

## REFERENCE LIST

- Alcantra, J.L, Moore, B.C., Kuhnel, V., & Launer, S. 2003. Evaluation of the Noise Reduction System in a Commercial Digital Hearing Aid. *International Journal of Audiology* 42(1): 34-42.
- American Academy of Audiology, 2003: *Pediatric Amplification Protocol*.
- Arnold, S.A. 2000. The Auditory Brain Stem Response. In: Roeser, R.J., Valente, M., Hosford-Dunn, H. (eds.), *Audiology Diagnosis* (pp. 451-470). New York: Thieme.
- Babbie, E. 1992. *The Practice of Social Research*. California: Wadsworth Publishing Company.
- Babbie, E, and Mouton, J. 2002. *The Practice of Social Research*. Cape Town: Oxford University Press Southern Africa.
- Bachmann, K.R., and Hall III, J.W. 1998. Pediatric Auditory Brainstem Response Assessment: The Cross-check Principle Twenty years later. *Seminars in Hearing* 12 (1): 41–59.
- Bailey, K.D. 1982. *Methods of Social Research*. London: Collier Macmillan Publishers.
- Beauchaine, K.L. 2002. An Amplification Protocol for Infants. In: R.C. Seewald and J.S. Gravel (eds.), *A Sound Foundation through Early Amplification: Proceedings of the Second International Conference* (pp. 105-112). Stäfa, Switzerland: Phonak AG.

- Beauchaine, K.L., and Donoghy, K.F. 1996. Amplification Selection Considerations in the Pediatric Population. In: F.H. Bess, J.S. Gravel and A.M. Tharpe (eds.), *Amplification for Children with Auditory Deficits* (pp. 145–160). Nashville: Bill Wilkerson Center Press.
- Bellis, T.J. 2003. *Assessment and Management of Central Auditory Processing Disorders in the Educational Setting from Science to Practice* 2<sup>nd</sup> Edition. Canada: Singular Publishing.
- Bess, F.H., 2000. Early Amplification for Children: Implementing Change. In: R.C. Seewald (ed.), *A Sound Foundation through Early Amplification: Proceedings of an International Conference* (pp. 247-251). Stäfa, Switzerland: Phonak AG.
- Bess, F.H., & Hall III, J.W. 1992. *Screening Children for Auditory Function*. Nashville: Bill Wilkerson Center Press.
- Boothroyd, A. 1997. Auditory Capacity of Hearing Impaired Children using Hearing Aids and Cochlear Implants: Issues of efficacy and assessment. *Scandinavian Audiology*, 26(46): 17-25.
- Brown, E, Klein, A.J., and Shydee, K.A. 1999. Hearing-aid-processed Tone-pips: Electroacoustic and ABR characteristics. *Journal of the American Academy of Audiology* 10: 190-197.
- Buerkli-Halevy, O., and Checkley, P.C. 2000. Matching Technology to the Needs of Infants. In: R.C. Seewald (ed.), *A Sound Foundation through Early Amplification: Proceedings of an International Conference* (pp. 77-86). Stäfa, Switzerland: Phonak AG.

Burkard, R.F., and Secor, C. 2002. Overview of Auditory Potentials. In: J.Katz (ed.), *Handbook of Clinical Audiology* 5<sup>th</sup> Ed. (pp. 233-248). Baltimore: Lippincott, Williams & Wilkins.

Cone-Wesson, B. 2003. Electrophysiologic Assessment of Hearing in Infants: Compound Nerve Action, Auditory Brainstem Response, and Auditory Steady State Response. *The Volta Review* 103(4): 253-279.

Cone-Wesson, B., Dowell, R.C., Tomlin, D., Rance, G., and Ming, W.J. 2002. The Auditory Steady-State Response: Comparisons with the Auditory Brainstem Response. *Journal of American Academy of Audiology* 13(4): 173-187.

Cone-Wesson, B., Rickards, F., Poulis, C., Parker, J., Tan, L., and Pollard, J. 2002. The Auditory Steady State Response: Clinical Observations and Applications in Infants and Children. *Journal of the American Academy of Audiology* 13(5): 270-282.

Cone-Wesson, B., Parker, J., Swiderski, N., and Rickards, F. 2002. The Auditory Steady-State Response: Full-Term and Premature Neonates. *Journal of the American Academy of Audiology* 13(5): 260-269.

Cone-Wesson, B., Vohr, B.R., Sninger, Y., Widen, J.E., Folsom, R.C., Gorga, M.P., and Norton, S.J., 2000. Identification of Neonatal Hearing Impairment: Infants with Hearing Loss. *Ear and Hearing* 21(5): 488-507.

De Vos, A.S., Strydom, H., Fouché, C.B., Poggenpoel, M. and Schurink, E.W. 2002. *Research at Grass Roots* 2<sup>nd</sup> Ed. Paarl: Van Schaik.

