

# Professor Arthur Quentin Summerfield

## PERSONAL DETAILS

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**Date of Birth** 18th September 1949

**Nationality** British

**Address** Department of Psychology and Hull York Medical School  
University of York  
Heslington  
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UK

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## EDUCATION

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1959-1967 University College School, London.  
1967 GCE S Levels: Physics (Distinction), Chemistry (Distinction).  
GCE A Levels: Pure Maths (A), Applied Maths (B).  
1966 GCE A Levels: Physics (A), Chemistry (A), Mathematics (A).

1968-1971 University of Cambridge.  
1971 BA Natural Sciences (Psychology), Class 2.1.  
1974 MA.

1971-1975 The Queen's University of Belfast.  
1975 PhD Experimental Psychology. Thesis title: "Information-processing analyses of perceptual adjustments to source and context variables in speech".

## EMPLOYMENT

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1975-1977 NATO Postdoctoral Research Fellowship, Haskins Laboratories, Yale University, New Haven, Connecticut, USA.

1977-2004 Medical Research Council: Speech and Hearing Scientist, MRC Institute of Hearing Research.  
1977 Appointed to 5-year limited-term contract.  
1981 Promoted to Scientist Grade 1 with tenure.  
1982-2004 Leader: Speech, Psychoacoustics and Signal-processing Section.  
1985 Promoted to Senior Grade.  
1986-1993 Assistant Director MRC IHR.  
1988 Promoted to Special Appointments.  
1993-2004 Deputy Director MRC IHR.

2004- Anniversary Professor of Psychology, University of York.

## HONORARY APPOINTMENTS

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- 1992-2004 Special Professor of Experimental Psychology, University of Nottingham.  
2008- Honorary Professor of Psychology, Hull York Medical School.

## FELLOWSHIP

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- 1998 Elected a fellow of the Acoustical Society of America.

## PRIZES

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- 1995 Joint recipient, with Dr D.H. Marshall, of the George Davey Howells Memorial Prize from the University of London, in recognition of the contribution to Otolaryngology of the Institute's Report on the Evaluation of the National Cochlear Implant Programme.
- 1996 The Thomas Simm Littler Prize from the British Society of Audiology in recognition of co-ordinating and reporting the Evaluation of the National Cochlear Implant Programme.
- 1996 The Edith Whetnall Memorial Medal from the Otology Section of the Royal Society of Medicine in recognition of the contribution to otological medicine of the evaluation of the National Cochlear Implant Programme.
- 2003 Joint recipient with M. Nakisa, S. Archbold, B. McCormick, K. Gibbin, and G. O'Donoghue of the American Auditory Society's prize for Outstanding Research in Audiology and the Hearing Sciences.
- 2005 Joint recipient with other members of the UK Cochlear Implant Study Group of the American Auditory Society's prize for Outstanding Research in Audiology and the Hearing Sciences.

## NAMED AND KEYNOTE LECTURES

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- 1996 The Edith Whetnall Memorial Lecture, Royal Society of Medicine.  
1999 The E.J. Richards Memorial Lecture, University of Southampton.  
2000 The Graham Fraser Memorial Lecture, Royal Society of Medicine.  
2001 Keynote Lecture: Royal National Institute for Deaf People Futures Conference, Royal College of Surgeons.  
2002 Keynote Lecture: 7th International Conference on Cochlear Implantation, University of Manchester.  
2003 Keynote Lecture: 8th International Conference on Cochlear Implantation, University of Indiana.  
2004 Bloedel Visiting Research Lecturer, Department of Otolaryngology, University of Washington, Seattle.  
2008 (March) Otto Wolff lecture, Institute of Child Health, London.  
2008 (July) 1<sup>st</sup> Stuart Gatehouse Memorial Lecture, IHCON2008, Lake

2008 Tahoe, California  
(October) The Herbert Read Lecture, Yorkshire Philosophical Society, York.

#### GRANTS COMMITTEE

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1983-87 MRC Neurosciences and Mental Health Board Grants Committee.

#### EDITORIAL BOARDS

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1979-1984 Editorial Board of *Phonetica*.  
1984-1994 Editorial Board of *The Quarterly Journal of Experimental Psychology*.  
1991 Guest Editor of a Special Issue on "Hearing and Speech".  
1990 *Acoustical Society of America* Editorial Board for the reprint collection of "Papers in Speech Communication: Speech Perception".  
1991-1995 Editorial Board of the *British Journal of Audiology*.  
1995-1999 Consulting Editor, *Perception and Psychophysics*.  
1995-1999 Consulting Editor, *British Journal of Audiology*.  
1999- Editorial Board of *Cochlear Implants International*.

