Curriculum Vitae

DARCY BRISBANE KELLEY

Harold Weintraub Professor
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Lab website: https://kelleylab.biology.columbia.edu/
See also:
http://www.columbia.edu/cu/biology/faculty/kelley/index.html
https://www.neurosciencephd.columbia.edu/profile/dbkelley?profile=researcher
https://www.researchgate.net/profile/Darcy_Kelley

EDUCATION

A.B. Barnard College, Columbia University, New York City. 1970
Ph.D. The Rockefeller University, New York City. 1975

PROFESSIONAL EXPERIENCE

1995 -	Director, Doctoral Program in Neurobiology and Behavior, CU
1994 -	Faculty, Center for Environmental Research and Conservation, CU
1987 -	Professor, Department of Biological Sciences, Columbia University
1985 -1989	Course Director, Neural Systems and Behavior, MBL
1982 -1987	Associate Professor, Dept. of Biological Sciences, CU
1982 -1984	Instructor, Neural Systems and Behavior, MBL
1978 -1981	Assistant Professor, Department of Psychology, Princeton University
1977 -1978	Assistant Professor, The Rockefeller University
1975 -1977	Post-doctoral Fellow, F. Nottebohm, Rockefeller University
1970 -1975	Graduate Fellow, D. Pfaff, Rockefeller University

HONORS AND AWARDS

- Galambos Lecture, UCSD 2020 Postponed Covid-19
- Faculty mentoring award, Columbia University 2020
- Distinguished lecture, University of North Carolina 2019
- Sinauer Lecture, UMass Amherst 2018
- Member, American Academy of Arts and Sciences 2017 -
- Distinguished lecture, Georgia State University 2017
- Whitman Fellow, Marine Biological Laboratory 2015,2016
- Fellow, International Society for Neuroethology 2014 -
- Frog acoustic communication honoree, ISBE 2014
- Sawyer lecture, UCLA, 2011
- Harold Weintraub Chair in Biological Sciences, 2010 -

• Distinguished lecture, Champalimaud Neuroscience Programme, 2010
• Lenfest award, Columbia University 2009
• Kravitz lecture, Neurobiology, Marine Biological Laboratory 2008
• HHMI Professor 2002 – 2006; 2006 - 2010; 2010 -
• Heyman Center Award for distinguished service to the Core Curriculum 2007
• Forbes lectureship, the Grass Foundation and the MBL 2003
• Arbas lectureship, University of Arizona 2002
• Society for Neuroscience, Special Lecturer 2001
• Society for Neuroethology, Plenary Lecturer 2001
• University of Arizona, Dist. Lecturer in Developmental Neuroscience 1999
• Scholar-in-Residence, Smithsonian Tropical Research Station, BCI, Panama 1999
• Javits Neuroscience Investigator Award, NIH 1995 - 2002
• Phi Beta Kappa Visiting Scholar 1996-97
• Society for Neuroscience, Special Lecturer 1995
• University of Southern California, Distinguished Lecturer in Neuroscience 1995
• University of Florida at Tallahassee, the Rushton Lectures 1993
• Society for Developmental Psychobiology, Wiley Distinguished Lecturer 1992
• Fellow, American Association for the Advancement of Science 1989
• Williams College, Class of 1866 Lectureship 1989
• Society for Neuroscience, Presidential Symposium 1988
• Wellesley College, Mayer Lectureship 1988
• Dalhousie University, Soc. Neuroscience Chapter Lecturer 1987
• Javits Neuroscience Investigator Award, NIH 1988 - 1995
• Vanderbilt University, Kennedy Lectureship 1982
• Research Career Development Award, NIH 1981 - 1986
• Alfred P. Sloan Foundation Research Fellowship in Neuroscience 1978 - 1981
• NIH Post-doctoral Fellowship 1975 - 1977
•Rockefeller Scholar, the ARCS Foundation 1974
•National Science Foundation Graduate Fellowship 1970 - 1973
•Danforth Foundation Graduate Fellowship 1970
•Grace Potter Rice Graduate Fellowship, Barnard College 1970
•A.B. magna cum laude, Phi Beta Kappa 1970

SCIENTIFIC ADVISORY BOARDS, CONSULTANCIES, TRUSTEESHIPS, CHAIRS

2020 Scientific Advisory Board Member, Champalimaud Institute for the Unknown*
2016 Scientific Advisory Board of the Max Planck Research Unit for Neurogenetics*
2015 Advisory Board in the Life Sciences, University of the People*
2014 Consultant, Smart Courses Project, Gates Foundation
2014, 2015 Consultant, Tribeca Film Institute, Sloan Foundation project on science in films
2012 Consultant on science education for Smolny College, St. Petersburg, Russia
2012 - 2016 Board of Trustees, American Association of Colleges and Universities
2011 Review of junior faculty, Champalimaud Neuroscience Programme, Instituto Gulbenkian de Ciencia
2010 Review of science programs, Fordham University at Rose Hill
2010 Review of Interdisciplinary Graduate Program in Neuroscience, Univ. of Arizona
2010 Review of Graduate Program in Neuroscience, Harvard University Medical School

2008 Review of science curriculum, The Dalton School
2007 - 2011 Board of Trustees, The Grass Foundation; Chair, Investment Committee
2007 Board of Trustees, Talking Science; the Science Friday Initiative
2007 Review of Behavioral Neuroscience, U. Penn.
2006 - 2018 Board of Trustees, The Wenner Gren Foundation
2006 Review of Biology Department, Boston College
2006 Review of Honors Program, Yeshiva College
2005 - 2009 External Advisory Board, Center for Behavioral Neuroendocrinology, Atlanta
2003 Chair, Gordon Research Conference on Hormones and Development
2001 Scientific Advisory Board, COBRE, University of Puerto Rico
2000 - Scientific Advisory Board, RCMI, City University of New York
1991 -2005 Sherman Fairchild Foundation, Scientific Consultant
2000,2006 Review of Programs in Neuroscience, University of Pennsylvania
1997 Review of Programs in Neuroscience, UCLA
1994 - 2000, 2005 Sloan Foundation, Research Fellowships in Neuroscience Review Panel
1991 - 1998 Department of Ecology and Evolutionary Biology, Princeton University
1989 - 1990 Rutgers University, Institute for Research on Animal Behavior
1983 - 1987 Hereditary Disease Foundation

EDITORIAL

Editorships

2014 - 2019 eNeuro, reviewing editor
1986 - Journal of Neurobiology, Co-Editor (now Developmental Neurobiology)*
1986 -1991 Editorial Committee, Annual Reviews of Neuroscience
1983 -1985 Journal of Neurobiology, Editorial Board
1983 -1985 Trends in Neuroscience, Journal Club Board
1981 -1986 Developmental Psychobiology, Editorial Board

