

MICHAEL JOSEPH RYAN

Clark Hubbs Regents Professor in Zoology, University of Texas

Senior Research Associate, Smithsonian Tropical Research Institute, Panama

Mailing Address:

Department of Integrative Biology
1 University Station C0990
University of Texas
Austin TX 78712 USA

mryan@utexas.edu

(office) 512-471-5078

(fax) 512-471-3878

(section office) 512-471-5858

url: <http://www.sbs.utexas.edu/ryan/>

Education:

1977-1982	Cornell University, Neurobiology and Behavior	Ph.D.
1975-1977	Rutgers University, Zoology	M.S.
1971-1975	Glassboro State College, Biology	B.A.

Academic Honors and Awards:

2021	<i>Member Sigma Xi, The Scientific Research Honor Society</i>
2017	<i>Distinguished Animal Behaviorist, Animal Behavior Society</i>
2013	<i>Eminent Ecologist, Kellogg Biological Station, Michigan State University</i>
2012	<i>Fellow of the American Association for the Advancement of Science</i>
2011	<i>Fellow Wissenschaftskolleg (Institute for Advanced Studies), Berlin</i>
2011	<i>College of Natural Sciences Teaching Excellence Award, University of Texas</i>
2011	<i>ING Professor of Excellence, University of Texas</i>
2010	<i>E.O. Wilson Naturalist Award, American Society of Naturalists</i>
2008	<i>Joseph Grinnell Medal, Museum of Vertebrate Zoology, Univ. Calif., Berkeley</i>
2007	<i>Exemplar Award, Center for Integrative Studies in Animal Behavior, Indiana U.</i>
2007	<i>Presidential sequence, Animal Behavior Society</i>
2007	<i>Selected as one of 25 "Leaders in Animal Behavior" (Cambridge Univ. Press. 2010)</i>
2006	<i>Fellow of the Animal Behavior Society</i>
2001	<i>Outstanding Academic Title (Choice Magazine) Anuran Communication (ed. M.J. Ryan)</i>
2001	<i>Fellow of the American Academy of Arts and Sciences</i>
1997	<i>Guggenheim Fellow</i>
1997	<i>Visiting Scholar, University of California, Berkeley</i>

1997	<i>Distinguished Visiting Professor</i> , James Cook University, Townsville, Australia
1996	<i>Distinguished Visiting Professor</i> , University of Torino, Italy
1995	<i>Distinguished Herpetologist</i> , Herpetologists' League
1994	<i>Erskine Fellow</i> , University of Canterbury, Christchurch, New Zealand
1994	<i>Distinguished Visiting Animal Behaviorist</i> , University of Nebraska, Lincoln
1993-date	<i>Clark Hubbs Regents Professor in Zoology</i> , University of Texas, Austin
1993	<i>Visiting Distinguished Professor</i> , University of Miami, Miami
1989	<i>Visiting Professor</i> , Wake Forest University
1985-1987, 1990-1991	<i>Reeder Fellowship in Ecology and Evolution</i> , University of Texas, Austin
1985	<i>Young Investigator Award</i> , American Society of Naturalists
1982-1984	<i>Miller Fellow</i> , University of California, Berkeley
1981	<i>Herpetologists' League Award</i> , "Best Student Paper" - Evolution Category, Memphis, Tennessee
1980	<i>Stoye Award</i> , American Society of Ichthyologists & Herpetologists, "Best Student Paper" (Ecology, Ethology, Evolution), Fort Worth, Texas
1978	<i>Herpetologists' League Award</i> , "Best Student Paper", Tempe, Arizona
1975	<i>Outstanding Biology Student Medallion</i> , Glassboro State College

Academic Positions:

2020-date	Associate Chair for Graduate Education, Department of Integrative Biology, University of Texas, Austin
2019-date	Graduate Advisor, Ecology, Evolution and Behavior Program, University of Texas, Austin
2010-date	Senior Research Associate, Smithsonian Tropical Research Institute, Balboa, Panama
1993-date	Clark Hubbs Regents Professor in Zoology
2000-date	Professor, Department of Integrative Biology, University of Texas, Austin
1993-2000	Professor, Department of Zoology, University of Texas, Austin
1993-1999	Graduate Advisor, Department of Zoology, University of Texas, Austin
1988-1993	Associate Professor, Department of Zoology, University of Texas, Austin
1984-1988	Assistant Professor, Department of Zoology, University of Texas, Austin
1982-1984	Miller Fellow, University of California, Berkeley
1982-2010	Research Associate, Smithsonian Tropical Research Institute, Balboa, Panama

Professional Activities:

2022-date	Vice Chairman- Board of Directors, <i>Merlin Tuttle's Bat Conservation</i>
2020-2022	Scientific Advisory Board (Chair), <i>Max Planck Institute for Ornithology</i> , Seewiesen, Germany (continuous since 2011, see below)
2018-2020	Scientific Advisory Board (Chair), <i>Max Planck Institute for Ornithology</i> , Seewiesen, Germany
2017	Organizing Committee, <i>XXVI International Bioacoustics Council</i> , Uttarakhand, India
2016	Organizing Committee, <i>8th World Congress of Herpetology</i> , Hangzhou, China
2014-2021	Board of Directors, <i>Merlin Tuttle's Bat Conservation</i>