Diefendorf, A.O. 2002. Detection and Assessment of Hearing Loss in Infants and Children. In: J. Katz (ed.), *Handbook of Clinical Audiology* 5<sup>th</sup> Ed. (pp. 469-480). Baltimore: Lippincott, Williams & Wilkins,

Diefendorf, A.O., Reitz, P.S., Escobar, M.W., and Wynne, M.K. 1996. Initiating Early Amplification: TIPS for Success. In: F.H. Bess, J.S. Gravel and A.M. Tharpe (eds.), *Amplification for Children with Auditory Deficits* (pp. 123-144). Nashville: Bill Wilkerson Center Press.

Diefendorf, A.O. and Weber, B.A. 1994. Identification of Hearing Loss: Programmatic and Procedural Considerations. In: J. Roush and N.D. Matkin (eds.), *Family Centered Assessment and Intervention* (pp. 43-66). Baltimore: York Press, Inc.

Dillon, H. 2001. *Hearing Aids*. Sydney: Boomerang Press.

Dimitrijevic, A., Sasha John, M., Van Roon, P., Purcell, D.W., Adamonis, J., Ostroff, J., Nedzelski, J.M., and Picton T.W. 2002. Estimating the Audiogram Using Multiple Auditory Steady State Responses. *Journal of the American Academy of Audiology* 13(4): 205-224.

Dimitrijevic, A., Sasha John, M., and Picton, T.W. 2004. Auditory Steady-State Responses and Word Recognition Scores in normal-Hearing and Hearing-Impaired Adults. *Ear and Hearing* 25(1): 68-84.

- Don, M., and Kwong, B. 2002. Auditory Brainstem Response: Differential Diagnosis. In: J. Katz (ed.), *Handbook of Clinical Audiology* 5<sup>th</sup> Ed. (pp. 274-297). Baltimore: Lippincott, Williams & Wilkins,
- Drummond, A. 2003. *Research Methods for Therapists*. United Kingdom: Nelson Thornes Ltd.
- Feightner, J.W. 1992. Screening in the 1990's: Some Principles and Guidelines. In: F.H. Bess and J.W. Hall iii (eds.), *Screening Children for Auditory Function* (pp. 1-16). Nashville: Bill Wilkerson Center Press.
- Ferraro, J.A., and Durrant, J.D. 1994. Auditory Evoked Potentials: Overview and Basic Principles. In: J. Katz (ed.), *Handbook of Clinical Audiology* 4<sup>th</sup> Ed. (pp. 317-338). Baltimore: Lippincott, Williams and Wilkins.
- Fowler, C.G., and Shanks, J.E. 2002. Tympanometry. In: J. Katz (ed.), *Handbook of Clinical Audiology* 5<sup>th</sup> Ed. (pp. 175-204). Baltimore: Lippincott, Williams and Wilkins.
- Garnham, J., Cope, Y., Durst, C., McCormick, B., and Mason, S.M. 2000. ABR assessment of aided thresholds before cochlear implantation. *British Society of Audiology*: 267-278.
- Goldstein, R., and Aldrich, W.M. 1999. *Evoked Potential Audiometry: Fundamentals and Applications*. Boston: Allyn & Bacon.

- Gorga, M.P., Neely, S.T., Hoover, B.M., Dierking, D.M., Beauchaine, K.L., and Manning, C. 2004. Determining the Upper Limits of Stimulation for Auditory Steady State Response Measurements. *Ear and Hearing* 25(3): 302-307.
- Gorga, M.P., and Neely, S.T. 2002. Some Factors that May Influence the Accuracy of Auditory Brainstem Response Estimates of Hearing Loss. In: R.C. Seewald and J.S. Gravel (eds.), *A Sound Foundation through Early Amplification: Proceedings of the Second International Conference* (pp. 49-61). Stäfa, Switzerland: Phonak AG.
- Gorga, M.P. 1999. Predicting Auditory Sensitivity from Auditory Brainstem Response Measurements. *Seminars in Hearing* 20(1): 29-43.
- Gorga, M.P., and Thornton, R.T. 1989. The Choice of Stimuli for ABR Measurements. *Ear and Hearing* 10(4): 217-230.
- Gravel, J.S. 2005. Evidence-Based Practice in Pediatric Audiology. In: R.C. Seewald and J.M. Bamford (eds.), *A Sound Foundation through Early Amplification: Proceedings of the Third International Conference* (pp. 17–26). Stäfa, Switzerland: Phonak AG.
- Gravel, J.S. 2000. Audiologic Assessment for the Fitting of Hearing Instruments: Big Challenges from Tiny Ears. In: R.C. Seewald (ed.), *A Sound Foundation through Early Amplification: Proceedings of an International Conference* (pp. 33-46). Stäfa, Switzerland: Phonak AG.

