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Self Help for Hard of Hearing People

hearing matters

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**Ray Hare - Libby Harricks
Award Winner**

SHHH 2007 Libby Harrick's Award

Ray Hare's Story

For my first twenty-eight years, I lived in what was then the northern outskirts of Sydney. During my childhood, I would play in the local bushland and dairy paddocks with my brother and mates. I really enjoyed nature, the open spaces and the opportunity to race around on scooters and billycarts. My brother and I would run cross-country semi-marathons each weekend at a time when such activities were not fashionable. It was a great place to grow up, virtually free of the hassles and dangers of modern city living.

At Normanhurst Primary and High schools, I was an average student. I had a keen interest in science, history and manual arts. After finishing school at the Leaving Certificate, I joined CSR as a trainee chemist at Pyrmont and attended the Sydney Technical College over four years. On completing my Chemistry Certificate course, I resigned from CSR to commence a Degree in Agricultural Science at the University of Sydney. As a mature-aged student, I loved every moment of my study and graduated with first-class honours after four years. My lecturers encouraged me to undertake a post-graduate degree in agricultural genetics and plant breeding over the next five years. I was rather fortunate to receive the Farrer Memorial Scholarship which provided living support during my post-graduate studies at the University of Sydney, Plant Breeding Institute, Castle Hill. I studied the genetics of durable stem rust resistance in wheat. Durable resistances are long lasting, as they are not rendered ineffective by virulence changes in the pathogen over time. This topic is still highly relevant today with the emergence of a highly virulent strain of stem rust in east central Africa. The pathogenic variant is capable of spreading and destroying vast areas of wheat across Africa, Asia, America and not least Australia. The food supply of no less than two billion people is threatened and a suite of durably resistant varieties is essentially the only solution to the protection of the crop.



Photo: Ray Hare (right) and Moroccan durum wheat breeder Nsarellah Nasserlehaq examining the durum wheat crop at Tamworth.

On completing my PhD studies in 1976, I commenced a job as a wheat breeder with the New South Wales Department of Agriculture (now NSW DPI) at the Tamworth Agricultural Institute. Over the past thirty years, I have supervised the Australian National Durum Wheat Improvement Program and released seven varieties. Virtually all Australian pasta is made from durum wheat derived from the Program's varieties. Some two hundred tonnes of pasta are consumed daily in Australia. Australia is now a significant exporter of durum wheat to a number of countries, with about half purchased by very discerning Italian customers. Australian durum wheat provides an important ingredient in about eight million meals each day, around the world.

While my career in wheat breeding has been rather uncomplicated, based in one location for thirty years, it has nevertheless been a fascinating one. Durum wheat breeding involves many different elements, including research and development across agronomic, disease and pest resistance, processing quality and consumer nutrition. One comes into contact with many different people from all sectors of the industry both in Australia and overseas. I have had the good fortune to travel to virtually all continents where durum wheat is grown, to establish and continue a range of international collaborations in such countries as Syria. In 2000, I had the honour to receive the Public Service Medal and then the Farrer Memorial Medal in 2001, as recognition for my contribution to the Australian durum wheat industry.



Photo: Ray and Wife Margaret

In 1974, I married my darling wife, Margaret. We have three loving boys, Stephen, Nathan and David. They have grown up now and each has completed their first university degrees. Nathan and David are doing post-graduate studies. Stephen and Nathan have married delightful girls, Deb and Nicole. Stephen and Deb have two lovely little boys. Mardi and Pop are very proud of their grandsons.

My hearing has deteriorated imperceptibly slowly over many years. During high school lessons and university lectures, I found that I needed to sit close to the front of the class to avoid missing the instruction. It was usually easy to find a seat at the front, under the teacher's nose. The most popular seats were of course at the back of the room where unofficial 'non-learning activities' took place. With friends, especially in noisy situations, it was

often difficult to hear all the conversation. The punch line of many a joke would escape me, much to my frustration. Because I could still hear most things I was not aware of a change in my hearing. It never occurred to me to have it tested. My health has always been very good, so there was no need to go near doctors for a check-up: when it's not broken don't touch it - the usual macho male attitude towards health matters.