- 2014-2017 Scientific Advisory Board, *Max Planck Institute for Ornithology*, Seewiesen, Germany
- 2013 External review committee, Biology Department, Indiana University
- 2012 External review committee, Biology Department, University of Kentucky
- 2012 National Science Foundation Panel
- 2012 Guest Editor, *Proceedings of the National Academy of Sciences*
- 2011 co-organizer National Science Foundation workshop- *The Future of Animal Behavior*
- 2011-date Board of Reviewing Editors, *Science*
- 2011-2015 Advisory Board, *Program in Cognition and Communication*, University of Vienna
- 2011-2017 Associate Editor, *Biology Letters*
- 2011-2014 Editorial Board, *Interaction Studies, Social Behaviour and Communication in Biological and Artificial Systems*
- 2011-2013 Scientific Advisory Board, *Max Planck Institute for Ornithology*, Seewiesen, Germany
- 2009 President, *Animal Behavior Society*
- 2009 Script Consultant, *Bronx Born Film Productions*
- 2009 Science Fair judge, Brykerwoods Elementary, Austin, Texas
- 2009 External review committee, Biology Department, University of Utah
- 2008 External review committee, Department of Biology, Texas A&M
- 2007-2008 President-elect, *Animal Behavior Society*
- 2007 Organizer, *Winter Animal Behavior Conference*
- 2007 External review committee, Department of Biology, University of Cincinnati
- 2006 Oversight Committee, Department of Organismic and Evolutionary Biology, Harvard University
- 2006-2008 Editorial Board, *Journal of Experimental Zoology Part A: Comparative Experimental Biology*
- 2004-2007 Associate Editor, *The American Naturalist*
- 2003-2004 Advisory Committee, Department of Ecology and Evolution, Columbia University, New York, New York.
- 2003-2004 Advisory Board, *Interaction Studies: Social Behaviour and Communication in Biological and Artificial Systems*
- 2002-2005 Editorial Board, *Annual Review of Ecology and Systematics*
- 2001 External review, School of Biological Sciences, University of California, Irvine
- 1997-1999 Editorial Board, *Behavioral Ecology and Sociobiology*
- 1997-2000 Editorial Board, *Evolution of Communication*
- 1994-1997 Secretary, *Society for the Study of Evolution*
- 1998 External review, Department of Biology, University of Minnesota
- 1993-1998 Board of Governors, *American Society of Ichthyologists and Herpetologists*
- 1993-1996 Associate Editor, *Evolution*
- 1988-1992 Council of the *Herpetologists League*
- 1986-1991 Board of Governors, *American Society of Ichthyologists and Herpetologists*

Research Grants and Fellowships:

- 2021-2024 Fonds de Recherche Nature et Technologies (Quebec): Examining universals in music

- and animal communication to reveal biological foundations of music. (PIs S. Woolley, J. Sakata, I. Peretz, T. O'Donnell, Collaborators: M. Ryan, S. Mehr)
- 2019-2023 National Science Foundation: IOS: Collaborative Research: RUI: Cognitive overload versus enhanced performance: Is more information always better? (PIs R. Taylor, Kim Hunter, M.J. Ryan, R.A. Page)
- 2018 VPR Research & Creative Grant, University of Texas: The creative role of dopamine in the evolution of sexual beauty (PI)
- 2017-2019 Smithsonian Institution Scholarly Studies Program: Multimodal signal evolution: Is more information always better? (PIs R.A. Page, M.J. Ryan, R.C. Taylor, K. Hunter)
- 2012-2016 National Science Foundation: Supplement to Multimodal communication and sexual selection (PIs M.J. Ryan, R.A. Page, R. Taylor)
- 2012-2012 National Science Foundation: Meeting: The Future of Animal Behavior. (PIs J. Strassman, D. Rubenstein)
- 2011-2017 National Science Foundation: Multimodal communication and sexual selection (PIs M.J. Ryan, R.A. Page, R. Taylor; date includes one year no-cost extension)
- 2006-2010 National Science Foundation: Eavesdroppers and signal evolution (sole PI)
- 2005-2006 National Science Foundation- cDNA microarray for studies of sexual communication (sole PI)
- 2006-2008 National Science Foundation- The role of multimodal cue assessment in sexual selection (PI; R. Taylor, Co-PI)
- 2005-2010 National Science Foundation- Neural basis for elaborate male traits (Co-PI; S. Burmeister, PI)
- 2002-2004 Texas Applied Research Program- Ultraviolet communication in swordtails (sole PI)
- 2001-2002 National Science Foundation- Ultraviolet communication in swordtails (sole PI)
- 2001-2005 National Science Foundation- The phylogenetic and functional integration of complex phenotypes regulating social/reproductive interactions (IRCEB) (Co-PI; D. Cannatella PI; W. Wilczynski Co-PI)
- 2000-2004 National Science Foundation- The evolution of acoustic signals of frogs (Co-PI; D. Cannatella PI; D. Hillis Co-PI)
- 1998-2001 National Science Foundation- Historical effects on the evolution of female mating preferences (PI; A.S. Rand Co-PI)
- 1998-1999 Smithsonian Institution Scholarly Studies Program - The evolution of female mating preferences in the túngara frog (Co-PI; A.S. Rand PI)
- 1998-1999 NATO- Maintenance of female sexual preferences in the unisexual molly (Co-PI; J. Páezfal, PI)
- 1996-1999 National Science Foundation- Fish TV: Unraveling the effects of female preferences on correlated characters in pygmy swordtails. (sole PI)
- 1995-1997 National Institute of Mental Health- Neuroethology of social communication. (Co-PI; W. Wilczynski PI)
- 1995-1996 Smithsonian Institution Scholarly Studies Program- The evolution of communication in frogs of the genus *Physalaemus*. (Co-PI; D. Cannatella Co-PI, A. Cardosa Co-PI; A.S. Rand PI)
- 1994-1998 National Science Foundation- The evolution of female mating preferences in the túngara