- Hall III, J.W. 2005. *Pediatric conference*: Pretoria, South Africa .
- Hall III, J.W. 1992. *Handbook of Auditory Evoked Responses*. Boston: Allyn and Bacon.
- Hall III, J.W. 1999. *Auditory Evoked Response and Otoacoustic Emission Hands-on Workshop*. January 21-23, 1999, Vanderbilt University Medical Centre, Nashville, Tennessee.
- Hall III, J.W. 2000. *Handbook of Otoacoustic Emissions* , California: Singular Publishing Group .
- Hall III, J.W. and Mueller, H.G. 1997. *Audiologist' Desk Reference, Volume I*. California: Singular Publishing Group.
- Hall III, J.W., and Mueller, H.G. 1998. *Audiologist' Desk Reference, Volume II*. California: Singular Publishing.
- Harrell, W.R. 2002. Pure tone Evaluation. In: J. Katz (ed.), *Handbook of Clinical Audiology* 5<sup>th</sup> Ed. (pp. 71-87). Baltimore: Lippincott, Williams and Wilkins.
- Hayes, D., and Northern, J. 1997. *Infants and Hearing*. San Diego: Singular Publishing group.
- Hegde, M.N. 1987. *Clinical Research in Communicative Disorders: Principles and Strategies*. Boston: College-Hill Publication.

Hedley-Williams, A., Tharpe, A.M., and Bess, F.H. 1996. Fitting Hearing Aids in the Pediatric Population: A survey of practice procedures. In: F.H. Bess, J.S. Gravel and A.M. Tharpe (eds.), *Amplification for Children with Auditory Deficits* (pp. 107-122). Nashville: Bill Wilkerson Center Press.

Herdman, A.T., and Stapells, D.R. 2003. Auditory Steady-State Response Thresholds of Adults with Sensorineural Hearing Impairments. *International Journal of Audiology* (42): 237-248.

Herdman, A.T., and Stapells, D.R. 2001. Threshold Determination using the Monotic and Dichotic Multiple Auditory Steady-State Response Technique in Subjects. *Scandinavian journal of Audiology* (30): 41-49.

Hill, A., and Spittlehouse, C. 2005. What is critical appraisal?  
[www.evidence-based-medicine.co.uk](http://www.evidence-based-medicine.co.uk); accessed November 2005.

Hood, L.J. 1998. *Clinical Applications of the Auditory Brainstem Response*. San Diego: Singular Publishing group.

Hyde, M. 2005. Evidence-Based Practice, Ethics and EHDI Program Quality. In: R.C. Seewald and J.M. Bamford (eds.), *A Sound Foundation through Early Amplification: Proceedings of the Third International Conference* (pp. 281–301). Stäfa, Switzerland: Phonak AG.

Hyde, M., Sninger, Y.S., and Dom, M. 1998. Objective Detection and analysis of Auditory Brainstem Response: An historical Perspective. *Seminars in Hearing* 19(1): 97-113.



- Jacobson, J.T., 1985. *The Auditory Brainstem Response*. San Diego: College-Hill Press.
- Jeng, F-C., Brown, C.J., Johnson, T.A., and Vander Werff, K.R. 2004. Estimating Air-Bone Gaps Using Auditory Steady-State Responses. *Journal of the American Academy of Audiology* 15(1): 67-78.
- Jerger, J. 1998. The Auditory Steady State Response: Editorial. *Journal of the American Academy of Audiology* (editorial).
- Jenkins, S., Price, C.J., and Straker, L. 2003. *The Researching Therapist*. Edinburgh: Churchill Livingstone.
- John, M.S., Brown, D.K., Muir, P.J., and Picton, T.W. 2004. Recording Auditory Steady State Response in Young Infants. *Ear and Hearing* 25(6): 539-553.
- John, M.S., Dimitrijevic, A., and Picton, T. W. 2002. Auditory Steady-State Responses to Exponential Modulation Envelopes. *Ear and Hearing* 23(2): 106-117.
- John, M.S., Lins, O.G., Boucher, B.L., and Picton, T.W. 1998. Multiple auditory steady-state responses (MASTER): Stimulus and recording parameters. *Audiology*: 59-82.
- Joint Committee on Infant Hearing Screening, 1994. 1994 Position Statement. *ASHA* (36): 38-42.
- Joint Committee on Infant Hearing, 2000. Year 2000 Position Statement:

- Principles and Guidelines for Early Hearing Detection and Intervention Programs. *American Journal of Audiology*, (9): 9-29.
- Katz, J. 2002. *Clinical Audiology* 5th Ed. (pp. 3-8). Baltimore: Lippincott, Williams and Wilkins.
- Kei, J., Allison-Levick, J., Dockray, J., Harrys, R., Kirkegard, C., Wong, J., Maurer, M., Hegarty, J., Young, J., and Tudehope, D. 2003. High-Frequency (1000 Hz) Tympanometry in Normal Neonates. *Journal of the American Academy of Audiology* 14(1): 20-28.
- Kirkwood, D.H. 2002. Caring for our Youngest Patients: A unique Opportunity and Challenge. *Hearing Journal* 55(11): editorial.
- Kuk, F. 2004. Personal Correspondence: *Pediatrics and functional gain*.
- Kuk, F., and Marcoux, A. 2002. Factors Ensuring Consistent Audibility in Pediatric Hearing Aid Fitting. *Journal of the American Academy of Audiology* 13(9): 503-520.
- Kurtzer-White, E., and Luterman, D. 2001. *Early Childhood Deafness*. Timonium: York Press.
- Kuwada, S., Anderson, J.S., Batra, R., Fitzpatrick, D.C., Teissier, N. & D'Angelo, W.R. 2002. Sources of the Scalp-Recorded Amplitude-Modulation Following Response. *Journal of the American Academy of Audiology* 13(4):188-204.
- Leedy, P.D., and Ormrod, J.E. 2005. *Practical Research: Planning and*

*Design*. New Jersey: Merrill Prentice Hall.

Leedy, P.D., and Omrod, J.E. 2001. *Practical Research: Planning and Design*. New Jersey: Merrill Prentice Hall.

Leedy, R. 1997. *Practical research: Planning and Design*. Ohio: Columbus.

Leedy, R. 1981. *How to read research and understand it*. New York: Macmillan.

Lewis, D.E. 2000. Hearing Instrument Selection and Fitting in Children. In: M. Valente, H. Hosford-Dunn, and R.J. Roeser (eds.), *Audiology Treatment* (pp. 149-212). New York: Thieme.

Lins, O.G., Picton, T.W., Boucher, B.L, Durieux-Smith, A., Champagne, S.C., Moran, L.M., Perez-Abalo, M.C., Martin, V., and Guillermo, S. 1996. Frequency-Specific Audiometry Using Steady-State Responses. *Ear and Hearing* 17(2): 81-96.

Lins, O.G., and Picton, T.W. 1995. Auditory Steady-State Responses to Multiple Simultaneous Stimuli. *Electroencephalography and Clinical Neurophysiology* 96: 420-432.

Louw, B., 2004 Lecture: *Research Ethics in Communication Pathology*.

Luterman, D.M. with Kurtzer-White, E and Seewald, R.C., 1999. *The Young Deaf Child*. Baltimore: York Press Inc.

Luts, H., Desloovere, C., Kumar, A., Vandermeersch, E., and Wouters, J.

2004. Objective Assessment of Frequency-specific Hearing Thresholds in Babies. *International Journal of Pediatric Otorhinolaryngology* (68): 915-926.
- Mahoney, T.M., 1985. Auditory Brainstem Response Hearing Aid Applications. In: J.T. Jacobson (ed.), *The Auditory Brainstem Response* (pp. 349-370). San Diego: College-Hill Press.
- Marais, C.C., 2003. Transducer influence on Auditory Steady State Evoked Potentials. *Unpublished M Communication Pathology thesis*, University of Pretoria, South Africa.
- Mendel, LL, Danhauer, J.L, and Singh, S. 1999. *Singular's Illustrated Dictionary of Audiology*. San Diego: Singular Publishing Group, Inc.
- Moeller, M.P. 2001. Intervention and Outcomes for Young Children Who are Deaf and Hard of Hearing and their Families. In: E. Kurtzer-White and D. Luterman (eds.), *Early Childhood Deafness* (pp. 109-138). Timonium: York Press.
- Moeller, M.P., 2000. Early Intervention and Language Development in Children who are Deaf and Hard of Hearing. *Pediatrics*, 106(E43).
- Mouton, J. 2001. *How to succeed in your Master's & Doctoral Studies*. Pretoria, South Africa: Van Schaik Publishers.
- National Institutes of Health Consensus Statement, 1993. Early

- Identification of Hearing Impairment in Infants and Young Children. In: D. Hayes and J. Northern (eds.), *Infants and Hearing* (appendix E). San Diego: Singular Publishing Group.
- Neault, M.W. 2001. After Screening: The Diagnostic Process in Early Childhood Deafness. In: E. Kurtzer-White and D. Luterman (eds.), *Early Childhood Deafness* (pp. 29-48). San Diego: York Press.
- Neuman, W.L. 1997. *Social Research Methods: Qualitative and Quantitative Approaches*. Boston: Allan Bacon.
- Northern, J.L., and Downs, M.P. 2002. *Hearing in Children*. Baltimore: Lippincott, Williams and Wilkins.
- Oates, P., and Stapells, D.R. 1998. Auditory Brainstem Response Estimates of the Pure-Tone Audiogram: Current Status. *Seminars in Hearing* 19(1): 61-85.
- Orlando, M.S., and Prieve, B.A. 1998. Models for Universal Newborn Hearing Screening Programs in Universal Newborn Hearing Screening. In: L.G. Spivak (ed.), *Universal Newborn Hearing Screening*. New York: Thieme.
- Oxford-Centre for Evidence Based Medicine 2004.  
[www.cebm.net/ebm\\_is\\_isnt.asp](http://www.cebm.net/ebm_is_isnt.asp); accessed October 2005.
- Palmer, C. 2005. In Fitting Kids with Hearing Aids, Ensuring Safety and