Guest Editorships

1984 Steroid hormones as Trophic Agents in Neural Development in Journal of Neurobiology
2002 Neurobiology of Behaviour (with M. Srinivasan) in Current Opinion in Neurobiology
2012 *Xenopus* as an Experimental Model System for Developmental Neuroscience (with H. Cline) in Developmental Neurobiology

SCIENCE IN THEATER, FILM AND RADIO; PUBLIC TALKS

2015 Faces and Voices: How your brain decodes identity. Raising the Bar
2015 Science Cafe sponsored by BioBus and BioBase
2014 Music, Emotion and the Brain: Raising the Bar http://rtbevent.com/
2013 Music and the Brain; The Fly Room Project, Imagine Film Festival
2011 Awards Committee, Student Grand Jury Prize, Tribeca Film Festival; juror and panelist Imagine Science Film Festival
2010 Radio: Science Friday http://www.sciencefriday.com/program/archives/201002121
2010 Panelist, The Discovery Process, Sundance Film Festival
2008 Tribeca Film Institute-Sloan Screenplay Development Program

2008	Advisor and panelist, Imagine Film Festival http://www.filmannex.com/movie/what-is-a-scientist/5255
2005	Panelist, Hamptons International Film Festival
2005	TFI Sloan Science Summit panelist
2004 -	Sloan project, Ensemble Studio Theater*

FEDERAL AND OTHER ADVISORY PANELS

2015, 2016	T32 Review panel NINDS
2014	SRB-M (87) Study Section, Chair, NINDs; T32 reviews for NIGMS and NINDS
2013	T32 Review Panel NIA
2013	R25 review panel NICHS
2013	R24 review panel NINDS
2012	T32 Review Panel, NICHHD
2012	NSF Activation 1 Preproposal review panel
2008 - 10	T32 Review Panel, Joint Institute Program in Neuroscience
2007 - 10	Ad hoc reviewer NICHHD T32 review panel
2007	Member, CCLI review, NSF
2004	Member, T90 training grant review panel (NIH)
2004 - 5	Ad hoc reviewer NICDD review panel
2003	Scientific Advisory Panel, Environmental Protection Agency, Atrazine
2003	EPA Workshop on Anuran Model Systems
1999	ANDP Fellows Review Panel
1995 -1999	Member, NST training grant review panel (NIH)
1996/9,2000	HHMI International Research Scholars Program
1994,98,99	HHMI predoctoral review panel
1981 -1985	Member, Biopsychology study section (NIH)

PROFESSIONAL SOCIETIES

Society for Neuroscience* American Association for the Advancement of Science*
American Society of Zoologists New York Academy of Sciences
International Society for Neuroethology* Society for Developmental Biology*
Society for Experimental Biology* Genetics Society of America*

SERVICE

<u>Columbia University</u>

<u>Department of Biological Sciences</u>

Chair Executive committee* Director of Graduate Studies MA in Biotechnology
Undergraduate Committee Neuroscience and Behavior major Finance Committee
Chair and Member, Faculty Search Committees Graduate Committee Library Committee
Designated Survivor Chair Biological Science 2020*

<u>University-wide</u>

Presidential Scholars in Neuroscience and the Humanities Advisory Committee, CU*
Search Committee, Executive Director Mind, Brain and Behavior Institute
Search Committee in Biology, Barnard College Search Committee in EEEB, CERC
Director, Doctoral Program in Neurobiology and Behavior* COSI

Policy Committee on Science and Technology
Faculty Advisory Committee, Labyrinth Books
Columbia University Animal Care Committee
University Seminar in Neurobiology, Co -Chair
Junior Faculty Review Committee
Columbia College Committee on Instruction
Chair, Natural Sciences Advisory Group
Committee on Faculty Development
Advisory Committee, The School at Columbia University
Diversity Initiative, Executive Committee
MD/PhD Advisory Committee
Vice-presidential Search Committee
Women's Center Advisory Board
Executive Committe : Grad Sch
Horowitz Prize Committee
Ch.Task Force on Mandatory Retirement
Chair General Studies Dean Search Committee
Departmental Review Committee
A&S Development Committee
Advisory Committee, E3B

Society for Neuroscience

Public Information Committee
Nominating Committee
Program Committee
Investment Committee*
Education Committee, member and Chair
Lindsley Prize Committee, member and Chair
Committee on Committees

Other Extramural

Marine Biological Laboratory 1995 - 2002, 2004 - 2007, 2015
- Trustee and Search Committee for Director
- Education and Housing Committee
- Chair, NS&B Director Search
- Chicago/MBL Planning Workshop

Howard Hughes Medical Institute
- HHMI Professors Review
- International Scholars Program Review Panel
- Predoctoral Fellowship Review Panel

International Society for Neuroethology, Council Member, Chair, Program Committee, Nominations
Association of Neuroscience Departments and Programs, Columbia Representative*
The Rockefeller University Alumni Advisory Committee
Sloan Foundation Fellowship Committee
COBRE, University of Puerto Rico
University of the People, Scientific Advisory Board*
City University of NY, RCMI Science Advisory Committee*
*current

PUBLICATIONS

Darcy B. Kelley, Irene H. Ballagh, Charlotte L. Barkan, Andres Bendesky, Taffeta M. Elliott, Ben J. Evans, Ian C. Hall, Ursula Kwong-Brown, Young Mi Kwon, Emilie Perez, Heather Rhodes, Avelyne Villain, Ayako Yamaguchi, Erik Zornik (2020) Generation, coordination and evolution of neural circuits for vocal communication. Journal of Neuroscience, 40, 22 – 36.

Ian C. Hall and Darcy B. Kelley (2020) Endocrine modulation of acoustic communication;

Xenopus laevis as a model system. In Endocrine Regulation of Animal Vocalization. F. Hoffmann and Werner Kloas, Eds. Elsevier.

Ursula Kwong-Brown, Martha L. Tobias, Damian O. Elias, Ian C. Hall, Coen P.H. Elemans, Darcy B Kelley (2019) The return to water in ancestral *Xenopus* was accompanied by a novel mechanism for producing and shaping vocal signals. eLife 2019;8:e39946. DOI: https://doi.org/10.7554/eLife.39946

Barkan, C.L, Kelley, D.B. and Zornik, E. (2018). Premotor neuron evolution reflects divergent vocal behaviors, Journal of Neuroscience, 38, 5325 – 5327.
Read reviews of this work in Nature, Science, and Journal of Neuroscience.