- frog (PI; A.S. Rand Co-PI)
- 1994-1995 Smithsonian Institution Scholarly Studies Program- The evolution of female mating preferences in the túngara frog (Co-PI; A.S. Rand PI)
- 1994 University Research Institute (Univ. Texas)- Video animation in studies of sexual selection. (sole PI)
- 1993-1994 National Science Foundation- The evolution of female mating preferences in swordtails. (sole PI)
- 1991-1994 National Science Foundation- Microevolution of acoustic communication in the cricket frog (PI; W. Wilczynski, Co-PI)
- 1991 National Institute of Mental Health Symposium Grant- American Society of Zoology Symposium- Mechanisms of mate choice (Co-PI; W. Wilczynski, PI)
- 1990 University Research Institute (Univ. Texas). Faculty Research Leave- Sexual selection and communication in the *Physalaemus pustulosus* species group. (sole PI)
- 1990 University Research Institute (Univ. Texas)- Sexual selection and communication in the *Physalaemus pustulosus* species group. (sole PI)
- 1989 National Geographic Society- Biogeography of body size polymorphism in *Xiphophorus nigrensis*. (sole PI)
- 1988-1989 Smithsonian Institution Scholarly Studies Program- The sensory basis of sexual selection (Co-PI; A.S. Rand, PI)
- 1987 University Research Institute (Univ. Texas)- Sexual selection and sound localization in the túngara frog. (sole PI)
- 1987 Smithsonian Institution Visiting Researcher Fellowship- Sexual selection and sound localization in the túngara frog. (sole PI)
- 1986 University Research Institute (Univ. Texas)- Sexual selection in swordtails (*Xiphophorus*). (sole PI)
- 1986-1989 National Science Foundation- Microevolution of acoustic communication in the cricket frog (PI; W. Wilczynski, Co-PI)
- 1985 University Research Institute (Univ. Texas)- Environmental bioacoustics in anurans
- 1985 Texas - Peru Partnership (Washington D.C.)- Field collection of bats (*Trachops cirrhosus*) for studies of sound localization (PI; G. Pollak Co-PI).
- 1985 University Research Institute (Univ. Texas)- Acoustical foraging in an Australian bat. (sole PI)
- 1984 University Research Institute (Univ. Texas)- Sound localization in non-tympanic frogs. (sole PI)
- 1983 National Geographic Society- Environmental influences on the evolution of frog vocalizations. (sole PI)
- 1983 National Geographic Society- Bat-frog interactions in Africa (Co-PI, M. Tuttle PI)
- 1982 American Philosophical Society- Synchronized calling in a Neotropical treefrog: mechanisms and evolution. (sole PI)
- 1981-1982 National Institute of Mental Health traineeship- Animal communication and neurophysiology
- 1981 National Geographic Society- Bat-frog interactions (PI, M. Tuttle Co-PI)
- 1979-1980 Smithsonian Institution Predoctoral Fellowship- Sexual selection and communication in

- 1979-1980 a Neotropical frog.
National Science Foundation Doctoral Dissertation Improvement Grant- Sexual selection and communication in a Neotropical frog
- 1979 Gaige Fund, American Society of Ichthyologists and Herpetologists- Sexual selection and communication in a Neotropical frog. (sole PI)
- 1979 Sigma Xi, Cornell Univ. chapter- Sexual selection and communication in a Neotropical frog. (sole PI)
- 1978 Graduate Student Research Appointment, Smithsonian Institution- Sexual selection and communication in a Neotropical frog.
- 1978 Smithsonian Institution Scholarly Studies Program- Lizard thermoregulation. (sole PI)
- 1975 Theodore Roosevelt Memorial Fund, American Museum of Natural History- Reproductive behavior of the bullfrog. (sole PI)

Teaching Experience:

University of Texas, Austin

- 2014-2021 Animal Behavior
- 2017 Graduate Seminar: Cognitive Ecology
- 2016 Graduate Seminar: Acoustic Communication
- 2012 Graduate Seminar: Sexual Selection and the Brain
- 2009 Signature (Freshman) Course, Sex in the Wild
- 2008 Graduate Seminar: Principles of Brain Evolution
- 2006 Graduate Seminar: Sexual Conflict
- 2005-2014, Fundamentals of Integrative Animal and Behavior
2017-2020
- 2019
- 2002 Graduate Seminar- Recognition Mechanisms in Plants and Animals
- 2001 Graduate Seminar- Sensory Ecology
- 2000 Graduate Seminar- Cognition, Evolution and Behavior
- 1997 Graduate Seminar- Human Language and Animal Communication
- 1993, 1995 Behavioral Ecology
- 1992 Graduate Seminar- Evolution of Behavior
- 1990-1994, Animal Behavior
1996, 1998,
1999
- 1989, 1993, Herpetology
1997
- 1987-1988 Graduate Seminar- Advanced Topics in Animal Behavior
1994
- 1986 Graduate Seminar- Graduate Student Seminar in Ecology
- 1985, 1987, Animal Communication

1991, 1996
1998, 2001-
2008, 2010-
2012, 2014
1985-1988 Vertebrate Natural History
1984 Ecology, Evolution and Society (non-majors)

Other

1983 Graduate seminar- Sexual Selection Theory, University of California, Berkeley
1977-1979 Teaching assistant- General Biology, Cornell University
1976-1977 Teaching assistant- General Biology, Rutgers University
1975 Student teacher- General Biology, Glassboro High School, New Jersey
1975 Dual certification- Biology high school, Science high school, New Jersey

Invited Lectures:

2021— Darwin Day, Central Washington University (Biology Department), Wellington (webinar); Speciation Seminar Series, University of California, Berkeley (webinar); University of Toronto (Biology Department) (webinar); XXVI International Course, Biological Bases of Behavior, Tlaxcala, Mexico (webinar); International Conference on Herpetological Biodiversity and Conservation in Eurasian Countries along the Belt and Road, Chengdu, China (webinar)

2020— Australian National University (Biology Department) (webinar); University of Nebraska (Biology Department) (webinar)

2019— Smithsonian Tropical Research Institute, Gamboa, Panama; University of California, Santa Barbara (Institute for the Mind); Lone Star College (Writers, Speakers and Ideas & Women’s History Month), Kingwood Texas

2018— Book People (bookstore), Austin Texas; Labyrinth (bookstore), Princeton, New Jersey; Houston Museum of Natural Sciences, Houston, Texas; Pacific Science Center, Seattle, Washington; Oregon Museum of Science, Portland, Oregon; Princeton University Press, Princeton, New Jersey; Princeton University (Department of Ecology and Evolution), Princeton, New Jersey; Politics and Prose (bookstore), Washington DC; Animal Sentience workshop, University of Québec, Canada

2017— University of Toronto (Biology Department) Mississauga, Canada; Texas A&M (Ecology Evolution and Behavior Program) College Station

2015— East Carolina University (Biology Department), Greenville, North Carolina; Edinburgh University (Zoology/Institute of Evolutionary Biology), Scotland, UK; Latin American Herpetology Congress, Cartagena, Colombia; McGill University (Biology Department), Montreal, Canada; Simon Fraser University (Biology Department), Vancouver, Canada; University of British Columbia (Biology Department), Vancouver, Canada; St. Andrews University (Center for

- Biodiversity), Scotland UK University of Texas at Arlington (Biology Department), Arlington; Winter Animal Behavior Meeting (Steamboat Springs, Colorado).
- 2014— Cornell University (Department of Neurobiology and Behavior), Ithaca NY; James Madison University (Biology Department), Harrisonburg VA; Max Planck Institute, Seewiesen, Germany; North Carolina State University (Keck Center), Raleigh; University of Central Florida (Biology Graduate Student Association-Invited Speaker), Orlando; University of Ghent, Belgium; University of Oklahoma (Biology Department), Norman
- 2013— Colorado State University (Biology Department), Fort Collins; Kellogg Station, Michigan State University, Battle Creek; Nottingham University (School of Biology), Nottingham, United Kingdom; University of Montana, Missoula (Biology Department); University of Texas, Austin (Section of Neurobiology); Uppsala University (Biology Department), Sweden; Winter Animal Behavior Conference, Steamboat, Colorado
- 2012— Bielefeld University (Biology Department) Bielefeld, Germany; Louisiana State University (Museum of Zoology), Baton Rouge, Louisiana; McMaster's University (Biology Department), Toronto; Smithsonian Tropical Research Institute, Panama; St. Edwards University (Biology Department), Austin, Texas; Salisbury University (Biology Department), Salisbury, Maryland; Universidad de los Andes (Biology Department), Bogota, Colombia; University of Zurich (Biology Department), Zurich, Switzerland; Winter Animal Behavior Conference, Steamboat, Colorado
- 2011— Animal Behavior Symposium of Mexico, Tlaxcala, Mexico; Baylor University (Biology Department), Waco, Texas; Kellogg Biological Station, East Lansing, Michigan; Michigan State University (Department of Biology), Lansing; Museum für Naturkunde, Berlin, Germany; Trinity University (Biology Department), San Antonio, Texas; University of Californian (Department of Integrative Biology), Berkeley; University of Californian (Museum of Vertebrate Zoology), Berkeley; University of Kentucky (Department of Biology), Lexington; Univeristy of Vienna (Communication and Cognition Program), Vienna; Winter Animal Behavior Conference, Steamboat, Colorado
- 2010— University of Missouri (Department of Biological Sciences), Columbus; Universidad Nacional Autonoma (Institute of Ecology), Mexico City, Mexico; University of California, Santa Barbara (Department of Ecology, Evolution and Marine Biology), Oklahoma State University (Department of Biology), Stillwater; Winter Animal Behavior Conference, Steamboat, Colorado
- 2009— Cornell University (Department of Neurobiology and Behavior), Ithaca New York; Laboratory of Ornithology, Cornell University, Ithaca New York; University of Texas (Biology Department),

