LATEST RESULTS AND FUTURE DIRECTIONS IN SPEECH PROCESSING FOR THE NUCLEUS MULTICHLANNEH COCHLEAR PROSTHESIS

R Dowell\textsuperscript{1,2}, L Whiffor\textsuperscript{2}, P Seligman\textsuperscript{2}, A Vandali\textsuperscript{4}, R Hollow\textsuperscript{3} and GM Clark\textsuperscript{1,4}

\textsuperscript{1}The University of Melbourne, Dept of Otolaryngology
\textsuperscript{2}Cochlear Pty Limited
\textsuperscript{3}The Royal Victorian Eye & Ear Hospital
\textsuperscript{4}The Australian Bionic Ear & Hearing Research Institute

The past two years has seen the introduction of the Speak speech encoding scheme for most patients using the Nucleus 22-channel cochlear prosthesis. This scheme, based on the Spectral Maxima Speech Processor (SMSP) developed at the University of Melbourne, uses a bank of 20 band-pass filters to present detailed spectral information to the intracochlear electrode array. Clinical trials of this speech processor have shown highly significant improvements over the previous Multipeak scheme in English, German, French and Japanese speaking patients. The largest improvements were evident for open-set testing in background noise, which represents a more realistic measure of everyday benefit than testing in quiet. The latest results for adults who have changed from Multipeak to Speak will be presented, along with results over time for newly-implanted patients using the Speak scheme. New research aimed at improving the speech processing in both the spectral and temporal domains will also be discussed.
Author/s:
Dowell, R.; Whitford, L.; Seligman, P.; Vandali, A.; Hollow, R.; Clark, Graeme M.

Title:
Latest results and future directions in speech processing for the Nucleus multichannel cochlear prosthesis [Abstract]

Date:
1995

Citation:

Persistent Link:
http://hdl.handle.net/11343/26922

File Description:
Latest results and future directions in speech processing for the Nucleus multichannel cochlear prosthesis [Abstract]