The crunch was about to hit. At the age of thirty-six, I had a rather bad infection in both ears. The nasty pain and discomfort forced me to seek prompt medical attention. Antibiotics cleared up the infection within days. The GP made me see an Ear, Nose and Throat Specialist to check for any unresolved matters. The ENT as expected gave me a good check over, including a hearing evaluation. Before all the tests were finalised, it was obvious from the body language of the nurse and doctor that all was not OK. A moderate hearing loss was confirmed and I would need bilateral hearing aids, not a wonderful piece of news for an active out-of-doors person. The ENT strongly advised me to seek an appointment with a well-known Sydney-based audiologist, Dr Charles Pauka, to receive his sound professional advice. 'In the ear' hearing aids soon came along. During one of my consultations with Dr Pauka, he told me that my audiological data indicated that I would be a candidate for a cochlear implant before the age of sixty. His assessment has proved to be spot on.

Over the next twenty years, my hearing continued to diminish slowly. Regular hearing tests were conducted and more powerful aids prescribed as required. I was in the fortunate position to be able to compensate for my diminishing hearing by acquiring upgraded aids at about five yearly intervals. This compensation allowed me to continue a full, active professional and social life style, uninhibited by failing hearing.

On reaching a severe loss in both ears in 2000, a close deaf friend suggested that I seek a comprehensive assessment by a Sydney-based audiologist. The strongest 'behind the ear' aids available were prescribed by the prominent ear surgeon, Dr Phillip Chang. He indicated that these aids were probably to be my last. The next step in managing my situation would be in all likelihood a cochlear implant.

During an annual hearing assessment in July 2003, my hearing loss was found to be in the profound range in both ears, making my hearing aids basically ineffective. My word recognition was significantly below an acceptable standard. Sounds were becoming rather distorted when using my aids. I frequently required people to repeat their conversation, a personally frustrating, embarrassing and potentially isolating experience. Phone conversations were a trial, especially at work when speaking to those folks not familiar with my deafness. Work meetings and social gatherings were equally most difficult. The predicted next stage had arrived.

Dr Chang recommended that I give serious consideration to receiving bilateral cochlear implants. These implantations would be done sequentially, so that I could adapt to the new audiological signals to the brain in two manageable stages.

The decision to have the first implant was easy. I desperately wanted to remain in the hearing community and

minimise my disability. Within 10 days I was admitted to St Vincent's Hospital for the first implantation. No big dramas occurred. A small amount of anticipated pain about the incision lasted a day or so and a changed taste sensation for a week or two. Sweet foods tasted metallic, maybe a good way to wean oneself off those calorific heavy weights.

Nine months later, prior to receiving the second implant I was tested again to determine if a second cochlear implant could deliver hearing benefits. Speech discrimination tests demonstrated that my understanding of sentences was superior without the hearing aid. A second cochlear implant was again recommended, as it was believed that it would significantly improve my hearing.

I still had a few reservations about receiving a second implant. Would the second cochlear implant perform as well as the first cochlear implant? Would the sound sensation be the same as the first cochlear implant? Had the best ear been implanted first? I had a little residual hearing at the lower frequencies, which I could just still use with a hearing aid, although it was declining gradually. My expectation was that this residual hearing would be lost on implantation. Most implantees only receive one cochlear implant and manage well. Why was I being considered for a second implant?

With a second cochlear implant, I would be totally dependent on the implants. I had to put all my faith in these devices for all time, as there was essentially no return. The slim mid-term prospect of being able to take advantage of a medical breakthrough in the regeneration of cochlear hair cells would probably be denied. Given that there were no research reports of successful regeneration results in any animals close to humans or humans themselves, I believed that a routine approved regeneration treatment was sometime away. I wanted to stabilise my hearing now and was not prepared to wait an indeterminate time for a 'maybe' prospect.