San Antonio; University of Illinois (Biology Department), Champaign-Urbana; University of Vienna (Biology Department), Austria; Max Planck Institute, Seewiesen, Germany

2008— Harvard University, Cambridge, Massachusetts (Department of Evolution and Organismic Biology); Smithsonian Tropical Research Institute, Balboa, Panama; Texas A&M (Department of Biology), College Station; Winter Animal Behavior Conference, Steamboat Springs, Colorado

2007—University of Massachusetts, Amherst (Biology Department); University of Kansas, Lawrence (Department of Ecology and Evolutionary Biology); Winter Animal Behavior Conference, Steamboat Springs, Colorado; Barro Colorado Island, Smithsonian Tropical Research Institute, Panama; Department of Biology, Florida State University, Tallahassee; Department of Biology, Indiana University, Bloomington, Indiana; Department of Ecology & Evolution, University of California, Los Angeles; Winter Animal Behavior Conference, Steamboat Springs, Colorado; Department of Biology, University of North Carolina, Chapel Hill; Department of Ecology, Evolution and Behavior, University of Minneapolis, St. Paul

2006— Boston University (Biology Department), Boston, Massachusetts; University of Memphis, (Biology Department), Memphis, Tennessee; University of Montana, (Biology Department), Missoula, Montana; Institute in Neuroscience, Princeton University, Princeton, New Jersey; Purdue University (Biology Department), West Lafayette, Indiana; Winter Animal Behavior Conference, Steamboat Springs, Colorado

2005— Columbia University (Dept. Ecology and Evolution) New York, New York; University of California, Berkeley (Dept. Integrative Biology), Berkeley, California

2004— Bucknell University (Biology Dept.), Lewisburg, Pennsylvania; Max Plank Institute, Plön Germany; Trinity University (Biology Dept.), San Antonio, Texas; University of Washington (joint Biology and Psychology Depts.), Seattle, Washington; University of Alberta (Psychology Depts.), Edmonton, Canada; Winter Animal Behavior Meetings, Breckenridge, Colorado; University of Oklahoma (Zoology Dept.), Norman

2003— Georgia State University (Neuroscience Group), Athens, Georgia; University of Florida, (Dept. of Zoology), Gainesville, Florida; University of Texas (Artificial Intelligence Group, Computer Sciences Dept.), Austin Texas; University of Louisiana (Dept. of Biology), Lafayette, Louisiana

2002— Virginia Tech University (Biology Dept.), Blacksburg, Virginia; University of Zurich (Biology Dept.), Zurich, Switzerland; Cornell University (Dept. of Ecology and Evolution), Ithaca, New York; McMaster University (Dept. of Psychology), Toronto, Canada

2001— Simon Fraser University (Dept. of Ecology and Evolution), Vancouver, Canada; Smithsonian Tropical Research Institute, Balboa, Panama; University of California- Los Angeles (Behavioral Ecology Symposium Series), Los Angeles, California; University of Tennessee (Dept. of Ecology,

- Evolution and Behavior), Knoxville, Tennessee; University of Wurzburg (Biocentrum), Wurzburg, Germany
- 2000— University of California- Davis (Animal Behavior Program), Davis, California; University of California (Depts. of Psychology and Ecology & Evolution), La Jolla, California; University of California (Dept. of Ecology, Evolution and Marine Biology), Santa Barbara, California; University of Pittsburgh (Dept. of Biological Sciences), Pittsburgh, Pennsylvania; Florida International University (Dept. of Biology), Miami, Florida; Michigan State University (Dept. of Zoology), East Lansing, Michigan; Southwestern University (Biology Dept.), Georgetown, Texas; Texas A&M (Dept. of Fisheries and Wildlife) College Station, Texas
- 1999— Baylor University (Biology Dept.), Waco, Texas; Institute of Science (Biology Dept.), Bangalore, India; University of Arizona (Dept. of Ecology and Evolution), Tucson, Arizona; Harvard University (Dept. of Organismal and Evolutionary Biology), Cambridge, Massachusetts; University of Maryland (Dept. of Biology), College Park, Maryland; University of North Carolina (Dept. of Zoology), Chapel Hill, North Carolina
- 1998— Arizona State University (Biology Dept.), Phoenix, Arizona; Indiana University (Center for Integrative Studies in Animal Behavior), Bloomington, Indiana; University of Texas (Nonlinear Dynamics Group, Physics Dept.), Austin, Texas; University of Texas (Biology Dept.), Brownsville, Texas
- 1997— Cairns University (Biology Dept.), Cairns, Australia; James Cook University (Dept. of Zoology and Tropical Biology), Townsville, Australia; University of California- Davis (Center for Animal Behavior), Davis, California; University of California- Berkeley (Museum of Vertebrate Zoology), Berkeley, California; University of Chicago (Dept. of Ecology and Evolution), Chicago, Illinois; University of Oregon (Dept. of Zoology), Corvallis, Oregon
- 1996— University of Chicago (Dept. of Ecology and Evolutionary Biology), Chicago, Illinois; Museo Specola, University of Florence, Florence, Italy
- 1995— Michigan State University (Kellogg Biological Station), Hickory Corners, Michigan; Southeastern Louisiana University (Dept. of Biology), Hammond, Louisiana; University of Washington (Dept. of Biology), St. Louis, Missouri
- 1994— University of Canterbury (Dept. of Zoology), Christchurch, New Zealand; Florida State University (Dept. of Biological Sciences), Tallahassee, Florida; University of Otago (Dept. of Zoology), Dunedin, New Zealand; Royal Society of New Zealand, Christchurch, New Zealand; University of Texas (Dept. of Zoology), Arlington, Texas; University of Utah (Biology Dept.), Salt Lake City, Utah
- 1993— State University of New York (Dept. of Biological Sciences), Albany, New York; University of Houston (Biology Dept.), Houston, Texas; Universidad Autonomo de Mexico (Centro de Ecologia),

