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## THURLES NEWS

## An interview by Thurles man Gerry Molumby with fellow Tipp man Professor Gearoid O'Donoghue

## Thurles man Gearoid O'Donoghue - a renowned pioneer in hearing implants

Listening to Radió Éireann late into the night recently, with the varied sounds of jazz – Finbar Furey etc. made me realise how much we take our hearing for granted.

I was typing up my notes having met in the past few days Professor Gerry Donoghue; a Tipperary surgeon who literally gives patients their voice back with pioneering hearing implants.

A cochlear implant is an electronic medical device that replicates the work of damaged parts of the inner ear (cochlea) to provide sound signals to the brain.

Early into our interview in his office at Nottingham's Queens Medical Centre (QMC), Ear Nose and Throat Department Gerry (better known as Gearoid in and around Thurles), set the scene by telling me about an eight year old boy/patient from Mansfield (just outside Nottingham). An infant lies flaccid on an operating table. He has barely survived an attack of meningitis which has robbed him of his hearing - he is now totally deaf. Deafness

is not just loss of hearing, it impinges on every aspect of people's human development, deaf people or people with reduced hearing often suffer from isolation, poor literacy development, which can then lead to cognitive impairment.

This young boy's parents are devastated – their perfect child will never talk, never hear a human voice or enjoy the world of music. A novel technology, an electronics package, offers to rewire his hearing brain and connect him once again to the outside world. But it is fraught with risk, bedevilled by uncertainty. The treatment is controversial, doctors are critical and some call for such experimental treatment to stop.

The surgeon, gowned and masked, enters the operating room, lights glaring on the sterile stainless steel. The tension is palpable, little is said. The scalpel is passed, the microscope positioned, the operation begins.

Hours of minute microsurgery later, the electronics package (called a cochlear implant) has been implanted and the surgeon breathes a tentative sigh of re-

lief. But will it work?

Days later, the device is activated, mercifully the sponds and his hearing life gins again. The boy goes school, earns a first class University degree today works as an executive in a large multinational

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without his cochlear implant. When I noted that story Gerry told me "That's why I cycle to work every day". A man with a healthy sense of humour as he is a very proficient cyclist who dons the bicycle clips and helmet and cycles from his home in the centre of Nottingham to the QMC - Hospital and Medical Training School Nottingham.

Gerry and I went to the Christian Brothers School (CBS) Thurles primary and secondary, he was a few years ahead of me but reminisced about growing up in one of the four sugar beet factory towns in the sixties.

Gerry's father Liam Ó Donnchú was the primary school teacher in Holyford and a passionate advocate of the Irish language, his mother Cáit (nee Stapleton) of Piperhill, in Hollyford.

Gerry, who turned 65 yesterday (St Valentine's Day), left the CBS for Medical School at UCC in 1969. Not long into his medical training in Cork and after a rugby game party one weekend he was introduced to Rapahele Saint Olive from Lyon, in France, who was studying English in Cork and who is now his wife.

Gerry still loves going back to Cork to sail its magnificent coastal waters as recreation today and well deserved, but as a young student it was heads down in the books. Gerry decided to specialise in Ear, Nose and Throat Surgery and went to England (temporarily as he had hoped) to complete his specialist training. He started in the Royal National Hospital, then located in London's Soho, and was later appointed to the historic Radcliffe Infirmary.

During this time, Gerry went to study at University Hospital in Boston, USA, working in a unit that specialised in head and neck cancer; his mentor there was a brilliant Irishman (Dr. Stuart Strong) who pioneered the use of the laser in surgery of the airway.

Following this, he got an opportunity to do a fellowship in hearing research at the University of California, San Francisco. Here he did a lot of laboratory research on deafness and how we could combat it in humans using electronic stimulation.

"I never realised that this early technology, which is science and medicine working together, would totally transform the landscape of deaf-



Professor Gerry O'Donoghue pictured outside his place of work in Nottingham, England.

ness and bring huge lifeopportunities to deaf people". Gerry had found his life's passion.

Twenty five years ago Gerry performed his first cochlear implant and today can, at home and abroad perform 120 such operations a year.

Gerry told me "That even at £20,000 each the implant, like a prosthetic limb does not restore full mobility, the implant does not produce sound as we know it – but has the key ingredients of a speech signal that children get used to and learn from. Along with the child - speech therapists, teachers, siblings, ents/guardians we try like a piano tuner to fine tune the implant to the needs of the child. With the added help of sign language the children grow up to fully embrace life's opportunities"

In 1989 following his specialist training, Gerry came to Nottingham University Hospital where he is now the Professor of Otology and Neurotology.

"Istill tremble a little when I look back on the early days of cochlear implantation and the almost impossible hurdles we faced. Even funding was a problem – the implants were astronomically expensive (and still are) and the NHS would not pay for them"

To this end Gerry founded a charity, The Ear Foundation, to buy the implants for those children who needed them. This Charity continues to flourish but now is involved in research and education. They have implanted approaching on 2,000 patients from far and wide – one of the largest services in the world.

"I have had the good fortune of travelling extensively and either operating or lecturing in every continent and in countless hospitals – it has been such a privilege for me to serve in this way".

In between operation lecturing here in Nottingham Gerry shares his extensive medical expertise in the developing world. A major focus of his work is the time spent in India establishing cochlear implant programmes in Chennai in Southern India. Gerry told me he has also been much engaged in Serbia whose health services were in dire straits after the last Balkan war, back in 1995, and they have just elected him Honorary Professor at the University of Belgrade in recognition of his work.

Research has also been a major feature of his professional life and Gerry cofounded the National Institute of Health Research's labs for hearing research. Research is demanding but is key to making tomorrow's treatments better than those we have today.

Rightly, Gerry has been honoured with many awards at home and abroad; The Royal College of Surgeons of England awarded him their highest honour, a Hunterian Professorship. Gerry has been have been President of the Otology Section at the Royal Society of Medicine in London and The British Association of ENT Surgeons has

recently elected him as their Master. The Irish ENT Society, to whom Gerry has had a very close relationship, presented him with their Sir William Wilde Memorial Medal – honouring the founder of ear surgery, the polymath William Wilde, and father of the famous Oscar.

As to the future Gerry reeled out from memory where his pioneering work will take him – to lecture – give hands on mentoring to other surgeons, and to continue the technology of cochlear implants in medicine. Off to Paris, Lisbon, San Francisco, Belgrade and to Uppsala and Moscow

Reflecting on his family values from Charles Kickham's 'the homes of Tipperary', Gerry told me: "I consider myself incredibly fortunate to have been able to play my part alleviating one of mankind's most pernicious disabilities. I owe much to my own parents who always valued education and to Thurles CBS who provided me with such brilliant educational opportunities during those crucial formative years. Being now a proud father of four children, David, Edwina, Kevin and Olivia and two grandchildren, Aisia and Freya, I know only too well how crucial education is and how profoundly it moulds our lives directions."

Gerry's family includes his brothers Liam (Thurles) and Denis (Clonmel) and his sister Roisin (Hackett in Templemore). He gets home to Thurles occasionally and loves coming home.

