



News from the Implant team

The end of an era - by Professor Ramsden



Following the recent retirement of Deborah Mawman from the Implant Centre at MRI who most of us have met at some point we are pleased to include some thoughts (and advice) from Professor Ramsden.

It seems like a lifetime ago that a shy young Deborah Mawman first entered the ENT Department at Manchester Royal Infirmary.

And it now seems incredible that the same young lass is now disappearing into the sunset with husband Tim by her side and a bag of golf clubs over her shoulder.

When the Cochlear Implant programme got going in 1988, Deborah became an integral part of the new venture and she has remained an essential member of the adult programme ever since.

She has been friend and councillor to countless implantees over the years and her easy charm and effortless professionalism made her a

reassuring presence with the patients who might contemplate this new-fangled operation with some trepidation.

She will be sorely missed by all who looked on her as a friend as well as a professional.

As she retires I have only two bits of advice for her "Keep your head down and swing slowly".

Congratulations, Deborah, and thank you for all you have done for the implant team and our patients.

And on behalf of CICADA, we echo those thoughts, thank you Deborah for all you've done.

A strange encounter

by Kevin Williams

In these strange and stressful times it's sometimes easy to forget that routine things still have to happen in order to keep the world turning.

Now I would not give this tale such importance but maybe it illustrates the times we are living in.

In the old days, before the dreaded lurgi was upon us we would receive routine requests from the health service and also from our local GP services, reminders about getting a Flu Jab, or an annual review of some sort or other.

I must admit that I don't always take immediate note of letters that appear to be just routine advice, OK I will always get a flu jab even though the process these days is more like a reality game show trying to work out where to go and when but when I received a rather curt letter about my annual Hypertension review, I thought I had better do something about it.

From this point on the process seemed to resemble a Monty Python sketch. I tried to make an appointment on line using my phone but after getting through and being treated to ten minutes of warnings of symptoms and rules and regulations I gave up the wait.

To be honest I try not to use the phone as I'm not brilliant

with it and sometimes information from the other end doesn't always translate well. However, this being the age of the internet and all that, I had a stab at making an appointment by using the GP website and was pleasantly surprised at how easy it was. Everything of course was couched in rules about arriving no earlier than ten minutes before the appointment, the fact that there were strict rules about coming into the building etc. Having made copious notes (OK mental notes!) I turned up at the appointed hour in the pouring rain outside the main doors of the surgery and proceeded to read the door ... sorry all the notices pasted to the door to give me a clue about whether to shout 'Open Sesame!' or something like that.

The pertinent notice said that only one person was allowed into the vestibule at once and there was no access to the waiting room. I thought only grand houses had vestibules? Sorry, I digress. At that point the outer door mysteriously opened all by itself, and so not wishing to cause any more confusion I stepped over the

threshold to discover that I was now in some sort of airlock. Ahead of me the doors to the the waiting room were closed and locked and plastered with more warning notices, to the right of me were two traffic cones and stretched between them

was 'crime scene' plastic tape keeping me



away from the side wall. I could see no one and hear no one. damp misery.

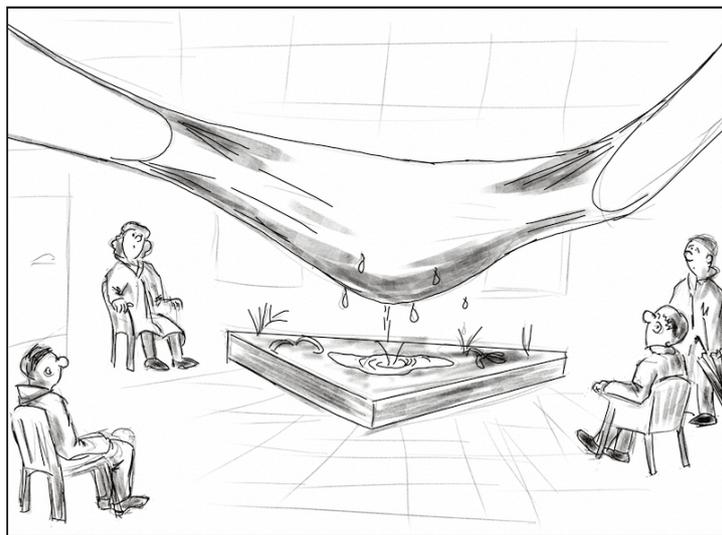
All of a sudden a hole appeared in the wall and a muffled voice seemed to be saying 'Who is it?', I appeared to have fallen into a Monty Python sketch. Banishing images of Dead Parrots and King Arthur and the witches I said my name, well that's what I thought I said however it was more like 'Bbmmmb w***S. This was obviously not good enough and I was rewarded with the view of a masked head with the ear pointing at me.

Being the intuitive type I repeated my name as clearly as I could and this was followed by a muffled noise from within the wall which I took a guess at 'Date of Birth'. There then followed some gesticulating signs which appeared to be telling me to leave the building turn right and walk around into the back garden and wait there. Out into the pouring rain I went, I didn't even know they had a back garden there, through the car park with sodden traffic wardens stoically booking cars despite the weather I saw a wall with a gate and taking a deep breath stepped through the wall.