#### COMMITTEES

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1980-83 Committee of the Experimental Psychology Society.  
1981-84 Committee of the Speech Group of the Institute of Acoustics.  
1993-96 MRC Training Advisory Committee.  
1999 External advisor to the NHS in Scotland in a review of cochlear implantation services.  
1999-2005 Medical Scientific Advisory Committee of the Royal National Institute for Deaf People. (Chair of grants committee 2003-2005).  
2001 Advisor to the Department for Work and Pensions on the numbers of people in the UK who use British Sign Language.  
2001- Scientific Advisory Committee of the Institute of Sound and Vibration Research, University of Southampton.  
2002-2007 Scientific Advisory Committee of the charity Defeating Deafness- The Hearing Research Trust.  
2004 Member: MRC Brain Research Panel.  
2004- Member: MRC College of Experts.  
2007 Co-Chair: 2007 Conference on Implantable Auditory Prostheses, Lake Tahoe, California.  
2007- Chief Research Advisor: Deafness Research UK

#### ADVICE TO GOVERNMENT DEPARTMENTS AND AGENCIES

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2000 To the *Department for Work and Pensions* on the number of people in England and Wales whose first or preferred language is British Sign Language.  
2001 To the *Department of Health* on geographical variation in the demand and supply of cochlear implants.  
2001 To the *Department of Health* on the National Specialised Services Definitions Set for cochlear implantation.  
2001 To the *Specialist Services Advisory Group* of the Department of Health on the optimal size of population base from which to commission cochlear implantation.

- 2002 To the *Medical Devices Agency* of the Department of Health on the incidence of meningitis, and of mortality from any cause, in people with cochlear implants.
- 2003 To the *Commission d'Evaluation des Produits et Prestations* on methods that might be used to evaluate the provision of cochlear implantation in France.
- 2005 To the *NHS Purchasing and Supplies Agency* on the quinquennial contract for cochlear implants.
- 2005/6 To the *NHS in Scotland* as Chair of the National Services Division's Quinquennial Review of the provision of cochlear-implantation services.
- 2007 Member of an Expert Advisory Group advising health analysts on evaluations for the *National Institute for Health and Clinical Excellence* of the clinical effectiveness and cost-effectiveness of cochlear implantation.

#### PROFESSIONAL SOCIETIES

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The Acoustical Society of America.  
 The Experimental Psychology Society.  
 The British Society of Audiologists.  
 The British Cochlear Implant Group.  
 The Association for Research in Otorhinolaryngology.

#### PUBLICATIONS

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##### **Report to Government**

Summerfield A.Q., Marshall D.H. (1995). Cochlear Implantation in the UK 1990-1994. Report by the MRC Institute of Hearing Research on the Evaluation of the National Cochlear Implant Programme. *Executive Summary and Synopsis*. Her Majesty's Stationary Office, London. ISBN 0-11-321950-4.

Summerfield A.Q., Marshall D.H. (1995). Cochlear Implantation in the UK 1990-1994. Report by the MRC Institute of Hearing Research on the Evaluation of the National Cochlear Implant Programme. *Main Report*. Her Majesty's Stationary Office, London. ISBN 0-11-321930-X.

##### **Papers in Refereed Journals**

###### **1974**

Summerfield A.Q., Haggard M.P. (1974). Perceptual processing of multiple cues and contexts: effects of following vowel upon stop-consonant voicing. *Journal of Phonetics* 2, 279-295.

###### **1977**

Summerfield A.Q., Haggard M.P. (1977). On the dissociation of spectral and temporal cues to the voicing distinction in initial position. *Journal of the Acoustical Society of America* 62, 435-448.

###### **1979**

Summerfield A.Q. (1979). Use of visual information in phonetic perception. *Phonetica* 36, 314-331.

Haggard M.P., Summerfield A.Q. (1979). Perceptual and memory factors in machine-aided speaker verification. *International Journal of Man-Machine Studies* 11, 717-728.

### **1980**

Summerfield A.Q., Bailey P.J., Erickson D. (1980). A note on perceptuo-motor adaptation of speech. *Journal of Phonetics* 8, 491-499.

