various instruments. The software embedded in the Sound Shirt is able to translate 8 different sounds, including bass, cello, horn and percussion instruments. These sounds are picked up by the microphones on stage and transmit-

ted into data, which is in turn sent remotely to the shirt.

The shirt contains 16 micro-actuators, which vibrate exactly to the feel of the music in real-time. Different parts of the orchestra can be felt on different areas of the body. Bass sounds like cello and double bass are felt in the lower regions of the shirt and higher register instruments like the brass section are felt on the upper back:

*“The deeper, heavier bass notes [activate the actuators] down in lower parts of torso, and the lighter sections, like violin and lighter notes, further up on the body, around the neck area and clavicle. As they’re watching the orchestra, they can see certain areas are more active than others; they feel sound waves in specific areas of the body, and within a few minutes understand there is a correlation.”—CuteCircuit CEO Ryan Gentz*

The entire composition played in front of the user comes to life as a language composed of a series of tactile sensations across the torso, neck and back of the person experiencing the music.

## FIRST IMPRESSIONS

Although it was only launched last year initial impressions from its target audience are extremely positive. Users note that violins can be felt on the arms and drums on the back, which results in a fully immersive feeling. The feeling of experiencing the same amazing music with hundreds of other people is now within reach for the deaf and hard of hearing.

The lucky few who have tested it also remark on how comfortable

the garment is as it is made from soft stretch fabric and doesn’t come encumbered with a labyrinth of wires like you would expect from a shirt which receives data and turns it into vibrations.



## FUTURE PLANS

Although the initial prototypes of the CuteCircuit’s shirts were purchased by museums, telecom firms, research labs and now, orchestras, the company sees great potential in using wearable technology to augment our senses. There are already vibrating controllers in the gaming world and the sound shirt could be a welcome addition to this trend.

CEO Ryan Gentz also has several other orchestras who are making enquiries about the sound shirt. It seems that demand for this technology is increasing among the entire classical music world.

However, a potentially more widespread future use of the shirt was suggested in the promotional video for the product. Following the end of watching a stirring classical music performance, the wearer jokes “Next, lets listen to AC/DC!” ●

*Editor's Note: Each shirt is priced at \$22.50 online*

Source: <http://bit.ly/2rLy7QK>  
posted November 10, 2017



## LAUNCH OF ACCESSHUB BY NATIONAL RELAY SERVICE

On 6 February The Department of Communications and the Arts, which is responsible for the National Relay Service (NRS), will launch a new source of information about the NRS on its website.

This new information source will be called Accesshub.

Accesshub will be the central place to go online to find out about all the communication options available to people who are deaf, hard of hearing or have a speech impairment. Accesshub will provide the information needed to use and access the NRS.

From 6 February, Accesshub will be found at [www.communications.gov.au/accesshub](http://www.communications.gov.au/accesshub).

Closure of the NRS website: From 6 February, when you try to visit any page on the NRS website you will be automatically redirected to Accesshub. The NRS website will cease to exist.

You won't need to do anything different to get to Accesshub. Just use links to the NRS website as you do now.

There are no changes to relay calls. The NRS will continue to work the same way it does now, providing the same wide range of call channels.

For those who use the NRS website to make Internet Relay or Captioned Relay calls, there will be no changes to the address or function of these call pages. If you have the call page bookmarked for Internet Relay or

Captioned Relay, those bookmarks will continue to work and you can make a call as usual.

The NRS app will keep working as a channel for making NRS calls just as it does at present.

There are no changes to the NRS Helpdesk. The NRS Helpdesk will continue to provide advice and support about relay calls to NRS users and the general public. The contact details will be exactly the same.

More information: If you want more information about the changes contact the NRS Helpdesk on 1800 555 660 or [helpdesk@relayservice.com.au](mailto:helpdesk@relayservice.com.au). Remember, changes occur from 6 February 2019.

### BE AWARE...

There is growing evidence according to various news reports that leaving devices on overnight to be charged can be responsible for fires happening.

We suggest placing your sound processor in your Dri Kit, and charging your rechargeable batteries early at night, then before going to bed, turn the connections off at the wall, and recharging the batteries again first thing in the morning. Better to be safe than sorry!

### BEING ON A COMMITTEE

Oh! Give me your pity. I'm on a Committee,  
Which means that from morning to night  
We attend and amend, and contend and defend,  
Without a conclusion in sight.

We confer and concur, we defer and demur,  
And reiterate all of our thoughts.  
We revise the agenda with frequent addenda,  
And consider a lot of reports.