- Audibility is a good way to start. *Hearing Journal* 58(2): 10-17.
- Pediatric Working Group of the Conference on Amplification for Children with Auditory Deficits, 1996. Amplification for Infants and children with hearing loss. *American Journal of Audiology* 5(1): 53-68.
- Perez-Abalo, M.C., Savio, G., Torres, A., Martin, V., Rodriguez, E, and Galan, L 2001. Steady State responses to Multiple Amplitude Modulated Tones: An optimized method to test Frequency-specific thresholds in hearing impaired children and normal hearing subjects. *Ear and Hearing* 22(3): 200-211.
- Picton, T.W. 2005. Objective Audiometry: Problems and Progress. Oral presentation at the 2<sup>nd</sup> European Conference on Pediatric Amplification Solutions: *Sound for a Young Generation*.
- Picton, T.W., Dimitrijevic, A., Perez-Abalo, M-C., and Van Roon, P. 2005. Estimating Audiometric Thresholds Using Auditory Steady-State Responses. *Journal of the American Academy of Audiology* 16(3): 140–154.
- Picton, T.W., and John M.S 2004. Avoiding Electromagnetic Artifacts When Recording Auditory Steady-State Responses. *Journal of the American Academy of Audiology* 15(8): 541-554.
- Picton, T.W., Dimitrijevic, A., Van Roon, P., Sasha-John, M., Reed, M., and

- Finkelstein, H. 2002. Possible Roles for Auditory Steady-State Responses in fitting Hearing Aids. In: R.C. Seewald and J.S. Gravel (eds.), *A Sound Foundation through Early Amplification: Proceedings of the Second International Conference* (pp. 63-73). Stäfa, Switzerland: Phonak AG.
- Picton, T.W., John, M.S., and Dimitrijevic, A. 2002. Possible Roles for the Auditory Steady State Responses in Identification, Evaluation and Management of Hearing Loss. *Audiology Today* (14): 29-34.
- Picton, T.W., Durieux-Smith, A., Champagne, S.C., Whittingham, J., Moran, L.W., Gigueve, C., and Beauregard, Y. 1998. Objective Evaluation of Aided Thresholds using Auditory Steady-State Response. *Journal of the American Academy of Audiology* (9): 315-331.
- Prieve, B.A., and Fitzgerald, T.S. 2002. Otoacoustic Emissions. In: J. Katz (ed.), *Handbook of Clinical Audiology* 5<sup>th</sup> Ed. (pp. 440-466). Baltimore: Lippincott, Williams and Wilkins.
- Purdy, S.C., Katsch, R., Dillon, H., Storey, L., Sharma, M., and Agung, K., 2005. Aided Cortical Auditory Evoked Potentials for Hearing Instrument Evaluation in Infants. In: R. C. Seewald and J.M. Bamford (eds.), *A Sound Foundation through Early Amplification: Proceedings of the Third International Conference* (pp. 115-128). Stäfa, Switzerland: Phonak AG.
- Purdy, S.C., and Abbas, P.J. 2002. ABR Thresholds to Tonebursts Gated with

- Blackman and Linear Windows in Adults with High-frequency Sensori neural Hearing Loss. *Ear and Hearing* 23(4): 358-368.
- Rance, G., Roper, R., Symons, L.M., Poulis, C., Dourlay, M., and Kelly, T. 2005. Hearing Thresholds Estimation in Infants Using Auditory Steady-State Responses. *Journal of the American Academy of Audiology* 16(5): 291 – 300.
- Rance, G., and Briggs, R.J.S. 2002. Assessment of hearing level in infants with significant hearing loss: the Melbourne experience with steady-state evoked potential threshold testing. *Annals of Otology Rhinology and Laryngology* 111 (Suppl. 189): 22 -28.
- Rance, G., and Rickards, F. 2002. Prediction of Hearing Threshold in Infants Using Steady-State Evoked Potentials. *Journal of the American Academy of Audiology* 13(5): 236-245.
- Rance, G., Beer, D.E, Cone-Wesson, B., Shepherd, R.K., Dowell, R.C., King, A.M., Rickards, F.W., and Clark, G.M. 1999. Clinical Findings for a Group of Infants and Young Children with Auditory Neuropathy. *Ear and Hearing* 20(3): 238-252.
- Rance, G., Dowell, R.C., Rickards, F.W. Beer, D.E, and Clark, G.M. 1998. Steady State evoked potentials and behavioral hearing thresholds in a group of children with absent click-auditory brainstem response. *Ear and Hearing* 19(1): 48-61.
- Rance, G., Rickards, F.W., Lawrence, T.C., De Vidi, S, and Clark, G.M.