Bailey P.J., Summerfield A.Q. (1980). Information in speech: observations on the perception of [s]-stop clusters. *Journal of Experimental Psychology: Human Perception and Performance* 6, 536-563.

Turek S. van de G., Dorman M.F., Franks J.R., Summerfield A.Q. (1980). Identification of synthetic /bdg/ by hearing-impaired listeners under monotic and dichotic formant presentation. *Journal of the Acoustical Society of America* 67, 1031-1040.

### **1981**

Haggard M.P., Summerfield A.Q., Roberts M. (1981). Psychoacoustical and cultural determinants of phoneme boundaries: evidence from trading F0 cues in the voiced-voiceless distinction. *Journal of Phonetics* 9, 49-62.

Summerfield A.Q. (1981) On articulatory rate and perceptual constancy in phonetic perception. *Journal of Experimental Psychology: Human Perception and Performance* 7, 1074-1095. (Reprinted by the Acoustical Society of America in "Papers in Speech Communication: Speech Perception", 1991.)

Summerfield A.Q., Bailey P.J., Seaton J., Dorman M.F. (1981). Fricative envelope parameters and silent intervals in distinguishing "slit" and "split". *Phonetica* 38, 181-192.

Roberts M., Summerfield A.Q. (1981). Audio-visual presentation demonstrates that perceptual adaptation in speech is purely auditory. *Perception and Psychophysics* 30, 309-314.

### **1982**

Summerfield A.Q. (1982). Differences between spectral dependencies in auditory and phonetic temporal processing: Relevance to the perception of voicing in initial stops. (1982). *Journal of the Acoustical Society of America* 72, 51-61.

Tyler R.S., Summerfield A.Q., Wood E.J., Fernandes M.A. (1982). Psychoacoustic and phonetic temporal processing in normal and hearing-impaired listeners. *Journal of the Acoustical Society of America* 72, 740-752.

### **1983**

Brooke N.M., Summerfield A.Q. (1983). Analysis, synthesis, and perception of visible articulatory movements. *Journal of Phonetics* 11, 63-76.

Summerfield A.Q., McGrath M. (1983). Detection and resolution of audio-visual conflict in the perception of vowels. *Quarterly Journal of Experimental Psychology* 36, 51-74.

### **1984**

Summerfield A.Q., Haggard M.P., Foster J.R., Gray, S. (1984). Perceiving vowels from uniform spectra: phonetic exploration of an auditory after-effect. *Perception and Psychophysics* 35, 202-213.

### **1985**

McGrath M., Summerfield A.Q. (1985). Intermodal timing relations and audio-visual speech recognition by normal-hearing adults. *Journal of the Acoustical Society of America* 77, 678-685.

Sidwell A., Summerfield A.Q. (1985). The effect of enhanced spectral contrast on the internal representation of vowel-shaped noise. *Journal of the Acoustical Society of America* 78, 495-506.

Summerfield A.Q., Bailey P.J., Foster J.R., Tyler R.S. (1985). Influences of formant bandwidth and auditory frequency selectivity on identification of place of articulation in stop consonants. *Speech Communication* 4, 213-229.

#### **1986**

Sidwell A., Summerfield A.Q. (1986). The auditory representation of symmetrical CVC syllables. *Speech Communication* 5, 283-297.

#### **1987**

Leek M.R., Dorman M.F., Summerfield A.Q. (1987). Minimal spectral contrast for vowel identification by normal-hearing and hearing-impaired listeners. *Journal of the Acoustical Society of America* 81, 148-154.

Summerfield A.Q., Sidwell A., Nelson T. (1987). Auditory enhancement of changes in spectral amplitude. *Journal of the Acoustical Society of America* 81, 700-708.

MacLeod A., Summerfield A.Q. (1987). Quantifying the contribution of vision to speech perception in noise. *British Journal of Audiology* 21, 131-141.

#### **1988**

Stubbs R.J., Summerfield A.Q. (1988). Evaluation of two voice-separation algorithms using normal-hearing and hearing-impaired listeners. *Journal of the Acoustical Society of America* 84, 1236-1249.

#### **1989**

Assmann P.F., Summerfield A.Q. (1989). Modelling the perception of concurrent vowels: Vowels with the same fundamental frequency. *Journal of the Acoustical Society of America* 85, 327-338.

Summerfield A.Q., Assmann P.F. (1989). Auditory enhancement and the perception of concurrent vowels. *Perception and Psychophysics* 45, 529-536.