- Mexico City, Mexico; University of Washington (Zoology Dept.), Seattle, Washington
- 1992— Cornell University (Section of Neurobiology and Behavior), Ithaca, New York; University of California- Davis (Animal Behavior Program) Davis, California; University of North Carolina (Biology Dept.), Chapel Hill, North Carolina; University of Toronto (Biology Dept.), Toronto, Ontario
- 1991— Smithsonian Tropical Research Institute, Balboa, Panama; University of Basel (Zoology Institute), Basel, Switzerland; University of Bern (Zoology Institute), Bern, Switzerland; Marine Science Institute, University of Texas, Port Aransas, Texas; University of Zurich (Zoology Institute), Zurich, Switzerland
- 1990— Harvard University (Organismal and Evolutionary Biology Dept.), Cambridge, Massachusetts; Princeton University (Biology Dept.), Princeton, New Jersey; Universidad de Católica (Biology Dept.), Quito, Ecuador
- 1989— Duke University (Zoology Dept.), Durham, North Carolina; Memphis State University (Zoology Dept.), Memphis, Tennessee; Rhodes College (Biology Dept.), Memphis, Tennessee; University of Wyoming (Zoology Dept.), Laramie, Wyoming; Wake Forest University, Winston-Salem, North Carolina
- 1988— Arizona State University (Zoology Dept.), Tempe, Arizona; Creighton University (Biology Dept.), Omaha, Nebraska; Kansas State University (Zoology Dept.), Manhattan, Kansas; Max Planck Institute, Seewiesen, West Germany; University of Missouri (Biology Dept.), Columbus, Missouri; Texas Christian University (Biology Dept.), Dallas, Texas.
- 1987— Baylor University (Biology Dept.), Waco, Texas; National Institutes of Health (Brain Evolution and Behavior Section), Poolesville, Maryland; University of California- Santa Barbara (Dept. of Biological Sciences), Santa Barbara, California; University of Kentucky (Zoology Dept.), Lexington, Kentucky; University of Oklahoma (Zoology Dept.), Norman, Oklahoma; Smithsonian Tropical Research Institute, Balboa, Panama; State University of New York (Biology Dept.), Stony Brook, New York
- 1986— Princeton University (Biology Dept.), Princeton, New Jersey; University of California- Riverside (Biology Dept.), Riverside, California; University of Munich (Zoology Institute), Munich, West Germany; Technical University of Munich (Zoology Institute), Munich, West Germany
- 1985— Harvard University (Biology Dept.), Cambridge, Massachusetts; Rice University (Biology Dept.), Houston, Texas; Savannah River Ecology Lab, Aiken, South Carolina
- 1984— California Academy of Sciences, San Francisco, California; Cambridge University (Sub-dept. Animal Behaviour), Cambridge, England; University of California- Berkeley, (Museum of

Vertebrate Zoology), Berkeley, California; University of Washington (Zoology Dept.), Seattle, Washington; University of Kansas (Museum of Natural History), Lawrence, Kansas; University of Houston (Biology Dept.), Houston, Texas

1983— San Francisco State University (Biology Dept.), San Francisco, California; Sonoma State University (Biology Dept.), Rohnert Park, California; University of California- Davis (Zoology Dept.), Davis, California; University of Chicago (Biology Dept.), Chicago, Illinois; University of Illinois (Dept. Ecology, Ethology, Evolution), Urbana, Illinois; University of Missouri (Biology Dept.), Columbia, Missouri

1982— Arizona State University (Zoology Dept.), Tempe, Arizona; Cornell University (Neurobiology and Behavior), Ithaca, New York; University of California- Berkeley (Zoology Dept.), Berkeley, California; University of California- Berkeley (Museum of Vertebrate Zoology), Berkeley, California; University of California- Los Angeles (Biology Dept.), Los Angeles, California; University of Texas- Austin, (Zoology Dept.), Austin, Texas

