**Curriculum Vitae**

1. **Personal Information**
2. **Dooling, Robert J**, University of Maryland, Department of Psychology and Program in Neuroscience and Cognitive Science, College Park, MD, 20742
3. Current Academic Appointment: Emeritus Professor and Research Professor, University of Maryland, Department of Psychology and Program in Neuroscience and Cognitive Science, College Park, MD, 20742, 2019-present
4. Other Academic Appointments while at UMD: Co-Director Neuroscience Major, 2019-2020; Director, Neuroscience and Cognitive Science Program, 2007-2013; Co-Director, Center for the Comparative & Evolutionary Biology of Hearing, 2003-2014; Associate Vice President for Research, 2001-2014; Research Policy Advisor, 1995-1999; Associate Chair, Psychology Department, 1992-1994; Associate Professor, Department of Psychology, 1984-1988
5. Education

Ph.D. in Physiological Psychology, St. Louis University (1975), St. Louis, MO

M.S. in Biology & Psychology, St. Louis University (1969), St. Louis, MO

B.S. in Biology & Chemistry (1967), Creighton University, Omaha, NE

e. Employment Background

1. Full Professor, University of Maryland, Department of Psychology, College Park, MD, 20742, 1988-2019
2. Associate Professor, University of Maryland, Department of Psychology, College Park, MD, 20742, 1984-1988
3. Adjunct Assistant Professor, Rockefeller University, Behavior, New York, NY, 10065, 1981-1986
4. Assistant Professor, University of Maryland, Department of Psychology, College Park, MD, 20742, 1981-1984
5. Visiting Professor, Vassar College, Department of Psychology, Poughkeepsie, NY 12604, 1979-1980
6. Assistant Professor, Rockefeller University, Behavior, New York, NY, 10065, 1977-1981
7. Postdoctoral Fellow, Rockefeller University, Behavior, New York, NY 10065, 1975-1977
8. Research Assistant, Central Institute for the Deaf 1967-69, 1971-75)
9. **Research, Scholarly and Creative Activities**

a. Book Chapters

Slabbekorn, H., **Dooling, R.J.,** and Popper, A.N. (2018). Man-made sounds and animals. In Slabbekorn, H.,Dooling, R.J.,Popper, A.N., and Fay, R.R. Eds). Effects of Anthropogenic Noise on Animals. New York: Springer Science+Business Media, LLC

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Farabaugh, S.M., and **Dooling, R.J.** (1996). Ecology and evolution of acoustic communication in parrots: Laboratory and field studies in parrots. In Kroodsma and Miller (Eds.), Ecology and Evolution of Acoustic Communication in Birds (pp. 97-117). Ithaca, New York: Cornell University Press.

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b. Books and Reports

Slabbekorn, H., **Dooling, R.J.,** Popper, A.N., and Fay, R.R. (2018). Effects of Anthropogenic Noise on Animals. New York: Springer Science+Business Media, LLC

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c. Articles in Scientific Journals

**In Prep:**

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**In Press:**

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**2015**

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**2013**

Manabe, K., **Dooling, R.J.,** and Takaku, S. (2013) Differential Reinforcement of an Approach Response in Zebrafish (Danio rerio). *Behavioural Processses*, 98, 106-111.

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Ryals, B.M., Dent, M.L., and **Dooling, R.J**. (2013) Return of Function after Hair Cell Regeneration, *Hearing Research, 297*, 113-120.

Lohr, B., Brittan-Powell E. F., Pater, L. and **Dooling, R. J**. (2013). Auditory brainstem responses and auditory sensitivity in woodpeckers, *Journal of Acoustical Society of America, 133*(1), 337-42.

**2012**

Tu, H.-W. and **Dooling, R.J**.(2012) Perception of warble song in budgerigars (Melopsittacus undulatus): evidence for special processing. *Animal Cognition, 15*(6), 1151-1159.

**2011**

Noirot, I.C., Brittan-Powell, E.F. and **Dooling, R.J.** (2011). Masked and unmasked auditory thresholds in three species of birds as measured by the auditory brainstem response. *Journal of the Acoustical Society of America, 129*(6), 3445-3448.

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Vernaleo, B. and **Dooling, R.J.** (2011). Relative salience of envelope and fine structure cues in zebra finch song. *Journal of the Acoustical Society, 129*, 3373-3383

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Brittan-Powell, E. F., **Dooling, R.J**., Ryals, BM and Gleich, O. (2010). Development of auditory sensitivity in Belgian Waterslager canaries. *Hearing Research, 269*, 56-69.