#### **1990**

Stubbs R.J., Summerfield, A.Q. (1990). Algorithms for separating the speech of interfering talkers: Evaluations with voiced sentences, and normal-hearing and hearing-impaired listeners. *Journal of the Acoustical Society of America* 87, 359-372.

MacLeod A., Summerfield A.Q. (1990). A procedure for measuring auditory and audio-visual speech-reception thresholds for sentences in noise: rationale, evaluation, and recommendations for use. *British Journal of Audiology* 24, 29-44.

Assmann P.F., Summerfield A.Q. (1990). Modeling the perception of concurrent vowels: Vowels with different fundamental frequencies. *Journal of the Acoustical Society of America* 88, 680-697.

#### **1991**

Stubbs R.J., Summerfield A.Q. (1991). Effects of signal-to-noise ratio, signal periodicity, and degree of hearing impairment on the performance of voice-separation algorithms. *Journal of the Acoustical Society of America* 89, 1383-1393.

Summerfield A.Q., Assmann P.F. (1991). Perception of concurrent vowels: Effects of pitch-period asynchrony and harmonic misalignment. *Journal of the Acoustical Society of America* 89, 1364-1377.

Summerfield A.Q. (1991). Lipreading and audio-visual speech perception. *Philosophical Transactions of the Royal Society London B*. 335, 71-78.

### **1992**

Summerfield A.Q., Culling J.F. (1992). Auditory segregation of competing voices: Absence of effects of FM or AM coherence. *Philosophical Transactions of the Royal Society London B*. 336, 357-366.

### **1993**

Foster J.R., Summerfield A.Q., Marshall D.H., Palmer L., Rosen S.M., Ball V. (1993). Lipreading the BKB sentence lists: corrections for list and practice effects. *British Journal of Audiology* 27 233-246.

### **1994**

Culling J.F., Summerfield A.Q., Marshall D.H. (1994). Effects of simulated reverberation on the use of binaural cues and fundamental-frequency differences for separating concurrent vowels. *Speech Communication* 14, 71-95.

Assmann P.F., Summerfield A.Q. (1994). The contribution of waveform interactions to the perception of concurrent vowels. *Journal of the Acoustical Society of America* 95, 471-484.

Lea A.P., Summerfield A.Q. (1994). Minimal spectral contrast for vowel identification. *Perception and Psychophysics* 56, 379-391.

Summerfield A.Q., Palmer A.R., Foster J.R., Marshall D.H., Twomey T. (1994) Clinical evaluation and test-retest reliability of the IHR-McCormick Automated Toy Discrimination Test. *British Journal of Audiology* 28, 165-179.

### **1995**

Palmer A.R., Summerfield A.Q., Fantini D.A. (1995). Responses of auditory nerve fibres to stimuli producing psychophysical enhancement. *Journal of the Acoustical Society of America* 97, 1786-1799.

Summerfield A.Q., Marshall D.H. (1995). Pre-operative predictors of outcomes from cochlear implantation in adults: performance and quality of life. *Annals of Otolaryngology, Rhinology, and Laryngology*. Volume 104, Supplement 166, 105-108.

Summerfield A.Q., Marshall D.H. (1995). Cochlear implantation: demands, costs, and utility. *Annals of Otolaryngology, Rhinology, and Laryngology*. Volume 104, Supplement 166, 245-248.

Culling J.F., Summerfield A.Q. (1995). Binaural grouping of complex sounds: absence of across frequency grouping by common inter-aural delay. *Journal of the Acoustical Society of America* 98, 785-797.

Culling J.F., Summerfield A.Q. (1995). The role of frequency modulation in the perceptual separation of concurrent vowels. *Journal of the Acoustical Society of America* 98, 837-846.

Gates G.A., Daly K., Dichtel W.J., Dooling R.J., Gulya A.J., Hall J.W., Jerger S.W., Jones J.E., Mayer M.H., Pierschalla M., Ross L.F., Schwartz R.G., Weinstein B.E., Young E.D., Abbas P.J., Blamey P., Brackman D.E., Brimacombe J.A., Chute P.M., Cohen N.L., Dorman M.F., Eddington D.K., Gantz B.J., Heller J.W., Ketten D.R., Knutson J.F., Leake P.A., McDermott H.J., Miyamoto R.T., Moog J.S., Osberger M.J., Shannon R.V., Skinner M.W., Summerfield A.Q., Tobey E.A., Wilson B.S., Zwolan T.A., Donahue A.H., Allen M.P., Beck L.B., Bray E.A., Cooper J.A., Ferguson J.H., Flack M.N., Hall W.H., Hambrecht F.T., Krasnegor N., Monjan A.A., Naunton R.F., Snow J.B., Hodes R.J., Alexander D.F., Hall Z.W., Brown J.

