



-----CAREER RESEARCH and TEACHING INTERESTS-----

Physiology and Neurophysiology of the Auditory System (a.k.a. Physiological Acoustics)  
Sensory Psychology of the Auditory and Vestibular Systems (secondary)  
Scientific Bases of Communicative Disorders and their Treatment  
IntraOperative Neurophysiological Monitoring, including during/following bionic device implantation  
Research and Development of Audiological Instrumentation

-----APPOINTMENTS AND POSITIONS-----

**ACADEMIC & ADMINISTRATIVE:**

1972-1976	School of Medicine Temple University Philadelphia, PA	Assistant Professor of Otorhinology% & Director of Auditory Research (%department title at the time)
1974-1976	School of Medicine Temple University	Assistant Professor of Physiology
1976-1983	School of Medicine Temple University	Assoc. Professor of Otorhinology & Physiology (tenured in primary appointment)
1979-1984	School of Medicine Temple University	Director of Audiology & Auditory Research
1983-1984	School of Medicine Temple University	Professor of Otorhinolaryngology
1984	Temple University	Adjunct. Prof. of ORL
1984-1985	School of Medicine University of Pittsburgh Pittsburgh, PA	Visiting Professor of Otolaryngology; *Chief, Section of Audiology, Div. of Otology
1984-1998*	Eye & Ear Hospital/ University of Pitt. Med. Cntr.	*Director, Center for Audiology
1985-1996	School of Medicine University of Pittsburgh Faculty of Arts & Sci.	Professor of Otolaryngology (primary appointment; tenured) Professor of Communication (secondary appointment) Effectively Otological member of the IntraOperative Monitoring team (Neurosurgery)
1995--2012	School of Health and Rehab. Sciences	Professor of Rehabilitation Science and Technology (secondary appt.)
1996, 2002	Univ. Claude Bernard Lyon, France	Professeur Visiteur/Invité [nominally one-mo. appts.]
1996--2012	School of Health and Rehab. Sciences School of Medicine	Professor of Communication Sci. and Disorders (primary appt.; tenured) Prof. of Otolaryngology (secondary appt.)
1998-2000	Univ. Claude Bernard Lyon, France	Professeur Associé en Physiologie (sabbatical leave from 19998-99 ac. yr.; enhancement leave '99-00; post at rank of

2000-2001	Univ. Claude Bernard Lyon, France	prof. first class [full, re American system) Visiting Researcher and Professeur Invité (Sept. '00 – '01 Feb.)
1999	Ohio State University	Adjunct Professor of Spch. & Hear. Science
2006--2012	University of Pittsburgh	Vice-Chair of Comm. Sci. & Disorders
2010--2012	University of Pittsburgh	Prof., Clinical and Translational Research Institute (secondary appointment)
2012--	University of Pittsburgh	Professor Emeritus of Communication Science and Disorders
	Intelligent Hearing Systems, Miami	Research Scientist (part-time)

**NON-ACADEMIC POSITIONS:**

1967-1968	Ohio University Athens, OH	Research Assistant
1968-1971	Northwestern Univ. Evanston, IL	Pre-doctoral trainee
1970-1972	Richard Buckingham, MD Park Ridge, IL	Audiologist (part-time)
1971-1972	Northwestern Univ. Evanston, IL	Post-doctoral fellow

**-----CERTIFICATION AND LICENSURE-----**

**SPECIALTY CERTIFICATION:**

American Speech-Language-Hearing Association	1979: CCC-A
	2014: CCC-A(Retired)

**MEDICAL OR OTHER PROFESSIONAL LICENSURE:**

State Examiner's Board in Speech, Language, and Hearing, Pennsylvania (Audiologist)	1980 - 2014
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**---MEMBERSHIPS IN PROFESSIONAL AND SCIENTIFIC SOCIETIES---**

**Present:**

American Auditory Society  
Life Member  
American Speech Language Hearing Association  
Life Member and Fellow  
International Evoked Response Audiometry Study Group  
Council Chair Emeritus, 2016-  
International Society of Audiology  
Member

**Past:**

Acoustical Society of America

Co-chair, Physiological and Psychological  
Acoustics Section of the program committee, Spring Meeting, 1990  
Member of the ANSI S3.1 Committee on Maximum  
Permissible Ambient Noise Levels for Audio-metric Test Rooms.  
Member of the ANSI Committee on Auditory Evoked  
Potentials.  
Chair, working group s3/WG43 on Calibration of  
Bone Vibrators

American Academy of Audiology

Fellow  
Member, program committee, Annual Convention,  
1991; 1993  
Member, Research Committee, 1995-1997  
Chair, working group, position paper on ototoxicity monitoring, 2003-2005

American Physiological Society

Association for the Advancement of Science

Association for Research in Otolaryngology

Member of the Research Information Committee,  
1984-1985.  
Member, Ad Hoc Committee on Research Requirements  
and Opportunities, 1987.  
Chairman, Nominating Committee, 1988.  
Program advisory committee member, 1993-95

American Speech Language Hearing Association

Life Member and Fellow  
Chair, Audiometric Evaluation Working Group on  
Auditory Evoked Potential Measurements and  
member of the (standing) Committee on Audiometric  
Evaluation, 1984-1989.  
Member, advisory committee of the ASHA Foundation  
for development of a new clinical research  
award, 1992.  
Member, program committee—Annual Convention  
(Hearing Science or Audiology programs) 1992; 1993; 2000  
Member, Ad Hoc Committee on Audiologic Management  
of Individuals Receiving Ototoxic and/or  
Vestibulotoxic Drug Therapy 1993-1994.  
Member of SID-6: Hear. & Hear. Dis., Physiology  
& Psychoacoustics  
Member, SID-6 Steering Committee, 1995

Member, Working Group on Neurophysiologic Intraoperative  
Monitoring (charged to up-date 1992 guideline), 1999-2000.  
Member, International Issues Committee, 2006-2008

Council of Academic Programs in Comm. Sci. & Disorders

Member RADD committee & Chair, Working Group on Doctoral Program Guidelines 2002-2003

International Evoked Response Audiometry Study Group

(formerly, International Electric Response...)

Council Chair, 2009-2016

Vice Chair, 1989--2009

Secretary, 1983-1988

Newsletter editor, 1993-1996

Co-program chair, X Biennial Symposium,  
Charlottesville, VA (Univ. of Virginia, with R. Ruth), 1987

Co-program chair & scientific program chair, XIV Biennial  
Symposium, Lyon, France (Univ. Claude Bernard; with L. Collet), 1995

International Society of Audiology

Member

Founding Associate Editor, *International Journal of Audiology*

Member, Scholarship Committee, 2018, 2020.

Member, Scientific Committee, 2004

Pennsylvania Speech-Language-Hearing Association

Southwest Pennsylvania Speech and Hearing Association

-----**HONORS**-----

Graduated *summa cum laude* with honors in Speech & Hearing 1967  
Ohio University, Athens, OH

Elected: Fellow of the American Speech-Language-Hearing 1989  
Association

Honors of the Association from the South Western 1993  
Pennsylvania Speech, Language, & Hearing Assoc.

Honors of the Association 2007

American Speech-Language-Hearing Association

*(This is the highest honor of the national organization that provides clinical certification and continuing education monitoring and other professional support services in clinical audiology and speech-language pathology. The Certificate of Clinical Competency is generally recognized as meeting professional competency requirements for many state licences to practice, including the Commonwealth of Pennsylvania.)*

Career Recognition, Auditory Electrophysiology and Leadership 2016  
International Evoked Response Audiometry Study Group

Lifelong Dedication to Audiology and Achievements 2016  
International Society of Audiology

-----PUBLICATIONS-----

**Refereed Articles:**

**Durrant, J.D.**, and Shallop, J.K. Effects of differing states of attention on acoustic reflex activity and temporary threshold shift. *J. Acoust. Soc. Am.* 1969 46:907-913.

Dallos, P., Billone, M.C., **Durrant, J.D.**, Wang, C.-Y., and Raynor, S. Cochlear inner and outer hair cells: functional differences. *Science* 1972 177:356-358.

Dallos, P., and **Durrant, J.D.** On the derivative relationship between stapes displacement and cochlear microphonics. *J. Acoust. Soc. Am.* 1972 52:1263-1265.

**Durrant, J.D.**, and Dallos, P. Influence of direct-current polarization on the cochlear partition on the summing potentials. *J. Acoust. Soc. Am.* 1972 52:542-553.

**Durrant, J.D.**, and Dallos, P. The effects of dc current polarization on cochlear harmonics. *J. Acoust. Soc. Am.* 1972 52:1725-1728.

**Durrant, J.D.**, and Dallos, P. Modification of DIF summing potential components by stimulus biasing. *J. Acoust. Soc. Am.* 1974 56:562-570.

Katinsky, S., and **Durrant, J.D.** Results of audiometric study of sensorineural impaired subjects treated with acupuncture. *Asha* 1974 16:411-414.

**Durrant, J.D.**, and Ronis, M.L. Remote extracochlear versus intracochlear recordings in guinea pig. *Ann. Otol.* 1975 84:88-94.

**Durrant, J.D.**, and Gans, D. Biasing of the summing potentials. *Acta Otolaryngol.* 1975 80:13-18.

Sieminski, L.R., **Durrant, J.D.**, Rosenberg, P.E., and Lovrinic, J.H. Stapedial reflexes in normal versus recruiting ears. *J. Auditory Res.* 1977 17:251-262 (released in 1978).

**Durrant, J.D.**, and Philips, C.M. An AC ohmmeter for electrode impedance measurements. *J. Acoust. Soc. Am.* 1979 65:1065-1066.

**Durrant, J.D.** Comments on the effects of overstimulation on microphonic sensitivity. *J. Acoust. Soc. Am.* 1979 66:597-598.

Gabriel, S., **Durrant, J.D.**, et al. Computer identification of waves in the auditory brain stem evoked potentials. *EEG Clin. Neurophysiol.* 1980 49:421-423.

**Durrant, J.D.** Changes in summing potentials and related electrophysiological manifestations of overstimulation. *J. Aud. Res.* 1979 19:183-200 (released in 1981).

**Durrant, J.D.**, Gabriel, S., and Walter, M. Psychophysical tuning functions for brief stimuli: Preliminary report. *Amer. J. Otolaryngol.* 1981 2:108-113.

**Durrant, J.D.** Pattern-reversal auditory evoked potential. *EEG Clin. Neurophysiol.* 1987 68:157-160.

**Durrant, J.D.** Auditory-evoked potential to pattern-reversal stimulation. *Audiology* 1987 26:123-132.

**Durrant, J.D.**, and Furman, J.M.R. Long-latency rotational evoked potentials in subjects with and without bilateral vestibular loss. *EEG Clin. Neurophysiol.* 1988 71:251-256.

Hodgson, M.J., Furman, J., Ryan, C., **Durrant, J.**, and Kern, E. Encephalopathy and vestibulopathy following a short-term hydrocarbon exposure. *J. Occupational Med.* 1989 31:51-54.

Jacob, R.G., Lilienfeld, S.O., Furman, J.M.R., **Durrant, J.D.**, and Turner, S.M. Panic disorder with vestibular dysfunction: Further clinical observations and description of space and motion phobic stimuli. *J. Anxiety Dis.* 1989 3:117-130.

**Durrant, J.D.**, Nozza, R.J., Hyre, R.J., and Sabo, D.L. Masking level difference at relatively high masker levels: Preliminary report. *Audiology* 1989 28:221-229.

Furman, J.M.R., **Durrant, J.D.**, and Hirsch, W.L. Eighth nerve signs in a case of multiple sclerosis. *Am. J. Otolaryngol.* 1989 10:376-381.

Wolfson, M.R., **Durrant, J.D.**, et al. Emergence of the brainstem auditory evoked potential in the premature lamb *EEG Clin. Neurophysiol.* 1990 75:242-250.

**Durrant, J.D.**, and Boston, J.R. Correlation study of two-channel recordings of the brain-stem auditory evoked potentials. *Ear and Hearing* 1990 11:215-221.

**Durrant, J.D.**, Sabo, D., and Hyre, R. Gender, head size, and ABRs examined in large clinical sample. *Ear and Hearing* 1990 11:210-214.

**Durrant, J.D.** Extratympanic electrode support via vented earmold. *Ear and Hearing* 1990 11:468-469.

**Durrant, J.D.**, Rodgers, G., Myers, E.N., and Johnson, J.T. Hearing loss-risk factor for cisplatin ototoxicity? Observations. *Am. J. Otology* 1990 11:375-377.

Furman, J.M.R., **Durrant, J.D.**, Hyre, R., and Kamerer, D.B. Vestibular recruitment in Meniere's disease. *Ann. Otol. Rhinol. Laryngol.* 1990 99:805-809.

Ananthanarayan, A.K., and **Durrant, J.D.** On the origin of wave II of the auditory brainstem evoked response. *Ear and Hearing* 1991 12:174-179.

Mitrakou, A., Ryan, C., Veneman, T., Mogan, M., Jenssen, T., Kiss, I., **Durrant, J.**, et al. Hierarchy of glycemic thresholds for activation of counterregulatory hormone secretion, initiation of symptoms and onset of cerebral dysfunction in normal humans. *Am. J. Physiology* 1991 260(Endocrinol. Metab. 23):E67-E74.

**Durrant, J.D.**, and Ferraro, J.A. Analog model of human click-elicited SP and effects of high-pass filtering. *Ear and Hearing* 1991 12:144-148.

Punch, J.L., Jenison, R.L., Allan, J., and **Durrant, J.D.** Evaluation of three strategies for fitting hearing aids binaurally. *Ear and Hearing* 1991 12:205-215.

**Durrant, J.D.**, Gerich, J.E., Mitrakou, A., Jensen, T., and Hyre, R. Changes in BAEP under hypoglycemia: temperature-related? *EEG Clin. Neurophysiol.* 1991 80:547-550.

Sabo, D.L., **Durrant, J.D.**, Curtin, H., Boston, J.R., and Rood, S. Correlations of neuro-anatomical measures to brainstem auditory evoked potential latencies, *Ear and Hearing* 1992 13:213-222.

Ananthanarayan, A.K., and **Durrant, J.D.** The frequency following response and the onset response: evaluation of frequency specificity using a forward masking paradigm, *Ear and Hearing* 1992 13:228-232.

Jacob, R.G., Furman, J.M.R., Clark, D.B., and **Durrant, J.D.** Vestibular symptoms, panic, and phobia. Overlap and possible relationships. *Annals of Clinical Psychiatry* 1992 4(3):163-174.

**Durrant, J.D.**, and Hyre, R. Relative effective frequency response of bone versus air conduction stimulation examined via masking, *Audiology* 1993 32:175-184.

Frank, T., **Durrant, J.D.**, and Lovrinic, J.M. Maximum permissible ambient noise levels for audiometric test rooms, *Amer. J. Audiology* 1993 2:33-37.

**Durrant, J.D.**, and Hyre, R. Observations on temporal aspects of bone conduction clicks: real head measurements, *J. Amer. Acad. Audiol.* 1993 4:213-219.

**Durrant, J.D.**, Kamerer, D.B., Chen, D. Combined OAE and ABR studies in acoustic tumor patients. In *ECoG, OAE and Intraoperative Monitoring*, D. Hoehmann, ed. Kugler: Amsterdam 1993 pp. 231-239.

**Durrant, J.D.**, Martin, W.H., Hirsch, B., Schwegler, J. 3CLT ABR analyses in a human subject



with unilateral extirpation of the inferior colliculus, *Hearing Research* 1994 72:99-107.

Prasad, S., Hirsch, B.E., Kamerer, D.B., **Durrant, J.D.**, and Sekhar, L.N. Facial nerve function following cerebellopontine angle surgery: prognostic value of electroneuronography, *Am. J. Otol.* 1994 14:326-329.

Prasad, S., Hirsch, B.E., Kamerer, D.B., **Durrant, J.D.**, and Sekhar, L.N. Facial nerve function following cerebellopontine angle surgery: prognostic value of intraoperative thresholds, *Am. J. Otol.* 1994 14:330-333.

Ananthanarayan, A.K., and **Durrant, J.D.** Comparison of transducer radiation recorded from hearing impaired subject and a resistor network simulator. *Br. J. Audiology* 1994 28:149-154.

Jacob, R.G., Woody, S.R., Clark, D.B., Lilienfeld, S.O., Kucera, G.D., Furman, J.M.R., and **Durrant, J.D.** Discomfort with space and motion: A possible marker of vestibular dysfunction assessed by the situational characteristics questionnaire, *J. Psychopath. Behav. Assessment* 1994 15:299-324.

Furman, J.M., and **Durrant, J.D.** Head-only rotational testing: influence of volition and vision. *J. Vestib. Res.* 1995 4:323-329.

Vento, B.A., **Durrant, J.D.**, Palmer, C.V., and Smith, E.K. Middle ear effects secondary to nasogastric intubation, *Am. J. Otolary* 1995 16:820-822.

Hirsch, B.E., **Durrant, J.D.**, Yetiser, S., Kamerer, D.B., and Martin, W.H. Localizing retrocochlear hearing loss, *Am. J. Otolary* 1996 17:537-546.

Pou, A.M., Hirsch, B.E., **Durrant, J.D.**, Gold, S. R., and Kamerer, D.B. Efficacy of tympanic electrocochleography in the diagnosis of endolymphatic hydrops, *Am. J. Otol.* 1996 17:607-611.

Jacob, R. G., Furman, J.M., **Durrant, J.D.**, and Turner, S.M. Panic, agoraphobia and vestibular dysfunction. *Amer. J. Psychiatry* 1996 153:503-512.

**Durrant, J.D.** and Fowler, C.G., ABR Protocols for dealing with asymmetric hearing loss, *Am. J. Audiol.* 1996 5:5-6 (an invited, peer-reviewed commentary).

Morlet, T., Perrin, E., **Durrant, J.D.**, et al. Development of cochlear active mechanisms in humans differs between gender. *Neuroscience Letters* 1996 220:49-52.

**Durrant, J.D.**, Kesterson, R.K., and Kamerer, D.B. Distortion product otoacoustic emission assessment in evaluation of the nonorganic hearing loss suspect. *Am. J. Otol.* 1997 18:361-367.

Jacob, R. G., Furman, J.M., **Durrant, J.D.**, and Turner, S.M. Surface dependence: a balance control strategy in panic disorder with agoraphobia. *Psychosom Med.* 1997 59:323-330.

**Durrant, J.D.**, Wang, J., Ding, D.L., and Salvi, R.J. Are inner or outer hair cells the source of

summating potentials recorded from the round window? *J. Acoust. Soc. Amer.* 1998 104:370-377.

**Durrant, J.D.** Contralateral suppression of otoacoustic emissions-delay of effect? *J. Communic. Dis.* 1998 31:485-488.

Furman, J.M. and **Durrant, J.D.** Head-only rotational testing in the elderly. *J. Vestib. Res.* 1998 8:355-61.

Palmer, C.V., Adams, S.W., **Durrant, J.D.**, Bourgeois, M., and Rossi, M. Managing hearing loss in a patient with Alzheimer disease. *Am. Acad. Audiology* 1998 9:274-284.

Palmer, C., Adams, S., Bourgeois, M., **Durrant, J.**, Rossi, M. Reduction of caregiver identified problem behaviors in patients with Alzheimer disease post hearing aid fitting. *J. Speech Lang. Hear. Res.* 1999 42:312-328.

Furman, J.M. and **Durrant, J.D.** Somatosensory cuing of head-only rotational testing. *J Vestib Res* 1999 9:189-95.

Taubman, L.B., Palmer, C.V., **Durrant, J.D.**, and Pratt, S. Accuracy of hearing aid use time as reported by experienced hearing aid wearers. *Ear and Hearing* 1999 20:299-305.

Morand, N., Kalfa, S., Ravazzani, P., Tognola, G., Grandori, F., **Durrant, J.D.** et al. Frequency and temporal analysis of contralateral acoustic stimulation on evoked otoacoustic emissions in humans. *Hear. Res.* 2000 145:52-58.

Lindley, G.A., Palmer, C.V., **Durrant, J.**, and Pratt, S. Adaptation to loudness and environmental stimuli in three newly fitted hearing aid users, *J. Am. Acad. Audiology*, 2000 11:316-322.

Maison, S., **Durrant, J.**, Gallineau, C., Micheyl, C., and Collet, L. Delay and temporal integration in medial olivocochlear bundle activation in humans. *Ear and Hearing* 2001 22:65-74.

Norena, A., Micheyl, C., **Durrant, J.D.**, Chéry-Croze, S., and Collet, L. Perceptual correlates of neural plasticity related to spontaneous otoacoustic emissions? *Hearing Research* 2002 171:66-71.

Shuster, L.I., and **Durrant, J.D.** Toward a better understanding of self-produced speech. *Journal of Communication Disorders*, 2003, 36, 1-11.

Philibert, B.P., **Durrant, J.D.**, et al. Stacked tone-burst-evoked auditory brain-stem response (ABR): Preliminary findings. *Int. J. Audiology* 2003, 42:71-81.

Morlet, T., **Durrant, J.D.**, et al. Development of auditory asymmetry in transient evoked otoacoustic emissions in pre-term infants. *J. Amer. Acad. Audiology* 2003 14:339-346.

Zhou, J., **Durrant, J.D.** Effects of interaural frequency difference on binaural fusion evidenced by electrophysiological versus psychoacoustical measures. *J. Acoust. Soc. Amer.* 2003 114:1508-1515.

Gabriel, D., Veuillet, E., Ragot, R., Schwartz, D., Ducorps, A., Norena, A., **Durrant, J.D.** et al. Effect of stimulus frequency and stimulation site on the N1m response of the human auditory cortex. *Hear. Res.* 2004, 197:55-64.

Menard, M., Gallego, S., Truy, E., Berger-Vachon, C., **Durrant, J.D.**, and Collet, L. Auditory steady-state response evaluation of auditory thresholds in cochlear implant patients, *In. J. Audiol.* 2004, 43 Suppl. 1:S39-43.

Vento, B., **Durrant, J.D.**, Sabo, D., Boston, J.R. Development of f2/f1 Ratio Functions in Humans. *J. Acoust. Soc. Am.*, 2004:115:2138-2147.

Zhou, J., **Durrant, J.D.**, Balaban. C. Differential intracochlear recordings of electrical background activity. *J. Acoust. Soc. Am.* 2004, 116:1-4.

**Durrant, J.D.**, Palmer, C.V., and Lunner, T. Analysis of counted behaviors in a single-subject design: Modeling hearing-aid intervention in hearing-impaired patients with Alzheimer's, *Int. J. Audiol.* 2005, 44:31-38.

Petitot, C, Collet, L and **Durrant, J.D.** Auditory steady-state responses (ASSR): Effects of modulation and carrier frequencies, *Int. J. Audiol.* 2005, 44:567-573.

Ruscetta, M.N., Palmer, C.V., **Durrant, J.D.** et al. Validity, internal consistency, and test/retest reliability of a localization disabilities and handicaps questionnaire. *J. Am. Acad. Audiol.* 2005, 16:585-595.

Morand-Villeneuve, N., Veuillet, E., Perrot, X., Lemoine, P., Gagnieu, MC., Sebert, P., **Durrant J.D.**, and Collet, L. Lateralization of the effects of the benzodiazepine drug oxazepam on medial olivocochlear system activity in humans. *Hear. Res.* 2005, 208:101-106.

El-Kady, M., **Durrant, J.D.**, Tawfik, S. et al., Study of auditory function in patients with chronic obstructive pulmonary diseases, *Hear. Res.* 2006, 212:109-116.

Kaf, W.A., **Durrant, J.**, Sabo, D.L. et al., Validity and accuracy of electric response audiometry using the auditory steady-state response : Evaluation in an empirical design, *Int. J. Audiol.* 2006, 45:211-223.

Zhou, J., Balaban, C., and **Durrant, J.D.**, Effect of intracochlear perfusion of vanilloids on cochlear neural activity in the guinea pig. *Hear. Res.* 2006, 218:43-49.

Kaf, W.A, Sabo, D.L., **Durrant, J.D.**, Rubinstein, E. Reliability of electric response audiometry using the 80-Hz auditory steady-state response : Evaluation in an empirical design, *Int. J. Audiol.* 2006, 45:477-486.

**Durrant J.D.**, Sabo, D.L., and Delgado, R.E. Call for calibration standard for newborn screening using auditory brainstem responses. *Int. J. Audiol.* 2007, 46:686-691.

- Ruscetta, M.N., Palmer, C.V., **Durrant, J.D.**, Grayhack, J., and Ryan, C. The impact of listening with directional microphone technology on self-perceived localization disabilities and handicaps. *J. Am. Acad. Audiol.* 2007, 18:794-808.
- Tantibundhit, C., Boston, J.R., Li, C.C., **Durrant, J.D.**, Shaiman, S., Kovacyck, K., and El-Jaroudi, A. New signal decomposition method based speech enhancement. *Signal Processing*, 2007: 87:2607-2628.
- Tlumak, A., **Durrant, J.D.** and Collet, L. 80-Hz auditory steady-state responses (ASSR) at low-conventional and high audiometric frequencies. *Int. J. Audiol.* 2007, 46:26-30.
- Tlumak, A.I., Rubinstein, E., and **Durrant, J.D.** Meta-Analysis of Variables that affect Accuracy of Threshold Estimation via Measurement of the Auditory Steady-State Response (ASSR), *Int. J. Audiol.* 2007, 46:692-710.
- Yoo, S.D., Boston, J.R., El-Jaroudi, A., Li, C.C., **Durrant, J.D.**, Kovacyk, K., Shaiman, S.. Speech signal modification to increase intelligibility in noisy environments, *J. Acoust. Soc. Am.* 2007, 122:1138-1149.
- Guthrie, O.W., Li-Korotky, H.-S., **Durrant, J.D.**, Balaban, C. Cisplatin induces cytoplasmic to nuclear translocation of nucleotide excision repair factors among spiral ganglion neurons, *Hear. Res.* 2008, 239:79-91.
- Horn, J.H., Pratt, S.R., and **Durrant, J.D.** Parameters to maximize 2f<sub>2</sub>-f<sub>1</sub> distortion product otoacoustic emission levels, *J. Sp. Lang. Hear. Res.* 2008, 51:1620-1629.
- Guthrie, O.W., Li-Korotky, H.S., **Durrant, J.D.**, and Balaban C. Cisplatin induces cytoplasmic to nuclear translocation of nucleotide excision repair factors among spiral ganglion neurons. *Hear. Res.* 2008, 239:79-91.
- Tlumak, A.I., **Durrant, J.D.**, Delgado, R.E., and Boston, J.R. Steady-state analysis of auditory evoked potentials over a wide range of stimulus repetition rates: Profile in adults, *Int. J. Audiol.* 2011, 50: 448–458.
- Tlumak, A.I., **Durrant, J.D.**, Delgado, R.E., and Boston, J.R. Steady-state analysis of auditory evoked potentials over a wide range of stimulus repetition rates in awake vs. natural sleep, *Int. J. Audiol.* 2012, 51: 418-423.
- Tlumak, A.I., **Durrant, J.D.**, Delgado, R.E., and Boston, J.R. Steady-state analysis of auditory evoked potentials over a wide range of stimulus repetition rates: Profile in children vs. adults, *Int. J. Audiol.* 2012, 51: 480–490.
- MacKechnie, C.A., Greenberg, J.J., Gerkin, R.C., McCall, A.A., Hirsch, B.E., **Durrant, J.D.**, Raz ,Y. Rinne revisited: steel versus aluminum tuning forks, *Otolaryngol. Head Neck Surg.* 2013, 149:907-913.
- Mancini, P.C., **Durrant, J.D.**, Pimenta Starling, A.L., Martinelli Iório, M.C. Children with

phenylketonuria treated early: Basic audiological and electrophysiological evaluation, *Ear & Hear.* 2013, 34: 236–244.

Huang, E.I., **Durrant, J.D.**, and Boston, J.R. Will diminishing cochlear delay affect speech perception in noise? *Int. J. Aud.* 2015, 54:562-567.

Tlumak, A.I., **Durrant, J.D.**, Delgado, R.E. The Effect of Advancing Age on Auditory Middle- and Long-Latency Evoked Potentials Using a Steady-State-Response Approach, *Am. J. Audiol.* 2015, 24:494-507.

Tlumak, A.I., **Durrant JD**, Delgado, R.E. The Effect of Stimulus Intensity and Carrier Frequency on Auditory Middle- and Long-Latency Evoked Potentials Using a Steady-State-Response Approach, *Am. J. Audiol.* 2016, 25:62-74.

Zhang, M., Pratt, S.R., Doyle, P.J., McNeil, M.R., **Durrant, J.D.**, Roxberg, J., Ortmann, A. Audiological assessment of word recognition skills in persons with aphasia, *Am. J. Audiol.* 2018, 27:1-18.

**Reviews, Invited Published Papers, Proceedings of Conference and Symposia, Monographs, Books and Book Chapters:**

**Durrant, J.D.** Effects of noise on cochlear potentials. New York: Raven Press; 1976:179-197.

**Durrant, J.D.**, and Lovrinic, J.H. Bases of hearing science. Baltimore: William and Wilkins; 1977.

**Durrant, J.D.**, Burns, A., and Ronis, M.L. Electrocochleographic studies in animals. *Adv. Oto-Rhino-Laryng.* 1977 22:14-23.

**Durrant, J.D.** Anatomic and physiologic correlates of the effects of noise on hearing in noise and audiology. Baltimore: University Park Press; 1978:109-141.

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*This was a collaborative effort under the auspices of the IERASG to produce a comprehensive graduate-level introduction and foundational reference to this subspecialty. J.D.D. served as production editor for all figures of the book. As did all editors, he also contributed articles therein, as author or coauthor as follows:*

- J.D.D., Basic Concepts of clinical electrophysiology in audiology (*overview*)
- J.R. Boston and J.D.D., Signal generation, analysis, and conditioning—Analog versus digital perspectives
- J.D.D., K.M. Kochanek, and L.K. Sliwa, Bioelectric basics, interface dilemmas, and electrode montages/Caps—One size fits all?
- O. Ozdamar and J.D.D., The good, bad, and ugly—Optimizing response extraction from background noise and how signal processing may become too much
- J.D.D., C.G. Fowler, and S.C. Purdy, Heads Up: Interlude—And you don't even have to raise your hand when you hear the beep
- J.D.D. and J.A. Ferraro, CM, SP, and AP: Not alphabet soup and first signs AEPs are Afoot
- J.A. Ferraro and J.D.D., Electrocochleography: How do electrical signals get from hearing organs to the “outside” and what good are they?
- J.D.D., J.A. Ferraro, and J.J. Barajas de Prat, Heads Up: Intriguing ECochG App: Sensing weakened wall of semicircular canal
- J.D.D. and M. Walger, Heads Up: A case spared operative treatment thanks to testing of both brainstem and cortical AEPs
- J.D.D. and C.G. Fowler, Heads Up: Testing patients who “exaggerate” their hearing thresholds
- J.D.D., D.L. McPherson, and L. Collet, Heads Up: Not only electric fields, magnetic fields too—Confirming origins
- A.I. Tlumak and J.D.D., Quick look at intraoperative neuromonitoring and other evoked potentials
- J.D.D. and A.I. Tlumak, Heads Up: A case of elective surgery that could have gone badly were it not for IONM

### **Research-Related Seminars, Other Presentations, or Invited Lectures**

Durrant, J.D. "Effect of relevant cues on attention in binaural listening," 73rd Meeting of the Acoustical Society of America, 19-22 April 1967, New York, NY

Durrant, J.D., and Dallos, P. "Comparison of effects of biasing the cochlear partition with electrical current and sound stimulation on the DIF SP responses," 84th Meeting of the Acoustical Society of America, 28 Nov.-1 Dec. 1972, Miami Beach, FL.

Durrant, J.D. "Comparison of remote extracochlear versus intracochlear recordings in guinea pig," 87th Meeting of the Acoustical Society of America, 23-26 April 1974, New York, NY.

Durrant, J.D. "Effects of noise on cochlear potentials," International Symposium: The Effects of Noise on Hearing, 23-25 June 1975, Cazanovia, NY.

Durrant, J.D., Burns, A., and Ronis, M.L. "Electrocochleographic studies in animals," Special Meeting on Audio-Vestibular System and Facial Nerve, 16-18 July 1975, Amsterdam, Netherlands.

Durrant, J.D. "SP and CM following exposure to intense tones," 90th Meeting of the Acoustical Society of America, 3-7 November 1975, San Francisco, CA.

Sieminski, L.R., Durrant, J.D., and Rosenberg, P.E. "Dynamic properties of the acoustic reflex in normal versus pathological ears with loudness recruitment," Annual Meeting of American Speech and Hearing Association, 21-24 November 1975, Washington, D.C.

Durrant, J.D. "Physiological effects of noise on hearing," American Society for Engineering Education 84th Annual Conference, 14-17 June 1976, Knoxville, TN.

Durrant, J.D. "Limitations in the application of cochlear microphonic recordings in the study of acoustic trauma," 94th Meeting of the Acoustical Society of America, 12-16 December 1976, Miami Beach, FL.

Durrant, J.D. "Study of a combined noninvasive-ECochG and BSER recording technique," (as above).

Durrant, J.D. "Summating potentials during and following acoustic trauma," 93rd Meeting of the Acoustical Society of America, 6-10 June 1977, University Park, PA.

Durrant, J.D., Rosenberg, P.E., and Ronis, M.L. "Efficacy of a non-traumatic ear-canal recording technique (ECochG) in routine audiological evaluations," 5th Symposium of the International Electric Response Audiometry Study Group, 15-18 August 1977, Jerusalem, Israel.

Durrant, J.D. "Study of the cochlear after-potential: Preliminary report," 95th Meeting of the Acoustical Society of America, 16-19 May 1978, Providence, RI.

Durrant, J.D. "Observations on the cochlear afterpotential," Midwinter Research Meeting of the Assoc. for Res. in Otolaryngol., Jan. 1979, St. Petersburg Beach, FL.

Durrant, J.D. "The physiology of hearing and an auditory physiologist's view of tinnitus," 1st International Tinnitus Sem., 8-9 June, 1979, New York (invited; faculty member).

Durrant, J.D., and Walter, M. "Psychophysical tuning functions: Influence of probe duration," 97th Meeting of the Acoustical Soc. Am., 11-15 June, 1979, Cambridge, MA.

Durrant, J.D., Kephart, J.E., Fria, T., and Dickter, A.E. "Evaluation of two electrode configurations for BSERA--forehead versus vertex," Biennial Symposium of the International Electric Response Study Group, 6-9 Aug. 1979, Santa Barbara, CA.

Durrant, J.D., Gabriel, S., Kephart, J.E., Dickter, A.E., and Ronis, M.L. "Feasibility study of computer identification of Jewett waves (BSER)," as above.

Durrant, J.D. "Events upon the termination of sound," scientific exhibit presented at the Annual Convention of the American Speech-Language-Hearing Assoc., Nov. 1979, Atlanta, GA.

Durrant, J.D., Gabriel, S., and Walter, M. "Observations on the influence of probe duration on psychophysical tuning functions," Midwinter Meeting of the Assoc. for Res. in Otolaryngology, 20-23 Jan. 1980, St. Petersburg Beach, FL.

Durrant, J.D. "Brainstem evoked response evaluation in adults," Annual Convention of the Penna. Speech and Hearing Assoc., Mar. 1980, Philadelphia, PA.

Durrant, J.D. "Cochlear afterpotentials in turn 2 and other considerations," Midwinter Meeting of the Assoc. for Res. in Otolaryngology, 19-21 Jan. 1981, St. Petersburg Beach, FL.

Ronis, M.L., Durrant, J.D., Dickter, A.E., and Wolff, E.S. "Diagnostic management of the unilateral or asymmetrical hearing-loss case," XII World Congress of Otorhinolaryngology, 21-27 June, 1981, Budapest, Hungary.

Durrant, J.D., Shelhamer, M., Fria, T.J., and Ronis, M.L. "Examination of the sidedness of the brain-stem auditory evoked potential," Biennial Symposium of the International Response Audiometry Study Group, 28 June- 2 July, 1981, Bergamo, Italy.

Durrant, J.D., Yagiz, C., Dickter, A.E., and Ronis, M.L. "Brain-stem auditory evoked potentials observed in a population of mentally handicapped subjects," as above.

Hohenberger, M., Shelhamer, M., and Durrant, J.D. "Signal-noise relationships in brain-stem auditory evoked potentials," as above.

Gabriel, S.G., Durrant, J.D., and Lovrinic, J.H. "Dependence of psychophysical tuning curves on probe bandwidth: Relation to critical bandwidth," 102nd Meeting of the Acoustical Society of America, 30 Nov.-4 Dec., 1981, Miami Beach, FL.

Durrant, J.D., Dickter, A.E., and Ronis, M.L. "Composite brain stem evoked potentials in cases of unilateral hearing loss," Midwinter Research Meeting of the Association for Research in Otolaryngology, 18-21 Jan., 1982, St. Petersburg Beach, FL.

Durrant, J.D. "Animal model tinnitus: Theoretical considerations," Second International Tinnitus Seminar, 10-11 June, 1983, New York, NY (invited).

Durrant, J.D. "ABR generators - theory; peripheral tinnitus" (as above).

Shelhamer, M., Durrant, J.D., and Hohenberger, M., "Selective averaging: amplitude-reject vs. correlation method," Biennial Symposium of the Int. Electric Response Audiometry Study Group, 4-8 July, 1983, Ottawa, Ont., Canada.

Durrant, J.D., et al., "Further analyses of parameters of the BAEP" (as above).

Durrant, J.D., et al., "Feasibility study of very low frequency hearing measurements via conventional instrumentation," Midwinter Research Meeting of the Association for Research in Otolaryngology 23-27 January, 1983, St. Petersburg Beach, FL.

Durrant, J.D. "Card readers: application to audiologic data storage." Presented as part of a miniseminar, "Current trends, approaches, and problems in audiologic applications of computers," Convention of the American Speech-Language-Hearing Assoc., 18-21 Nov., 1983, Cincinnati, OH.

Durrant, J. D., "Electrocochleography--Basic and Applied Aspects", presented as part of miniseminar with S. Zerlin, et al., "Electrocochleographic recording: techniques and clinical value", Convention of the American Speech-Language-Hearing Assoc., Nov. 1984, San Francisco, CA.

Wolfson, M.R., Durrant, J.D. et al., "ABR and cardio-pulmonary measurements in fetal lambs," Midwinter Meeting of the Assoc. Res. Otolaryngology, 3-7 Feb. 1985, Clearwater, FL.

Durrant, J.D., and Fria, T.J. "Pattern reversal auditory evoked potential," Biennial Symposium of the International Electric Response Audiometry Study Group, 2-5 September, 1985, Erlangen, West Germany.

Durrant, J.D., Boston, J.R., and Scwabassi, R. "Two-dimensional Lissajous figures in the evaluation of two-channel BAEP (brain-stem auditory evoked response) recordings," (as above).

Wolfson, M.R., Durrant, J.D., and Shaffer, T.H. "Brainstem auditory evoked potentials in fetal and extrauterine pre-term lambs," (as above).

Hohenberger, M., Schwegler, J., and Durrant, J.D. "A two-parameter based approach to the enhancement of nonstationary BAEP data," (as above).

Durrant, J.D., and Fria, T.J. "Pattern reversal auditory evoked potential," Convention of the American Speech-Language-Hearing Association, 22-25 November, 1985, Washington, D.C.

Durrant, J.D., and Kesterson, R.K. "System for clinical ultra-high frequency hearing testing," Mid-Winter Meeting of the Association for Research in Otolaryngology, 2-6 Feb., 1986, Clearwater, FL.

Durrant, J. D., Hyre, R., Sabo, D, and Nozza, R. "MLD-intensity function: Preliminary study", Convention of the American Speech-Language-Hearing Association, 19-24 November 1986,

Detroit, MI.

Durrant, J. D. "Observations on combined noninvasive ECoChG and ABR recording", presented as part of miniseminar by J. A. Ferraro, et al., "Clinical Electrocochleography: An Update" (as above).

Durrant, J. D. "Pattern-Reversal auditory evoked potential: Further observations", (as above).

Durrant, J. D., and Furman, J. M. R. "Human long-latency rotational evoked potentials," Mid-Winter Meeting of the Association for Research in Otolaryngology, 1-5 February 1987, Clearwater Beach, FL.

Durrant, J. D., and Furman, J. M. R. "Long-latency rotational evoked potentials in subjects with and without bilateral vestibular loss," Biennial Symposium of the International Electric Response Audiometry Study Group, 24-27 August, 1987, Charlottesville, VA.

Durrant, J. D., Sabo, D., and Hyre, R. "Relation between gender, head size, and ABR latencies examined in clinical data," (as above).

Silver, M.R., Kroboth, P., Sorkin, M.I., Durrant, J.D., and Wall, C. "Vancomycin pharmacokinetics and ototoxicity in CAPD", see *Kidney International* 1987 31:255

Durrant, J.D. "Correlational study of two-channel ABR recordings," Mid-Winter Meeting of the Association for Research in Otolaryngology, 1-5 February 1988, Clearwater Beach, FL.

Furman, J.M.R., Durrant, J.D., and Kamerer, D.B. "Vestibular recruitment in Meniere's Disease," Annual Barany Society Meeting, 1988, Uppsala, Sweden.

Durrant, J.D., Hyre, R., and Sabo, D. "Gender, head size, and ABRs examined in large clinical sample," Convention of the American Speech-Language-Hearing Association, 18-21 November 1988, Boston, MA.

Durrant, J.D. "Ipsilateral-contralateral interchannel correlations of ABR latencies" (as above).

Durrant, J.D., Eidelman, B.H., Rossman, R.N., and Boston, J.R. "Preliminary study of pattern-reversal AEPs in multiple sclerosis cases" (as above).

Durrant, J.D. "Comments on 'Multiple sclerosis presenting with sudden hearing loss' by Verkest, S. B., Case, J. L., and Musiek, F. E. (presented at 1988 ASHA Convention)" (as above).

Morrow, L.A., Kiss, I., Hodgson, M.A., and Durrant, J.D. "Neurophysiological changes in adults following exposure to neurotoxins", Third International Symposium on Neurobehavioral Methods in Occupational and Environmental Health, December 1988, Washington, DC.

I. Kiss, Ryan, C.M., Mitrakou, A., Jensen, J., Durrant, J., and Gerich, J.E. "The effects of experimentally-induced hypoglycemia on neuropsychological and electrophysiological indices of

cognitive function," International Neuropsychological Society, 1988, Vancouver, BC.

Durrant, J.D., and Ferraro, J.A. "Effects of high-pass filtering on human SP-AP Ratio," Midwinter Research Meeting of the Association for Research in Otolaryngology, 5-9 February 1989, St. Petersburg, FL.

Durrant, J.D., Mitrakou, A., Jensen, T., et al. "Auditory brain-stem response observed under hypoglycemia," (as above.)

Durrant, J.D., Rodgers, G.K., and Myers, E.N. "Hearing loss--risk factor for cisplatin ototoxicity? Preliminary inquiry: case studies," 45th Annual Meeting of the Penna. Academy of Ophthalmology and Otolaryngology, 13-15 April 1989, Pittsburgh, PA.

Durrant, J.D., R. Hyre, Boston, J.R., and Eidelman, B.H. "Pattern-reversal AEP: normative studies and pilot study of cortical lesions," XI. Biennial Symposium of the Electric Response Audiometry Study Group, 25-29 September 1989, Tokyo, Japan.

Durrant, J.D., and Ferraro, J.A. "Analog model of human click-elicited SP and effects of high-pass filtering" (as above).

Durrant, J.D., Sabo, D., Curtin, H., and Rood, S. "Correlation study of BAEP versus brainstem and skull dimensions" (as above).

Durrant, J.D., Kiss, I., Mitrakou, A., Jensen, T., and Gerich, J.E. "Auditory evoked potentials observed under hypoglycemia" (as above).

Krishnan, A.K., and Durrant, J.D. "On the origin of wave II of the BAEP: vertical vs. horizontal derivations" (as above).

Krishnan, A.K., and Durrant, J.D. "Forward masking of the frequency following response" (as above).

Durrant, J.D., Hyre, R., Piroth, W.W., and Frank, T. "Observations on bone conduction relevant to ABR testing," Convention of the American Speech-Language-Hearing Association, 17-20 November 1989, St. Louis, MO.

Durrant, J.D., Punch, J.L., and Allan, J. "Comparison of digital noise reduction algorithm vs. binaural processing" (as above).

Ferraro, J.A., and Durrant, J.D. "Effects of high-pass filtering on the human electrocochleogram" (as above).

Nuss, D.W., Janecka, I.P., Durrant, J.D. Frontal branch of facial nerve: One or many? Presented at the First Annual Meeting of the North American Skull Base Society, 17-21 February 1990, Los Angeles, CA.

Durrant, J.D., Hyre, R., and Piroth, W.W. "Bone conduction clicks and related observations", see. *J. Acoust. Soc. Am.* 1990, 87:S143.

Durrant, J.D., Gilmartin, K.J., Holland, A.L., and Kamerer, D.B. "Greater effects of hearing impairment in Alzheimer's disease?" Convention of the American Speech-Language-Hearing Association, 16-19 November 1990, Seattle, WA.

Ferraro, J.A., Durrant, J.D., Lilly, D.J., Ruth, R.A., Hall, J.W. "Electrocochleography: Update on technique and applications" (as above).

Durrant, J.D., Hyre, R., Boston, J.R., Eidelman, B.H., and Tompkins, C.A. "Pattern-reversal (frequency modulation) vs. transient LAEP in cases with cortical lesions." Midwinter Research Meeting of the Association for Research in Otolaryngology, 3-7 February 1991, St. Petersburg, FL.

Durrant, J.D., Fausti, S.A., Stelmachowicz, P.G., and Northern, J.L. "Update on high frequency audiometry." Convention of the American Academy of Audiology; 25-28 April 1991, Denver, CO.

Durrant, J.D., Davis, P.B., Talbott, E.O., Ives, D.G., Traven, N.D., and Kuller, L.H. "Self-reported hearing impairment and handicap among rural elders." (as above).

Durrant, J.D., and Allen, J.B. "Clinical experience with CUBDISP distortion product measurement system: preliminary report." International Symposium--Otoacoustic Emissions: Theory, Applications & Techniques, 9-10 May 1991, Kansas City, MO.

Davis, P.B., Durrant, J.D., Baron, K., and Kesterson, R. "Hearing impairment and hearing loss in a university based geriatric primary care clinic", American Geriatric Society, 11-14 June 1991, Chicago.

Durrant, J.D., Robinette, M.S., Allen, J.B., and Bauch, C.D. "Combined OAE and ABR studies in acoustic tumor patients", Biennial Symposium of the International Electric Response Audiometry Study Group, 25-29 September 1991, Trento, Italy.

Robinette, M.S., Bauch, C.D., Durrant, J.D., et al. "Cochlear vs. neural function following eighth nerve tumor surgery", Convention of the American Auditory Society, September 1991, Kansas City, KS.

Durrant, J.D., Vento, B.A., Kesterson, R.K., and Jacob, R.G. "Bivariate analysis of ABR interaural latency differences", Convention of the American Speech-Language-Hearing Association, 22-25 November 1991, Atlanta, GA.

Durrant, J.D., Hyre, R.J., and Piroth, W.W. "Relative frequency responses of BC vs AC stimulation" (as above).

Sabo, D.L., Durrant, J.D., and Milisits, L. "A comparison of air and bone conduction ABRs in a



pediatric population" (as above).

Durrant, J.D. "Cochlear implants", NSSLHA Annual Spring Seminar, Clarion University, 13 March 1992, Clarion, PA.

Durrant, J.D., Walton, J.P., Talbott, R.E., Jerger, J. F., et al., "Update miniseminar in otoacoustic emissions", Annual Convention of the American Academy of Audiology, 9-12 April 1992, Nashville, TN.

Prasad, S., Hirsch B.E., Kamerer, D.B., Durrant, J.D., Sekhar, L. "Facial nerve function following cerebellopontine angle surgery: prognostic value of electroneuronography", Annual Meeting of the American Otologic Society, 11-14 April, 1992, Palm Desert, CA.

Prasad, S., Hirsch B.E., Kamerer, D.B., Durrant, J.D., Sekhar, L. "Facial nerve function following cerebellopontine angle surgery: prognostic value of intraoperative thresholds", (as above).

Durrant, J.D., Prasad, S., Janecka, I.P., Nuss, D.W., "Facial monitoring in location and dissection of frontal branches--improved postoperative restoration of function", Annual Meeting of the American Neurosurgical Monitoring Society, 14-16 May 1992, Pittsburgh.

Durrant, J.D., Kamerer, D.B., Chen, D. "Combined OAE and ABR studies in acoustic tumors patients", Int. Conference on Intraoperative Monitoring and Electrocochleography, 21-24 September 1992, Wurzburg, Germany.

Durrant, J.D., Vento, B.A., Allen, J.B., and Hyre, R.J. "Some technical issues in otoacoustic emissions measurement", Convention of the American Speech-Language-Hearing Association, 20-23 November 1992, San Antonio, TX.

Campbell, K.C.M., Durrant, J.D., and Ferraro, J.A. "Recent advances in electrocochleography: New directions in clinical practice", (as above).

Vento, B.A., Durrant, J.D., Palmer, C.V., and Smith, E.K. "Middle ear effects secondary to nasogastric intubation" (as above).

\*Durrant, J.D. "Examination of Relationship between Slope of Audiogram and DPOAE-vs.-Frequency Plot", Midwinter Research Meeting of the Association for Research in Otolaryngology, - February 1993, St. Petersburg, FL.

Sclabassi, R.J., and Durrant, J.D. Neurophysiological monitoring in skull base surgery. Presented at the Jerusalem Symposium on Surgery of the Skull Base and Adjacent Midline Region, 1993, Jerusalem, Israel.

Durrant, J.D. "The use of otoacoustic emissions in audiology", International Congress on Otoacoustic Emissions, 9-12 May 1993, Lyon, France.

Durrant, J.D. and Ferraro, J.A. Human SP to clicks, pips, and bursts, Biennial Symposium of the International Electric Response Audiometry Study Group, 6 -10 September 1993, Park City, UT.

Durrant, J.D., Dauman, R., Erre, J.-P., Huang, W., and Aran, J.-M. Round-window summing potentials in guinea pig--comparisons among stimuli (as above).

Martin, W.H., Schwegler, J.W., Durrant, J.D., and Pratt, H. Another shot at the ABEP generators (as above).

Durrant, J.D. and Yetiser, S. DPOAEs in hydrops-related and other low-frequency hearing loss. Convention of the American Speech-Language-Hearing Association, 19-22 November 1993, Anaheim, CA.

Burkard, R.F., Ruth, R.A., Durrant, J.D., Ferraro, J.A. Toward a standardization in the measurement of auditory evoked potentials (as above).

Campbell, K.C.M., Rybak, L.P., Fausti, S.A., Durrant, J.D. Ototoxicity: Agents and audiologic monitoring (as above).

Michyel, C., Durrant, J.D., and Collet, L. Central masking of the detection of clicks. Midwinter Research Meeting of the Association for Research in Otolaryngology, - February 1994, St. Petersburg, FL.

Martin, W.H., Schwegler, J.W., Durrant, J.D., and Pratt, H. New information on the generators of ABEP waves II and V in humans (as above).

Durrant, J.D. and Kesterson, R.K. Evaluation of the nonorganic and relevant recent advances, Convention of the American Academy of Otolaryngology, 28 April - 1 May 1994, Richmond, VA.

Ferraro, J.D. and Durrant, J.D. Technical aspects of tympanic ECoChG (as above)

Durrant, J.D., Bobbin, R.P., Cullen, J.K., and Chertoff, M.E. Auditory distortion products: Past, present, and future, Convention of the American Speech-Language-Hearing Assoc. 17-21 November 1994, New Orleans.

Durrant, J.D., Yetiser, S, Kamerer, D.B. Binaural interaction in the ABR: Temporal and spatial effects (as above).

Durrant, J.D., Kesterson, R.K., and Dashieff, R. Binaural interaction in the ABR: Temporal and spatial effects (as above).

Fowler, C.G., Durrant, J.D., Mikami, C.M., and Martin, W.H. Binaural interaction in the ABR: Temporal and spatial effects (as above).

Durrant, J.D., Kesterson, R.K., and Kamerer. Use of DPOAE Assessment in audiologic

evaluation of the nonorganic hearing loss suspect, American Laryngological, Rhinological and Otolological (Triologic) Society--Easter Section Meeting, 26-28 January 1995, Pittsburgh, PA.

Durrant, J.D. and Prevatte, S. Ancillary issues in bedside ototoxicity monitoring, American Academy of Audiology, 30 March - 2 April 1995, Dallas, TX.

Durrant, J.D. and Kesterson, R.K. Evaluation of the nonorganic and relevant recent advances (as above; invited repeat presentation).

Ferraro, J.D. and Durrant, J.D. Technical aspects of tympanic ECoChG (as above; invited repeat presentation).

Vento, B., Durrant, J.D., Sabo, D.L. et al. Distortion product OAE monitoring of ototoxicity in children (as above; this oral paper won the first author a travel grant to the convention).

Durrant, J.D., Kesterson, R.K., and Kamerer, D.K. Use of DPOAE assessment in audiologic evaluation of the nonorganic hearing loss suspect, Biennial Symposium of the International Evoked Response Audiometry Study Group, 27 - 31 August 1995, Lyon France.

Hettman, C., and Durrant, J.D. Mismatch Negativity (MMN) in Anesthetized Adults: A Pilot Study, (as above).

Durrant, J.D., and Krieger, D. Artifact Reduction in Evoked Potential Recordings via Polynomial Curve Fitting--Feasibility Study. Midwinter Research Meeting of the Association for Research in Otolaryngology, - February 1996, St. Petersburg, FL.

Soso, M.J., Durrant, J.D., Giuliani, M.J., Lovely, T.J., and Jannetta, P.J. Auditory Phenomena in Hemifacial Spasm, Am. Academy of Neurology, 1996.

Ferraro, J.D. and Durrant, J.D. Technical aspects of tympanic ECoChG (invited repeat presentation), American Academy of Audiology, 1996.

Durrant, J.D. Clinical implications and applications of recent findings in physiological acoustics, Annual Convention of the Kansas Speech and Hearing Association, 3-5 October 1996, Kansas City.

Durrant, J.D., Fowler, C.G., et al. Anatomy and physiology of the ear: Clinical applications of new knowledge, Annual Convention of the American Speech-Language-Hearing Association, 21-24 November 1996, Seattle.

Nodar, R., Durrant, J.D., et al., Clinical grand rounds in audiology (as above).

Durrant, J., Wang, J. Ding, D.L. and Salvi, R. Are inner or outer hair cells the source of summing potentials recorded from the round window? Midwinter Research Meeting of the Association for Research in Otolaryngology, - February 1997, St. Petersburg, FL.

Scolieri, P., Durrant, J.D., Cass, S.P., Papadakis, C., Scudder, C.A. DPOAE evaluation of ototoxicity from intratympanic gentamicin in a rhesus monkey (as above).

Kane, J. and Durrant, J.D. Frequency selectivity: Comparisons between DPOAE and psychophysical tuning curves in normal-hearing subjects (as above).

Ferraro, J.D. and Durrant, J.D. Practical aspects of tympanic electrocochleography (invited repeat presentation), American Academy of Audiology, 17-20 April 1997, Ft. Lauderdale.

Robinette, M. and Durrant, J.D. Role of EOAEs in differential diagnosis of hearing disorders (as above).

Durrant, J., Gallego, S., Collet, L., Morgon, A., and Truy, E. Characterization of EABR: Stimulation site and stimulation level, Vth International Cochlear Implant Conference, 1-3 May, 1997.

Gallego, S., Durrant, J., Collet, L., Berger-Vachon, C. Numerical time-frequency filters adapted to the recording of EABR (as above).

J. D. Durrant, J. M. Furman, B. I. Carr. DPOAE in Monitoring of Cisplatin Ototoxicity, Biennial Symposium of the International Evoked Response Audiometry Study Group, 9-12 June 1997, Memphis, TN.

Durrant, J.D., Maison, S., Micheyl, C., Gallineau, C., and Collet, L. Delay of Contralateral Suppression of TOAE (as above).

Maison S, Micheyl C, Gallineau C, Durrant JD, Collet L. Contralateral Attenuation of TEOAEs by Amplitude-Modulated Noise (as above).

Durrant, J., Gallego, S., E. Truy, and Collet, L. Promontory test and electrically stimulated ABRs prior to implantation, International Objective Measures Workshop (Digisonic Cochlear Implant), 17 October 1997, St. Laurent-du-Var, France.

Durrant, J., Gallego, S., E. Truy, and Collet, L. Characterization of electrical auditory brain-stem response (as above).

Rosowski, J.J., and Durrant, J.D. Function of the middle ear—advances in understanding and assessment (SID-6 sponsored short course), Annual Convention of the American Speech-Language-Hearing Association, 20-23 November 1997, Boston.

Durrant, J.D. Contralateral suppression of otoacoustic emissions—delay of effect? (Invited commentary on presentation by M.C. Liberman), ASHA Research Symposium (Feedback and Executive Control in Human Communication, as above).

Ferraro, J.D. and Durrant, J.D. Practical aspects of tympanic electrocochleography (invited repeat presentation), American Academy of Audiology, 2-5 April 1998, Los Angeles.

Robinette, M. and Durrant, J.D. Role of EOAEs in differential diagnosis of hearing disorders (invited repeat presentation, as above).

Fowler, C.G., Bauch, C.D., Brown, C.J. Challenges with auditory evoked responses (grand rounds; as above).

Mendel, L.L., Hall, J.W., and Durrant, J.D. The unique role of otoacoustic emissions in differential diagnosis and determination of hearing physiology, American Academy of Audiology, 2-5 April 1998, Los Angeles.

Goyne, T., Ucellini, K., and Durrant, J.D. Binaural listening under quiet conditions in elderly listeners (as above).

Gallego, S., Durrant, J.D., Truy, E., and Collet, L., New ABR acquisition technique and characterization of results with the digisonic cochlear implant, 4<sup>th</sup> European Symposium on Paediatric Cochlear Implantation, 14-17 June 1998, 's-Hertogenbosh, The Netherlands.

Durrant, J. D., Fischer, M., Boston, J.R., Gallego, S. Modeling of multichannel implant stimulation and a possible clinical application (as above).

Durrant, J.D., Carr, B.I., Taubman, .B., and Furman, J. Efficacy study of DPOAE testing and high frequency audiometry in monitoring of liver cancer patients treated via chemotherapy, Ototoxicity: Basic Research & Clinical Applications (International Symposium), 18-20 June 1998.

Durrant, J.D. Intérêt pronostique potentiel de nouveaux tests en audiologie [Prognostic potential for new tests in audiology], IV<sup>e</sup> Congrès de la Société Française d'Audiologie, 7-8 December 1998, Clermont-Ferrand, France (invited).

Durrant, J., Veulliet, E., Micheyl, C.; Collet, L., Gallégo, S. On the question of involvement of the middle-ear-muscle reflex in contralateral suppression of otoacoustic emissions, Midwinter Research Meeting of the Association for Research in Otolaryngology, 13 – 18 February 1999, St. Petersburg, FL.

Palmer, C.V., Adams, S., Bourgeois, M.S., Durrant, J.D. and Rossi, M. Treating hearing loss in Patients with Alzheimer's Disease. Annual Convention of the American Speech-Language-Hearing Association, 18-21 November 1999, San Francisco.

Durrant, J.D., Taubman, L.B., Goyne, T.R., and Furman, J. Efficacy of high-frequency DPOAE testing. American Auditory Society, 7 – 8 April 2000, Scottsdale, AZ.

Durrant, J.D., Philibert, B., Collet, L. and Don, M. Stacked-band-derived ABR—Tone-burst Approximation? (as above).

Philibert, B., Durrant, J.D., Micheyl, C. and Veulliet, E. Mismatch negativity (MMN) and intensity discrimination (DLi) (as above).

Dumont, Y., Duclaux, R., Annat, G., and Durrant, J.D. Une expérience d'enseignement de la physiologie en langue anglaise en faculté de médecine. Forum International Francophone de Pedagogie Medicale, 18-20 May 2000, Quebec City.

Don, M., Durrant, J.D., et al. Grand Rounds: Innovative physiological assessment measures, Convention of the Am. Spch.-Lang.-Hear. Assoc., November 2000, Washington, DC.

Shuster, L.I. and Durrant J.D. An investigation of self-hearing of one's own voice, as above.

Durrant, J.D. and Taubman L.B. Developpement du système intégré pour le monitoring de l'ototoxicité auditive et vestibulaire (Development of an integrated system for monitoring of audio-/vestibulo-ototoxicity), Congrès de la Société d'Audiologie, December 2000, Tours, France.

Philiber, B., Durrant, J.D., et al. Les potentiels évoqués dérivés: utilisation de bouffées tonales (Derived evoked potentials: use of tone-bursts), as above.

Collet, L., Durrant, J.D., and Petitot, C. Une nouvelle exploration fonctionnelle auditive: les potentiels évoqués auditifs stationnaires multiples (A new functional auditory test: the multiple auditory steady-state potentials), as above.

Noreno, A., Micheyl, C., Durrant, J.D., et al. Is there a neural plasticity related to spontaneous otoacoustic emissions? Association for Research in Otolaryngology, February 2001, St. Petersburg, FL.

Durrant, J.D., Taubman, L., and Collet, L. Preliminary observations on "narrow field" recordings of the 40-Hz steady-state potential, 2<sup>nd</sup> International Symposium on Objective Measures in cochlear Implantation (invited presentation; also member, international faculty), 16-18 March 2001, Lyon, France.

Durrant, J.D. Vieillesse de l'audition, (Aging of the auditory system), "National Days of French Hearing-Aid Fitters", "Multidisciplinary Day", 24 March 2001, Paris (invited presentation).

Vento, B.A., Durrant, J. D., and Sabo, D.L. "Development of DPOAE f2/f1 ratio functions in human infants", Biennial Symposium of the International Evoked Response Audiometry Study Group, 22 - 27 July 2001, Vancouver, BC, Canada.

Kaf, W., Durrant, J.D., Sabo, D.L., and Pratt, S. "Contralateral suppression of otoacoustic emissions: preliminary study to determine optimal parameters" (as above).

Collet, L., Gallego, S., Durrant, J.D., and Truy, E. "Electrically evoked multiple auditory steady-state responses recorded in idgionic cochlear-implanted patients" (as above).

Taubman, L. B., and Durrant, J.D. "Test-retest reliability of measures of auditory middle-latency

response in normal-hearing adults” (as above).

Zhou, J., and Durrant, J.D. “Effects of interaural frequency difference on binaural fusion evidenced by psychoacoustical versus electrophysiological measures” (as above).

El-Kady, M.A. and Durrant, J.D. Effects of chronic obstructive pulmonary disease on auditory function in humans, Midwinter Research Meeting of the Association for Research in Otolaryngology, 27-31 January 2002, St. Pete., FL.

Durrant, J.D., Palmer, C.V., and Bourgeois, M.S. Model of counted behaviors upon hearing-aid intervention (Alzheimer patients), American Auditory Society, 13 – 16 March 2002, Scottsdale, AZ.

Taubman, L.B., Durrant, J.D., Ryan, C., and Becker, D.J. Distortion product otoacoustic emissions in juveniles with insulin dependent diabetes mellitus (as above). *{Note: this poster won the first author a doctoral-student travel scholarship to this national scientific meeting.}*

Zhou, J., Durrant, J.D., and Balaban, C. Electrophysiological studies on effects of intracochlear perfusion of capsaicin and capsazepine: In search of a role for vanilloid receptors in primary auditory neurons. Midwinter Meeting of the Association for Otolaryngology, 22-27 February 2003, Daytona Beach

Collet, L., Gabriel, D., Veuillet, E., Norena, A, Durrant, JD, et al. Tonotopic organization of the auditory cortex for high frequency tones (as above).

Zhou, J. and Durrant, J.D. Differential intracochlear recordings of the ensemble background activity (EBA). *{Note: this poster won the first author a doctoral-student travel scholarship to this national scientific meeting.}* American Auditory Society, 13-16 March 2003, Scottsdale, AZ.

Zhou, J. and Durrant, J.D. Possible influence of a common pain-reception mechanism in auditory neurons (as above).

Collet, L., Gallégo, S., Durrant, J.D., and Truy, E. Electrically multiple auditory steady state responses recorded and fitting of cochlear implants. Third International Symposium and Workshops on Objective Measures in Cochlear Implants, 26-28 June 2003, Ann Arbor, MI.

Kaf, WA, Durrant, JD, and Sabo, DL, Kovacyk, K, and Taubman, LB. Validity and accuracy of ERA using auditory steady-state responses. Biennial Symposium of the International Response Audiometry Study Group, 8-12 June 2003, Tenerife

Kaf, WA, Durrant JD, Sabo, DL, Taubman, LB, and Kovacyk, K. Reliability of ERA using auditory steady-state responses (as above).

Durrant, JD, Taubman, LB, Ryan, CM, and Becker, DJ. DPOAE, ABR, and AMLR in Insulin-Dependent Diabetes Mellitus Adolescents. American Auditory Society, 7-9

March 2004, Scottsdale, AZ.

Boston, JR, Yoo, S, Durrant, JD, Kovacyk, K, Karn, S, Li, CC and El-Jaroudi, A. Effects of Speech Transition Information on Intelligibility, Acoustical Society of America, spring meeting, June, 2004, New York.

Durrant, JD, Tlumak, A, Kovacyk, K, Ambient Noise on Auditory Tests. Biennial Congress of the International Society of Audiology, Sept 2004, Phoenix, AZ.

Yoo, S, Boston, RJ, Durrant, JD, Kovacyk, K, Karn, S, Shaiman, S, et al. "Relative energy and intelligibility of transient speech components," Proc. EUSIPCO-2004, pp. 1031-1034, 12<sup>th</sup> European Signal Processing Conference, Vienna, Austria, September 6-10, 2004.

Yoo, S, Boston, RJ, Durrant, JD, Kovacyk, K, Karn, S, Shaiman, S, et al., "Relative energy and intelligibility of transient speech information," Proc. Int'l Conference on Acoustics, Speech, and Signal Processing, pp. I69-I72, Philadelphia, PA, March 18-23, 2005.

Krishnan, L.A., Strickland, E.A., Durrant, J.D. "Auditory brainstem response correlate of the psychophysical temporal effect of masking", see Abstracts of the Twenty-eighth Midwinter Research Meeting, A.R.O, 2005, abstr. #229.

Durrant, JD, Tlumak, A, Kovacy, K. Toward Real-Ear Calibration in Routine Hearing Testing. American Auditory Society, March 2005, Scottsdale, AZ.

Tlumak, A, Durrant, JD, Collet, L, Auditory Steady-State Responses (ASSR) At Low-Conventional And High-Frequency Audiometric (HFA) Frequencies, Biennial Symposium of the International Evoked Response Audiometry Study Group, 12-16 June 2005, Havana.

Kochanek, K, Orkan-Łęcka, Durrant, JD, et al., Potential Usefulness of Auditory Brainstem Responses Elicited by Tone Pips in Diagnosis of Retrocochlear Hearing Loss (as above).

Durrant, J.D., Gaffney, P., Furman, J.M. Head-only rotation versus roto-chair testing—Reliability in normals, American Auditory Society, March 2006, Scottsdale, AZ.

Vento, B., Durrant, J., and Sabo, D., Maturational changes in DPOAEs: Right/left differences. NHS 2006 Conference--Beyond Newborn Hearing Screening: Infant and Childhood Hearing in Science and Clinical Practice. May 31 - June 3, 2006, Cernobbio, Italy.

Durrant, J.D., Kaf, W.A., and Sabo, D. Empirical test of bias of recruitment on accuracy of ASSR Threshold Estimation, 28<sup>th</sup> International Congress of Audiology, 3-7 September 2006, Innsbruck, Austria.

Kochanek, k., Orkan-Lecka, E., Durrant, J.D., Sliwa, L., et al. Potential usefulness of audito



brainstem responses elicited by tone pips in diagnosis of retrocochlear hearing loss. (as above)

Durrant, J.D., Tlumak, A., and Kaf, W. Further observations on the performance of ASSR audiometry, 1<sup>st</sup> National Audiologic-Phoniatic Conference, 10-12 September, 2006, Warsaw, Poland; also organized/co-moderated teleconference presentations by CSD faculty from Pittsburgh during a main congress session).

Durrant, J.D., Sabo, D., and Delgado, R. Standard calibration method for newborn screening? American Auditory Society, 4-6 March 2007, Scottsdale, AZ

Kochanek, K., Orkan-Lecka, E., Durrant, J., Sliwa, L., Pilka, A., and Skarzynski, H. Application of ABRs elicited by tone pips in diagnosis of retrocochlear hearing loss (as above).

Keogh, L, Durrant, J., Sabo, D., and Phelps, R. Further observations on ABRs frequency-specific stimuli in newborns. *Winner of mentored poster/travel award* (as above).

Horn, J., Pratt, S., and Durrant, J. Optimal test parameters of the 2f<sub>2</sub>-f<sub>1</sub> component of the DPOAE (as above).

Durrant, J.D., Pratt, S., Roxberg, J, Ortmann, A., McNeil, M., and Doyle, P. Observations on otoacoustic emissions and other auditory evoked responses in cohorts of aging subjects with and without aphasia, Biennial Symposium of the International Evoked Response Audiometry Study Group, 10-14 June 2007, Bled, Slovenia.

Horn, J.H., Pratt, S., Durrant, J.D. Study of parameters to optimize 2f<sub>2</sub>-f<sub>1</sub> DPOAE output (as above)

Keogh, L., Durrant, J.D., Sabo, D., Phelps, R. Examination of an abbreviated stacked-ABR test in newborns (as above).

Tlumak, A., Rubinstein, E., and Durrant, J.D. Meta-analysis of variables that affect accuracy of threshold estimation via measurement of the auditory steady-state response (as above).

Durrant, J.D., Ortman, A., McNeil, M.R., Pratt, S., and Roxberg, J. Auditory evoked responses in aging subjects with and without aphasia, American Auditory Society, 6-8 March 2008, Scottsdale, AZ.

Durrant, J.D., Genna, G.I., Burkhardt, K. Moxon, A., Delgado, R.E., and Pratt, S. . Analysis in adults of head-turn behavior fundamental to visual reinforcement audiometry—Potential New Source of Information, International Congress of Audiology, 8-12 June 2008, Hong Kong.

Bentler, R. with invited round-table panelists/presenters: A. Dittberner, J. Durrant, J. Ferraro, T.Y-C. Ching. Improving outcomes with hearing prostheses (as above). [My contribution pertained to treatment of demented/brain-damaged patients with hearing aids.]

Durrant, J.D. Reflections on MRI in Relation to Audiological Differential Diagnosis and

Hearing Science, international conference for the dedication of the Bioimaging (fMRI) Center, International Center for Hearing and Speech, 19-20 March 2009, Warsaw.

Durrant, J.D. and Moncrieff, D.W. Education in Audiology and Otology in Europe--Training for the practice of pediatric-educational audiology, 9th European Symposium on Pediatric Cochlear Implantation, 14-17 May 2009, Warsaw.

Tlumak, A., Durrant, J.D., Delgado, R.E.2, and Boston, J.R. Steady-state measurement and analysis approach to profiling AEPs from short-to-long-latency: underlying concepts and results in adults, Binnennial Symposium of the Evoked Response Audiometry Study Group, 8-11 June 2009, Rio de Janeiro.

Mancini, P.C., Starling, A.L.P., Durrant, J.D., Iorio, M.C.M. Short and middle-latency auditory responses in children with phenylketonuria having undergone early diagnosis and treatment: Preliminary results, as above.

Durrant, J.D., Sabo, D.L., and Delgado, R.E. Call for calibration standard, Meeting of the Joint Committee on Infant Hearing, 17-18 September 2009, Rockville, MD.

Durrant, J.D., keynote speaker, "Challenges of the globalization of standards and education in audiology, International Congress of Audiology, 28 March – 1 April 2010, Sao Paulo, Brazil.

Durrant, JD, Connor, CM, Nittrouer, SN, Geers, AE, and Moncrieff, DW, Links between Auditory and Literacy Development: Critical Issues, American-Speech-Language Hearing Association Convention, November 18–20, 2010, Philadelphia, PA.

Tlumak, A, Durrant, JD, Delgado, RE, and Boston, JR. Steady-State Analysis of AEPs: Profile in Children versus Adults (as above).

Tantibundhit, C., Boston, R.J., Li, C.C., Durrant, J.D., Shaiman, S. et al.. Speech enhancement using transient speech components, see Proc. Int'l Conference on Acoustics, Speech, and Signal Processing, 2010, Toulouse, France. *{This paper received recognition as a Student Paper Contest Finalist.}*

Rasetshwane, DM, Boston, JR, Durrant, JD, Yoo, SY, Li, CC, Shaiman, S. SPEECH Enhancement by combination of transient emphasis and noise cancellation, 14th IEEE Digital Signal Processing & 6th Signal Processing Education Workshop, IEEE Signal Processing Society DSP/SPE 2011, January 4-7, 2011, Sedona, AZ (with published proceedings).

Boston, JR and Durrant, JD. Time-Frequency-Analysis Based Enhanced Speech Intelligibility in Noise, Annual Meeting, American Auditory Society, March 3-5, 2011, Scottsdale, AZ.

El-Kady, MA, Li-Korotky, HS, Durrant, J, Palmer, C, and Sabo, DL. Major histocompatibility complex in cochlear hair cells exposed to interferon-alpha (as above).

MacKechnie, CA, Raz, Y, and Durrant, JD. Is the Rinne Test Created Equally Across Tuning

Forks? (as above).

Durrant, J. Issues of extending stimulus-response approach to later potentials: results in children and non-alert adults, European Federation of Audiology Societies Congress, June 22-25, 2011, Warsaw, Poland (keynote address).

Hatzopoulos, S with Durrant, J, Jedrzejczak, W, and Liu, W. Current and future trends NHS/EDHI practices; panelist/presenter on potential use of the ASSR for newborn screening (as above).

Tlumak, AI, Durrant, JD, Delgado, RE, and Boston JR. Follow-up report on efforts to extend the steady-state stimulus-response approach to longer-latency-equivalent potentials and results in children and non-alert adults, Biennial Symposium of the International Evoked Response Audiometry Study Group, June 26-30, 2011, Moscow, Russia.

Mancini, PC, Durrant, JD, Starling, ALP, Iório, MCM. Children with phenylketonuria treated early: basic audiological and electrophysiological evaluation (as above).

### **Post Retirement**

Durrant, J.D. Expanding the Steady State Approach to the Longer Latency Potentials, Keynote Address, 20<sup>th</sup> World Congress of the International Federation of Otorhinolaryngological Societies. 1- 5 June 2013, Seoul, Korea.

Also invited session co-organizer and moderator: Auditory Steady-State Responses: Current Issues and Issues.

Durrant, J.D. Expanding the Steady State Approach to the Longer Latency Potentials, Biennial Symposium of the International Evoked Response Audiometry Study Group, June 9-13, 2013, New Orleans, USA.

Mancini, P.C., Martinelli M.C., and Durrant J.D. On Early Maturation of the ABR: Is Common Wisdom There to Truly Lawful? (IERASG as above).

Durrant, J.D. Annual Meeting of the Danish Technical Audiology Society 13-14 September 2013; Vejle, Denmark -- Invited lectures:

~Bases of and Preliminary Efforts toward New Enhancements of Visual Reinforcement Audiometry (VRA)

~Revisiting Alzheimer's and Audiological Management, and Mini-Update

~Toward Extending Auditory Steady-State Response (ASSR) Testing to Longer-Latency Equivalent Potentials

Durrant, J.D. 国际诱发反应测听协作组历史及演变 (History of and Advances Echoed Through the IERASG). Invited presentation at the Inaugural meeting of the Chinese Evoked Response Audiometry Study Group (CERASG), held within the Congress of the Chinese Otolaryngology Doctor Society, 30-31 Oct 2014, Beijing.

~May 2016: Invited to return to the PRC to render tutorial lectures broadly covering evoked

potentials and their clinical applications in audiology, given in Beijing, Shanghai, and Guangzhou. Collectively, these events were intended to help expand interests/knowledge base thereto in China.

Durrant, J.D. Auditory evoked response test methods, Invited day course, 23 February 2015; Pusat Perubatan Universiti Malaya, Kuala Lumpur, Malaysia (in affiliation with Intelligent Hearing Systems, Miami, FL USA).

Durrant, J.D. Auditory evoked response: Bases and issues in frequency-specific testing, Invited lecture; 27 February 2015; MSc of Audiology Programme, Center for Hearing, Speech & Balance, Department of Otolaryngology, National University of Singapore.

Tlumak, A., Durrant, J., and Delgado, R. Extending auditory steady-state response to long-latency testing (ASSLLR): Threshold estimation, Annual Meeting, American Auditory Society, March 5-7, 2015, Scottsdale, AZ.

Tlumak, A.I., Durrant, J.D., Delgado, R.E. Investigation of middle-to-long-latency equivalent ASSRs in younger vs. older adults, Biennial Symposium of the International Evoked Response Audiometry Study Group, May 10-14, 2015, Busan, Korea.

Tlumak, A.I., Durrant, J.D., Delgado, R.E. Auditory steady-state long-latency Response (ASSLLR): Back to fundamental stimulus parameters, Annual Meeting, American Auditory Society, March 3-5, 2016, Scottsdale, AZ.

Durrant, J.D. and Ferraro, J.F. Renewed Look at Electrocochleography--History, Advances, and Response Modeling, Annual Meeting of American Speech and Hearing Association, November 17-20, 2016, Philadelphia, PA.

Horn, J., Pratt, S., Durrant, J., Palmer, C., Torre, P. 2f2-f1 DPOAE Sources in contradiction to the two-source/two mechanism model? (as above).

Ferraro, J.A., Kileny, P., and Durrant, J.D. Current Applications of ECochG Beyond the Diagnosis of Meniere's Disease, American Auditory Society, March 2-4, 2017, Scottsdale, AZ.

Durrant, J.D. Hallowel Davis Lecture (and invited lecture and honor of the society): Unpublished works and the importance of continuing to turn stones in our science, Biennial Symposium of the International Evoked Response Audiometry Study Group, May 21-24 2017, Warsaw, Poland.

Durrant, J.D. Personal memories from a past chairman (special historical session, invited lecture) (as above).

Durrant, J.D and past collaborators: C.V. Palmer, M.S. Bourgeois, K. Gilmartin, and T. Lunner. Unjustified neglect of attention to hearing health needs of aging persons with dementia in the modern age (invited lecture to parallel congress of the above--7th National Symposium of the Audiologic and Phoniatic Section, Polish ENT Society).

Durrant, J.D. Brainstem response and related other electrophysiological test in ANSD diagnosis—Still more to learn?, Life Science Advanced Forum (lectures were by invitation only), The 2nd International Advance Forum on Auditory Neuropathy; Nobel Forum, Karolinska Institute, November 1-3, 2017, Stockholm.

Durrant, J.D., Delgado, R.E., and Hood, L.J. Scrutiny of issues of threshold estimation via cortical (or any?) ERA, Biennial Symposium of the International Evoked Response Audiometry Study Group, June 30-July 4 2019, Sydney, Australia.

Durrant, J.D. In Memoriam Roger Thornton (as above).

Durrant, J.D. Paradigm shift in evoked response audiometry (ERA) where it all started—in the cortex—and for all? (a keynote lecture), 2nd French-Brazilian International Symposium--'Hearing: Genetics, Cognition and Technology', Belo Horizonte (Brazil), November 28-29, 2019.

Durrant, J.D. New ERA Textbook—Basic Concepts of Clinical Electrophysiology in Audiology (an invited report/preview, status of this IERASG affiliated project and nuances of the product), Biennial Symposium of the International Evoked Response Audiometry Study Group/Online Conference, June 14-July 9, 2021, Cologne, Germany.

#### -----SERVICE TO UNIVERSITY/OTHER PROFESSIONAL ACTIVITIES-----

**Teaching--Brief Overview:** Most recent courses taught (i.e. pre-retirement, U Pitt):

CSD 1025 Hearing Science

CSD 2038 Physiological and Psychological Acoustics

CSD 2045 Physiological Assessment

CSD 2048 Sound and Vibration: Measurement and Management

CSD 2049\_3049 Graduate seminar: Aging of the Auditory System

CSD 3049 (more recently) Doctoral seminar, on scientific bases of cochlear and brainstem implants

CSD 2251 Vestibular Assessment and Rehabilitation (team taught; lecturer and course organizer and facilitator)

CSD 2455\_2252 Advanced Physiology: An Audiology Seminar in Electrophysiological Assessment

#### **TEACHING:**

##### **Temple University (1972-1984)**

Medical School:

Lectures on vestibular and auditory physiology given regularly in freshman physiology course. "Clinical correlation" lecture on basic clinical audiology given regularly in freshman neuroanatomy course.

Clinical audiology lectures given in sophomore/junior neurosensory interdisciplinary course.  
Basic hearing science and clinical audiology conferences as part of junior/senior ENT rotation.

Residency Training:

Responsible for organizing and contributing lectures to annual audiology lecture series for ENT residents.

Lectures on electric response audiometry during annual neurology resident lectures.

Regularly invited to lecture to ENT residents at University of Pennsylvania (electrocochleography and psychoacoustics).

Undergraduate Courses (Speech Dept., Div. Spch.-Lang.-Hear. Sci.):

Basic Hearing Science

Graduate Courses (Speech Dept., Div. Spch.-Lang.-Hear. Sci.):

Psychoacoustics

Seminar - Hearing Science--Advance Psychoacoustics

Physiologic Methods in Audiology (emphasis on electro-cochleography and brain-stem electric response audiometry)

Lab. Practicum in Audition--Basic Electronics for Audiologists (team taught, but was principal lecturer)

Research Design (co-instructor)

Noise and Industrial Audiology (guest lecturer on auditory and nonauditory effects of noise)

Misc. independent studies.

Master's and Doctoral Theses and Related Activities:

Regularly participated in masters and doctoral students qualifying examinations (Dept. Speech), both as question writer and evaluator.

Participated (other than as advisor) on doctoral committees and proposal and/or thesis defenses for 6 doctoral students (2 from Dept. of Physiology and 1 from Dept. of Speech, T.U.; 1 from Drexel U.; 2 from U. of Penna.

Advisor/Coadvisor:

3 Ph.D. dissertations completed, Dept. Speech, T.U.:

Louis Sieminski

G. Donald Miller

Sandra Gabriel

1 Master's thesis completed, Dept. Speech, T.U.:

Bridgett Mancano

1 Master's thesis completed, Dept. Biomed. Eng., Drexel U.

(via cooperative/exchange program between TU and Drexel:  
Mark Shelhammer

Advised two doctoral students, Depts. Speech and Physiology  
who, for personal reasons, were unable to complete their  
degrees.

### **Continuing Education:**

Update: Brain stem evoked potentials," lecture given at the Second Biennial Alumni Reunion,  
Manhattan Eye, Ear, and Throat Hospital, 13-14 Oct. 1978, New York, NY (invited).

What the clinician should know about BSERA," North-East Regional Conference of the  
American Speech-Language-Hearing Assoc., 23-26 July, 1981, Philadelphia, PA (invited; with  
A.E. Dickter).

"Hearing Loss in Children", continuing education program presented by the Temple ENT  
Department; lectured on methods of hearing measurement, impedance audiometry, and electric  
response audiometry; Temple University School of Medicine, Philadelphia; 1 June, 1977.

Audiology Workshop in Brain Stem Evoked Response Audiometry, 7-8 April, 1982,  
Bloomsburg State College (invited faculty).

Workshop: Evoked Responses, 24-26 March, 1983, Hershey, PA, co-sponsored by  
Instrumentation Assoc. and Clark Instruments (invited faculty).

Miniseminar: Clinical Use of BSER, presented at the annual convention of the Penna.  
Speech-Language-Hearing Assoc., 27-30 April, 1983 (with A.E. Dickter).

Miniseminar: Current Trends, Approaches, and Problems in Audiologic Applications of  
Computers, American Speech-Language-Hearing Association, 18-21 Nov., 1983, Cincinnati  
(program organizer and presenter; see below).

### **University of Pittsburgh (1984--2012)**

#### Lectures given at the Residents' Audiology Conference:

(co-coordinator of this lecture series and a principal lecturer, including topics below; now, since  
Fall 1990, combined with Residents' Otology Conference; see below)

"Basic Hearing Science", 9 November, 1987

"Basic Audiology Methods", 23 November, 1987

"Immittance Testing", 25 January, 1988

"Audiometric Applications of Evoked Potential Measurement", 28  
March, 1988

"Case Management and Referral for Audiologic Services" with R.  
Nozza, 18 February, 1989.

"Bases of Auditory Electrophysiologic Testing", 11 March, 1989.

"Electrophysiologic and Special Auditory Testing: Detection of Retrocochlear Lesions", 8 April, 1989.

"Fundamental Acoustics for Hearing Science", 18 September, 1989.

"Physiological Acoustics", 23 October, 1989.

"Psychoacoustics", 21 November, 1989.

"Hearing Aids & Basics of Evaluation/Fitting" with R. Kesterson, 20 February 1990.

"Electrophysiologic Testing (overview)", 18 June 1990.

Lectures given at the Residents' Otology Conference (co-coordinator since Fall 1990):

"Electrophysiology of Audition" and "Tinnitus-Classification, Diagnosis and Treatment"; responsible for organizing four other lectures, including providing half of one of them myself; Dec. 1984 - Apr. 1985.

"Electrophysiology of Audition", 6 October, 1986

"Application of Electrical Potentials of the Ear:", 1 December, 1986

"Bases of Tuning Fork Tests", December, 1987

"Facial Evoked Electromyography (Electroneuronography)", 7 November, 1988

"Tuning Forks: Clinical and Acoustic Considerations" with B. Hirsch, 20 February 1989.

"Hearing Aid Evaluation, Regulations, Fitting" with R. Kesterson, 6 March 1989

"Evaluation of Functional Hearing Loss" with R. Kesterson, 22 January 1990

"Workshop on use of Portable Audiometers" with R. Kesterson, 19 March 1990

"Overview of Audiology Special Tests", 12 September 1994.

"Advances in Hearing Aid Technology", with C. Palmer 23 January 1995.

Audiology rotations, ENT residents; responsible for providing or coordinating instruction and/or guiding independent study, 1 morning/week during their respective otoneurology rotations.

"Orientation in Audiology for First Year ENT Residents," a 1-day program; responsible for organizing and contributing lectures on basic hearing science and clinical audiology; July or August of each year (whilst primary appointee in Department ORL).

Lecture to the sophomore medical students on basic audiology as a contribution to the Clinical Skills/Physical Diagnosis Specialty Sessions, 1984-1993 (previously responsible for 8 sessions, from Sept. to March each year; 1 lecture given annually since 1989).

Miscellaneous lectures:

"Vestibular Physiology", given to audiology graduate students, Dept. of Communication, 11



March, 1986.

"Effects of Noise on Hearing", given to undergraduate/beginning graduate students in Communication Disorders, 4 December 1986.

"Acoustics", given at Resident's (Otolaryngology) Basic Science Conference, May 1987.

"Hearing Tests and Their Interpretation", given to geriatric medicine residents, 14 September 1987.

"Hearing Tests and the Influence of Peripheral Hearing Loss on Neurologic Evaluations", given to neurology residents, 5 December 1987.

"The Auditory System", given to neurology residents, 26 January, 1989.

"Acoustics--Review & Clinical Relevance", given at Resident's (Otolaryngology) Basic Science Conference, 10 April, 1989.

"Hearing Loss and Aging", given to staff and residents, Benedum Geriatric Center, 17 January 1990.

"Auditory Neurophysiology and Cochlear Implant Technology", lectures given a part of a bioengineering course, U.Pitt, Spring 1991.

"Research at the Center for Audiology", proseminar given to communication disorder graduate students, 12 September, 1991.

"Acquisition/analyses of auditory short-latency potentials", lecture given to Neurophysiology Computer Group, UPMC, March 1992.

"Auditory Neurophysiology", Neuroscience course lecture, October, 1992.

"DPOAE-Effects of Leaks", given at ASHA Pre-Visited proseminar given to speech/language and audiology graduate students, November, 1992.

"Audiology, The Profession", given at the National Students Speech-Language-Hearing Association (Univ. of Pgh. Chapter) in March, 1993.

"Hearing and Hearing Aids", lecture given each spring to graduate students in Rehabilitation Science and Technology, since 1994.

"Studies of the Differential Diagnostic Value of Otoacoustic Emissions", proseminar given to speech/language and audiology graduate students and faculty, March 2, 1995.

"The French Connection: Collaborative Studies of Evoked Responses, Efferent System, and Implants (Université Claude Bernard, Lyon)", Proseminar, Dept. Comm. Sci. & Disorders (SHRS), September 12, 1996.

#### Other :

Annually organized and delivered half of the lectures in a one-day orientation in audiology for first-year otolaryngology residents, to 1998.

Annually assisted in the development of the Otology Resident Conferences course schedule, often contributing 1 or 2 lectures, to 1998.

Annually, CSD Student Orientation Lecture, since 2001.

#### Undergraduate Courses (Department of Communication, now Dept. Com. Science and Disorders):

*Hearing Science* (concepts of acoustics, physiologic acoustics [auditory periphery and central auditory systems], and psychoacoustics; taught annually since Spring 1997; design demonstrations and supervise graduate student assistant in accompanying laboratory course).

Graduate Courses (Department of Communication (Comm. Dis.):

*Electrophysiologic Methods* (intro-level course), offered annually since 1986.

*Advanced Electrophysiologic Methods*, annually from 1991 plus twice before; then biennially since 1999.

*Instrumentation in Hearing Science*, annually, 1989-1997;

revised Fall 1994 to include basic principles psychoacoustics.

*Physiological and Psychological Acoustics*, biennially since 1999

*Sound and Vibration Measurement and Management* (including noise, its effects, measurement & abatement), biennially since 2000.

*Aging of the Auditory System*, 2002, 2003, 2005.

*Vestibular Assessment and Rehabilitation*, 2007 with Dr. Kamran Barin, Ohio State Univ.

*Doctoral Seminar: Advanced Psychoacoustics*, (summer 1997 with Prof. L. Feth, OSU; summer 1999)

*Doctoral Seminar in Audiology: Scientific Bases of Cochlear Implantation*, 2003, 2005, 2007.

Master's and Doctoral Theses and Related Activities:

Advisor/Coadvisor\* for doctoral dissertations completed:

Diane Sabo	1989	Rhetoric & Communication (CSD program)
Cheryl Hettman*	1996	School of Nursing
Mona El-Kady*	2000	Visiting Scholar; dissertation defense South Valley Univ., Egypt
Jianxun Zhou	2003	Communication Science & Disorders
Wafaa A. Kaf	2003	Communication Science & Disorders
Abreena I. Tlumak	2010	Communication Science & Disorders

Served/serving on numerous other doctoral committees in CSD, Electrical Engineering, Rehab. Sci. & Technology, and Physical Therapy, including the following for dissertations completed:

George Lindley	2000	Communication Science & Disorders
Kathleen Kelly	2002	Physical Therapy
Melissa Nascone Ruscetta	2005	Communication Science & Disorders
Sungyub Yoo	2005	Electrical Engineering
Charturong (Paul) Tantibundhit	2006	Electrical Engineering
Lata Krishnan	2008	CSD, Purdue University

Served on Master's theses committees in the Departments of CSD and Electrical Engineering.

Research Practica:

Fall, 1985 -- 1 doctoral student

Spring, 1986 -- 2 doctoral students

Summer, 1986 -- 1 doctoral student

Summer, 1990 -- 1 masters & 1 doctoral student

Summer, 1991 -- 1 masters & 1 doctoral student

Fall 1996—primary appointment in CS&D—continuous/numerous research practica/directed studies/independent studies, Fall 1997 - 2012.

Directed AuD student research practica, 2004 – 2012.

Independent Studies:

Spring 1986, Electronic instrumentation for hearing science - - 2 doctoral students.

Winter 1990, Basic electronics -- 1 doctoral student

Fall 1992, Evoked potentials in critical care monitoring --  
1 doctoral student (Nursing)

Fall 1997+ -- continuous flow of res. prac. supervision since becoming full-time CSD in 1997.

Visiting Fellows--Department of Otolaryngology: (served as advisor or coadvisor\*, generally to direct research activities):

\*Ms. Yousria El Sid, Egypt; audiologist, 1989

\*Dr. Sertac Yetiser; Turkey; otolaryngologist, 1992-3

Mr. Xia-guang Zhao; Peoples Republic of China; physiologist,  
1993-4

\*Dr. Weining Huang; Peoples Republic of China;  
otolaryngologist, 1994 (did not complete fellowship;  
called back to homeland for administrative reasons)

Ms. Luciana C.D. d.Castro; Brazil; audiologist; 1994

Ms. Renata Soneghet; Brazil; audiologist; 1994

Dr. James Kane; Huntington, WV; audiologist; 1994-1997

\*Dr. Mehmet Gulhane, Ankara, Turkey, 1995-1996

\*Dr. Chariton Papadakis, Univ. Crete, Greece, 1995-1996

Dr. Zolt Farkas, Budapest, Hungary, 1997

Ms. Tatiana Olzsanski, Sao Paulo, Brazil, 1998.

Dr. Mona Anwar El-Kady, Sohag, Egypt, 1997-2000

### **Continuing Education:**

Three Rivers Conference on Communicative Disorders; gave short course entitled, "Fundamentals of Brain-stem evoked response audiometry;" Pittsburgh, PA; 1-3 November, 1984 (Invited Speaker).

Annual Meeting of the Speech and Hearing Association of Virginia; gave a short course entitled, "Electrocochleography, American Style" and a miniseminar entitled, "Auditory brain-stem response potpourri;" Richmond, VA, 29-30 March, 1985 (Invited Speaker).

"Audiologists and Auditory Evoked Potentials: Clinical Update Minisymposium," continuing education program presented at the Eye and Ear Hospital; organized and contributed lectures; Pittsburgh, PA; 8 June, 1985.

Otology Grand Rounds, presentation on ototoxicity and ultra-high frequency hearing loss and evaluation, 18 June, 1985.

"Tympanometry for the Practitioner and Nurse," continuing education program presented at the University of Pittsburgh (sponsored by Pittsburgh Children's and Eye and Ear Hospital, in cooperation with a commercial sponsor); co-coordinated (with R. Nozza) and presented lecture on basic science and principles of tympanometry/immittance testing; Pittsburgh, PA; 23 October, 1985; 28 May 1986.

Three Rivers Conference on Communicative Disorders; gave miniseminar, "ABR: Methods and

Considerations;" Pittsburgh, PA; 24 October, 1986 (Invited Speaker).

Spoke at a regular meeting of the Western Pennsylvania Dental Hygienists' Association, Pittsburgh, PA, "Noise and Dentistry", 9 April, 1986

Co-coordinated course (with J. Lovrinic) at Temple University on Cochlear Implants and contributed lectures: "Review of Peripheral and Central Auditory physiology", Origin of Electrical Stimulation of the Auditory System", Sound Encoding for Electrical Stimulation", and "Overview of Surgically Implantable Devices, 11-12 April 1986.

Participated in short course, "Update on Cochlear Implants: Technical Aspects of Instrumentation", Convention of the Penna. Speech and Hearing Association, Pittsburgh, PA; 18-27 March, 1987.

"Recent Advances in High Frequency Audiometry: Air and Bone Conduction", with T.B. Frank, Penn. State, Penna. Speech and Hearing Association Convention, Pittsburgh, PA; 18-27 March, 1987.

The First Annual ENG, Equilibrium, and BAER Seminar, Wilmington, Delaware; "Principles, Neural Generators, and Normal Parameters of Brainstem Responses", Interpretation and Pitfalls", and "Electrocochleography" and chaired session on case presentations and discussion; 29-30 May 1987 (Invited Speaker).

Miniseminar: "The Short Latency Auditory Evoked Potentials, presented with members of the Working Group on Auditory Evoked Potential Measurement", Convention of the American Speech-Language-Hearing Association, November 1987, New Orleans (organizer).

"Report of ASHA Working Group on Auditory Evoked Potential Measurements", presented as part of miniseminar with R. A. Ruth et al., "Current Status of auditory Evoked Potential Standards and Guidelines", Convention of the American Speech-Language-Hearing Assoc., Nov. 1987, New Orleans, LA.

Invited panelist, "Clinical/Educational Problem Solving", December meeting (9 Dec. 1987) of the Southwest Pennsylvania Speech and Hearing Association.

"Audiology Update and Practical Workshop on Auditory Evoked Potentials", continuing education program presented at the University of Pittsburgh, organized and contributed lectures, 19-20 May 1988, Pittsburgh, PA.

"Audiology Update: Advances in Hearing Aid Technology--Real Ear Analyzers and Digital Hearing Aids", continuing education program presented at the University of Pittsburgh, organizer and lecturer, 28 October 1988, Pittsburgh, PA.

"The 2nd Annual Philadelphia Evoked Potential Workshop", invited lecturer and discussion facilitator, Adams Mark Hotel (Instrumentation Assoc.), 9-11 February 1989, Philadelphia, PA.

"Generators of the ABR: Theoretical and Practical Considerations", invited lecture given to the Department of Hearing and Speech, University of Kansas Medical Center, 27 February 1989, Kansas City, KS.

"Modern Audiology (?)", invited keynote address, Fourteenth Annual Seminar (NSSLHA), Clarion University, 10 March 1989, Clarion, Pa.

"Digital Hearing Aids", invited lecture, workshop sponsored by the Southwestern Pennsylvania Speech and Hearing Association, 16 September 1989.

"Cochlear Implant Program of the Eye and Ear Hospital/University of Pittsburgh", invited lecture given to the Department of Otolaryngology, University of Kyoto, 2 October 1989, Kyoto, Japan.

"Hearing Evaluation (in Neurofibromatosis)", invited lecture given at A Symposium on Neurofibromatosis by the Penna. Chapter of the Nat. Neurofibromatosis Fnd., 7 October 1989, Pittsburgh, Pa.

"Hearing Conservation: Effects of Noise on Hearing", invited lecture given to employees of the ALCOA Technical Center, 18 January 1990, ALCOA Center, PA.

"Technical Aspects of ABR Recording" and "Effects of Peripheral Hearing Loss on the ABR", invited lectures given at The Third Annual Philadelphia Evoked Potential Workshop, 22-23 February 1990, Philadelphia, PA.

Miniseminar: "Facial Evoked Electromyography (FEMG) Testing", with S. Klein, presented at the Annual Convention of the Pennsylvania Speech-Language-Hearing Assoc., 4-7 April 1990, Pittsburgh, PA.

"Newer Techniques in Electrophysiologic Monitoring", Invited lecture given at Mini-Seminar: Otology Update, Eye and Ear Institute, 18 May 1990, Pittsburgh, PA.

Audiology Update: Digital Technology in Hearing Aid Fitting and Selection II: Real-ear Measurements and Applications, program presented at the University of Pittsburgh, organizer and lecturer, 25 October 1990, Pittsburgh, PA.

The Fourth Annual Philadelphia Evoked Potential Workshop, invited lectures, 14-16 March 1991, Philadelphia, PA.

Otoneurology Update: Objective diagnostic and monitoring methods, presented at the University of Pittsburgh, organizer and lecturer, 13 June 1991, Pittsburgh, PA.

Durrant, J.D. "Perspectives on the professional doctorate", invited panelist, Audiology Workshop, Southwestern Penna. Sp. & Hear. Assoc, 14 Sept. 1991, Pittsburgh.

Audiology Update: Measurement of Otoacoustic Emissions, presented at the University of

Pittsburgh, organizer and lecturer, 26 October 1991, Pittsburgh, PA.

Annually participate in "ASHA Revisited", January meeting of the Southwestern Penna. Sp. & Hear. Assoc. (present papers given at preceding ASHA and/or AAA Conventions), since 1985.

"Electrophysiology: Short Latency Evoked Potentials", invited lecture given at the American Convention of the Illinois Speech-Language-Hearing Assoc., 27 February - 1 March 1992, Chicago, Illinois.

"Electrocochleography: Basic Principles and Current Research", presented at the American Convention of the Illinois Speech-Language-Hearing Assoc., 27 February - 1 March 1992, Chicago, Illinois.

"Auditory Evoked Potentials", invited lecture given to Dept. Otolaryngology, S. Illinois Medical School, 1 March 1992, Springfield, Illinois.

"Audiometric Evaluation", invited lecture given at Assessment and Rehabilitation of Vestibular and Balance Disorders, seminar given at the University of Pittsburgh, 31 July - 1 August 1992.

"DPOAE--the CUBDISP system", invited lecture given at the National Hospital, 25 September 1992, Copenhagen, Denmark.

"Auditory System: Sound and Inner Ear"; "Auditory System: Central Pathways, Lectures given in Neuroscience 3, Fall 1992.

"Using Cubic Distortion Product Oto-Acoustic Emissions in Clinical Testing", invited lecture given at Ohio State University, 16 October 1992.

"Audiology, the profession", invited lecture given to the University of Pittsburgh, Chapter of the National Students Speech-Language-Hearing Assoc., 23 March 1993, Pittsburgh.

"Emerging Clinical Applications of Otoacoustic Emissions", short course (with D. Sabo) presented at the Annual Convention of the Pennsylvania Speech-Language-Hearing Assoc., 31 Mar. - 3 Apr. 1993.

"Distortion Product Otoacoustic Emissions", invited lecture given to the Laboratoire d'Audiologie Experimentale, I.N.S.E.R.M. Unite 229, Hôpital Pellegrin, 28 April 1993, Bordeaux, France.

"Functional Assessment of the Auditory System", invited lecture given to the Department de Physiologie Sensorielle, Audition et Voix, Université Claude Bernard, Lyon (Hôpital Édouard Herriot), 6 May 1993, Lyon, France.

"Clinical Applications of DPOAE Testing", grand rounds (invited) given to the Department of Otolaryngology, Long Island College Hospital, 3 June 1993, Brooklyn, New York.

"Electrocochleography", invited lecture given at the continuing education course, Clinical

Applications of Electrophysiology, 4 June 1993, Manhattan Eye, Ear & Throat Hospital, New York.

Otoneurology/Audiology Update--Recent Advances in Cochlear Implants and Other Technology for the Deaf, J.D. Durrant and D.B. Kamerer program chairmen and lecturers; June 30, 1993.

Otology Grand Rounds, lectured on hearing research at the ISERM unit in Bordeaux and the CNRS unit in Lyon, France, October, 1994.

"Skills Workshop--Audiometry", demonstrations given at the continuing education course, Otolaryngology for the Family Practitioner, 14 January 1994, UPMC.

"Update on the Rehabilitation of Sensorineural Hearing Loss", lecture given as part of Mini-Seminar Series: Update in Techniques for Hearing Restoration, 11 October 1995, UPMC.

Otology Grand Rounds, lectured on evaluation of pseudohypacusis, with R. Kesterson, June 1994.

Invited lectures: "Functional Anatomy of the Auditory Pathways", "The Efferent System", "Electrocochleography", "Intraoperative Monitoring of Auditory and Facial Nerve Function" (with P. Kileny), case reports, and panel discussions, Integrating Physiologic Auditory Measures: Acoustic Immittance, Otoacoustic Emissions, Evoked Potentials (American Speech-Language-Hearing Assoc.), 11-13 August 1994, University of Michigan, Ann Arbor.

Invited lecture, "Audiologic Assessment" in Assessment and Rehabilitation and Balance Disorders, University of Pittsburgh, August, 1994.

Otology Grand Rounds, lectured on electrocochleography, with B. Hirsch, September, 1994.

Invited panelist, "Perspectives on the Future of Speech-language and Audiology," meeting of the Southwest Penna. Speech, Language, and Hearing Assoc., November 30, 1994.

Invited lectures, "Clinical Applications of Otoacoustic Emissions" and the "Efferent System and the Collet Effect", given to graduate students and faculty, Central Michigan University, Mt. Pleasant, MI, February 17, 1995.

Invited lecture, "Intraoperative Monitoring", given to communication disorders graduate students and faculty, University of Tennessee, Knoxville, TN, March 28, 1995.

Invited co-course director and principal lecturer, "Seminar on assessment and rehabilitation of the auditory and vestibular systems", 2-day course given under the auspices of the Panhellenic Society of ORL & HNS, Athens, Greece, May 5-6, 1995.

Invited lecture, Hearing Loss and Dizziness: Diagnosis and Management, Otorhinological Society of Crete, Heraklion, Crete, May 10, 1995.

Invited lecture, Twenty-Seventh Annual Mid-South Conference on Communication Disorders, Memphis, Feb, 1997.

Invited lecture, "Role of the Hair Cells in Generation of the SP (summating potential)", Department of Hearing and Speech, University of Kansas Medical Center, 19 September 1997, Kansas City, KS.

Keynote address, "Modelling and the Auditory System", International Conference on Contribution of Cognition to Modelling, A.M.S.E., 6-8 July 1998, Lyon, France.

Invited lecture, "Obtaining Diagnostic Information from Hair Cell Nonlinearities," John W. Black Memorial Symposium: The Role of Hair Cells in Hearing, Ohio State University, 27-28 August 1998, Columbus.

Invited lectures, "Clinical Applications of Electrocochleography"; "Otoacoustic Emissions and Clinical Applications"; "Clinical utility of Middle & Long-Latency Auditory Evoked Potentials", Celebration of 100 Years of the Gulhane Medical University, 25-27 May 1998, Ankara, Turkey.

Invited lecture, "Function of the Outer and Middle Ear", Department of Hearing and Speech, University of Kansas Medical Center, September 1999, Kansas City, KS.

Durrant, JD and Sabo, D; invited lecture, "Advances in Clinical Applications of Auditory Evoked Potentials", Annual Convention of the Pennsylvania Academy of Audiology, Sept. 14, 2002, Pittsburgh, PA

Invited lecturer, Weinberg Lecture Series, Dept. Audiology and Speech Sciences, Purdue University, West Lafayette, IN, September, 2003.

Invited lecturer, James Madison University, Virginia, 4<sup>th</sup> Annual Innovations in Clinical Communication Sciences, "Physiological Acoustics, Electrophysiology, and Applications", October, 2003.

Invited lecturer, course-length series of lectures given at the International Hearing and Speech Center, Kajetany (Warsaw), Poland; Physiological and Psychological Acoustics, November 2003 and April 2004.

Invited lectures, PR China, sponsored by Intelligent Hearing Systems in cooperation with three medical faculties in the cities of Beijing, Shanghai, and Guangzhou, December, 2003

Invited lecturer and session chair, telecasted satellite session, 2<sup>nd</sup> International Conference on Telemedicine and Multimedia Communication, Warsaw, Poland, Sept 2004; conference faculty and local program organizer.

Invited lecture on the Auditory Steady-State Potentials, Children's Hospital, Wilmington Delaware, November 2004.



Invited lecturer, Communication Sciences and Disorders Dept., Southwest Missouri State University, Springfield, MO, March 2005, Durrant, JD, and Kaf, WA, Auditory Evoked Potentials and Auditory Efferent Reflex: Theory, Technique, and Clinical Application.

Invited short-course, Council of Graduate Programs in Communication Sciences and Disorders Conference, Scottsdale, AZ, April 2005: Chertoff, M, and Durrant, JD, New Approaches to Teaching Basic Science Courses.

Invited lectures, International Speech and Hearing Center, Warsaw, Poland, May 2005: Durrant, JD, Balaban, CD, Zhou, J, Tinnitus and Noise Damage—A Unique Linkage?

Invited lecture, Durrant, JD, Value of Tonal Pattern Test in Central Auditory Processing Testing (as above).

Invited round-table session chair and presenter, Education in Audiology. (as above).

Guest faculty; organizer and chair of televideo session on telerehabilitation and other multimedia applications in medicine and rehabilitation from U Pitt, 3rd International Conference on Telemedicine and Multimedia Communication, Oct. 2005, Kajetany (Warsaw) Poland.

Invited lecture, The 80-Hz Auditory Steady-State Response--So What's So Good About It? Callier Center, University of Texas, Dallas, June, 2006.

Lectures given at the Audiology Conference, joint staff conferences of Childrens and Eye and Ear Hospitals audiology staffs (co-organizer):

"Electrocochleography", 21 February 1985.

"Computers in Otology and Audiology", with R. Nozza, 23 May, 1985.

Presentation on my current research, 20 November, 1985.

"High Frequency Audiometry--Update", 22 January, 1986.

"Rotational/Vestibular Evoked Potentials", with J. Furman, 25 March, 1987.

"Immittance Testing: State of the Art", with R. Hyre, 21 October, 1987.

"Communicative Disorders in Alzheimer's Disease", with A. Holland, 19 October 1988.

"Digital Hearing Aids", with R. Kesterson, 15 March 1989.

"ABR, Head size, and Gender", with D. Sabo, 12 April 1989.

"Multifrequency Immittance Testing", with R. Nozza, 17 January 1990.

"Otoacoustic Emissions: Overview and Recent Advances", 16 May 1990.

Lectures given at the Dept. of CSD, Clinical Seminar Series (providing CEU credits for faculty and area professionals; incomplete but characteristic listing of lectures given):

"French Connection II—News from the 2nd International Symposium and Workshop on Objective Measures in Cochlear Implantation (Lyon, France)", Spring 2002.

"News from the Auvergne: Effects of Intralabyrinthine Pressure on OAEs and Related

Effects” by Prof. Paul Avan, Université Clermont (France)--and contributed scientific presentation, “Effects of Intralabyrinthine” Pressure on OAEs and Related Effects, Spring 2002.

Organized special grand rounds and contributed presentation on otoacoustic emissions featuring visiting professor, Dr. Jacek Smurzynski, University of Basel, Fall 2003.

“Adverse Effects of Insulin-Dependent Diabetes Mellitus on Auditory Function?”, Spring 2004.

“Up-date on Instrumentation for Bedside Audio-Vestibular Testing, Audiology,” Spring 2005.

“Beyond NRT: Role for ABR/Other-AEP Testing in Cochlear-Implanted Patients?”  
Audiology, April 2006

“Can Visual Reinforcement Audiometry and Its Information Yield Be Improved?”; co-presenter with S. Pratt.

Dept. CSD Research Round-Table:

“Mathematical Modeling—Concepts and Applications for the Non-Mathematician”, Spring 2004.

Various poster presentations at annual poster sessions.

In-services (Medical Center and University, excluding lectures, etc. listed above):

Audiology Staff--instruction in brain-stem evoked response testing (i.e. preparation of subject, executing programs on the computer, protocol selection and test strategy, data analysis, and interpretation of findings); fall, 1984 with on-going up-dating and refinement.

Audiology Staff--individual staff members instructed in use of computer data bases and other utilities; on-going.

Secretary-receptionist--trained in use of word processing; Sept./Oct., 1984.

Audiology Staff--instruction on data entry into audiology computer data base under development and basic orientation into use of spread sheets.

Audiology Staff (selected, as needed)--instruction on advanced electrophysiologic methods: electrocochleography, intraoperative monitoring, and facial electromyography (electroneuronography).

Hearing Aid Department administrative secretary--instruction on use of editor to develop mail/phone log.

Participated in in-service for Emergency Room staff on TTY operation and communication with deaf patients (with R. Horn and R. Kesterson), 11 October 1988.

Audiology staff--instruction on use of distortion product otoacoustic emissions analysis system,

fall 1990.

Hearing Aid staff--instruction on use of point-of-sale, computer inventory system (to track dispensing activities), January 1991.

Alzheimer Disease Research Center staff--lecture: "Study of hearing in patients with Alzheimer's disease", 1 November 1991.

"SSEP and Facial Nerve Monitoring", in-service given to the EEIP Dept. of Anesthesiology, 3 November 1992.

### **Post Retirement**

Durrant, J.D. Auditory evoked response test methods, Invited day course, 23 February 2015; Pusat Perubatan Universiti Malaya, Kuala Lumpur, Malaysia (in affiliation with Intelligent Hearing Systems, Miami, FL USA).

Durrant, J.D. Auditory evoked response: Bases and issues in frequency-specific testing, Invited lecture; 27 February 2015; MSc of Audiology Programme, Center for Hearing, Speech & Balance, Department of Otolaryngology, National University of Singapore, Singapore

Durrant, J.D. Invited lecture (CSD grad students and faculty, incl. F. Musiek lab): Reflections on the History of Audiology as a Profession and the Academic Life and Times of Raymond Carhart, University of Arizona, March 13, 2019, Tucson.

### **RESEARCH:**

#### **Grants Received**

{Dollars of grant support garnered are a matter of record but have are not reported here as no longer apropos the purpose intended. Rather, this section simply addresses timeframes and lists of topics, collarobrators, and sponsors to characterize my involvement in the quest for external support of one's work. Otherwise, I consider the tapping of resources of venue, colleagues, subject cohorts, etc. of similar/greater importance and of which I belief my track records of publication and scientific-presentation (above) bespeak.]

#### **Research and Development:**

1972-1973, General Research Support Grant, Temple University Med. School

1977-1978, "Combined Electrococh./BSER - New Technique for Evoked Response Audiometry", Biomedical Research Support Grant, TUMS

1974-1976, "Electrophysiological Correlates of Auditory Fatigue - Changes in Cochlear Nonlinearities", Deafness Research Foundation

1977-1979, "Studies of the Cochlear After-Potential", Deafness Research Foundation

1976, National Foundation March of Dimes (T.R.C. Sisson, P.I.; J.D.D., Co-I.)

1983-1985, "Pattern Evoked Auditory Response - Feasibility Study", Penna. Lions Hearing Res. Fund

1983-1985, "Development of Signal Enhancement Methods for Aud. Evoked Responses", Whitaker Foundation (engineering-support; M. Hohenberger, P.I.; J.D.D., Co-I.)

1983-1984, "Auditory and Vestibular Recruitment in Meniere's Disease", Penna. Lions Hearing Res. Fund (J. Furman, P.I.; J.D.D., Co-I.)

1985-1986, "Efficacy of a New Ultra-High Frequency Transducer for Audiometry Above Conventional Test Frequencies", Biomedical Research Support Grants, Eye & Ear Hospital (J.D.D., P.I.).

1985-1986, "Development of a Computerized Audiology Clinical Data Base" (as above)

1986, "Investigation of Prevention of Auditory and Vestibular Impairment in Patients with Renal Disease", Deafness Research Foundation (M. Silver, P.I.; J.D.D., consultant)

1986-1988 (now in second of 3 yrs. planned), "Vestibular Evoked Potentials", Penna. Lions Hearing Res. Fund (J. Furman, P.I.; J.D.D., Co-I.)

1986-1987, "Development of Utilities for Audiology Data Base", Biomedical Research Support Grants, Eye & Ear Hospital (J.D.D., P.I.).

1986-1987, "Preliminary Study of Pattern Reversal Auditory Evoked Potentials in Patients with Multiple Sclerosis" Biomedical Research Support Grants, Eye & Ear Hospital (J.D.D., P.I.).

1987-1989, "Model Program for Self-Paced Learning of Surgical Techniques via the Interactive Video Information System", Digital Equipment Corporation/Univ. of Pgh.

1987-1988, "Study of Anatomical Correlates of Auditory Brain-stem Response Latencies in Humans", Biomedical Research Support Grants, Eye & Ear Hospital (J.D.D. and D. Sabo, Co-P.Is.).

1987-1990 (in 2nd of 3 yrs. planned), RB#4011, "Bone Vibrator for Auditory Evoked Potential Testing", Ben Franklin Challenge Grant Program (Commonwealth of Pennsylvania) with matching funds from Radioear Corporation (i.e. cash and in kind contributions: equipment and personnel).

1988-1990 (with 1 yr. extension), "Auditory Evoked Potentials to Pattern-Reversal Stimuli", Deafness Research Foundation.

1988-1991 "Panic Attacks: Assessment with Clinical Audiovestibular Tests", National Institute of Mental Health (R. Jacob, P.I.; S. Turner, J. Furman, and J.D. Durrant, Co-Is.).

1988-1990 (with 1 yr. extension), "Study of Hearing in Patients with Alzheimer's Disease", Alzheimer Disease Research Center (NIH center--pilot grant) (J.D. Durrant, P.I.; D. Kameroner, and A. Holland, Co-Is).

1992, "Panic in Balance Disorder Patients", The Upjohn Corporation (D.B. Clark, P.I.; R. G. Jacob, Co-I.; J.M.R. Furman and J.D. Durrant, consultants).

1991-1995 (including extensions), "Bedside Ototoxicity Testing, Pennsylvania Lions Hearing Research Foundation (J.D.D. and J.M.R. Furman, Co-PIs).

1993-1996 "Panic, Avoidance and the Vestibular System", National Institute of Mental Health (R. Jacob, P.I.; J.M.R. Furman, and J.D. D., Co-Is).

1995-1996, "Facilitation of the Auditory Nerve Following Masking and Its Use in Clinical Test", Peoples Republic of China (P.I., X. Zhao, China; J.D.D., Co.I.).

1995, "The Utility of Distortion Product Otoacoustic Emissions (DPOAEs) in the Study of Hereditary Hearing Loss", (D. L. Sabo, P.I., J.D.D., and J.C. Post, Co.Is.).

1996-1997, "Managing Hearing Impairment in a Group of Patients with Alzheimer Disease", National Alzheimer Association (C. Palmer, P.I., M. Bourgeois, J.D.D., P. Bonino, Co-Is).

1998-1999, "Bedside Audio Vestibular Testing System for Ototoxicity Monitoring", NIH-NIDCD, STTR [R49] Phase I (J.D.D. P.I.; E. Miskiel, proj. coord, Intelligent Hearing Systems [Miami].; J. Furman, and B. Carr, Co-Is; O. Ozdamar, consultant).

1998-2003, "Vestibular Processing", NIH Program Project (J. Furman, P.I.; J.D.D. consultant for sub-projects 5 & 6).

9/1/01-8/31/04 (with extension), R42 DC03615-03, NIH/NIDCD & NIA, STTR Phase II, "Audio-Vestibular Testing for Bedside/Other Applications", J.D.D. PI; corporate partner, Intelligent Hearing Systems, Miami, Delgado, Co.I.

07/01/99-06/30/2004, 5R01 HD29487-08 (D. Becker, P.I., et al. of parent project), NIH/NICHHD, "Cognitive Function and Hypoglycemia in Children with Insulin Dependent Diabetes Mellitus"; J.D.D.Co-I./ P.I. of subproject.

1/1/03-12/31/05, N000140310277, J.R. Boston, P.I., J.D.D. et al. Co-I., Office of Naval "Research, Transition Speech-wave Waveform Features to Enhance Speech Recognition in Noisy Environments".

2/1/04-1/31/2007, S. Pratt, P.I., P.D. Doyle, J.D.D., et al. Co-Is, RR&D Merit Review Grant, Veterans Administration, "Effects of Sensory Hearing Loss on Auditory Language Processing in

Aphasia.”

10/11/06-12/31/09, N000140710014 (J. R. Boston, P.I., J.D.D. et al. Co-Is.), Office of Naval Research, “Real-time Amplification of Speech Transition Features to Improve Speech Recognition in Noisy Environments”.

2010-2011, 1R41DC011236 – 01. NIH/NIDCD STTR Phase I, S. Pratt P.I., J.D.D. Co-I with corporate partner E. Miskiel, Intelligent Hearing Systems (Miami, FL), “Automated Head Turn Tracking and Other Innovations for Visual Reinforcement Audiometry.  
[Note: J.D.D., principle inventor of method under investigation.]

#### Training Grants:

1995-2000, NIDCD, "Research Training in Pediatric Otolaryngology"; M. Casselbrant, Prog.Dir.; C. Bluestone, J.D.D., et al., preceptors.

1/1/2009 –12/31/2013, H523K080323, US Department of Education, Combined Priority for Personnel Preparation: Preparation of Audiologists to Serve Children with Auditory Disorders, J.D.D. Project Director, D. Moncrieff Co-PD.

#### Post-Retirement

3/1/2017–2/28/2019, 1R44DC015920-01A1 NIH-NIDCD SBIR Phase II, R.E. Delgado, P.I. (corporate partner at Intelligent Hearing Systems (Miami), J.D.D., A.I. Tlumak Co-Is, and L.J. Hood (Vanderbilt University) Co-I./subcontract P.I., “Automated Objective Audiometry using Long Latency Steady State Responses”.

Notes:

a. Apropos the method under investigation, a patent was sought and awarded on behalf of U Pitt: 5-30-2017, U.S. Patent No. 9,662,035, J.D.D. A.I. Tlumak, R.E. Delgado, and J.R. Boston; "Steady state measurement and analysis approach to profiling auditory evoked potentials from short-latency to long-latency.

b. Phase II funding was awarded via direct submission, effectively crediting dissertation and post-doc work of Tlumak, Durrant (mentor), and Delgado {see publications}, namely as meeting an acceptable efficacy assessment, thus without a prior Phase I submission and award as customary.

2019-2021 (with extension), 1R43DC018436-01 NIH-NIDCD SBIR Phase I, R.E. Delgado, P.I. (corporate partner at Intelligent Hearing Systems (Miami), D.K. Brown and J.D.D. Co-Is, “Audiometric Behavioral Response Simulator”.

#### **Other Research-Related Activities:**

Member, International Editorial Board, *International Journal of Audiology* (formerly *Audiology*, journal of the International Society of Audiology), 11/95 - present.

Member, Merit Review, Neurobiology Subcommittee, Dept. of Veterans Affairs, 1995-1998.

Member, medical advisory board and reviewer for Penna. Lions Hearing Research Foundation; 1989-2014.

Review(ed) manuscripts/served as editorial consultant, including (but not comprehensively): *Audiology, Ear and Hearing* (journal of the American Auditory Society), *American Journal of Audiology (ASHA)*, *Journal of the Acoustical Society of America*, *Otolaryngology - Head and Neck Surgery*, *J. Speech and Hearing Disorders/Research (ASHA)*, *J. American Academy of Audiology*; *American Journal of Otolaryngology*; *Diabetes Care*, *Hearing Research*, *Journal of Electroencephalography and Clinical Neurophysiology*, *IEEE Transactions on Rehabilitation Engineering*, and *Biological Psychiatry*.

Other document reviews include participation in select peer review of guidelines, such as produced by the American Speech-Language-Hearing Association.

Have reviewed grant proposals for National Science Foundation, Department of Defense, the Veterans' Administration, and National Institutes of Health (including experience reviewing program project and serving as ad hoc member of the following study sections: Hearing Research, June 1989; Epidemiology and Disease Control-2, Oct. 1991; Special Emphasis Hearing Research (SBIR/STTRs reviewed)); American Academy of Audiology; American Institute of Biological Sciences.

Grant proposal reviewer and study section participant for the Western Pennsylvania Advanced Technology Center (Ben Franklin Partnership); 1985-1990.

Member of the Technology Transfer Committee of the University of Pittsburgh which reviews patent proposals; 1998-2012.

Other Miscellaneous grant reviews: Children's Hospital of Pittsburgh, Aug. 1991; S. Illinois University School of Med. (ADRC), Feb. 1992; Ohio State University, Dec. 1992; University of Virginia, a center of excellence proposal, 1995; University of Kansas, Jan. 1996.

Member of the Audiology Advisory Committee to the Speech and Hearing Program, Department of Health, Commonwealth of Penna.; 1990-1992.

### **Université Claude Bernard, Lyon 1 (1998-2001)**

#### **Research—Grant**

Bourse d'accueil, Programmes Thématique (to investigate objective indicators of Tinnitus), Région Rhone-Alpes (PI; S. Schery-Croze, Program director; J.D.D. et al. Co-Is).

#### **Mentoring in Research**

Graduate Students “en DEUST” [roughly Master’s level] [advisor]: H. Faurie

Doctoral Students (“en thèse – DEA”) [served as a mentor/collaborator in their research]:

C. Micheyl, defended 1996

A. Giraud, defended 1997

S. Maison, defended 1998; jury member  
S. Gallégo, defended 1999; jury member  
S. Kalfa, defended 1999  
S. Garnier, defended  
A. Noreno, defended  
B. Philibert, defended  
N. Morand, defended

Note: the above derived from various short study leaves and appointments as visiting professor or professor associé en physiologie during sabattical and enhancement leaves, in collaboration with Prof. L. Collet's laboratory.

### **Teaching**

Sensory Physiology: 4-wk course for 2-year med. Students, given in English and French; 2000 – 2002, with Professor Roland Duclaux.

### **Continuing Education:**

Invited lecture, Physiologie de l'oreille interne et ototoxicité [Physiology of the inner ear and ototoxicity], Les Rendez-vous du Pavillon U – ORL '99 (Hôpital E. Herriot), 19 January 1999.

### **SERVICE:**

#### **Temple University (1972-1984)**

Re-instrumented and revitalized the Auditory Research Laboratory (section of ENT), largely through research grants. This was the purpose for which I was brought to Temple, and it was in the ARL that my efforts were concentrated during my early years at Temple, before the lab. and clinic were combined into one section, of which I as appointed director.

Developed the Special Test Unit within the Section of Audiology, beginning with the introduction of noninvasive electrocochleography, and later brain-stem electric response testing, for routine clinical use. Ours was one of the first area clinics to offer these test procedures. This, coincidentally, involved the development of the Department's general purpose computer system which underwent continuous refinement (supported in part by private and research grants). Later added visual evoked response capability and set up a joint service with the Department of Neurology. Before leaving TU was actively working towards a multidepartmental consortium to provide evoked response evaluations on a hospital-wide basis (rather than on the basis of multiple competing facilities).

Consolidated the laboratory and clinic sections after the demise of Dr. Philip Rosenberg, former director of the clinical service, and thereby assumed directorship of the audiology clinic.

Developed and implemented a computer data-based clinical data storage and retrieval system, utilizing card reader data entry and permitting batch processing. Despite Temple's long history in audiology, there was no data storage/retrieval system beyond that provided by patient file folders (which ultimately are purged).



**University of Pittsburgh (1984--2012)**

Director, Center for Audiology, Eye and Ear Hospital of Pittsburgh/University of Pittsburgh Medical Center (University Ear Nose Throat Associates).

Member of the search committee for the Director of Audiology at Children's Hospital (Pediatric Division of the Department of Otolaryngology), May, 1985.

Member of the Audiology Advisory Committee of the Department of Communication; coauthor of the Committee's report (recommendation for future organization in and development of the audiology program), spring, 1985.

Co-coordinator of the Audiology Conferences; weekly meetings (i.e. lectures, journal club, and case presentations) of the Children's and Eye and Ear Audiology/ENT staffs; also regular contributor.

Member of Search Committee for replacement of Prof. E. Burgi, Div. Comm. Disorders, Department of Communication, 1985 - 1987.

Member of the Graduate Faculty (via the Department of Communication)

Faculty Member of the Center for Neuroscience

Member of Search Committee for replacement of Dr. A. Krishnan, Div. Comm. Disorders, Department of Communication, 1989- ; chair of committee Fall 1993.

Participation on promotion and tenure committees (reviews of candidates for ranks of associate and full professor).

Chair, Curriculum Coordinating Committee, Dept. Comm. Sci. & Disorders (S.H.R.S.); Chair, Undergraduate and Doctoral Curriculum Committees and Member, Audiology Masters and Continuing Education Committees; Appeals Committee July 1996-1998.

Chair, search committee for Assistant Professor in Comm. Sci. & Disorders (S.H.R.S.), clinical audiology supervisor, Fall/Winter 1996.

Member, IRB Committee of School of Health and Rehabilitation Sciences (reviews proposals prior to submission to University's Internal Review Board), 1997-1998.

Member, AL&ST Task Force (on planning/development of computer, network, and multimedia resources for teaching), 1997-1998.

Chair, Nominating Committee, School of Health and Rehabilitation Sciences (coordinate nomination of and voting for officers of the School's faculty for the coming year), 1998.

Member, University Technology Transfer Committee, 1998-2012

Chair, CSD Continuing Education Committee, 1999-2002; member 2003.

Member, CSD Faculty Development Committee, 2002-2012

Member, CSD Budget and Planning Committee, 2004-2012

Chair, CSD Computer Committee, 2004-2012.

Chair-Elect and subsequently Chair, Faculty of the School of Health and Rehabilitation, 2003-2005.

Chair-Elect and subsequently Chair, Faculty of the School of Health and Rehabilitation, 2007-2009.

Miscellaneous – chair/member of various committees for tenure and promotion evaluations and search committees for the Depts. CSD, RST, and PT (SHRS).

Other Contributions to the Department, School, Medical School, and/or University Medical System:

General clinical administrative responsibilities (i.e. as Director of Audiology, UPMC, 1984-1998): responsible for all budget requests/ justifications and the implementation (program and staff development, as well as instrumentation) which have led to of continual upgrades of audiologic and electrophysiologic test systems and computers for the Center for Audiology.

Introduced word-processing and other elements of personal and office computing into office management of our section.

Authored the proposal to the Hospital by which the Audiology section acquired two evoked response test instruments, permitting it to up-grade/up-date its facilities in this area, permit routine used of evoked response tests and application testing by any of the audiology staff (who previously were not involved at all); one unit also was set up for mobile use, e.g. in the operating room.

Directed the development and implementation of a computer data-based clinical data storage and retrieval system with multi-user data entry, batch processing, and multi-user on-line data retrieval. Despite EEH's long history in audiology, as in the case of Temple Hospital, there was no data storage/retrieval system beyond that provided by patient file folders (which ultimately are purged).

Coauthored a proposal to the Hospital by which the Audiology and Vestibular sections acquired new computer facilities.

Authored proposal to Western Pennsylvania Hearing Foundation for acquisition of real-ear hearing aid analyzers.

Coauthored a proposal to the Hospital to acquire computer equipment for new operating room

evoked potential monitoring system.

Implementation and refinement of extratympanic electrocochleography as a routine special-test service.

Development and/or implementation of special test facilities: (1) high-frequency audiometry--designed transducer and instrumented and established appropriate norms; (2) designed binaural masking level difference adaptor for audiometer and developed norms for multiple masker levels; (3) implementation of facial evoked electromyographic test system; (4) instrumentation/implementation of integrated facial electromyographic system and rehabilitation program (in development)

Initiated acquisition of various digital hearing aid programs as routine services of the hearing aid department.

Coauthored proposal to Western Pennsylvania Hearing Foundation for acquisition of computer/digital equipment to fabricate stimulus system for evoked response testing of implant cases.

Implemented multifrequency immittance testing as routine offering of audiologic services.

Implemented otoacoustic emissions analyses systems; initiated use of distortion-product otoacoustic emissions (OAE) testing as adjunct to electrophysiologic (differential diagnostic) assessment and assessment battery for nonorganic hearing loss.

Developed hearing screening program at the Benedum Geriatric Center of the UPMC; implemented satellite audiology/hearing aid operations at Canterbury Place (UPMC-affiliate geriatric center).

Efforts to initiate ototoxicity monitoring program and bedside ototoxicity screening.

Implemented psychoacoustic special test system to support research paradigms (e.g. psychophysical tuning functions) as well as provide this level of flexibility to clinical research and (supplemental) testing in our center.

Established Medicare denial appeal process to help patients facilitate and successfully obtain coverage for their hearing tests.

Established and implemented software and hardware for department wide computer network and scheduling system, effectively consolidating two different schedules (audiology clinic and hearing aid dispensary) in a computer-based multiuser environment.

Instrumented and initiated facial evoked electromyographic testing and integrated facial EMG for facial reanimation therapy.

Implemented instrumentation for intraoperative monitoring and post-op

rehabilitation/programming of auditory brain-stem implants; worked with Dr. D. Kameron (division chief and implant program director) to secure a slot as coinvestigator in the nationwide FDA-approved clinical trial program of this device (with Cochlear Corp. and House Institute). Authored equipment grants to support this activity, from Western Pennsylvania Hearing Foundation.

Orchestrated and helped to acquire instrumentation for evoked response testing in animals in our Otolaryngology research quarters.

Developed and programmed a staff case-logging and productivity tracking utility.

Responsible for seeding of hearing services within developing UPMC/UENTS satellites (including at the time, Westmoreland, West Penn, and South Side).

Instrumental in developing the initial liaison between the former program of Communication Science and Disorders (Department of Communication and Rhetoric, FAS) and the School of Health and Rehabilitation Sciences and in fostering development of (then) newly formed Department of CSD within the SHRS.

Developed the Physiological and Psychological Acoustics Laboratory in the Department of Communication Science and Disorders, and responsible for annual budgetary issues (equipment acquisition, etc.) for the lab.

Developed an independent study “exchange” program with the Dept. of Speech and Hearing, Ohio State University.

Instrumental in development and implementation of professional doctoral program in Audiology.

### **Miscellaneous Service**

#### **Sertoma International**

Member, Advisory Council 1996-2002

#### **The DePaul Institute\***

Member, Board of Directors 1994-1999

Member, education committee, 1994-1997; member search committees for director and principal, 1995; search committee for director, 1997.

[\*school for deaf & other com.-dis. children]

#### **International Center for Hearing and Speech, Kajetany, Poland**

Member, international scientific advisory committee and visiting lecturer and research collaborator, especially during the formative years of this institute (mid+ 2000's), and amicable relations with the director and several faculty to this day, indeed having have been formally recognized as a “friend” of the Institute.