This time rather than an airlock I seemed to have been transported back in time to the Wreck of the Hesperus. In the yard (with a small sodden border of weeds) was a tarpaulin stretched across the area tied to various vertical parts of the building and below were four plastic chairs, one in each corner of the yard where people sat in

However what was apparent looking at the canvas awning was that about 15 gallons of rainwater, having nowhere to go apart from some suspicious looking holes in the canopy, were in danger of obeying the laws of gravity and in the process might drown the patients before they had a chance to get help. Visions of being washed away down the high street towards the motorway flashed through my mind.

Being British of course the first topic of conversation amongst strangers is usually the weather, but strangely enough, not in this case, just some anxious looks at the rigging lines to see if they were secure.



As we stood there waiting to see what happened next, a side door opened and a patient was shown out by a member of staff. I'm not sure if it was the treatment they had or the state of the canvas but they moved very quickly to get out

of the yard. Eventually it was my turn and I quickly moved across the yard to the relative security of the building, needless to say the 'Review' involved an impressive collection of needles as well as pneumatic devices. I am of the opinion that these days a welcome 'hello' is always followed by pain of some sort. Never mind I suffered in silence with stiff upper lip as you do, but was disappointed not to get a 'Good Boy' sticker at the end! The moral of the story? Well I won't be going to the doctors if it's raining that's for sure!

Developments don't stop for COVID!

Earphone tracks facial expressions, even with a face mask

Cornell University researchers have invented an earphone that can continuously track full facial expressions by observing the contour of the cheeks -- and can then translate expressions into emojis or silent speech commands.

With the ear-mounted device, called C-Face, users could express emotions to online collaborators without holding cameras in front of their faces -- an especially useful communication tool as much of the world engages in remote work or learning.

With C-Face, avatars in virtual reality environments could express how their users are actually feeling, and instructors could get valuable information about student engagement during online lessons. It could also be used to direct a computer system, such as a music player, using only facial cues.

"This device is simpler, less obtrusive and more capable than any existing ear-mounted wearable technologies for tracking facial expressions," said Cheng Zhang, assistant professor of information science and senior author of "C-Face: Continuously Reconstructing Facial Expressions by Deep Learning Contours of the Face With Ear-Mounted Miniature Cameras."

The paper will be presented at the Association for Computing Machinery Symposium on User Interface Software and Technology, to be held virtually Oct. 20-23.

"In previous wearable technology aiming to recognize facial expressions, most solutions needed to attach sensors on the face," said Zhang, director of Cornell's SciFi Lab, "and even with so much instrumentation, they could only recognize a limited set of

discrete facial expressions."

Because it works by detecting muscle movement, C-Face can capture facial expressions even when users are wearing masks, Zhang said.

The device consists of two miniature RGB cameras -- digital cameras that capture red, green and bands of light -- positioned below each ear with headphones or earphones. The cameras record changes in facial contours caused when facial muscles move.

Once the images are captured, they're reconstructed using computer vision and a deep learning model. Since the raw data is in 2D, a convolutional neural network -- a kind of artificial intelligence model that is good at classifying, detecting and retrieving images -- helps reconstruct the contours into expressions.

The model translates the images of cheeks to 42 facial feature points, or landmarks, representing the shapes and positions of the mouth, eyes and eyebrows, since those features are the most affected by changes in expression.

These reconstructed facial expressions represented by 42 feature points can also be translated to eight emojis, including "natural," "angry" and "kissy-face," as well as eight silent speech commands designed to control a music device, such as "play," "next song" and "volume up."

The ability to direct devices using facial expressions could be useful for working in libraries or other shared workspaces, for example, where people might not want to disturb others by speaking out loud. Translating expressions into emojis could help those in virtual reality collaborations communicate more seamlessly, said Francois Guimbretière, professor of information science and a co-author of the C-Face paper.

One limitation to C-Face is the earphones' limited battery capacity, Zhang said. As its next step, the team plans to work on a sensing technology that uses less power.

The research was supported by the Department of Information Science at Cornell University.

Snippets

Face masks are everywhere of course in many shapes and sizes and one would think they were now a fashion accessory sometimes. We, as a group of people who rely on lipreading to assist in conversations are finding out how difficult it is especially in stressful situations such as hospitals, doctors and the like.

There have been campaigns running on social media to encourage more people to wear the transparent masks but the problem is always that the random person who needs to communicate is not aware of our needs. However I have recently found out in conversations with various people around the health service that these masks cannot be used by health professionals carrying out their work because they have not been approved for use in contact situations but the Face Visors are a good substitute.

If anyone has any experiences to share or is aware of progress on these masks please let us know so we can help to change things.

... And now for something completely different.

If anyone is looking to get some Christmas shopping done early, I would be more than willing to produce a picture with a frame for you and in the process help Macmillan Charity.

I have a gallery of pictures online at <https://www.facebook.com/PaintingsForMacmillan/> where the Album - Macmillan paintings is located.



Contact details for articles: I would love to hear from anyone with an example of a service, good or bad, or an amusing incident in a queue (there are lots of queues these days)

Cicada: email: secretary@manchestercicada.org.uk - Text: 07533 217730 or postal address: 107 Manchester Road, Hyde Cheshire, SK14 2BX

CICADA support Links: <http://www.manchestercicada.org.uk/help-support/>

Any contacts you help me with will be added to our website and publicised on our facebook page: **Manchester Cicada club**. If you want to join just put in a request.

Manchester Auditory Implant Centre: Repairs and Battery Supply

Tel: for all repairs. 0161 276 8079

Email: auditory.implant@mft.nhs.uk for cochlear implants and BAHA