

Curriculum Vitae

DENNIS McFADDEN

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Personal Data:

Birthdate: 2 October 1940
Birthplace: Oakland, California

Married: Nancy L. Wilson
Children: Tracie Ann (47)
Devin James (40)

Education:

B.A. Sacramento State College, 1962
Major: Psychology, Graduated with Honors
Graduated in the All-College Honors Program

Ph.D. Indiana University, 1967
Major: Sensory Psychology
Minors: Physiological Psychology and Learning
Advisor: James P. Egan

Training and Professional Experience:

Assistant Professor (1967-1972), Associate Professor (1972-1977), Full Professor (1977-), Department of Psychology, University of Texas

Visiting Scholar, University of California, Berkeley, 1972-1973

USPHS Pre-Doctoral Fellow, University Fellow, and Research Assistant, Hearing Communication Lab, Department of Psychology, Indiana University, 1965-1967

Research Assistant, Communication Section, Sperry Rand Research Center, Sudbury, Massachusetts, 1962-1963

Honors and Awards:

Fellow, Acoustical Society of America, 1976
American Association for the Advancement of Science, 1990
Association for Psychological Science, 2002

Jacob K. Javits Neuroscience Investigator Award, National Institute of Neurological and Communicative Disorders and Stroke, 1984-89. Transformed into a Claude D. Pepper Award of Excellence, National Institute on Deafness and Other Communication Disorders, 1989-91

Piper Professor 1987, awarded by Minnie Stevens Piper Foundation, San Antonio, Texas

Ashbel Smith Professor, UT Austin, 1998-

Dean's Fellow, UT College of Liberal Arts, Spring 2002

Teaching Awards:

Teaching Award from local chapter of Psi Chi, The Nat'l Honorary Society in Psych., 1983
Scored in 97th percentile, or higher, in the Exit Survey of graduating seniors conducted by Office of the Dean of Liberal Arts, 1983-92

Voted Outstanding Graduate Teacher by Graduate Faculty of College of Liberal Arts, 1977

Professional Activities:

Executive Council, National Academy of Sciences-National Research Council's Committee on Hearing, Bioacoustics, and Biomechanics (CHABA), 1978-81, 1989-92
Associate Editor for Psychological Acoustics, The Journal of the Acoustical Society of America, 1977-79
Editorial Board, Otolaryngology--Head and Neck Surgery, 1990-
Editorial Board, Handbook of Acoustics, published by Wiley and Sons, 1997
Member, Study Section (Auditory System) National Institutes of Health, October 2003.
Consulting Editor, Archives of Sexual Behavior, 2006-

Professional Societies:

Acoustical Society of America (ASA)
Association for Research in Otolaryngology (ARO)
American Association for the Advancement of Science (AAAS)
Society for Neuroscience (SFN)
International Academy of Sex Research (IASR)
Society for Behavioral Neuroendocrinology (SBN)
Association for Psychological Science (APS)
Organization for the Study of Sex Differences (OSSD)

Major University Service:

Promotions and Tenure Committee of the College of Liberal Arts, 1979-1981
Research Council, an advisory group to Vice-President for Research G. Fonken, 1979-1983
Faculty Advisory Committee on Extended Service, 1979-1981
Marshall, College of Liberal Arts Graduation Ceremony & University Commencement, 1982-86
University Council on Teacher Education, 1984-1986
Budget Council, Department of Psychology, 1972-
Chairman, Departmental Space Committee, 1982-1986
Steering Committee and then Executive Council, UT Institute for Neuroscience (INS), 1985-; re-elected 1997-2003; re-elected 2007-
University Nomination Committee for Piper Professorships, 1987-2000.
Consultative Committee to the President on the selection of a new dean for the UT College of Liberal Arts, 1988-1989
Review Committee D (Life Sciences), UT University Research Institute, 1989-92
Ad Hoc Committee to Recommend Modifications to Procedures to Foster Responsible Conduct in Research, 1991-95
Chairman, Departmental Ad Hoc Grievance Committee, Spring 1994
Executive Committee, Department of Psychology, Spring 1996-1997
Chairman, Graduate Studies Committee, Department of Psychology, Spring 1996-1997
Governance Review Committee, Department of Psychology, Spring 1996-1997
Chairman, Sensory Neuroscience area, Dept of Psychology, Spring 1996-Fall 2000; Fall 2003-04.
Member, New Building Committee, Dept of Psychology, 1996-1999; Chairman, Fall 1999-2002
Consultative Committee to the President, selection of new dean, UT College of Pharmacy, 1997-98
Consultative Committee to the President, selection of new Vice President for Research, 1998-99.
University Nomination Committee, Marshall and Rhodes Fellowships, 2000-
Member, Executive Committee, Center for Perceptual Systems (CPS) September 2001-
Chairman, Committee to Remodel Seay Auditorium, Dept of Psychology, 2006-08
Chairman, Committee to Rewrite By-Laws, UT Institute for Neuroscience, April 2007-08

Miscellaneous Professional Service:

Acoustical Society of America (ASA):

- Associate Editor for Psychological Acoustics, The Journal of the Acoustical Society of America, 1977-79
- Technical Program Chairman, April 1985 Meeting of the ASA, in Austin, Texas.
- Appointed to Fellowship Committee for Psychological and Physiological Acoustics, 1980- ; Chairman, 1995-2000.
- Appointed to Medals and Awards Committee, 1988-1991
- Selected by the Technical Committee for Psychological and Physiological Acoustics to read, edit, and organize into sessions, the Psychological and Physiological Acoustics papers submitted for the 80th Meeting of the ASA at Houston, Texas, November 1970. Also for the 89th Meeting at Austin, Texas, April 1975. Also for the 104th Meeting in Orlando, Florida, November 1982. Also for the 122nd Meeting in Houston, Texas, November 1991. Also for the 128th Meeting in Austin, Texas, November 1994.
- Elected to Technical Committee for Psychological and Physiological Acoustics, 1996-99
- Invited to give Hot Topics presentation, 131st Meeting, Indianapolis, May 1996
- Elected Member-at-Large of Austin Regional Chapter of the Acoustical Society of America; Spring 1974 through Fall 1975. Elected Vice-Chairman; February 1981-February 1982. Elected Chairman; February 1982-February 1983.
- Committee to Nominate Candidates for ASA National Elections, 1998
- Invited to speak on Evidence of Prenatal Hormonal Effects on the Auditory System in the Special Session on Development of the Auditory System at the Joint meeting of the ICA and ASA, Seattle, June 1998.

Assistant Editor for psychoacoustics for the publication dsh Abstracts, 1970-71

Organized and moderated a symposium on Neural Mechanisms in Behavior commemorating the 50th anniversary of the University of Texas Department of Psychology. March 1978.

Participated as an expert observer in the partial re-enactment of the JFK assassination. Dealey Plaza, Dallas, TX, for the US House Committee on Assassinations. August 1978.

Appointed Chairman of CHABA Working Group no. 89 on Tinnitus. May 1980-1982

Elected to National Advisory Board of the Institute for Advanced Study of the Communication Processes, University of Florida, 1982-1986

Elected and re-elected Secretary-Treasurer of Austin Society to Oppose Pseudoscience (ASTOP), Fall 1981-1985.

Miscellaneous Professional Service, continued:

Invited to talk to high school science students at the Central Texas Science Symposium on "The Effects of Noise and Drugs on Hearing." McCallum High School, Austin, TX, February 1983. Also to

science classes at Lanier High School (April 1983), Crockett High School (March 1984), and Anderson High School (April 1984), all in Austin, TX.

Judge, Central Texas Science and Mathematics Fair, 1984. State Finals, 1988

Appointed to the National Research Council's Committee on Low-Frequency Sound and Marine Mammals (Ocean Studies Board). May 1992-June 1994.

Appointed to the National Research Council's Committee to Review Results of ATOC's Marine Mammal Research Program. (Ocean Studies Board). January 1997-Dec. 1999.

Appointed to the Advisory Board of the Oregon Hearing Research Center. August 1992-

Invited to speak on Recent Developments in Research on Hearing and Balance, fifth anniversary celebration for the National Institute on Deafness and Other Communication Disorders (NIDCD), October 1993.

Interviewed on the topic of Otoacoustic Emissions, National Public Radio, 15 June 1995.

Interviewed on the topic of Otoacoustic Emissions in Homosexuals, National Public Radio, 2 March 1998.

Appeared as Mystery Newsmaker of the Week on Wait, Wait, Don't Tell Me, National Public Radio, 6 March 1998.

Invited to speak on Associations between OAEs and Psychoacoustics at the Workshop on Otoacoustic Emissions and Psychoacoustic Performance, 20-21 March 1998, Basel, Switzerland.

Invited to speak on What the Auditory System can tell us about Prenatal Development and Sexual Differentiation in Humans at the 25th Annual Meeting of the International Academy of Sex Research, 23-27 June 1999, Stony Brook, NY.

Invited to speak on What the Auditory System can tell us about Prenatal Development and Sexual Differentiation in Humans at the International Behavioral Development Symposium, 25-27 June 2000, Minot, ND (also July 2005).

Interviewed on the topic of Physiological Correlates of Homosexuality, KOOP-FM, Austin, 18 August 2000.

Invited to speak on Prenatal Hormones, Sexual Orientation, and the Auditory System at the Annual Meeting of the Society for Behavioral Neuroendocrinology, 27-30 June 2001, Scottsdale, AZ.

Invited to speak on The Auditory System as a Window onto Prenatal Development and Sexual Differentiation, Annual UT Neuroscience Symposium, 16 February 2002; also Annual Meeting of the American Psychological Society, 8 June 2002; also UT Dallas Colloquium Series, 13 September 2002; also LAMP, 20 April 2004 and February 2006; also UT Psychology Dept., 6 April 2005; also UC Berkeley, 16 March 2006; also University of Connecticut Health Center, 6 April 2006; Association for Research in Otolaryngology, Feb. 2008; Sperling Interdisciplinary Conference, Jackson Hole, Feb. 2008

Appointed as Review Coordinator for "Hearing Loss: Determining Eligibility for Social Security Benefits." National Research Council, April-August 2004.

First place in age group, Austin Runners Club five-race Sprint Series, 2008-09.

Grants Awarded:

Research Initiation Grant awarded by the UT Graduate School to build a psychoacoustics lab in Room 9 of Mezes Hall. \$10,000, awarded October 1968.

Lateralization of Signals of Different Durations. Awarded by the Small Grants Section of the National Institute of Mental Health. A one-year award beginning 1 June 1969. \$5,000 plus overhead.

Psychophysics of Binaural Hearing (co-PI L.A. Jeffress). Awarded by the National Institute of Neurological Diseases and Stroke (NINDS). A three-year award beginning 1 October 1969. Approximately \$30,000 per year plus overhead.

Renewal of above grant for a three-year period beginning 1 October 1972. Approximately \$40,000 per year plus overhead.

Second renewal of Psychophysics of Binaural Hearing for a five-year period beginning 1 October 1975. Approximately \$50,000 per year plus overhead.

Awarded a Faculty Research Assignment by the University Research Institute of the University of Texas. September 1972-August 1973. Also September 1977-August 1978. Also January-May 1986.

Auditory Adaptation for Suprathreshold Stimuli. Awarded by the National Institute of Neurological and Communicative Disorders and Stroke (NINCDS). A five-year award beginning 1 December 1979. Approximately \$65,000 per year plus overhead.

First renewal of Auditory Adaptation for Suprathreshold Stimuli, for seven years beginning 1 December 1984 (Jacob K. Javits Neuroscience Investigator Award). Approx. \$140,000 per year plus overhead.

Temporary Hearing Loss Induced by Intense Sounds and by Certain Anti-Arthritic Drugs. Awarded by Merck, Sharp, and Dohme Research Labs. A one-year award beginning September 1981. Approximately \$23,000 including overhead.

Aspirin Alters the Temporal and Frequency Resolution of the Auditory System. Awarded by the University Research Institute of the University of Texas. A six-month award beginning November 1982. \$6,000.

Interactions of Drugs and Noise Exposure. Awarded by the National Institute of Environmental Health Sciences (NIEHS). A four-year award beginning May 1985. Approx. \$95,000 per year plus overhead.

Second renewal of Auditory Adaptation for Suprathreshold Stimuli. Awarded by the National Institute on Deafness and Other Communication Disorders (NIDCD). A four-year award beginning 1 December 1991. Approximately \$200,000 per year plus overhead.

Third renewal of Auditory Adaptation for Suprathreshold Stimuli. Awarded by the National Institute on Deafness and Other Communication Disorders (NIDCD). A five-year award beginning 1 December 1995. Approximately \$220,000 per year plus overhead.

Fourth renewal of above (renamed Group and Individual Differences in Audition). Awarded by the National Institute on Deafness and Other Communication Disorders (NIDCD). A five-year award beginning 1 April 2001. Approximately \$300,000 per year plus overhead.

Fifth renewal of above. Awarded by the National Institute on Deafness and Other Communication Disorders (NIDCD). A five-year award beginning 1 July 2006. Approx. \$350,000 per year plus overhead.

Physiological Measures of Autism. Submitted to NIH October 2005; resubmitted July 2006; resubmitted February 2008. NOT YET AWARDED. Five years requested beginning 1 April 2007. Approximately \$170,000 per year plus overhead. Consortium Agreement to PI, Dr. K.A. Loveland, UT Health Science Center-Houston.

OAEs, AEPs, and Gender in Women with DSDs, Submitted to NIH May 2008; resubmitted May 2009; NOT YET AWARDED. Five years requested beginning 1 October 2009. Approximately \$225,000 per year plus overhead. Consultant to PI, Dr. Amy Wisniewski, University of Oklahoma Health Science Center.

Publications of Dennis McFadden

Articles, Chapters, and Books

- McFadden, D. Masking-level differences with continuous and with burst masking noise. J. Acoust. Soc. Am., 1966, 40, 1414-1419.
- McFadden, D. Detection of an in-phase signal with and without uncertainty regarding the interaural phase of the masking noise. J. Acoust. Soc. Am., 1967, 41, 778-781.
- McFadden, D., and Greeno, J.G. Evidence of different degrees of learning based on different tests of retention. J. Verbal Learn. Verbal Behav., 1968, 7, 452-457.
- McFadden, D. Masking-level differences determined with and without interaural disparities in masker intensity. Ph.D. dissertation, Indiana University, 1967; also J. Acoust. Soc. Am., 1968, 44, 212-223.
- Jeffress, L.A., and McFadden, D. MLDs and the phase angle, α . J. Acoust. Soc. Am., 1968, 43, 164.
- Egan, J.P., Lindner, W.A., and McFadden, D. Masking-level differences and the form of the psychometric function. Perception and Psychophysics, 1969, 6, 209-215.
- McFadden, D. Lateralization and detection of a tonal signal in noise. J. Acoust. Soc. Am., 1969, 45, 1505-1509.
- McFadden, D. Three computational versions of proportion correct for use in forced-choice experiments. Perception and Psychophysics, 1970, 8, 336-342.
- McFadden, D., and Pulliam, K.A. Lateralization and detection of noise-masked tones of different durations. J. Acoust. Soc. Am., 1971, 49, 1191-1194.
- Jeffress, L.A., and McFadden, D. Differences of interaural phase and level in detection and lateralization. J. Acoust. Soc. Am., 1971, 49, 1169-1179.
- McFadden, D., Barr, E.A., and Young, R.E. Audio analgesia: Lack of a cross-masking effect on taste. Perception and Psychophysics, 1971, 10, 175-179.
- McFadden, D., Jeffress, L.A., and Ermeij, H.L. Differences of interaural phase and level in detection and lateralization: 250 Hz. J. Acoust. Soc. Am., 1971, 50, 1484-1493.
- McFadden, D., Russell, W.E., and Pulliam, K.A. Monaural and binaural masking patterns for a low frequency tone. J. Acoust. Soc. Am., 1972, 51, 534-543.
- McFadden, D., and Sharpley, A.D. Detectability of interaural time differences and interaural level differences as a function of signal duration. J. Acoust. Soc. Am., 1972, 52, 574-576.
- McFadden, D., Jeffress, L.A., and Lakey, J.R. Differences of interaural phase and level in detection and lateralization: 1000 Hz and 2000 Hz. J. Acoust. Soc. Am., 1972, 52, 1197-1206.

Articles, Chapters, and Books, continued

- McFadden, D., and Gummerman, R.K. Monoptic and dichoptic metacontrast across the vertical meridian. *Vision Research*, 1973, 13, 185-196.
- McFadden, D. Precedence effects and auditory cells with long characteristic delays. *J. Acoust. Soc. Am.*, 1973, 54, 528-530.
- McFadden, D. A note on auditory neurons having periodic response functions to time-delayed, binaural stimuli. *Physiological Psychology*, 1973, 1, 265-266.
- McFadden, D., Jeffress, L.A., and Russell, W.E. Individual differences in sensitivity to interaural differences in time and level. *Perceptual and Motor Skills*, 1973, 37, 755-761.
- McFadden, D. Detection and lateralization of interaural differences of time and level by the blind. *Perceptual and Motor Skills*, 1974, 38, 211-215.
- McFadden, D., and Skinner, R.B., Jr. On the form of psychometric functions for taste. *Perception and Psychophysics*, 1974, 15, 379-382.
- McFadden, D., and Pasanen, E.G. High-frequency masking-level differences with narrow-band noise signals. *J. Acoust. Soc. Am.*, 1974, 56, 1226-1230.
- McFadden, D. Duration-intensity reciprocity for equal loudness. *J. Acoust. Soc. Am.*, 1975, 57, 702-704.
- McFadden, D. Beat-like interaction between periodic waveforms. *J. Acoust. Soc. Am.*, 1975, 57, 983.
- McFadden, D., and Pasanen, E.G. Binaural beats at high frequencies. *Science*, 1975, 190, 394-396.
- McFadden, D. Masking and the binaural system. In D.B. Tower (ed.), The Nervous System, Vol. 3: Human Communication and Its Disorders. New York: Raven Press, 1975, 137-146.
- McFadden, D. Reply to J.C. Stevens. *J. Acoust. Soc. Am.*, 1976, 59, 475.
- McFadden, D., and Pasanen, E.G. Lateralization at high frequencies based on interaural time differences. *J. Acoust. Soc. Am.*, 1976, 59, 634-639.
- McFadden, D., and Moffitt, C.M. Acoustic integration for lateralization at high frequencies. *J. Acoust. Soc. Am.*, 1977, 61, 1604-1608.
- McFadden, D., and Pasanen, E.G. Binaural detection at high frequencies with time-delayed waveforms. *J. Acoust. Soc. Am.*, 1978, 63, 1120-1131.
- McFadden, D., and Pasanen, E.G. Altered psychophysical tuning curves following exposure to a noise band with steep spectral skirts. In G. van den Brink and F.A. Bilsen (eds.), Psychophysical, Physiological, and Behavioural Studies in Hearing. Delft, The Netherlands: Delft University Press, 1980, 136-139.

Articles, Chapters, and Books, continued

- McFadden, D. (ed.) Neural Mechanisms in Behavior: A Texas Symposium. New York: Springer-Verlag, 1980, 305 pp. plus index.
- McFadden, D. The problem of different interaural time differences at different frequencies. *J. Acoust. Soc. Am.*, 1981, 69, 1836-1837.
- McFadden, D., and Plattsmier, H.S. Suprathreshold aftereffects of exposure to intense sounds. In R.P. Hamernik, D. Henderson, and R. Salvi (eds.), New Perspectives in Noise-Induced Hearing Loss. New York: Raven Press, 1982, 347-362.
- McFadden, D., and Plattsmier, H.S. Exposure-induced loudness shifts and threshold shifts. In R.P. Hamernik, D. Henderson and R. Salvi (eds.), New Perspectives in Noise-Induced Hearing Loss. New York: Raven Press, 1982, 363-373.
- McFadden, D. Tinnitus: Facts, Theories, and Treatments. Washington, D.C.: National Academy Press, 1982. Reprinted 1984. 146 pp. plus index.
- McFadden, D., and Wightman, F.L. Audition: some relations between normal and pathological hearing. *Annual Review of Psychology*, 1983, 34, 95-128.
- McFadden, D., and Plattsmier, H.S. Aspirin can potentiate the temporary hearing loss induced by intense sounds. *Hearing Research*, 1983, 9, 295-316.
- McFadden, D. Intense sounds may alter the mechanical properties of the cochlear partition. *J. Acoust. Soc. Am.*, 1983, 74, 447-455.
- McFadden, D., and Plattsmier, H.S. Frequency patterns of TTS for different exposure intensities. *J. Acoust. Soc. Am.*, 1983, 74, 1178-1184.
- McFadden, D., and Yama, M.F. Upward shifts in the masking pattern with increasing masker intensity. *J. Acoust. Soc. Am.*, 1983, 74, 1185-1189.
- McFadden, D., Plattsmier, H.S., and Pasanen, E.G. Temporary hearing loss induced by combinations of intense sounds and nonsteroidal anti-inflammatory drugs. *American Journal of Otolaryngology*, 1984, 5, 235-241.
- McFadden, D. and Plattsmier, H.S. Aspirin abolishes spontaneous oto-acoustic emissions. *J. Acoust. Soc. Am.*, 1984, 76, 443-448.
- McFadden, D., Plattsmier, H.S., and Pasanen, E.G. Aspirin-induced hearing loss as a model of sensorineural hearing loss. *Hearing Research*, 1984, 16, 251-260.
- McFadden, D. The curious half-octave shift: Evidence of a basalward migration of the traveling-wave envelope with increasing intensity. In R. Salvi, D. Henderson, R.P. Hamernik and V. Coletti (eds.), Applied and Basic Aspects of Noise-Induced Hearing Loss. New York: Plenum, 1986, 295-312.

McFadden, D. Some issues associated with interactions between ototoxic drugs and exposure to intense sounds. In R. Salvi, D. Henderson, R.P. Hamernik and V. Coletti (eds.), Applied and Basic Aspects of Noise-Induced Hearing Loss. New York: Plenum, 1986, 541-550.

Articles, Chapters, and Books, continued

McFadden, D. Comodulation masking release: the effects of varying the level, duration, and time delay of the cue band. J. Acoust. Soc. Am., 1986, 80, 1658-1667.

McFadden, D. Comodulation detection differences using noiseband signals. J. Acoust. Soc. Am., 1987, 81, 1519-1527.

McFadden, D. and Wright, B.A. Comodulation masking release in a forward-masking paradigm. J. Acoust. Soc. Am., 1987, 82, 1615-1620.

McFadden, D. Failure of a missing-fundamental complex to interact with masked and unmasked pure tones at its fundamental frequency. Hearing Research, 1988, 32, 23-39.

McFadden, D. Absence of overshoot in a dichotic masking condition. J. Acoust. Soc. Am., 1988, 83, 1685-1687.

Wier, C.C., Pasanen, E.G., and McFadden, D. Partial dissociation of spontaneous otoacoustic emissions and distortion products during aspirin use in humans. J. Acoust. Soc. Am., 1988, 84, 230-237.

Plattsmer, H.S. and McFadden, D. Temporary threshold shift measured with two psychophysical procedures. Audiology, 1988, 27, 334-343.

McFadden, D. Spectral differences in the ability of temporal gaps to reset the mechanisms underlying overshoot. J. Acoust. Soc. Am., 1989, 85, 254-261.

Champlin, C.A., and McFadden, D. Reductions in overshoot following intense sound exposures. J. Acoust. Soc. Am., 1989, 85, 2005-2011.

McFadden, D., and Champlin, C.A. Reductions in overshoot during aspirin use. J. Acoust. Soc. Am., 1990, 87, 2634-2642.

McFadden, D. and Wright, B.A. Temporal decline of masking and comodulation detection differences. J. Acoust. Soc. Am., 1990, 88, 711-724.

Wright, B.A. and McFadden, D. Uncertainty about the correlation among temporal envelopes in two comodulation tasks. J. Acoust. Soc. Am., 1990, 88, 1339-1350.

McFadden, D. and Wright, B.A. Temporal decline of masking and comodulation masking release. J. Acoust. Soc. Am., 1992, 92, 144-156.

Wright, B.A., and McFadden, D. Evidence that adaptation of suppression cannot account for auditory enhancement or enhanced forward masking. Philosophical Transactions of the Royal Society, London, Ser. B., 1992, 336, 325-329. (partially redundant to the following entry)

Wright, B.A., McFadden, D., and Champlin, C.A. Adaptation of suppression as an explanation of enhancement effects. *J. Acoust. Soc. Am.*, 1993, 94, 72-82.

McFadden, D. A speculation about the parallel ear asymmetries and sex differences in hearing sensitivity and otoacoustic emissions. *Hearing Research*, 1993, 68, 143-151.

Articles, Chapters, and Books, continued

McFadden, D. A masculinizing effect on the auditory systems of human females having male co-twins. *Proceedings of the National Academy of Sciences USA*, 1993, 90, 11900-11904.

McFadden, D. and Mishra, R. On the relation between hearing sensitivity and otoacoustic emissions. *Hearing Research*, 1993, 71, 208-213.

McFadden, D. and Pasanen, E.G. Otoacoustic emissions and quinine sulfate. *J. Acoust. Soc. Am.*, 1994, 95, 3460-3474.

McFadden, D. and Loehlin, J.C. On the heritability of spontaneous otoacoustic emissions: A twins study. *Hearing Research*, 1995, 85, 181-198.

McFadden, D., Loehlin, J.C. and Pasanen, E.G. Additional findings on heritability and prenatal masculinization of cochlear mechanisms: Click-evoked otoacoustic emissions. *Hearing Research*, 1996, 97, 102-119.

McFadden, D. Sex differences in the auditory system. *Developmental Neuropsychology*, 1998, 14, 261-298.

McFadden, D. Possible hormonal contributions to sex differences in otoacoustic emissions and in hearing. In A.R. Palmer, A. Rees, A.Q. Summerfield, and R. Meddis (eds.), Psychophysical and Physiological Advances in Hearing. London: Whurr, 1998, 65-72.

McFadden, D. and Pasanen, E.G. Comparison of the auditory systems of heterosexuals and homosexuals: Click-evoked otoacoustic emissions. *Proceedings of the National Academy of Sciences USA*, 1998, 95, 2709-2713.

McFadden, D., Pasanen, E.G., and Callaway, N.L. Changes in otoacoustic emissions in a transsexual male during treatment with estrogen. *J. Acoust. Soc. Am.*, 1998, 104, 1555-1558.

McFadden, D. and Callaway, N.L. Better discrimination of small changes in commonly encountered than in less commonly encountered stimuli. *Journal of Experimental Psychology: Human Perception and Performance*, 1999, 25, 543-560.

McFadden, D. and Pasanen, E.G. Spontaneous otoacoustic emissions in heterosexuals, homosexuals, and bisexuals. *J. Acoust. Soc. Am.*, 1999, 105, 2403-2413.

McFadden, D. Masculinizing effects on otoacoustic emissions and auditory evoked potentials in women using oral contraceptives. *Hearing Research*, 2000, 142, 23-33.

McFadden, D. and Champlin, C.A. Comparison of auditory evoked potentials in heterosexual, homosexual, and bisexual males and females. *Journal of the Association for Research in Otolaryngology*, 2000, 1, 89-99.

Pasanen, E.G. and McFadden, D. An automated procedure for identifying spontaneous otoacoustic emissions. *J. Acoust. Soc. Am.*, 2000, 108, 1105-1116.

Harkrider, A.W., Champlin, C.A., and McFadden, D. Acute effect of nicotine on nonsmokers: I. OAEs and ABRs. *Hearing Research*, 2001, 160, 73-88.

Articles, Chapters, and Books, continued

McFadden, D. Otoacoustic emissions as a window onto prenatal development and sexual differentiation. *Seminars in Hearing*, 2001, 22, 347-360. *abbreviated version of the following entry*

McFadden, D. Masculinization effects in the auditory system. *Archives of Sexual Behavior*, 2002, 31, 93-105.

McFadden, D. and Shubel, E. Relative lengths of fingers and toes in human males and females. *Hormones and Behavior*, 2002, 42, 492-500.

McFadden, D., and Bracht, M.S. The relative lengths and weights of metacarpals and metatarsals in baboons (*Papio hamadryas*). *Hormones and Behavior*, 2003, 43, 347-355.

McFadden, D. and Shubel, E. The relationships between otoacoustic emissions and relative lengths of fingers and toes in humans. *Hormones and Behavior*, 2003, 43, 421-429.

Loehlin, J.C. and McFadden, D. Otoacoustic emissions, auditory evoked potentials, and traits related to sex and sexual orientation. *Archives of Sexual Behavior*, 2003, 32, 115-127.

McFadden, D. and Bracht, M.S. Sex differences in the relative lengths of metacarpals and metatarsals in gorillas and chimpanzees. *Hormones and Behavior*, 2005, 47, 99-111.

McFadden, D., Loehlin, J.C., Breedlove, S.M., Lippa, R.A., Manning, J.T. and Rahman, Q. A reanalysis of five studies on sexual orientation and the relative length of the 2nd and 4th fingers (the 2D:4D ratio). *Archives of Sexual Behavior*, 2005, 34, 341-356.

McFadden, D., Westhafer, J.G., Pasanen, E.G., Carlson, C.L., and Tucker, D.M. Physiological evidence of hypermasculinization in boys with the inattentive type of attention-deficit/hyperactivity disorder (ADHD). *Clinical Neuroscience Research*, 2005, 5, 233-245.

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