1995. The Automated Prediction of Hearing Thresholds in Sleeping Subjects Using Auditory Steady-State Evoked Potentials. *Ear and Hearing* 16(5): 499-507.
- Rickards, F.W., Tan, L.E., Lawrence, T.C., Wilson, O.J., Drew, J.H., and Clark, G.M. 1994. Auditory Steady-State Evoked Potential in Newborns. *British Journal of Audiology* 28: 327-337.
- Referral Guidelines for Cochlear Implants, 2004. *Southern ENT*.
- Robinette, M.S., and Galtke, T.J. 2000. Otoacoustic Emissions. In: R.J. Roeser, M. Valente and H. Hosford-Dunn (eds.), *Audiology Diagnosis* (pp. 503-526). New York: Thieme.
- Roeser, R.J., Valente, M., and Hosford-Dunn, H. 2000. *Audiology Diagnosis*. New York: Thieme.
- Ross, M. 2001. Some Reflection on Early Childhood Deafness. In: E. Kurzer-White and D. Luterman (eds.), *Early Childhood Deafness* (pp. 1-12). Timonium: York Press, Inc.
- Ross, M. 1996. Amplification for Children: The Process Begins. In: F. Bess, J.S. Gravel and A.M. Tharpe (eds.), *Amplification for Children with Auditory Deficits* (pp. 1-28). Nashville: Bill Wilkerson Center Press.
- Roush, J., and Matkin, N.D. 1994. *Infants and Toddlers with Hearing Loss: Family Centered Assessment and Intervention*. Timonium: York Press, Inc.

Roush, P.A., 2005. Hearing Aid Fitting in Infants: Practical Considerations and Challenges. In: R.C. Seewald and J.M. Bamford (eds.), *A Sound Foundation through Early Amplification: Proceedings of the Third International Conference* (pp. 105-114). Stäfa, Switzerland: Phonak AG.

Scollie, S.D., 2005. Prescriptive Procedures for Infants and Children. In: R.C. Seewald and J.M. Bamford (eds.), *A Sound Foundation through Early Amplification: Proceedings of the Third International Conference* (pp. 91-104). Stäfa, Switzerland: Phonak AG.

Scollie, S., and Seewald, R.C. 2002. Hearing Aid Fitting and Verification Procedures for Children. In: J. Katz (ed.), *Handbook of Clinical Audiology* 5<sup>th</sup> Ed. (pp. 687-706). Baltimore: Lippincott, Williams and Wilkins.

Seewald, R.C. 2001. Current Issues in Pediatric Hearing Aid Fitting. In: E. Kurtzer-White and D. Luterman (eds.), *Early Childhood Deafness* (pp. 63-72). Timonium: York Press.

Seewald, R.C. 2000. *A Sound Foundation Through Early Amplification: Proceedings of an International Conference* (editorial). Stäfa, Switzerland: Phonak AG.

Seewald, R.C., Moodie, K.S., Sinclair, S.T., and Cornelisse, L.E. 1996.

- Traditional and Theoretical Approaches to Selecting Amplification for Infants and Young Children. In: F.H. Bess J.S. Gravel and A.M. Tharpe (eds.), *Amplification for Children with Auditory Deficits* (pp. 161-192). Nashville: Bill Wilkerson Center Press.
- Sninger, Y., Marsh, R., Walden, B., and Wilber, L.A. 2003. Guidelines for Ethical Practice in Research for Audiologists. *Audiology Today* 15(6):14-17.
- Sninger, Y.S., and Cone-Wesson, B. 2002. Threshold Prediction Using Auditory Brainstem Response and Steady-state Evoked Potentials with Infants and Young Children. In: J. Katz (ed.), *Handbook of Clinical Audiology* 5<sup>th</sup> Ed. (pp. 298-322). Baltimore: Lippincott, Williams and Wilkins.
- Sninger, Y.S., Doyle, K.L., and Moore, J.K. 1999. The Case for Early Identification of Hearing Loss in Children. Auditory system development, experimental auditory deprivation, and development of speech perception and hearing. *Pediatric Clinics of North America* 46(1): 1-14.
- Small, S.A., and Stapells, D.R. 2004. Artifactual Responses When Recording Auditory Steady-State Responses. *Ear and Hearing* 25(6): 611-623.
- Stach B.A. 1998. *Clinical Audiology an Introduction*. San Diego: Singular Publishing Group.
- Stapells, D.A., Herdman, A., Small, S.A., Dimitrijevic, A., and Hatton, J.,