Most hearing aid users are bilateral. Clinicians report that it is better to aid both ears as the overwhelming evidence suggests that the patient receives a superior hearing outcome when bilateral. Early research evidence and patient experience indicates a similar outcome for bilateral cochlear implants. Given these findings and my previous experience with bilateral hearing aids, bilateral cochlear implants appeared to be a reasonable option. After much consideration, I decided to have the second cochlear implant. While I received sound, confident and positive advice from both my surgeon and audiologist, the final decision to proceed was mine alone. My decision to proceed was made based on the experience of the highly successful outcomes from the first cochlear implant.

The surgery for the second cochlear implant was performed on 1 April 2004, with switch-on 22 April 2004. I was extremely fortunate not to experience any pain, adverse taste sensations, dizziness etc after this implantation. It was a breeze, due to the immense skill of my surgeon.

After each switch-on I was able to understand speech within 24 hours on the implanted side, which was truly amazing. Following the first switch-on, I gave a lecture the next day. I could understand questions with some difficulty, but managed without too many problems. Mind you, the nerves were rather strained to put it mildly. After the second switch-on, I could converse easily with the taxi driver while travelling from St Vincent's Hospital to the airport.

The human brain certainly has incredible powers to rapidly adapt to and interpret foreign information.

Since receiving bilateral cochlear implants, my hearing appears to have stabilised. I am now able to use a mobile phone (on 't' switch) with ease, which was not possible with hearing aids. I can manage TV without teletext, but I still find the text very helpful for certain programs where the accents are strong or the sound track is of poor quality.

My perception of music, particularly classical, is slowly improving. Some instruments sound well and truly off, while others are very near to how I understand they should sound.

In my specific case, I find bilateral cochlear implants to be clearly superior to a single cochlear implant. Hearing in noisy situations can still be difficult, but there is a significant improvement in quality over just one cochlear implant or bilateral hearing aids. In addition, the second cochlear implant provides a backup when a speech processor requires repair or the batteries run out. This means that I am never 'off the air' and I am always keen to replace spent batteries to remain bilateral.

The significant improvement in my hearing has given me much-needed and increased confidence to address farmer meetings, professional gatherings, give television and radio interviews (on 't' switch over the phone for radio). It is likely many in these audiences have no idea of my hearing disability, given the excellent performance of my bilateral implants.

All the way along, my family and friends have been very patient and highly supportive. Margaret has often been my ears in difficult situations. Many a time I have had to ask her: 'what was that all about?' There is a saying that can be paraphrased: a shared disability is a halved disability.

My cochlear implants have proved essential to managing in the hearing world, when almost totally deaf. They have allowed me to continue an active participatory life, without any real difficulty. For this I am most grateful to the people involved in the initial and continuing development of the cochlear implant technology, in large part an amazing Australian development.

In a sense I have been very fortunate to have minimised the impact of my deafness so effectively, so that I am very keen to support and provide personal advice to other folks who have hearing difficulties. In 2005, I was invited to join the Cochlear Awareness Network set up to inform the community about the benefits of cochlear implants to those people with severe to profound hearing loss. This involves speaking to individuals, health professionals, school classes and community groups about the implant and what it has done for me. The Hunter New England Area Health audiometrists, through Mrs Kathy Challinor, have asked me to address their group on various occasions. These ladies come into contact with people, from children through to the elderly, who can have serious hearing loss. Patients whom they consider could benefit from a talk with an implantee can be referred to me. I have spoken to a number of parents of rather young children to allay their genuine concerns regarding the procedures involved in implantation, switch-on and mapping. Now that more people are online, advice on all manner of hearing issues can be shared directly, quickly and interactively around the world. A few deaf people in Asian and African countries have sought my input into their cochlear implant inquiries.

Given that there are many hundreds of millions of people around the world who are deaf to some degree, there remains an enormous task to educate and assist these people and the wider community in dealing with this disability. The various Australian deaf support groups can and are playing an important role in this task, not only within Australia.

I count it an honour to have received the 2007 Libby Harricks Achievement Award, which recognises and perpetuates the memory of such a fine lady, who dedicated so much of her energy, enthusiasm and time to the effective support and encouragement of the hearing impaired.