Barkan, C.L., Zornik, E. and Kelley, D.B. 2017. Evolution of vocal patterns: retuning hindbrain circuits during species divergence. Journal of Experimental Biology. 220: 856-867; doi: 10.1242/jeb.146845

Kelley, D.B., Elliott, T.M., Evans, B.J., Hall, I.C., Leininger. E.C., Rhodes, H.J., Yamaguchi, A. and Zornik.E. 2017. Probing forebrain to hindbrain circuit functions in *Xenopus. Genesis* 55 DOI 10.1002/dvg.22999

Zornik, E., and Kelley, D.B. 2016 Hormones and vocal systems: Insights from *Xenopus.* In: Pfaff, D.W and Joëls, M. (editors-in-chief), Hormones, Brain, and Behavior 3rd edition, Vol 2. Oxford: Academic Press; 2017. pp. 131–144.

Hall, I.C., Kwong-Brown, U., Woolley, S.M.N and Kelley, D.B. 2016. Sex differences and endocrine regulation of auditory-evoked, neural responses in African clawed frogs (*Xenopus*). J. Comp. Physiol. A, *202*, 17-34.

Evans, B., Carter, T, Greenbaum,E., Gvoždík, V., Kelley, D.B., McLaughlin, P.J., Pauwels, O., Portik, D., Stanley, E., Tinsley, R., Tobias, M., and Blackburn, D. 2015. Genetics, morphology, advertisement calls, and historical records distinguish six new polyploid species of African clawed frog (*Xenopus*, Pipidae) from West and Central Africa. PLoSOne. 10.12: e0142823.

Albersheim-Carter, J., Blubaum, A., Ballagh, I., Missaghi, K., Siuda, E.R., McMurray, G., Bass, A.H., Dubuc, R., Kelley, D.B., Schmidt, M.F., Wilson, R. J.A., and Gray, P.A. 2015 Testing the evolutionary conservation of vocal motoneurons in vertebrates. Respiratory Physiology and Neurobiology. DOI: http://dx.doi.org/doi:10.1016/j.resp.2015.06.010

Leininger, E.C. and Kelley, D.B. 2015. Evolution of courtship songs in *Xenopus*; vocal pattern generation and sound production. Cytogenetic and Genome Research. DOI:10.1159/000433483

Leininger, E.C., Kitayama, K. and Kelley, D.B. 2015. Species-specific loss of sexual dimorphism in vocal effectors accompanies vocal simplification in African clawed frogs (*Xenopus).* Journal of Experimental Biology, 218, 849 - 857.

Tobias, M.L., Korsh, J. and Kelley, D.B. 2014. Evolution of male and female release calls in *Xenopus*, Behaviour, 148, 519 - 549.

Sweeney, L.S. and Kelley, D.B. 2014. Harnessing vocal patterns for social communication. Current Opinion in Neurobiology 28: 34 - 41.

Hall, I., Ballagh, I. and Kelley, D.B. 2013. The *Xenopus* amygdala mediates socially appropriate vocal communication signals. J. Neurosci. 33: 14543 - 14548.

Leininger, E.C. and Kelley, D.B. 2013. Distinct neural and neuromuscular strategies underlie independent evolution of simplified advertisement calls. Proc. R. Soc. B, *7 April* 280 no. 1756: 20122639

Nasipak, B.T. and Kelley, D.B. 2012. Developing laryngeal muscle of *Xenopus laevis* as a model system; androgen-driven myogenesis controls fiber type transformation. Devel. Neurobiol. 72, 664 - 675.

Tobias. M.T., Kelley, D.B. and Evans, B.J. 2011. Evolution of advertisement calls in African clawed frogs. Behaviour, 148, 519 – 549.

Elliott, T.M., Christensen-Dalsgaard, J., and Kelley, D.B. 2011. Temporally selective processing of communication signals by auditory midbrain neurons, J. Neurophysiol., 105, 1620 – 1632.

Zornik, E. and Kelley, D.B. 2011 Neuroendocrine basis for the hierarchical control of frog courtship vocalizations. Frontiers in Neuroendocrinology. 32, 353–366

Evans, B.J., Greenbaum, E, Kusamba C., Carter,T.F., Tobias. M. L. Mendel, S.A. and Kelley, D.B. 2011 Description of a new octoploid frog species (Anura: Pipidae: *Xenopus*) from the Democratic Republic of the Congo, with a discussion of the biogeography of African clawed frogs in the Albertine Rift. J. Zoology. 283, 276 - 290.

Kelley, D.B. 2010 Science for All in a Core Curriculum. In Science and the Educated American: A Core Component of a Liberal Education. Pp. 218 – 227. Project, Jerold Meinwold and John Hildebrand. American Academy of Arts and Sciences Physics for Future Presidents Ed. Richard A. Muller ISBN#: 0-87724-088-4

Kelley, D.B. and Bass, A.H. 2010 Neurobiology of vocal communication: mechanisms for sensorimotor integration and vocal paterning. Current Opinion in Neurobiology, 20, 748 – 753.

Tobias, M.L., Kelley, D.B., Yin, D. Korsch, J. and Corke, A. 2010. Vocal competition in male *Xenopus laevis*. Behav. Ecol. and Sociobiol., 65: 1791 -1803.

Yang, E.-J. and Kelley, D.B. 2009. Hormones and the regulation of vocal patterns in amphibians: *Xenopus laevis* vocalizations as a model system. In Hormones ,Brain and

Behavior, D. Pfaff, A. Arnold, A. Etgen, S. Fahrbach and R. Rubin (Eds), Academic Press, Vol. 2, 693 – 705.

Evans, B.J., Carter, T., Tobias, M.L. and Kelley, D.B. 2008. A new species of clawed frog (genus *Xenopus*), from the Itombwe Plateau, Democratic Republic of the Congo: implications for DNA barcodes and biodiversity conservation. Zootaxa, 1780: 55 -68.

Baur, L., Nasipak, B.T. and Kelley, D.B. 2008. Sexually differentiated, androgen-regulated, larynx-specific myosin heavy chain isoforms in *Xenopus tropicalis* and *Xenopus laevis*. Development, Genes and Evolution, 218, 371 - 179/

Nasipak, B.T. and Kelley, D.B. 2008. The genome of the diploid anuran *Xenopus tropicalis* contains a novel array of sarcoplasmic Myosin Heavy Chain genes expressed in larval muscle and larynx. Development, Genes and Evolution, 218, 389 - 397.

Zornik, E. and Kelley, D.B. 2008. Regulation of respiratory and vocal motor pools in the isolated brain of *Xenopus laevis* J. Neurosci., 28, 612 - 621.

Elliott, T.M., Christensen-Dahlsgaard, J. and Kelley, D.B. 2007. Tone and call responses of units in the auditory nerve and dorsal medullary nucleus of *Xenopus laevis*. J. Comp. Physiol. 193, 1243 - 1257.

Yang, E-J., Nasipak, B.Y. and Kelley, D.B. 2007. Direct action of gonadotropin in brain integrates behavioral and reproductive functions. PNAS, 104, 2477 - 2482.