1981— National Zoological Park, Washington, D.C.; Rockefeller University Field Research Center, Millbrook, New York; Rutgers University (Zoology and Physiology Dept.), Newark, New Jersey; Rutgers University (Institute of Animal Behavior), Newark, New Jersey; Syracuse University (Biology Dept.), Syracuse, New York

1980— Audubon Society, Balboa, Panama; Cornell University (Neurobiology and Behavior), Ithaca, New York; Sienna College (Biology Dept.), Albany, New York; Smithsonian Tropical Research Institute, Balboa, Panama; State University of New York- Albany (Biology Dept.), Albany, New York; U.S. National Museum of Natural History, Washington, D.C.

Plenary/Distinguished Lectures, Invited Symposia, and Workshops:

- 2021 *International Conference on Herpetological Biodiversity and Conservation in Eurasian Countries along the Belt and Road*, Chengdu, China (webinar)
- 2019 *Writers, Speakers and Ideas & Women's History Month*, Lone Star College, Kingwood
- 2019 *Institute for the Mind*, University of California, Santa Barbara
- 2018 *Hot Science Cool Talks*, University of Texas, Austin
- 2018 *Institute for Cognitive Sciences*, Animal Sentience Symposium, Montréal, Canada
- 2017 *Carl Gans Memorial Lecture*, Joint Meeting of Ichthyologists and Herpetologist, Austin, Texas
- 2017 *Cognitive Ecology Symposium*, Animal Behavior Society, Toronto, Canada
- 2015 *International Bioacoustics Congress*, Murnau, Germany
- 2015 *Burroughs Wellcome Lecture*, East Carolina University, Greenville, North Carolina
- 2015 *Marsden Lecture*, McGill University, Montreal, Canada
- 2014 *Symposium—Sensory Exploitation and Cultural Attractors*, University of Ghent, Ghent, Belgium

- 2014 *Symposium—Frog Communication*, International Society for the Study of Behavioral Ecology, New York City
- 2014 *Keck Institute- Distinguished Speaker*, North Carolina State University, Raleigh
- 2013 *Renaissance Weekend*, Strange Attractions, Monterrey CA
- 2012 *Immelman Lecture*, University of Bielefeld, Germany
- 2011 *Symposium (organizer) What Do Animal Signals Mean?* Joint Meeting of Animal Behavior Society & International Ethology Congress, Bloomington IN
- 2011 *Symposium—Neuroecology*, Society for Integrative and Comparative Biology, Salt Lake City, Utah
- 2011 *Southwest Association of Naturalist*, after-dinner lecture, *The Natural History of Natural Beauty*, Denton, Texas
- 2010 *Storer Lecture*, University of California, Davis
- 2009 *Animal Communication Workshop*, Atlanta, Georgia
- 2009 *First Friday's—Darwin's Revolution*, LA County Museum, Los Angeles
- 2009 *Atwood Lecture*, University of Toronto, Toronto, Canada
- 2008 *Plenary Lecture, VII Latin American Herpetological Congress*, Havana, Cuba
- 2008 *Integrative Studies in Animal Communication*, International Congress in Zoology, Paris, France
- 2008 *Information and Representation in Signaling using Sound*, Center for Behavioral Neuroendocrinology, Atlanta
- 2008 *Dean's Scholars Lecture*, University of Texas, Austin
- 2008 *Signature Lecture*, University of Texas, Austin
- 2008 *Grinnell Medal Lecture*, University of Californian, Berkeley
- 2008 *Sinauer Lecture*, University of Massachusetts, Amherst
- 2007 *Keynote Address* Konnevesi Research Retreat, Univesirty of Javaskala, Finland
- 2007 *Keynote Address BENELUX Zoological Congress*, Amsterdam, The Netherlands
- 2007 *Keynote Address 10th Annual Biology Research Symposium*, University of California, Los Angeles, California
- 2007 *Keynote Address, Center for Integrative Studies in Animal Behavior Symposium*, University of Indiana, Bloomington, Indiana
- 2006 *Symposium-- Sensory Ecology*, Animal Behavior Society, Snowbird, Utah
- 2004 *Symposium-- Sexual Selection in Túngara Frogs*, Animal Behavior Society, Oaxaca, Mexico (symposium organizer)
- 2004 *Plenary Lecture: Phylogenies and Behavior*, Association for the Study of Animal Behaviour, London
- 2004 *Allen L. Edwards Endowed Lectureship in Psychology*, University of Washington, Seattle
- 2004 *Distinguished Scholar Lecture Series in Psychology*, University of Alberta, Canada
- 2003 *The Swordtail Alphabet: From P to U to V. First European Meeting of Poeciliid Biologists*, Zurich, Switzerland
- 2003 *Perspective in Biology*, Wake Forest University, Winston-Salem, North Carolina
- 2003 *Tinbergen Symposium*. Leiden, The Netherlands
- 2002 *Lang Memorial Lecture in Neuroscience*. Woods Hole, Massachusetts