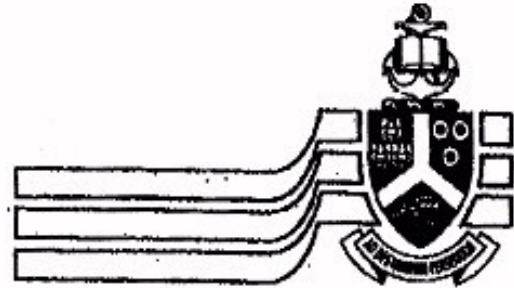
2005. Current Status of the Auditory Steady-State Response for Estimating an Infant's Audiogram. In: R.C. Seewald and J.M. Bamford (eds.), *A Sound Foundation through Early Amplification: Proceedings of the Third International Conference* (pp. 43-60). Stäfa, Switzerland: Phonak AG.
- Stapells, D.R. 2004 Current status of the Auditory Steady State Response For Estimating an Infant's Audiogram. Oral presentation at the third international conference, *A Sound Foundation Through Early Amplification Conference*, Chicago.
- Stapells, D.R. 2002. The Tone-evoked ABR: Why it's the measure of choice for young infants. *The Hearing Journal* 55(11): 14-17.
- Stapells, D.R. 2000a. Frequency-Specific Evoked Potential Audiometry in Infants. In: R.C. Seewald (ed.), *A Sound Foundation through Early Identification: Proceedings of an International Conference* (pp. 13-32). Stäfa, Switzerland: Phonak AG.
- Stapells, D.R. 2000b. Threshold Estimation by the Tone-evoked Auditory Brainstem Response: a literature meta-analysis. *Journal of Speech Language Pathology and Audiology* 24: 74-83.
- Stapells, D.R., and Oates, P. 1997. Estimation of the Pure-Tone Audiogram by the Auditory Brainstem Response: A Review. *Audiology and Neuro-Otology* 2(5): 257-280.
- Stapells, D.R., Gravel, J.S., and Martin, B.A. 1995. Threshold for Auditory

- Brain Stem Responses to Tones in notched Noise from Infants and Young Children with Normal Hearing or Sensorineural Hearing Loss. *Ear and Hearing*, 16(4): 361-371.
- Stapells, D.R., Picton, T.W., Durieux-Smith, A., Edwards, C.G., and Moran, L.M. 1990. Threshold for Short-Latency Auditory-Evoked Potentials to Tones in Notched Noise in Normal-Hearing and Hearing-Impaired Subjects. *Audiology* 29: 262-274.
- Stelmachowicz, P.A. 2000. How do we know we've got it right? Electroacoustic and Audiometric Measures. In: R.C. Seewald (ed.), *A Sound Foundation Through Early Amplification: Proceedings of an International Conference* (pp. 109-118). Stäfa, Switzerland: Phonak AG.
- Stelmachowicz, P.A., Hoover, B., Lewis, D.E., Brenman, M. 2002. Is Functional Gain *really* Functional? *The Hearing Journal* 55(11): 38-42.
- Steyn, A.G.W., Smit, C.F., Du Toit, S.H.C., and Strasheim, C. 1994. *Modern Statistics in Practice*. Pretoria: JL Van Schaik Publishers.
- Stueve, M.P., and O'Rourke, C. 2003. Estimation of hearing loss in children: Comparison of auditory steady-state response, auditory brainstem response, and behavioral test methods. *American Journal of Audiology* 12(2): 125–136.
- Swanepoel, D-W., Hugo, R., and Roode, R. 2004. Auditory Steady-State

- Responses for Children with Severe to Profound Hearing Loss. *Archives Otolaryngology Head and Neck Surgery* 130(5): 531-535.
- Swanepoel, D.W., Schmulian, D., and Hugo, R., 2002. The Effectiveness of the Auditory Steady State Response in Diagnosing Hearing Loss in Infants. *Health SA Gesondheid* 7(4): 47-56.
- Swanepoel, D.W., 2001. Estimating Pure Tone Behavioral Thresholds with the Dichotic Multiple Frequency Auditory Steady State Response Compared to an Auditory Brainstem Response Protocol in Normal Hearing Adults, *Unpublished M Communication Pathology thesis*, University of Pretoria, South Africa.
- Tharpe, A.M., and Haynes, D.S. 2005. Auditory Neuropathy/Dys-synchrony: A Mountain or a Molehill. In: R.C. Seewald and J.M. Bamford (eds.), *A Sound Foundation through Early Amplification: Proceedings of the Third International Conference* (pp. 271-278). Säfa, Switzerland: Phonak AG.
- Valente, M., Hosford-Dunn, H., and Roeser, R.J., 2000. *Audiology Treatment*. New York: Thieme.
- Valdes, J.L., Perez-Abalo, M.C., Martin, V., Savio, G., Serra, C., Rodriguez, E., and Lins, O. 1997. Comparison of Statistical Indicators for the Automatic Detection of 80 Hz Auditory Steady State Responses. *Ear and Hearing* 18(5): 420-429.
- Van der Reijden, C.S., Mens, L.H.M., and Snik, A.F.M. 2005. EEG Derivations