Brittan-Powell, E. F., Christensen-Dalsgaard, J., Tang, Y., Carr, C. E. and **Dooling, R. J.** (2010). Auditory brainstem responses in two lizard species, Journal of the Acoustical Society of America, 128, 787-794.

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**Dooling, R.J.,** Mulligan, J.A., and Miller, J.D. (1971). Auditory sensitivity and song spectrum of the common canary (*Serinus canarius*).  *Journal of the Acoustical Society of America, 50*, 700-709.

1. **Examples of Invited Talks and Colloquia at other Institutions (last 20 years)**

University of California-Berkeley, May 2004

University of Texas-Dallas, October 2004

Department of Biology, Odense University, Denmark, June 2005

Department of Neuroscience, George Mason University, April 2006

Department of Otolaryngology, University of Virginia, June 2006

Johns Hopkins University, March 2007

Purdue University, February 2008

New Mexico State University, October 2008

University of California-Santa Cruz, January 2013

Johns Hopkins University, June 2014

Department of Biology, Odense University, Denmark, September 2015

Department of Psychology, Tufts University, January 2018

Dept of Neurobiology and Behavior, Cornell University, November, 2022

Center for Hearing and Balance, Johns Hopkins University Oct 2024

1. **Recent Colloquia and Research Presentations at meetings (last 10 years)**

**Dooling, R.J**., Dent, M., and Lauer, A. (2023). Birds: A unique animal model for studying hearing loss and recovery. Acoustics 2023 Australia, Sydney, Australia.

**Dooling, R.J.,** Tu, Hsiao-Wei, Fishbein, A.RE., Stennette, K.A. (2022) Syllable Sequence Perception in Songbirds and Parrots. Joint Conference on Language Evolution, Tokyo, Japan

Fishbein, A. R. Lu, K., Liu, W., Idsardi, W. J., Fritz, J.B., Shamma, S.A., **Dooling, R.J.** (2021). Sequence processing in the auditory forebrain of the zebra finch (Taeniopygia guttata) and the budgerigar (Melopsittacus undulatus). Poster presented at SfN Global Connectome: A Virtual Event.

Fishbein, A. R. Prior, N.H., Ball, G.F., **Dooling, R.J.** (2020). Limitations in Avian Perception of Vocal Sequences: Implications for Language Evolution. Talk accepted for EvoLang 13, Brussels, Belgium. (Cancelled for Covid-19).

Fishbein, A. R. Lu, K., Liu, W., Idsardi, W. J., Fritz, J.B., Shamma, S.A., **Dooling, R.J.** (2020). Temporal Integration of Sequences in Secondary Auditory Region of the Zebra Finch Forebrain. Poster presented at 43rd Annual Meeting of the Association for Research in Otolaryngology, San Jose, CA.

Prior NH, **Dooling RJ,** Ball GF (2019). Moment-to-moment pair bond synchrony between pair bonded zebra finches. Presented at the Animal Behavior Society Meeting. Chicago, IL, USA

Fishbein, A. R., Prior, N. H., Idsardi, W. J., Ball, G. F., **Dooling, R. J.** (2019). Perception of Variation in Song Motifs by Birds and Humans. Poster presented at 26th International Conference on Comparative Cognition, Melbourne Beach, FL.

Fishbein, A. R., Lu, K., Idsardi, W. J., Shamma, S. A., Fritz, J. B., **Dooling, R. J**. (2019). Neurophysiological Coding of Temporal Fine Structure and Sequence in the Auditory Forebrain of the Zebra Finch. Poster presented at 42nd Annual Meeting of the Association for Research in Otolaryngology, Baltimore, MD.

Prior NH, Lawson S, Smith E, Ball GF**, Dooling RJ**.(2018) Temporal fine structure and zebra finch vocalizations. Presented at the Acoustical Society of America Meeting. Minneapolis, MN, USA

Fishbein, A. R., Prior, N. H., Ball, G. F., **Dooling, R.J**. (2018*). Perception of Sequences and Syllables in Vocal Learning Birds.* Presentation at Birdsong and Animal Communication Annual Meeting, Millbrook, NY.

Fishbein, A. R., Prior, N. H., Lawson, S. L., Ball, G. F., **Dooling, R. J.** (2018). *Variation in How Birds Listen to Their Songs.* Presentation at 55th Annual Conference of the Animal Behavior Society, Milwaukee, WI.

Fishbein, A. R., Ball, G. F., **Dooling, R. J.** (2018). *Use of Transition and Abstract Rules by Budgerigars in Auditory Pattern Processing.* Presentation at 175th Meeting of the Acoustical Society of America, Minneapolis, MN.

Prior NH, Smith E, Ball GF, **Dooling RJ**. (2018). Behavioral synchrony across relationship types in the zebra finch (Taeniopygia guttata). Animal Behavior Society. Milwaukee, WI, USA

Fishbein, A. R., Ball, G. F., **Dooling, R. J.** (2017). *Use of Transition and Abstract Rules by Budgerigars in Auditory Pattern Processing.* Poster presented at Birdsong Meeting 7, College Park, MD.

Prior NH, Smith E, Ball GF, **Dooling RJ**. (2017). Saliency of temporal fine structure in zebra finch vocalizations. Paper presented at the Acoustical Society of America. Boston, MA, USA

Fishbein, A. R**.** and **Dooling, R. J.** (2017). *An Efficient Behavioral Assay for Measuring Auditory Pattern Processing in Budgerigars.* Poster presented BBI Research Workshop: New Perspectives on Animal Models of Language and Cognition, College Park, MD.

Fishbein, A. R. and **Dooling, R. J.** (2017). *An Efficient Behavioral Assay for Measuring Auditory Pattern Processing in Budgerigars.* Poster presented at 4th International Symposium on Acoustic Communication by Animals, Omaha, NE.

Lawson, S.L., Fishbein, A. R**.**, Prior, N.H., **Dooling, R.J.,** Ball, G.F. (2017*) Perception of Structural Changes in Song Motifs by Zebra Finches.* Poster presented at 4th International Symposium on Acoustic Communication by Animals, Omaha, NE.

Fishbein, A. R.,Lawson, S. L., **Dooling, R.J**., Ball, G.F. (2017). *How Canaries Listen to Their Song.* Presentation at 173rd Meeting of the Acoustical Society of America, Boston, MA.

Lawson, S.L., Fishbein, A. R., Prior, N.H., Lohr, B., **Dooling, R.J.,** Ball, G.F. (2017). *Relative Salience of Syllable Order versus Syllable Fine Structure in Zebra Finch Song.* Work presented at 173rd Meeting of the Acoustical Society of America, Boston, MA.

Fishbein, A., Lawson, S., Ball, G.F., and **Dooling, R.J**. (2017*). Using Operant Conditioning Methods to Measure Song Perception*. Poster presented at the Fourth International Symposium on Acoustic Communication by Animals, Omaha, Nebraska.

Prior, N., Smith, E., Ball., G.F., and **Dooling, R.J.** (2017). *Saliency of Temporal Fine Structure in Zebra Finch Vocalizations.* Poster presented at the 173rd Meeting of the Acoustical Society of America, Boston, Massachusetts.

Prior, N., Smith, E., **Dooling, R.J.**, and Ball, G.F. (2017). *Behavioral Synchrony across Social Condition in Zebra Finches.* Poster presented at the Fourth International Symposium on Acoustic Communication by Animals, Omaha, Nebraska.

Prior NH, Smith E, Lawson S, Ball GF, **Dooling RJ.**(2017) Acoustic fine structure may contribute to functional communication in zebra finches. Birdsong Society for Neuroscience Satellite Meeting. College Park, MD, USA

Erbe, C., Reichmuth, C., Cunningham, K., and **Dooling, R.J**. (2016). *Masking in Marine Mammals: A Review*. Presented at the Fourth International Conference on The Effects of Noise on Aquatic Life*,* Dublin, Ireland.

Fishbein, A. R.,Lawson, S. L., Ball, G.F., **Dooling, R. J.** (2016). *Using Operant Conditioning Methods to Measure Song Perception in Birds.* Poster presented at 6th Meeting of the North American Ornithological Conference, Washington, D.C.

**Dooling, R.J**. and Popper, A. (2016). *Some Lessons from the Effects of Highway Noise on Birds*. Presented at the Fourth International Conference on The Effects of Noise on Aquatic Life*,* Dublin, Ireland.

**Dooling, R.J.** and Prior, N. (2015). *Do we hear what birds hear in birdsong*? Annual meeting of the Animal Behavior Society, Anchorage, Alaska (Invited).

**Dooling, R. J**. and Blumenrath, S.H. (2013). *Masking Experiments in Humans and Birds Using Anthropogenic Noises*. Budapest, Hungary. (Invited)

**Dooling, R.J**, Leek, M.R., and Popper, A.N. (2013) *Effects of noise on fishes: What we can learn from humans and birds*. Presented at Shanghai Ocean University.

1. **Sponsored Research: Grants**

NIMH (MH31165) 11/78-11/81

Irma T. Hirschl Career Award 12/80-12/81

NIH Career Development Award 09/82-9/87

NIH (NS19006) 12/82-12/84

NSF (BNS8405159) 10/84-7/87

NIH (NS19006) 12/84-12/87

NIH (NS19006) 01/88-12/92

NIH (NS25768) 02/88-12/90

NIH (DC00198) 01/93-12/98

NIMH Research Scientist Award 10/93-10/97

NIH (DC01372) 01/94-12/98

NIH (DC00046) T32 (Co-PI) 06/94-6/14

Dept of ARMY Contracts 04/98-12/98; 09/99-09/00; 05/03-04/06

NIH R21 – DC05481 05/02-01/04

NIH R01 - DC01372\* 04/98-04/08

NIH R01 - DC00198\* 07/98-1/09

NSF **MRI Grant: 0922985 (Co-PI) 06/10-06/13**

NIH P30 – DC004664\* 08/02-12/12

National Park Service 08/10-12/13

**3. Teaching, Mentoring and Advising.**

Courses, Lectures and Course Development

General Psychology (Undergraduate Honors)

Physiological Psychology (Undergraduate)

Developmental Biopsychology (Undergraduate)

Comparative Psychology (Graduate)

Responsible Conduct of Research (Graduate)

Hearing (Graduate) – Guest lecturer

Cognitive Psychology (Graduate) – Guest lecturer

Introduction to Audiology (Undergraduate) – Guest lecturer

1. **Other Service**

*NIH Consensus Panel:* Cochlear Implants in Children (1995)

*President,* Sigma Xi at the University of Maryland (2001)

*NIH Study Section: Hearing (1989-1993)*

*Congressional Subcommittee Testimony for the APA (1989)*

*Secretary, Sigma Xi at Rockefeller University (1981)*

*Associate Editor, Journal of the Acoustical Society of America 2022-present*

*Ad hoc Journal Reviewer:* Acoustical Society of America, American Association for the Advancement of Science, American Naturalist, Animal Behaviour, National Institutes of Health, National Institute of Mental Health, National Science Foundation, Zeitschrift fur Tierpsychologie, Behavioral Ecology and Sociobiology, Journal of Comparative Psychology, Journal of Experimental Psychology: Animal Behavior Processes, Developmental Psychobiology, The Journal of Neurobiology

**5. Campus Service**

Acting Associate Chair, Psychology

Member, Search Committee for Associate Provost for Research/Dean of Graduate School

Chair, Search Committee for Chair of Department of Hearing and Speech Sciences

Chair, Search Committee for Chair of Department of Afro-American Studies

Chair, Search Committee for Chair of Department of Biology

Research Policy Advisor for the Graduate School (1995-1999)

Chair, Research Committee of Graduate Council (1997-1999)

Member, Animal Care and Use Committee (1995-1999)

Co-Chair, Human Subjects Institutional Review Board (1997-2000)

Chair, Campus Intellectual Property Committee (2001-2003)

Member, Campus Conflict of Interest Committee (2004-2017)

Assoc. Director, Comparative and Evolutionary Biology of Hearing Training Grant (1994-2014)

Co-Director, Center for the Comparative and Evolutionary Biology of Hearing (2003-2014)

Chair, IACUC (2012-2016)

Chair, Campus Intellectual Property Committee (2012-present)

Associate Vice President for Research (2001-2014)

**6. Membership in Professional Organizations**

Acoustical Society of America

American Association for the Advancement of Science

American Psychological Association

Animal Behavior Society

International Society for Developmental Psychobiology

Psychonomic Society

Sigma Xi National Society

Society for the Experimental Analysis of Behavior

Society for Neuroscience

Association for Research in Otolaryngology

Washington Academy of Sciences

New York Academy of Sciences

**7. Awards and Honors**

Visiting Professor Programme – Denmark (2015)

Distinguished Scholar-Teacher Award (2003)

NIMH Research Scientist Award (1992-97)

Alexander v. Humboldt Award/Senior Scientist. (1990-91)

Wash. Acad. Sci. Award for Behavioral. Science Res. (1983)

NIH Research Career Development Award (1982-87)

NIMH Career Scientist Award (not activated) (1981)

Irma T. Hirschl Career Development Award (1980-81)

NIH Postdoctoral Fellowship (not activated) (1975)

NIH Predoctoral Fellowship (not activated) (1974)