(1995). Cochlear implants in adults and children. *Journal of the American Medical Association* 274, 1955-1961.

### **1996**

Arlinger S., Gatehouse S., Bentler R.A., Byrne D., Cox R.M., Dirks D.D., Humes L., Neuman A., Ponton C., Robinson K., Silman S., Summerfield A.Q., Turner C.W., Tyler R.S., Willott J.F. (1996). Report of the 1st Eriksholm Consensus Conference on Auditory Deprivation and Acclimatisation. *Ear and Hearing* 17, 87S-90S.

Tyler R.S., Summerfield A.Q. (1996). Cochlear implantation: relationships with research on auditory deprivation and acclimatization. *Ear and Hearing* 17: 38S-50S.

Robinson K., Summerfield A.Q. (1996). Adult auditory learning and training. *Ear and Hearing* 17: 51S-65S.

### **1997**

Summerfield A.Q., Marshall D.H., Archbold S. (1997). Cost-effectiveness considerations in paediatric cochlear implantation. *American Journal of Otology* 18, S166-S168.

### **1998**

Culling J.F., Summerfield A.Q. (1998) Measurements of the binaural temporal window using a detection task. *Journal of the Acoustical Society of America* 103, 3540-3553.

Culling J.F., Summerfield A.Q. (1998) Dichotic pitches as illusions of binaural unmasking I: Huggins' Pitch and the "Binaural Edge Pitch". *Journal of the Acoustical Society of America* 103, 3509-3526.

Culling J.F., Marshall, D.H., Summerfield A.Q. (1998) Dichotic pitches as illusions of binaural unmasking II: the Fourcin Pitch and the Dichotic Repetition Pitch. *Journal of the Acoustical Society of America* 103, 3527-3529.

### **1999**

Summerfield A.Q., Marshall D.H. (1999) Paediatric cochlear implantation and health-technology assessment. *International Journal of Paediatric Otorhinolaryngology* 47, 141-151.

Akeroyd M.A., Summerfield A.Q. (1999) A binaural analogue of gap detection. *Journal of the Acoustical Society of America* 105, 2807-2820.

Hall D.A., Haggard M.P., Akeroyd M.A., Palmer A.R., Summerfield A.Q., Elliot M.P., Gurney E.M., Bowtell R.W. (1999) "Sparse" temporal sampling in auditory fMRI. *Human Brain Mapping* 7, 213-223.

### **2000**

Ludman C.N., Summerfield A.Q., Hall D.A., Elliot M., Foster J., Hykin J.L., Bowtell R., Morris P.M. (2000). Lipreading ability and patterns of cortical activation studied using functional magnetic resonance imaging. *British Journal of Audiology* 34, 225-230.

Foster J.R., Hall D.A., Summerfield A.Q., Palmer A.R., Bowtell R. (2000). Sound-level measurements and calculation of safe noise dosage during EPI at 3T. *Journal of Magnetic Resonance Imaging* 12, 157-163.

Hall D.A., Summerfield A.Q., Goncalves M.S., Foster J.R., Palmer A.R., Bowtell R.W. (2000). Time-course of the auditory bold response to scanner noise. *Magnetic Resonance in Medicine* 43, 601-606.

Hall D.A., Haggard M.P., Akeroyd M.A., Summerfield A.Q., Palmer A.R., Bowtell R.W. (2000). Stimulus modulation and task effects in auditory processing measured using fMRI. *Human Brain Mapping* 10, 107-119.

Akeroyd M.A., Summerfield A.Q. (2000). Integration of monaural and binaural evidence of vowel formants. *Journal of the Acoustical Society of America* 107, 3394-3406.

Akeroyd M.A., Summerfield A.Q. (2000). Lateralization of a simple dichotic pitch. *Journal of the Acoustical Society of America* 108, 316-334.

Summerfield A.Q., Marshall D.H. (2000). Non-use of cochlear implants by post-lingually deafened adults. *Cochlear Implants International* 1, 18-38.

