

ClubBio08

TO MARKET, TO MARKET ...
AusBiotech Queensland State Conference

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AusBiotech
AUSTRALIA'S BIOTECHNOLOGY ORGANISATION

Speaker Profile



Assoc Prof. Jim Patrick Chief Scientist, Senior Vice-President Cochlear Limited

Jim Patrick has been involved in cochlear implant research and development since 1975, when he joined Prof Graeme Clark's Melbourne University research team. With training in physics and communications engineering and an interest in how electrical stimulation might be used to help people he led the successful development of "UMDOLEE", the ten channel cochlear implant being developed by the Departments of Otolaryngology and Electrical Engineering. When initial proof of concept generated federal Government support for commercial development in 1981, Jim moved to Sydney as a member of the Cochlear "Tiger Team" established by Paul Trainor inside the Nucleus group. He was responsible for system engineering and the digital aspects of the implantable stimulator.

This "clinically applicable" implant was first implanted in Australia in 1982, with a series of six patients giving the confidence to start a US clinical trial. Exposure to the implanted subjects, and the clear need to further improve the benefit provided to them, led to an ongoing interest in signal processing and understanding the issues faced by recipients.

Since then, Jim has been a member of Cochlear's senior management team, holding a number of senior technology management roles, at various times being responsible for R&D, Quality, and Manufacturing. One of his projects, over many years, involved the application of Cochlear's technology to the development of a Functional Electrical Stimulation (FES) system to help people with spinal chord injury. In his current role, he is responsible for Cochlear's global research program, exploring how novel forms of signal processing can improve the performance of the cochlear implant, and how advances in biology and electro-neural interfaces can be applied to future implant designs.