Vignal, C. and Kelley, D. 2007. Significance of temporal and spectral acoustic cues for sexual recognition in *Xenopus laevis*. Proceedings of the Royal Society B, 274, 479 - 488.

Elliott, T.M. and Kelley, D.B. 2007. Male discrimination of receptive and unreceptive female calls by temporal features. J Exp Biol. 210, 2836-42.

Zornik, E. and Kelley, D.B. 2007. Breathing and calling: neuronal networks in the *Xenopus laevis* hindbrain. J. Comp. Neurol., 501, 303 - 315.

Moore, F., Boyd, S. and Kelley, D.B. 2005. Historical perspective: hormonal regulation of behaviors in amphibians. Hormones and Behavior 28, 273 – 283.

Evans, B.J., Kelley, D.B., Melnick, D.J. and Canatella, D.C. 2005. Evolution of RAG-1 in polyploid clawed frogs. Molecular Biology and Evolution, 22, 1193 - 1207.

Kelley, D.B. 2004. Vocal communication in frogs. Current Opinion in Neurobiology. 14, 1-7.

Tobias, M.L., O'Hagan, R., Horng, S.H. and Kelley, D.B. 2004. Vocal communication between male *Xenopus laevis*; behavioral context and sexual state. Animal Behavior. 67, 353 – 365.

Evans, B.J., Kelley, D.B., Tinsley, R.C., Melnick, D.J. and Canatella, D.C. 2004. A mitochondrial phylogeny of African clawed frogs: phylogeography and implications for polyploid evolution. Molecular Phylogenetics and Evolution, 33, 197 – 213.

Yamaguchi, A., Kaczmarek, L. and Kelley, D.B. 2003. Functional specialization of male and female motoneurons. J. Neurosci., 23, 11568- 11576.

Wu, K.H., Tobias, M.T., and Kelley, D.B. 2003. Estrogen receptor expression in laryngeal muscle in relation to estrogen dependent increases in synaptic strength. Neuroendocrinology, 78:72-80.

Wu, K.H., Tobias, M.T., Thornton, J.W. and Kelley, D.B. 2003. Estrogen receptors in *Xenopus:* Duplicate genes, splice variants, and tissue-specific expression. Gen. Comp. Endocrinol.133:38-49.

Brahic, C.J. and Kelley, D.B. 2003. Vocal circuitry in *Xenopus laevis*; telencephalon to laryngeal motor neurons. J. Comp. Neurol. 464:115-30.

Kelley, D.B. and Brenowitz, E. 2002. Hormonal influences on courtship behavior. In Behavioral Endocrinology, 2nd Ed. Becker, J., Breedlove, S.M., Crews, D. and McCarthy, M. (Eds), MIT Press, 289 - 325.

Yamaguchi, A. and Kelley, D.B. 2002. Hormonal mechanisms of acoustic communication. In Acoustic Communiucation, A. Megala-Simmons, A. Popper and R. Fay, Eds. Springer Verlag, New York. 275 - 323.

Kelley, D.B. 2002. Hormonal regulation of motor output in amphibians*; Xenopus laevis* vocalizations as a model system. In Hormones, Brain and Behavior, D. Pfaff, A. Arnold, A. Etgen, S. Fahrbach and R. Rubin (Eds), Academic Press, Vol. 2, 445 - 468.

Kelley, D. B. and Tindall, D.W. 2002. Model systems for the study of androgen regulated gene expression in the central nervous system, In Hormones, Brain and Behavior, D. Pfaff,A. Arnold, A. Etgen, S. Fahrbach and R. Rubin (Eds), Academic Press, 527 - 538.

Breedlove, M, Jordan, C. and D.B. Kelley 2002. What neuromuscular systems tell us about hormones and behavior. In Hormones, Brain and Behavior, D. Pfaff,A. Arnold, A. Etgen, S. Fahrbach and R. Rubin (Eds), Academic Press, 193 - 221.

Edwards, C. and Kelley, D.B. 2001. Auditory and lateral line inputs to the midbrain of an aquatic anuran: neuroanatomical studies in *Xenopus laevis*. J. Comp. Neurol., 438, 148 - 162.

Kelley, D.B. 2001. Is song special? Neuron, 31, 508 - 510.

Wu, K.H., Tobias, M.L. and Kelley, D.B. 2001. Estrogen and laryngeal synaptic strength in

Xenopus laevis; opposite effects of acute and chronic exposures. Neuroendocrinology 74: 22 - 32.

Kelley, D.B., Tobias, M.L. and Horng, S. 2001. Producing and perceiving frogs songs; dissecting the neural bases for vocal behaviors in *Xenopus laevis*. In Anuran Communication, M. Ryan (Ed), Smithsonian Institution Press, pp. 156 - 166.

Yamaguchi A., Kaczmarek L.K., Kelley D.B. 2000. Intrinsic membrane properties of laryngeal motoneurons that control sexually differentiated vocal behavior in African clawed frogs, *Xenopus laevis*. Biol Bull. 199: 175-6.

Yamaguchi, A. and Kelley, D.B. 2000. Generating sexually differentiated vocal patterns: laryngeal nerve and EMG recordings from vocalizing male and female African clawed frogs (*Xenopus laevis*). J. Neurosci., 20: 1559 - 1567.

Kay, J.N, Hannigan, P. and Kelley, D.B. 1999. Trophic effects of androgen: Development and hormonal regulation of neuron number in a sexually dimorphic vocal motor nucleus. J. Neurobiol., 40, 375 - 385.

Kelley, D.G. and Tobias, M.L. 1999 The vocal repertoire of *Xenopus laevis*. In The Design of Animal Communication, M. Hauser and M. Konishi, Eds., MIT Press, Cambridge, pp 9 - 35.

Edwards, C.J., Yamamoto, K., Kikuyama, S. and Kelley, D.B. 1999. Prolactin opens the sensitive period for androgen regulation of a larynx-specific myosin heavy chain gene. J. Neurobiol, 41: 443 - 451.

Tobias, M., Tomasson, J. and Kelley, D.B. 1998. Attaining and maintaining strong vocal synapses in female *Xenopus laevis*, J. Neurobiol., 37, 441 - 448.

Thornton, J. and Kelley, D.B. 1998. Evolution of the androgen receptor: structure-function implications. BioEssays, 20, 860 - 869.

Tobias, M.L.,Viswanathan, S. and Kelley, D.B. 1998. Rapping, a female receptive call, initiates male/female duets in the South African clawed frog, Proc. Natl. Acad. Sci., 95:1870 - 1875.

Evans, B., Morales, J., Picker, M., Melnick, D. and Kelley, D.B. 1998. Behavioral, morphological and molecular analyses of a putative hybrid zone: absence of introgression between the endangered Cape clawed frog, *Xenopus gilli*, and the South African clawed frog, *Xenopus laevis laevis*, in the South-western Cape Province, South Africa,Copeia,1998 (2), 504 - 509.

Ruel, T., Kelley, D. and Tobias, M. 1998. Facilitation at the sexually differentiated laryngeal synapse of *Xenopus laevis*, J. Comp. Physiol., 182, 35 - 42.

Kelley, D. 1997 Generating sexually differentiated songs. Current Opinion in Neurobiology, 7, 839 - 843.

Pérez, J. and Kelley, D.B. 1997. Androgen mitigates axotomy-induced decreases in calbindin expression in motoneurons, J. Neurosci., 17: 7396-7403.

Evans, B., Morales, J., Picker, M., Kelley, D.B and Melnick, D.1996. Comparative molecular phylogeography of two *Xenopu*s species, *X. gilli* and *X. laevis*, in the South-western Cape Province, South Africa. Molecular Ecology, 6:333-343.

Pérez, J. and Kelley, D. 1996. Trophic effects of androgen: receptor expression and the survival of laryngeal motor neurons after axotomy, J. Neurosci. 16: 6625 - 6633.

Cohen, M. and Kelley, D. 1996. Androgen induced proliferation in the developing larynx of *Xenopus laevis* is regulated by thyroid hormone, Dev. Biol, 178, 113 - 123.

Pérez J., Cohen, M.A. and Kelley, D.B. 1996. Androgen receptor mRNA expression in *Xenopus laevis* CNS; Sexual dimorphism and regulation in the laryngeal motor nucleus. J. Neurobiol., 30, 556 - 568.

Robertson, J. and Kelley, D. 1996. Thyroid hormone controls the onset of androgen sensitivity in the developing larynx of *Xenopus laevis*, Dev. Biol.,176, 108 - 123.

Kelley, D. 1996. Sexual differentiation in *Xenopus laevis*. In: The Biology of *Xenopu*s, R.Tinsley and H. Kobel (Eds), Oxford University Press, Oxford, pp 143 - 176.

Kang, L., Marin, M. and Kelley , D. 1995. Androgen biosynthesis and secretion in developing *Xenopus laevis*, Gen. Comp. Endocrinol., 100, 293 - 307.

Tobias, M. and Kelley, D.B. 1995. Sexual differentiation and endocrine regulation of the laryngeal synapse in *Xenopus laevis*, J. Neurobiol., 28, 515 - 526.

Catz, D., Fischer, L. and Kelley, D. 199. Androgen regulation of a laryngeal-specific myosin heavy chain isoform whose expression is sexually differentiated, Dev. Biol., 171, 448 - 457.

Fischer, L., Catz, D.and Kelley, D. 1995. Androgen-directed development of the *Xenopus laevis* larynx: control of androgen receptor expression and tissue differentiation, Dev. Biol., 170, 115 - 126.

Tobias, M., Kelley, D. and Ellisman, M. 1995. A sex difference in synaptic efficacy at the laryngeal neuromuscular junction of *Xenopus laevis*, J. Neurosci., 15, 1660 - 1668.

Robertson, J., Watson, J. and Kelley, D. 1994. Androgen directs sexual differentiation of laryngeal innervation in developing *Xenopus laevis*, J. Neurobiol., 25, 1625 - 1636.

Watson, J., Robertson, J., Sachdev, U. and Kelley, D. 1993. Laryngeal muscle and motor neuron plasticity in *Xenopus laevis*: Analysis of a sensitive period for testicular masculinization of a neuromuscular system, J. Neurobiol. 24, 1615 - 1625.

Fischer, L., Catz, D. and Kelley, D. 1993. An androgen receptor mRNA isoform associated with hormone-induced cell proliferation, PNAS, 90, 8254 - 8258.

Kelley, D.B. 1993. The role of androgenic steroids in the sexual differentiation of the nervous system. In The Extraordinary Brain I. Neurobiologic Aspects. A. Galaburda, Ed., Harvard University Press, pp. 21 - 42.

Tobias, M., Marin, M. and Kelley, D. 1993. The roles of sex, innervation and androgen in laryngeal muscle fibers of *Xenopus laevis*, J. Neurosci. 13, 324 - 331.

Kelley, D.B. 1992. Opening and closing a hormone-regulated period for the development of courtship song; a cellular and molecular analysis of vocal neuroeffectors. In Developmental Psychobiology. G. Turkewitz, Ed., Annals of the New York Academy of Sciences 662,178 - 188.

Watson, J., and Kelley, D. 1992. Testicular masculinization of vocal behavior in juvenile female *Xenopus laevis*: Prolonged sensitive period reveals component features of behavioral development, J. Comp. Physiol.171, 343 - 350.

Kelley, D.B. and Brenowitz, E. 1992. Hormonal influences on courtship. In : Behavioral Neuroendocrinology, J. Becker, M.Breedlove, and D. Crews, Eds., MIT Press/Bradford Books, 187 - 218.

Fischer, L. and Kelley, D. 1991 Androgen receptor expression and sexual differentiation of effectors for courtship song in *Xenopus laevis*. Seminars in the Neurosciences 3,469 - 480.

Tobias, M.L., Marin, M., and Kelley D.B. 1991a. Development of functional sex differences in the larynx of *Xenopus laevis*. Developmental Biology 147, 251 - 259.

Tobias, M.L., Marin, M., and Kelley D.B. 1991b. Temporal constraints on androgen directed laryngeal masculinization in *Xenopus laevis*. Developmental Biology 147, 260-270.

He, W., Fischer, L., Sun, S., Bilhartz, D., Zhu, X., Young, C., Kelley, D., and Tindall, D. 1990. Molecular cloning of androgen receptors from divergent species with a polymerase chain reaction technique: complete cDNA sequence of the mouse androgen receptor and isolation of androgen receptor cDNA probes from dog, guinea pig and clawed frog. Biochem. Biophys. Res. Comm. 171, 697 -704.

Marin, M., Tobias, M., and Kelley, D. 1990. Hormone -sensitive stages in the sexual differentiation of laryngeal muscle fiber number in *Xenopus laevis*. Development, 110, 703-12.

Kelley, D.B. and Dennison, J. 1990. The vocal motor neurons of *Xenopus laevis*: development of sex differences in axon number. J. Neurobiol. 21, 869 -882.

Kelley, D.B. and Hayes, M. 1990. Amphibian experimental systems: Developmental neurobiology and behavioral endocrinology in the clawed frog, *Xenopus laevis*. J. Exp. Zool. Suppl. 4, 148-149.

Kelley, D.B. and Gorlick, D. 1990. Sexual selection and the nervous system: The neurobiology of courtship and aggressive displays. Bioscience: 40, 275 -283.

Kelley, D., Sassoon, D., Segil, N. and Scudder, M. 1989. Development and hormone regulation of androgen receptor levels in the sexually dimorphic larynx of *Xenopus laevis.* Dev. Biol.131, 111 -118.

Kelley, D.B. and Tobias, M.L. 1989. The genesis of courtship song: Cellular and molecular control of a sexually differentiated behavior. In : Perspectives in Neural Systems and Behavior, T.J. Carew and D.B. Kelley, eds. A. Liss, New York. 175 -194.

Kelley, D., Fenstemaker, S., Hannigan, P. and Shih, S. 1988. The sexually dimorphic laryngeal motor neurons of *Xenopus laevis*: A quantitative Golgi study. J. Neurobiol. 19, 413 -429.

Kelley, D. 1988. Sexually dimorphic behaviors. Ann. Rev. Neurosci., W.M. Cowan, E.M. Shooter, C.F. Stevens, R.F. Thompson (Eds.), 1988, Volume 11, pp. 225 -251.

Tobias, M. and Kelley, D. 1988. Electrophysiology and dye coupling are sexually dimorphic characteristics of individual laryngeal muscle fibers in *Xenopus laevis*. J. Neurosci. 8, 2422-9.

Segil, N., Silverman, L. and Kelley, D.B. 1987. Androgen binding levels in a sexually dimorphic muscle of *Xenopus laevis*. Gen. Comp. Endocrinol. 66, 95 -101.

Gorlick, D. and Kelley, D. 1987. Neurogenesis in the vocalization pathway of *Xenopus laevis*. J. Comp. Neurol. 257, 614 -627.

Kelley, D.B., Weintraub, A.S. and Bockman, R.S. 1987. Oviductal prostaglandin synthesis and female sexual receptivity in *Xenopus laevis*. In : Advances in Prostaglandin, Thromboxane and Leukotriene Research, Vol. 17B, B. Samuelsson, R. Paoletti and P. Ramwell (Eds.), Raven Press, New York, pp. 1133 -1135.

Tobias, M. and Kelley, D. 1987. Vocalizations of a sexually dimorphic isolated larynx: Peripheral constraints on behavioral expression. J. Neurosci. 7, 3191 -3197.

Sassoon, D., Gray, G. and Kelley, D. 1987. Androgen regulation of muscle fiber type in the sexually dimorphic larynx of *Xenopus laevis*.J. Neurosci. 7, 3198 -3206.

Sassoon, D., Segil, N. and Kelley, D.B. 1986. Androgen -induced myogenesis and chondrogenesis in the larynx of *Xenopus laevis* . Dev. Biol. 113, 135 -145.

Roy, E.J., Wilson, M.A. and Kelley, D.B. 1986. Estrogen -induced progestin receptors in the brain and pituitary of the South African clawed frog, *Xenopus laevis*. Neuroendocrinol. 42, 51-56.

Simpson, H. Blair, Tobias, Martha L. and Kelley, Darcy B. 1986. Origin and identification of fibers in the cranial nerve IX -X complex of *Xenopus laevis*: Lucifer Yellow backfills in vitro. J. Comp. Neurol. 244, 430-444.

Dworkin -Rastl, E., Kelley, D.B. and Dworkin, M. 1986. Localization of specific mRNA sequences in *Xenopus laevis* embryos by *in situ* hybridization. J. Embryol. Exper. Morphol. 91, 153-168.

Gorlick, D. and Kelley, D. 1986. The ontogeny of androgen receptors in the CNS of *Xenopus laevis*. Dev. Brain Res. 26, 193-201.

Kelley, D.B. 1986. Neuroeffectors for vocalization in *Xenopus laevis*: hormonal regulation of sexual dimorphism. J. Neurobiol. 17, 231 -248.

Hannigan, P. and Kelley, D. 1986. Androgen-induced alterations in vocalizations of female *Xenopus laevis*; Modifiability and constraints. J. Comp. Physiol. A 158, 17 -528.
Kelley, D. 1986. A motor theory of song perception. TINS 9, 149-150.

Sassoon, D. and Kelley, D. 1986. The sexually dimorphic larynx of *Xenopus laevis*: development and androgen regulation. Am. J. Anat. 177, 457 -472.

Bass, A., Segil, N. and Kelley, D. 1986. A steroid-sensitive electromotor pathway in mormyrid fish: autoradiography and receptor biochemistry. J. Comp. Physiol. 159, 535 -544.

Kelley, D. 1986. Genesis of male and female brains. TINS 9, 499-502.

Wetzel, D., Haerter, U. and Kelley, D. 1985. A proposed efferent pathway for mate calling in South African clawed frogs, *Xenopus laevis*: tracing afferents to laryngeal motor neurons with HRP -WGA. J. Comp. Physiol. A. 157, 749 -761.

Weintraub, A., Kelley, D.B. and Bockman, R.S. 1985. Prostaglandin E2 induces receptive behaviors in female *Xenopus laevis*. Horm. Behav.. 19, 386 - 399.

Gorlick, D., Kelley, D. and Constantine-Paton, M. 1984. A 1 4 C-2 -deoxyglucose autoradiographic investigation of sensory inputs to the optic tectum of *Rana pipiens* . J. Comp. Physiol. 55, 617-624.

Kelley, D. 1983. Sex electric: hormone action in fish. TINS 6, 247 -249.

Wetzel, D. and Kelley, D. 1983. Androgen and gonadotropin control of the mate calls of male South African clawed frogs, *Xenopus laevis*. Horm. Behav. 17, 388 -404.

Kelley, D. 1982. Hormone control of female sex behavior in South African clawed frogs, *Xenopus laevis*. Horm. Behav. 1, 158-174.

Nottebohm, F., Kelley, D.B. and Paton, J. 1982. Projections to vocal control areas of the canary telencephalon. J. Comp.Neurol. 207, 344 -357.

Paton, J., Kelley, D., Sejnowski, T. and Yodlowski, M. 1982. Mapping the auditory CNS of *Xenopus laevis* with 2 -deoxyglucose autoradiography. Brain Res. 249, 15 -22.

Erulkar, S., Kelley, D.B., Jurman, M., Zemlan, F., Schneider, G.and Krieger, N. 1981. The modulation of the neural control of the clasp reflex in male *Xenopus laevis* by androgens. PNAS (USA)78, 5876 -5880.

Kelley, D.B. 1981. Social signals: an overview. Am. Zool.21, 111 -116.

Kelley, D.B. 1981. Locations of androgen-concentrating cells in the brain of *Xenopus laevis:* Autoradiography with 3H-dihydrotestosterone. J. Comp. Neurol. 199, 221 -231.

Reingold, S., Sejnowski, T., Gelperin, A. and Kelley, D.B. 1981. [3H] -2 -deoxyglucose autoradiography in a molluscan nervous system. Brain Res. 208, 416 -420.

Kelley, D.B. 1980. Auditory and vocal nuclei of frog brain concentrate sex hormones. Science 207. 553 -555.

Wetzel, D., Kelley, D.B. and Campbell, B.A. 1980. Central control of ultrasonic vocalizations in neonatal rats: Brainstem motor nuclei. J. Comp. Physiol. Psychol. 94, 596 -605.

Sejnowski, T., Reingold, S., Kelley, D.B. and Gelperin, A. 1980. Localization of [3 H] -2 -deoxyglucose in single molluscan neurons. Nature 287, 449 -451.

Kelley, D.B. and Nottebohn, F. 1979. Projections of a telencephalic auditory nucleus - Field L - in the canary. J.Comp. Neurol. 183, 455 -470.

Kelley, D.B., Lieberburg, I., McEwen, B.S. and Pfaff, D. 1978. Autoradiographic and biochemical studies of steroid hormone-concentrating cells in the brain of *Rana pipiens*. Brain Res. 140, 287 -305.

Kelley, D.B. and Pfaff, D.W. 1978. Generalizations from comparative studies on neuroanatomical and endocrine mechanisms of sexual behavior. In Biological Determinants of Sexual Behavior. J.B. Hutchison, ed. John Wiley and Sons, Chichester, 225 -254.

Kelley, D. 1978. Neuroanatomical correlates of hormone-sensitive sex behaviors in frogs

and birds. In Developmental and Evolutionary Aspects of Brain - Hormone Interactions. G. Callard, ed., Am. Zool. 18:477 -488.

Kelley, D.B. and Pfaff, D.W. 1976. Hormone effects on male sex behavior in adult South African clawed frogs, *Xenopus laevis*. Hormones and Behavior 7, 159 -182.

Kelley, D.B., Morrell, J.I. and Pfaff, D.W. 1975. Autoradiographic localization of hormone -concentrating cells in the brain of an amphibian, *Xenopus laevis*. I.Testosterone. J. Comp. Neurol. 164: 63 -78.

Morrell, J.I., Kelley, D.B. and Pfaff, D.W. 1975. Autoradiographic localization of hormone-concentrating cells in the brain of an amphibian, *Xenopus laevis*, II.Estradiol. J.Comp. Neurol. 164, 63 -78.

Morrell, J.I., Kelley D. and Pfaff, D. 1975. Sex steroid binding in the brain of vertebrates: Studies with light microscopic autoradiography. In The Ventricular System in Neuroendocrine Mechanisms, Proceedings of the Second Brain-Endocrine Interaction Symposium. K.M. Knigge, D.E. Scott and M.Kobayashi, eds. Karger, Basel, 230 -256.

Malsbury, C., Kelley, D. and Pfaff, D. 1972. Responses of single units in the dorsal midbrain to somatosensory stimulation in female rats. Endocrinology, Proceedings of the Fourth International Congress of Endocrinology Excerpta Medica, Amsterdam, 205 -209

RECENT SEMINARS AND INVITED LECTURESHIPS (see also: INVITED SYMPOSIA, PLENARY AND KEYNOTE LECTURES) Postponed Covid-19

2018 – 2020
Cornell University 8/27/20. Neurobiology and Behavior R. Ragusa Host Zoom Seminar
International Xenopus Meeting, Portsmouth UK rescheduled 2021
University of Texas at Austin rescheduled March 2021
UCSF rescheduled 2021
Galambos Lecture, UCSD
Gordon Conference Neural Mechanisms of Acoustic Communication rescheduled 2021
Gordon Conference Auditory System rescheduled 2021
Computational Neuroethology currently meeting via Zoom
University of North Carolina
NXRET Meeting, MBL
CSHL *Xenopus* course lecture
International Xenopus Meeting, Seattle,
International Congress of Neuroethology, Brisbane, Australia
CPG Satellite Meeting, Baines Marine Station, University of Auckland, New Zealand
Princeton University
University of Delaware
Marine Biological Laboratory, Neural Systems and Behavior
Case Western Reserve University, Biology Department

2014 – 2017
Georgia State University, Distinguished Lecture, Brain and Behavior Program
University of Chicago, Graduate Student Invitee, Committee on Neurobiology
Grass Fellows Program, Marine Biological Laboratory
Brooklyn College, Biological Sciences
Smith College, Biology and Psychology
University of Minnesota, Neuroscience
John Hopkins University, Graduate Student Invitee, Neuroscience
Marine Biological Laboratory

2010 – 2013
USC, Neuroscience Program
Dalhousie University, Neuroscience Program
Retreat, Champalimaud Neuroscience Programme, Instituto Gulbenkian de Ciencia
UCLA, Sawyer lecture
Fowler Symposium, the Florida State University
Columbia University, Department of Neuroscience
Columbia University, Department of Ecology, Evolution and Environmental Biology

2007 -2009
University of Montana, Bozeman
Wake Forest University
Davidson College
Rochester Institute of Technology
University of Illinois at Champaign-Urbana

2003 - 2006
Washington University
University of British Columbia
Cornell University
Stanford
UCSF
UC Berkeley
UCSD
University of Missouri, Columbia University
Columbia University, Department of Physiology and Cellular Biophysics
University of California, Irvine
Forbes lectures, Marine Biological Laboratory (Grass Foundation)
North Carolina State University, Keck Center for Behavioral Biology
University of Chicago, Committee on Neurobiology
Queens College

2000 - 2002
Indiana University, Systems Neuroscience and Neuroethology
Harvard University, Neurobiology Department
Arbus lecture, University of Arizona

University of Pennsylvania, Program in Neuroscience
Skirball Institute, NYU Medical School
Georgetown University, Neuroscience Program
NYU, Department of Biological Sciences
Emory University, Department of Neuroscience, Graduate Student Invitee
NYU, Seminar on developmental cognitive neuroscience
Columbia, Department of Physiology
Purdue University, Neuroscience
UC Davis, Biology
Columbia University, Center for Neurobiology and Behavior
Fordham University, Biology
Marine Biological Laboratory, Neurobiology and Behavior Course
Marine Biological Laboratory, Computational Neuroscience Course
City University of New York, Biology
University of British Columbia, Neuroscience
Bowdoin College, Biology
Weil Medical College of Cornell University, Endocrine Grand Rounds

1997 - 1999
University of Arizona, Distinguished Lecturer in Developmental Neurobiology
University of Maryland, College Park
Smithsonian Tropical Research Station, Visiting Scholar
Marine Biological Laboratory, Computational Neuroscience Course
University of California at Davis, Biology Department
University of Oregon, Neuroscience Department
Oregon State University, Zoology Department
Swarthmore College, lecture series on "Communication in Biological Systems"
Columbia Univ., Graduate School of Arts and Sciences, Dean's Distinguished Lecture
The Rockefeller University, Neurobiology of Learning and Memory Course
Marine Biological Laboratory, Computational Neuroscience Course
University of Virginia, Biological Sciences
Case Western Reserve University, Depts of Neuroscience, Biological Sciences
New York University, Center for Neural Science
Smith College, Neuroscience and Behavior
Farleigh Dickenson University, Department of Biology
Lehman College, Department of Biology
University of Maryland School of Medicine, Department of Neurobiology
Phi Beta Kappa Visiting Scholar University of Iowa
Phi Beta Kappa Visiting Scholar Coe College
1995 - 1996
Purdue University, Keynote speaker, Neuroscience retreat
The Rockefeller University
Phi Beta Kappa Visiting Scholar University of Delaware and Villanova University
University of Washington, Bloedel Center
Society for Neuroscience, Special Lecture
Salk Institute for Biological Studies, Sloan Center for Theoretical Neurobiology

University of California at San Diego, Dept. of Biology
Mt. Sinai School of Medicine, Brookdale Institute for Molecular Biology
Emory University, Dept. Anatomy and Cell Biology
Dartmouth College, Department of Physiology
Center for Biomedical Research, Population Council
USC, Distinguished Lecturer in Neuroscience

1993 - 1994
Cornell University University of Pittsburgh, Neuroscience retreat speaker
University of California at San Francisco Northeastern University
Stanford University, Neuroscience retreat speaker
Marine Biological Laboratory, Neural Systems and Behavior Scholar-in-Residence
City University of New York University of Florida at Talahasee State
University of New York at Albany University of Texas at Austin
State University of New York at Buffalo New York State Psychiatric Institute
University of Colorado, Health Sciences Center, Neuroscience retreat speaker
University of Massachusetts at Amherst Indiana University

1990 - 1992
Oberlin College
Rockefeller University
Columbia University, Department of Psychology
Rutgers University
Mt. Sinai Medical School
New York University
Pennsylvania State University
University of Washington, Seattle
Cornell University Medical School
Duke University
NIH
Princeton University
New York Academy of Sciences
New York Psychoanalytical Society
Unniversity of British Columbia
Williams College
Mayo Clinic
University of Madrid

1988 -1990
University of California, San Francisco
University of California, San Diego
Wesleyan University
University of Southern California
University of Orgeon, Eugene
University of California, Riverside
University of Pittsburgh
Roche Institute for Molecular Biology
Cornell University Medical College
The Rockefeller University
Cornell University
Yale University
Bell Laboratories
Hunter College
Wellesley College
Brown University
University of Minnesota
Vassar College
Hunter College
University of Pennsylvania
College of Physicians and Surgeons, Columbia University

1986 -1987
Rockefeller University
State University of New York, Stony Brook
University of California, Los Angeles
University of Virginia
Rutgers, Newark
Vanderbilt University

American Museum of Natural History
Michigan State University
University of Colorado
Princeton University
Rutgers Brunswick
Dalhousie University
University of Chicago

1983 -1985
State University of New York, Downstate
State University of New York at Buffalo
University of Connecticut at Storrs
University of Pittsburgh
Cornell Univ. Med. College
University of California, Los Angeles
Rockefeller University
Cornell University
Harvard University
College of Physicians and Surgeons
Washington University

INVITED SYMPOSIA, PLENARY AND KEYNOTE LECTURES
2010 – 2018
17th International Xenopus Conference
International Congress of Neuroethology, Brisbane Symposium Speaker
Satellite Symposium: Patterning Neural Activity in the CNS, Leigh Marine Laboratory
Center for Behavioral Neuroscience/Sociogenomics RCN Symposium: Male-Female Interactions from Molecules to Behavior, Georgia State University 2017
NSF Workshop on Comparative Principles of Brain Architecture, San Diego, CA 2016
International Xenopus Meeting Crete 2016
Gordon Conference on Neuroethology. Lucca Italy 2015
Neural circuits controlling sexual behavior Janelia Farm Research Campus Conference 2014
Hormonal control of circuits for complex behavior HHMI Janelia Farm Research Campus Conference 2013
International Society for Neuroethology, Roots Symposium 2012
CABI Symposium, CUNY 2012
Discussant, Gordon Conference on Genes and Behavior 2012
Evolution of Neural Circuits, Cold Spring Harbor Laboratory 2011
Keynote address, Champalimaud Neuroscience Programme, 2011
UCLA, the Sawyer Lecture, 2011
The Florida State University, Fowler Symposium, 2011
Conference on sexual differentiation, brain and behavior, HHMI, Janelia Farm 2010
1998-2009
NMNH Smithsonian Institution, Senate of Scientists Speaker 2009
Indiana University Animal Behavior Conference, Plenary Speaker 2008
Maine Biomedical Symposium, Plenary Speaker 2008
SNRP meeting, New York City, Keynote address, 2008
AACU meeting on science in the liberal arts curriculum, Keynote address, 2008
Union College, Keynote Address, General Education Meeting 2004
University of Chicago, Neural Coding Workshop 2003
Gordon Conference, Hormones and Development 2003
Associacion Estudiantes Biologia, University of Puerto Rico, 2003
International Society for Neuroethology, Plenary Lecture, Bonn Congress August 2001
Gordon Conference on Metamorphosis, June 2001

The Rockefeller University, Alumni Reunion speaker May 2001
Rand Symposium, International Society of Herpetologists, 1998
1990 - 1997
No-Coast-Nerve-Net-Meeting, Model Systems in Neuroethology, 1997
Winter Animal Behavior Conference, 1996
Yale University Center for Neurological Sciences, Neurobiology Symposium, 1995
Sexual selection and the nervous system, Int. Congress of Neuroethology, 1995
Breckenridge Conference on Steroid Hormones and Trophic Factors, 1995
Microscopy Society of America, 1994
Keystone Conference on Muscle Development, 1994
Conference on Steroid Actions on Excitable Cells, 1993
The Development of Brain Function, NYU, 1993
Dahlem Conference, Flexibility and Constraint in Behavioral Systems 1993
Biology of *Xenopus* , University of London, 1992
Conference on Vertebrate Reproductive Endocrinology, US Fisheries Commission, 1992
Society for Developmental Psychobiology, 1992
Meeting in Neural Development, 1991
University of Toronto, Neuroscience Symposium,1991
National Dyslexia Research Foundation, Scientific Research Conference,1990
1986 -1989
Int. Cong. on Prostaglandins and Related Compound Winter Conference on Brain Research
Soc. Neurosci: Neural Control of Communication Conf. on Developmental Psychobiology
1st International Cong.Neuroethology Winter Conference on Animal Behavior
2nd International Congress of Neuroethology Soc. Neurosci.- Presidential Symposium