## **2001**

Hall D.A., Haggard M.P., Summerfield A.Q., Akeroyd M.A., Palmer A.R., Bowtell R.W. (2001). fMRI measurements of sound-level encoding in the absence of background scanner noise. *Journal of the Acoustical Society of America* 109, 1559-1570.

Nakisa M., Summerfield A.Q., Nakisa R.C., McCormick B., Archbold S., Gibbin K.P., O'Donoghue G.M. (2001). Functionally equivalent ages and hearing levels of children with cochlear implants measured with pre-recorded stimuli. *British Journal of Audiology* 35, 183-199.

Fortnum H.M., Summerfield A.Q., Marshall D.H., Davis A.C., Bamford J.M. (2001). Prevalence of permanent childhood hearing impairment in the United Kingdom and implications for universal neonatal hearing screening: questionnaire based ascertainment study. *British Medical Journal* 323, 536-539.

Chambers J., Akeroyd M.A., Summerfield A.Q., Palmer A.R. (2001). Active control of the volume acquisition noise in functional magnetic resonance imaging: method and psychoacoustical evaluation. *Journal of the Acoustical Society of America*, 110, 3041-3054.

## **2002**

Hall D.A., Johnsrude I.S., Haggard M.P., Palmer A.R., Akeroyd M.A., Summerfield A.Q. (2002) Spectral and temporal processing in human auditory cortex. *Cerebral Cortex*, 12, 140-9.

Summerfield A.Q., Nakisa M.J., Archbold S., McCormick B., Gibbin K.P., O'Donoghue G.M. (2002) Use of vocalic information in the identification of 'S' and 'SH' by children with cochlear implants. *Ear and Hearing*, 23, 58-77.

Fortnum H.M., Marshall D.H., Summerfield A.Q. (2002) Epidemiology of the United Kingdom population of hearing-impaired children including characteristics of those with and without cochlear implants — audiology, etiology, co-morbidity, and social demography. *International Journal of Audiology*, 41, 170-9.

Summerfield A.Q., Marshall D.H., Barton G.R., Bloor K.E. (2002) Cost-utility scenario analysis of bilateral cochlear implantation. *Archives of Otolaryngology — Head and Neck Surgery*, 128: 1255-62.

Palmer AR, Summerfield AQ. (2002) Microelectrode and neuroimaging studies of central auditory function. *British Medical Bulletin* 63: 95-105.

## **2003**

Barton G.R., Bloor K.E., Marshall D.H., Summerfield A.Q. (2003) Paediatric cochlear implantation: multi-centre retrospective cost analysis. *International Journal of Paediatric Otorhinolaryngology*, 67: 141-149.

Fortnum H.M., Marshall D.H., Bamford J.M., Summerfield A.Q. (2003) Hearing-impaired children in the UK: education setting and communication approach. *Deafness and Education International*, 4: 123-141.

Budd TW, Hall DH, Goncalves MS, Akeroyd MA, Foster JR, Palmer AR, Head K, Summerfield AQ. Sensitivity to interaural correlation in the human ascending auditory system: An fMRI investigation. (2003). *NeuroImage*, 20: 1783-94.

## 2004

Barton G.R., Marshall D.H., Bloor K.E., Summerfield A.Q. (2004). Influences of the scale and scope of activity on the cost of paediatric cochlear implantation. *International Journal of Audiology*, 43: 369-376.

Summerfield A.Q., on behalf of the United Kingdom Cochlear Implant Study Group. (2004). Criteria of candidature for unilateral cochlear implantation in post-lingually deafened adults I: Theory and measures of effectiveness. *Ear and Hearing*, 25: 310-335.

Summerfield A.Q. and Barton G.R., on behalf of the United Kingdom Cochlear Implant Study Group. (2004). Criteria of candidature for unilateral cochlear implantation in post-lingually deafened adults II: Cost-effectiveness analysis. *Ear and Hearing*, 25: 336-360.

Summerfield A.Q. and Marshall D.H., on behalf of the United Kingdom Cochlear Implant Study Group. (2004). Criteria of candidature for unilateral cochlear implantation in post-lingually deafened adults III: Prospective evaluation of an actuarial approach to defining a criterion. *Ear and Hearing*, 25: 361-374.

Barton GR, Bankart J, Davis AC, Summerfield AQ (2004). Comparing utility scores before and after hearing-aid provision: Results according to the EQ-5D, HUI3, and SF-6D. *Applied Health Economics and Health Policy*, 3: 103-105.