We compose and propose, we suppose and oppose,  
And the points of procedure are fun,  
But though various notions are brought up as motions,  
There's terribly little gets done.

We resolve and absolve, but we never dissolve,  
Since it's out of the question for us.  
What a shattering pity if we should end our committee:  
Where else would we make such a fuss?

Source: Anonymous!

### MONTHLY MEETUPS

Southside Meetup  
Flying Pepper Cafe  
120 Kate Circuit, Rochedale  
Thursday 7 February, 10am - 12noon  
Contact Shirley on [secretary@cicadaql.com.au](mailto:secretary@cicadaql.com.au)

Northside  
Dragonfly Cafe  
1657 Gympie Road, Carseldine  
Tuesday 2 July, 10am - 12noon  
Contact Gail on [gail046@hotmail.com](mailto:gail046@hotmail.com)

Fraser Coast Meet-up  
Hervey Bay Library  
161 Old Maryborough Road, Hervey Bay  
First Saturday of the month from 1.30pm onwards.

Gold Coast Meet-up  
Able Centre  
13 Sykes Court, Southport  
First Wednesday of the month from 10am - 12noon.

Sunshine Coast Meet-up  
Sunshine Castle  
292-296 David Low Way, Bli Bli  
Last Tuesday of the month from 10am - 12noon.

BHA Logan Hearing Support Group  
Logan North Library  
Corner Sports Drive & Springwood Road, Underwood  
First Saturday of the month.

Hearing with ...



## VISION & MISSION STATEMENT

Our mission is to provide advice, support and opportunities for social engagement in a community, to people with or considering cochlear implants and their friends and families.

Our vision is that all Queenslanders with or considering cochlear implants are supported and informed in their decisions

## BEQUESTS

We are a registered charity with the Australian Charities and Not-for-profits Commission.

If you wish to make a bequest to CICADA Queensland, contact our Secretary on [secretary@cicadaqld.com.au](mailto:secretary@cicadaqld.com.au)

## DISCLAIMER

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Views expressed in this magazine are not necessarily those of CICADA Queensland, or the Editor, nor do they take any responsibility for contents, errors or omissions. Readers' views or comments are to be addressed to the Secretary.

Please make all submissions for next edition of CICADA CHORUS by 3 May 2019. A word limit of 600 words applies.

...Did you know that our 675 batteries can also be used in hearing aids? Order some from our website at <http://bit.ly/2r1BrvH>

# Join us as a Friend of CICADA Queensland!

Annual membership is \$20 per person and \$30 per family from July to June of the current year. If joining after December of the current financial year, membership for the rest of the current financial year is \$10.

This fee includes the quarterly CICADA CHORUS magazine.

Our Membership Form is available on our [Forms](#) webpage.

## BATTERY SERVICE AND MERCHANDISE

CICADA Queensland provides a cochlear implant battery service and sells customised name badges, polo shirts, caps and MEDICAL ALERT! USB wristbands. All merchandise has our logo. All order forms show postage prices and are available on our [Forms](#) webpage. Prices are:

- A box of iCellTech 675 batteries cost \$35.00. Postage is extra.
- Cap is available in one size and different colours and cost \$14.50 each. Postage is extra.
- Polo shirt is available in sizes of small, medium and large and a variety of colours and cost \$28.00 each. Postage is extra.
- MEDICAL ALERT! USB wristband plus postage cost \$10.00 each.
- Name badges (magnetic) each cost \$16.85 including postage.

If paying by cheque or money order, please make payable to CICADA Queensland and post with order form/s to Secretary, CICADA Queensland, 85 Crotona Road, Capalaba 4157.

Our Heritage bank account is in the name of CICADA Queensland, Account No. 10416358, BSB 638-070. Please use your surname as a reference for who payment is from when depositing payments into our account.

## CICADA QUEENSLAND CONTACTS

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# A Human Connection

Bradley Reporting has a strong focus on captioning services for deaf and hard of hearing professionals and community members. Our services are designed to empower individuals and assist with overcoming some of the barriers to full participation in society. Bradley Reporting delivers a personalised service that is flexible and adapts to the different environments captioning is needed by our clients.

As a small business focusing on captioning for deaf and hard of hearing individuals, our friendly personalised service is particularly suited to NDIS participants.

The easiest way to book our services in Queensland is via Deaf Services (Auslan Connections) or via Expression Australia (Auslan Connections), in Victoria.

Contact us for more information:

[sales@bradleyreporting.com](mailto:sales@bradleyreporting.com)