- Providing Auditory Steady State Responses with High Signal-to-Noise Ratios in Infants. *Ear and Hearing* 26(3): 299-309.
- Vander Werff, K.R., and Brown, C.J. 2005. Effect of Audiometric Configuration on Threshold and Suprathreshold Auditory Steady-State Responses. *Ear and Hearing* 26(3): 310 – 326.
- Vander Werf, K.R., Brown, C. J., Gienapp, B.A., and Schmidt Clay, K.M. 2002. Comparison of Auditory Steady-State Response and Auditory Brainstem Response Thresholds in Children. *Journal of the American Academy of Audiology* 13(5): 227-235.
- Yoshinago-Itano, C. 2004. Levels of Evidence: Universal Newborn Hearing Screening (UNHS) and Early Hearing Detection and Intervention Systems (EHDI). *Journal of Communication Disorders* 37(5): 451-465.

Appendix A



University of Pretoria

Research Proposal and Ethics Committee  
Faculty of Humanities

6 September 2004

Dear Mr Swanepoel

**Project:** *The clinical value of the Auditory Steady State Response (ASSR) for early diagnosis and amplification for infants (0-8 months) with hearing loss*

**Researcher:** D Stroebel

**Supervisor:** DCD Swanepoel

**Department:** Communication Pathology

**Reference number:** 85243435

Thank you for the application you submitted to the Research Proposal and Ethics Committee, Faculty of Humanities.

I have pleasure in informing you that the Research Proposal and Ethics Committee formally approved the above study on 26 August 2004.

The committee requests you to convey this approval to Mrs Stroebel.

We wish you success with the project.

Sincerely

Prof Brenda Louw.  
Chair: Research Proposal and Ethics Committee  
Faculty of Humanities  
UNIVERSITY OF PRETORIA



## Appendix B

Researcher: Deidré Stroebel  
Tel: 021 930 3136

21 July 2004

### To Whom It May Concern:

#### Proposed research project:

#### **The clinical Application of ASSR in the Diagnosis and fitting of Hearing Aids in Infants (0 – 8 months)**

Thank you for considering for your child to be part of this research project. The positive results of early identification of hearing loss in infants on different aspects of their development are well known. Different methods are used to obtain information about infants' hearing status. These methods differ from the techniques used on adults. As technology improves, new methods become available that show a lot of promise in the field of pediatric audiology.

I am currently planning a research study in this regard as part of the requirements for a master's degree at the University of Pretoria. The proposed project involves determining the clinical value of Auditory Steady State Responses (ASSR) as a way to predict hearing thresholds, and to evaluate hearing aids in young infants. The results from the hearing assessments will be monitored and compared with the results of two clinically proven procedures, frequently used to determine hearing thresholds, namely the Auditory Brainstem Response (ABR) and Pure tone Audiometry, for a period of time. The study will be conducted under the supervision of personnel at the Department of Communication Pathology.

Procedures currently included in the standard test protocol used to assess infants in my private practice, involve the following:

- The diagnostic session – including ABR and ASSR.
- Measuring the gain from hearing aids through ASSR
- Behavioral testing after the age of 6 months.

As a client of this practice these procedures will also be used to evaluate and monitor your baby's hearing. All of the above procedures are non-invasive, no pain is involved and the ABR and ASSR procedures are normally done while the baby is sleeping. If sedation should be needed, this will be done in consultation with a pediatrician and with the necessary medical supervision. No additional costs will be charged for the Auditory Steady State Response test, as the value of this test is still being researched.

I would like to request your consent for your baby's participation; permission to use the results of your baby's routine hearing tests; as well as permission to use information from your baby's records for this research project. You have my assurance that no unnecessary tests will be done. You may also withdraw your child from the study at any time.

Myself, my supervisor, Mr. De Wet Swanepoel, or Prof. B. Louw, head of the Department of Communication Pathology at the University of Pretoria may be contacted, should you need any further information.

Thank you for your assistance.

Deidré Stroebel  
**Researcher**

Mr. De Wet Swanepoel  
**Supervisor**

Prof. B. Louw  
**HEAD: Department of Communication Pathology**

Surname: \_\_\_\_\_ Name: \_\_\_\_\_

I have read the letter of information regarding Mrs. D. Stroebel's proposed research study.

I understand what is involved and give permission that the test results of my child \_\_\_\_\_ may be used.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Appendix C

**DATA RECORDING SHEET**

Subject: \_\_\_\_\_

<b>ABR</b>	
Tone Burst	Click

Date:

Age at time of assessment:

<b>ASSR</b>				
	500 Hz	1000 Hz	2000 Hz	4000 Hz
Unaided Measured				
Unaided Predicted				
Aided Measured				
Unaided Predicted				

Date (unaided):

Age at time of assessment:

Date (aided):

Age at time of assessment:

<b>Behavioral thresholds</b>				
	500 Hz	1000 Hz	2000 Hz	4000 Hz
Unaided BT				
Aided BT				

Date (unaided):

Age at time of assessment:

Date (aided):

Age at time of assessment: