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Current as of April 2007

PERSONAL

Maiden name: Powell

EDUCATION

- 2002 Ph.D. Psychology, University of Maryland College Park
Development of auditory sensitivity in budgerigars (*Melopsittacus undulatus*)
- 1993 M.S. Psychology, University of Maryland College Park
Perception of developing vocalizations in the budgerigar (*Melopsittacus undulatus*)
- 1991 B.S. Psychology, University of Maryland College Park

RESEARCH INTERESTS

auditory evoked potentials, development of hearing, animal communication, vocal learning, vocal development, vocal resonance, speech perception,

EMPLOYMENT

- 2004-current Research Assistant Professor, Laboratory of Comparative Psychoacoustics,
Department of Psychology, University of Maryland
- 2003-2004 Research Associate and Manager, Laboratory of Comparative Psychoacoustics,
Department of Psychology, University of Maryland
- 2000-2003 Faculty Research Assistant and Manager, Laboratory of Comparative
Psychoacoustics, Department of Psychology, University of Maryland
- 1999-2000 Comparative and Evolutionary Biology of Hearing (CEBH) trainee
- 1998-1999 Teaching Assistant, Department of Psychology, University of Maryland Graduate
- 1995-1998 National Research Service Award (NRSA) fellow
- 1992-1994 Teaching Assistant, Department of Psychology, University of Maryland
- 1991-1992 Research Assistant, Department of Psychology, University of Maryland

AWARDS

- 2003-2006 Co-PI, Chiropteran auditory damage criteria for blast noise (DACA4203C0046)
Agency: CERL
- 2003 Jack Bartlett Award for Excellence in Dissertation Research Design
- 2002 Graduate Commencement Speaker, College of Behavior & Social Sciences,
University of Maryland
- 2000 Best Student Paper Acoustical Society of America Meeting Atlanta, GA
- 1999-2000 CEBH predoctoral fellowship
- 1995-1998 NRSA predoctoral fellowship
- 1993 Graduate Research Interaction Day (1st place), University of Maryland
- 1991 JP Guilford Research Award (2nd place), National Honor Society in Psychology

1991 Graduated with Honors in Psychology, University of Maryland
1991 University Honors Citation, University of Maryland
1990 Senior Summer Scholarship, University of Maryland
1990 Undergraduate research assistantship, University of Maryland
1988-1991 General Honors Program Scholarship, University of Maryland
1987-1991 Maryland Distinguished Scholar Award

TEACHING EXPERIENCE

Instructor for:

Introduction to Psychology (honors) – Fall 2004

Teaching assistant in graduate school for:

Animal Behavior

Perception

Perception (honors seminar)

Biological Basis of Behavior - laboratory course

Perception – laboratory course

PROFESSIONAL EXPERIENCE

Session chair: Acoustical Society of America, Nashville, TN 2003

Adhoc Reviewer: Journal of the Association for Research in Otolaryngology

TECHNICAL SKILLS

Experience with various neurophysiological techniques (ABR, FFR, CM); Signal Analysis; Digital signal processing; Experience with operant conditioning techniques; Experience with high performance liquid chromatography (HPLC-EC); Avian rearing; General computer skills (windows, systat, sigmaplot, spreadsheets, etc.); Computer maintenance

MEMBERSHIP

Acoustical Society of America

Animal Behavior Society

Association for Research in Otolaryngology

International Society for Neuroethology

Psi Chi National Honor Society in Psychology

Sigma Xi, UMCP chapter

PUBLISHED PAPERS

Dooling, R. J., Brown, S. D., Manabe, K. & Powell, E. F. (1996). The perceptual foundations of vocal learning in budgerigars. In Moss, C. F. & Shettleworth, S. (Eds.) *Neuroethological studies of cognitive and perceptual processes*, Westview Press.

Brittan-Powell, E. F., Dooling, R. J., Larsen, O. N. & Heaton, J. T. (1997). Mechanisms of vocal production in budgerigars (*Melopsittacus undulatus*). *Journal of the Acoustical Society of America*, 101, 578-589.

Brittan-Powell, E. F., Dooling, R. J. & Farabaugh, S. M. (1997). Vocal development in the budgerigar (*Melopsittacus undulatus*): Contact call learning. *Journal of Comparative Psychology*, 111, 226-241.

- Dent, M. L., Brittan-Powell, E. F. & Dooling, R. J. (1997). Discrimination of synthetic /ba-wa/ by budgerigars and humans. *Journal of the Acoustical Society of America*, 102(3), 1891-1897.
- Higgs, D.M., D. Soares, E.F. Brittan-Powell, M.J. Souza, C.E. Carr, R.J. Dooling, & A.N. Popper. (2002). Amphibious auditory responses of the American Alligator (*Alligator mississippiensis*). *J. Comp. Physiol. A.*, 188, 217-223.
- Brittan-Powell, E. F., Dooling, R.J. and Gleich, O. (2002). Auditory brainstem responses (ABR) in adult budgerigars (*Melopsittacus undulatus*). *Journal of the Acoustical Society of America*, 112, 999-1008.
- Brittan-Powell, E. F. and Dooling, R.J. (2004). Development of Auditory Sensitivity in budgerigars (*Melopsittacus undulatus*), *Journal of the Acoustical Society of America*, 115, 3092-3102.
- Wright, T. F., Brittan-Powell, E. F., Dooling, R.J. and Mundinger, P.C. (2004). Sex-linkage of deafness and song frequency spectrum in the Waterslager strain of domestic canary. *Proc Biol Sci*, 271 Suppl 6, S409-12.
- Brittan-Powell, EF, Lohr, B, Hahn, DC, and Dooling, R.J. (2005). Auditory brainstem responses in the Eastern Screech Owl: An estimate of auditory thresholds. *Journal of the Acoustical Society of America*, 118, 314-321.
- Lohr, B., Brittan-Powell E. F., Pater, L. and Dooling, R. J. (submitted). Auditory brainstem responses and auditory sensitivity in woodpeckers, *Journal of Comparative Physiology*.
- Manabe, K., Dooling, R. J. & Brittan-Powell, E. F. (submitted). Vocal learning in budgerigars (*Melopsittacus undulatus*): Effects of an audible template on vocal matching. *Journal of the Acoustical Society of America*

IN PREP MANUSCRIPTS

- Brittan-Powell, E. F., Dooling, R.J., Ryals, BM and Gleich, O. (in prep). Development of auditory sensitivity in Belgian Waterslager canaries.
- Brittan-Powell, E. F., Kobayashi, K., Okanoya, K., Dooling, R.J., Comer, C., and Park, T.J. (in prep). Constraints of subterranean living on auditory-vocal communication in the Naked mole-rat.

POSTERS and PRESENTATIONS

1. Powell, E. F. & Dooling, R. J. (1991). Vocal tract resonances in the budgerigar. Animal Behavior Society, Regional Meetings, Amherst, MA.
2. Powell, E. F., Dooling, R. J. & Farabaugh, S. M. (1992). Development of vocal learning in the budgerigar. Society for Neuroscience Abstracts, Anaheim, CA.
3. Powell, E. F., Farabaugh, S. M. & Dooling, R. J. (1993). Vocal development in budgerigars. Association for Research in Otolaryngology, St. Petersburg, FL.
4. Dooling, R. J., Powell, E. F. & Farabaugh, S. M. (1993). Development of contact calls in budgerigars. National Animal Behavior Society Meeting, Davis, CA.

5. Powell, E. F., Dooling, R. J. & Larsen, O. N. (1994). Spectral differences in calls produced by the budgerigar in air and helium. Society for Neuroscience Abstracts, St. Petersburg, FL.
6. Dent, M. L., Powell, E. F., Pierce, A. & Dooling, R. J. (1995). Discrimination of synthetic /ba-wa/ by budgerigars (*Melopsittacus undulatus*). Acoustical Society of America, Washington, D.C.
7. Powell, E. F., Dent, M. L. & Dooling, R. J. (1995). Discrimination of synthetic /ba-wa/ by budgerigars and humans. Fourth International Conference of Neuroethology. Cambridge, England.
8. Dooling, R., Powell, E. & Manabe, K. (1996). Vocal development and vocal learning in a non-songbird, the budgerigar (*Melopsittacus undulatus*). XIVth Congress of the International Primatological Society, XIXth Conference of the American Society of Primatologists. Madison, WI.
9. Brittan-Powell, E. F., Hall, F. S. & Dooling, R. J. (1997). Monoamine levels in the budgerigar brain. Association for Research in Otolaryngology, St. Petersburg, FL.
10. Brittan-Powell, E. F., Dooling, R. J. & Farabaugh, S. M. (1997). Perception of developing vocalizations by budgerigars. National Animal Behavior Society Meeting, College Park, MD.
11. Brittan-Powell, E. F. and Dooling, R. J. (2000). Brainstem evoked potentials in budgerigars (*Melopsittacus undulatus*). Association for Research in Otolaryngology, St. Petersburg, FL.
12. Brittan-Powell, E. F. and Dooling, R. J. (2000). Development of auditory sensitivity in budgerigars. Acoustical Society of America, Atlanta, GA.
13. Lohr, B., Brittan-Powell E. F., Dooling, R. J., and Pater, L. (2000). Auditory sensitivity in woodpeckers. Acoustical Society of America, Atlanta, GA.
14. Dent, M. L., Brittan-Powell, E. F., Dooling, R. J., Lohr, B. and Pater, L. (2000). Estimating equal loudness contours in animals. Acoustical Society of America, Atlanta, GA.
15. Brittan-Powell, E.F. and Dooling, R.J. (2001). Development of auditory sensitivity in budgerigars (*Melopsittacus undulatus*). Association for Research in Otolaryngology, St. Petersburg, FL.
16. Soares, D., Higg, D.M., Brittan-Powell, E.F., Souza, M. J., Carr, C. E. and Popper, A.N. (2001). The amphibious auditory response of the American alligator (*Alligator mississippiensis*). Association for Research in Otolaryngology, St. Petersburg, FL.
17. Brittan-Powell, EF, Okanoya, K., Dooling RJ, Comer C., and Park, T. (2001). The auditory brainstem response of the fossorial naked mole-rat. Society for Neuroscience Abstracts, San Diego, CA.
18. Brittan-Powell, E.F., Dooling, R.J., Wright, T., Munding, P.C., and Ryals, B.M. (2002). Development of auditory sensitivity in Belgian Waterslager (BWS) canaries. Association for Research in Otolaryngology, St. Petersburg, FL.
19. Brittan-Powell, E.F., Lauer, A., Dooling, R.J. and Ryals, B.M. (2003). Far-field neural population responses in Belgian Waterslagers (BWS) canaries. Association for Research in Otolaryngology, Daytona Beach, FL.
20. Wright, T.F., Brittan-Powell, E.F., Dooling, R.J. and Munding, P.M. (2003). Inheritance of auditory sensitivity and song frequency spectrum in the Belgium waterslager Canary. International conference on Acoustic Communication by Animals, College Park, MD.
21. Pater, L., Brittan-Powell, EF, Moss, C., Dooling, R.J., Loubeau, A. and Sparrow V.W. (2004) An Investigation of Hearing Threshold Shift in Bats due to Blast Wave Pressure. *Acoustical Society of America*, 148th annual meeting, San Diego, CA.
22. Brittan-Powell, EF, Lohr, B, Hahn, C and Dooling, R.J. (2005) Auditory sensitivity in the Eastern Screech Owl. *Association for Research in Otolaryngology*, New Orleans, LA.
23. Brittan-Powell, EF, Lauer, AM, Callahan, J, Dooling, RJ, Leek, MR, and Gleich, O. (2005). The effect of sweep direction on avian auditory brainstem responses, *Acoustical Society of America*, 149th annual meeting, Vancouver, BC.

24. Dooling, RJ, Brittan-Powell, EF, Lauer, AM, Dent, ML and Noirot, I. (2005) The problem of frequency weighting functions and standards for birds (A) *J. Acoust. Soc. Am.* 118, 2018.
25. Lauer, AM, Brittan-Powell, EF, Lohr, B. and Dooling, RJ (2005) Strain differences in auditory sensitivity in canaries bred for song and plumage, *Acoustical Society of America*, 149th annual meeting, Vancouver, BC.
26. Adler, H. Sanovich, E., Brittan-Powell, EF, and Dooling, RJ (2006) WDR1 Presence in the Songbird Inner Ear, Association for Research in Otolaryngology, Baltimore, MD.
27. Noirot, I., Brittan-Powell, EF, Dooling, RJ and Montgomery, L. (2006). A comparison of behavioural and auditory brainstem response measurements of absolute and masked auditory thresholds in three species of birds, *Acoustical Society of America*, 150th annual meeting, Providence, RI.