## 2005

Summerfield AQ, Cirstea SE, Roberts KL, Barton GR, Graham JM, O'Donoghue GM. (2005). Incidence of meningitis and of death from all causes among users of cochlear implants in the United Kingdom. *Journal of Public Health*, 27: 551-61.

Hall DA, Fussell C, Summerfield AQ. Reading fluent speech from talking faces: Typical brain networks and individual differences. (2005). *Journal of Cognitive Neuroscience*, 17: 939-953.

Hall D.A., Barrett D.J.K., Akeroyd M.A., Summerfield A.Q. Cortical representations of temporal structure in sound. *Journal of Neurophysiology*, 94, 3181-91.

## 2006

Stacey, P.C., Fortnum, H.M., Barton, G.R., & Summerfield, A.Q. (2006). Hearing-impaired children in the UK I: Auditory performance, communication skills, educational achievements, quality of life, and cochlear implantation. *Ear and Hearing*, 27, 161-186.

Barton, G. R., Stacey, P. C., Fortnum, H. M., & Summerfield, A. Q. (2006). Hearing-impaired children in the UK II: Cochlear implantation and the cost of compulsory education. *Ear and Hearing*, 27, 187-207.

Roberts, K.L, Summerfield, A.Q., Hall, D.A. (2006). Presentation modality influences behavioural measures of alerting, orienting, and executive control. *Journal of the International Neuropsychological Society*, 12, 485-492.

Barton, G. R., Fortnum, H. M., Stacey, P. C., & Summerfield, A. Q. Hearing-impaired children in the UK III: Cochlear implantation and the economic costs incurred by families. *Ear and Hearing*, 27, 563-574.

Barton, G. R., Fortnum, H. M., Stacey, P. C., & Summerfield, A. Q. Hearing-impaired children in the UK IV: Cost-effectiveness of paediatric cochlear implantation. *Ear and Hearing*, 27, 575-588.

Fortnum HM, Stacey PC, Summerfield AQ. (2006). An exploration of demographic bias in a questionnaire survey of hearing-impaired children: Implications for comparisons of children with and without cochlear implants. *Int J Pediatr Otorhinolaryngol*. [Epub ahead of print].

Summerfield AQ, Barton GR, Toner J, McAnallen C, Proops D, Harries C, Cooper H, Court I, Gray R, Osborne J, Doran M, Ramsden R, Mawman D, O'driscoll M, Graham J, Aleksy W, Meerton L, Verschure C, Ashcroft P, Pringle M. (2006). Self-reported benefits from successive bilateral cochlear implantation in post-lingually deafened adults: randomised controlled trial. *International Journal of Audiology*. Suppl:99-107.

## **2007**

Akeroyd MA, Chambers J, Bullock D, Palmer AR, Summerfield AQ, Nelson PA, Gatehouse S. (2007) The binaural performance of a cross-talk cancellation system with matched or mismatched setup and playback acoustics. *Journal of the Acoustical Society of America*, 121, 1056-69.

Stacey PC, Summerfield AQ. (2007). Effectiveness of high-variability computer-based auditory training in improving the ability of normally-hearing listeners to understand spectrally-distorted speech. *Journal of the Acoustical Society of America*, 121, 2923-35.

## **2008**

Raine CH, Summerfield Q, Strachan DR, Martin JM, Totten C. (2008). The cost and analysis of nonuse of cochlear implants. *Otology & Neurotology*, 29, 221-4.

Stacey PC, Summerfield AQ. (2008). Comparison of word-, sentence, and phonetic-based training strategies in improving the perception of spectrally-distorted speech. *Journal of Speech, Language, and Hearing Research*, 51, 526-38.

Fortnum HM, Stacey PC, Barton GR, Summerfield AQ. National Evaluation of Support Options for Deaf and Hearing-impaired Children: Relevance to education services. To be published in *Deafness and Education International*.

Roberts KL, Summerfield AQ, Hall DA. (In press) Covert auditory spatial orienting: An evaluation of the spatial relevance hypothesis. To be published in *Journal of Experimental Psychology: Human Perception and Performance*.

## **Invited Chapters**

### **1977**

Haggard M.P., Summerfield A.Q. (1977). Perceptual calibration for parameters of speaker differences -- measures from reaction-time increment studies. In S. Dornic (Ed.) *Attention and Performance VI*. Erlbaum: Hillsdale, N.J. pp.261-284.

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