- 2001 *CAST: A Science Odyssey (Science Teachers Association of Texas)*
- 2001 *University of Texas Outreach Lecture Series: Sexual Selection*. Austin, Texas
- 2000 *A Symposium in Honor of W.D. Hamilton*. University of California, Berkeley
- 2000 *Eminent Biologist Lecture Series*. Carnegie Museum, Pittsburgh, Pennsylvania
- 2000 *Annual Darwin Lecture*. University of Calgary, Calgary, Canada
- 1999 *Plenary Lecture: The Ethology and Evolution of Female Mating Preferences*, International Ethological Congress, Bangalore, India
- 1999 *Plenary Lecture: Reproductive Behavior in Anurans*, International Ethological Congress, Bangalore, India
- 1998 *Recent Advances in Anuran Communication, Herpetologists' League*, Guelph, Ontario (symposium organizer)
- 1997 *Sexual Selection and Phylogenetics*, Animal Behavior Society, College Park, Maryland (with D. McLennan)
- 1996 *Experimental Approaches to Evolution*, Japanese Research Development Corporation, Tokyo, Japan
- 1996 *Associates Meeting*, Institute of Neurosciences, La Jolla, California
- 1995 *Recognition: from Cell to Species*. Research NSF Training Grant Workshop, University of California, Davis, California
- 1995 *Distinguished Ecologist Lecture*. Louisiana Ecology Consortium. Hammond, Louisiana
- 1995 *Distinguished Herpetologist Lecture*. Herpetologists' League, Edmonton, Canada
- 1995 *Plenary Lecture: Historical Studies of Communication Systems*. (European) Animal Behavior Society, Leiden, The Netherlands
- 1995 *Gompertz Lecture*. Department of Integrative Biology, University of California, Berkeley
- 1994 *Phylogenetics in the Study of Behavior*. Animal Behavior Society, Seattle, Washington
- 1994 *Cognitive Ethology*. Animal Behavior Society, Seattle, Washington
- 1994 *Distinguished Animal Behaviorist Lecture*. Nebraska Behavioral Biology Group, Omaha, Nebraska
- 1993 *Sexual Selection in Ectotherms* (organizer). American Society of Ichthyologists and Herpetologists, Austin, Texas
- 1993 *Biology of Latin American Fishes*. American Society of Ichthyologists and Herpetologists, Austin, Texas
- 1993 *Short Course on Anuran Reproductive Behavior*. Latin American Herpetology Congress, Campinas, Brazil
- 1993 *Plenary Lecture: Why We Should Know More not Less Biology when Studying Behavioral Adaptations*. Second World Congress of Herpetology, Adelaide, Australia
- 1992 *Molecular Genetics and Evolution: Speciation*. American Society for the Advancement of Science, Chicago, Illinois
- 1992 *The Evolution and Design of Animal Signaling Systems*. The Royal Society, London, England
- 1992 *Behavioural Mechanisms in Evolutionary Perspective*. Instituto Juan March de Estudios e Investigaciones, Madrid, Spain
- 1991 *Sewall Wright Lecture*. Department of Biology, University of Chicago.

- 1991 *The Evolution of Geographic Variation in Behavior*. Animal Behavior Society, Wilmington, North Carolina
- 1991 *Species and Speciation*. Linnean Society, Cardiff, England
- 1991 *Plenary Lecture: Sexual Selection and Mating Systems*. International Ethological Congress, Kyoto, Japan
- 1990 *Does Sensory Biology Bias or Constrain the Direction of Evolution?* Vice Presidential Symposium, American Society of Naturalists, College Park, Maryland
- 1990 *The Role of Systematics in Behavior*. Society for the Study of Evolution, College Park, Maryland
- 1990 *Plenary Lecture: Sensory Systems and Sexual Selection*. Third International Conference of Behavioral Ecology, Uppsala, Sweden
- 1990 *Mechanisms of Mate Choice*. American Society of Zoologists, San Antonio, Texas
- 1989 *Sexual Selection and Communication in Amphibians and Reptiles*. International Herpetological Congress, Canterbury, England
- 1989 *Systematics and Phylogeny*. International Herpetological Congress, Canterbury, England
- 1988 *New Trends in Ichthyology*. Munich, West Germany
- 1986 *Energetic Constraints and Animal Behavior*. American Society of Zoologists, Nashville, Tennessee
- 1986 *The Evolution of the Amphibian Auditory System*. Bielefeld, West Germany
- 1985 *Common Principles in the Neuroethology of Acoustic and Electric Communication*. International Society of Neuroethology, Austin, Texas
- 1985 *Loftus-Hills Symposium*. American Society of Naturalists, Chicago, Illinois
- 1984 *Bioacoustics*. American Association for the Advancement of Science- Western Region, San Francisco, California
- 1983 *Acoustic Behavior of Anurans*. XVIIIth International Ethological Congress, Brisbane, Australia
- 1982 *The Ecology of Animal Communication*. Northeast Regional Animal Behavior Society, Boston, Massachusetts
- 1979 *Behavior, Ecology and Evolution of Iguanine Lizards*. Society for the Study of Amphibians and Reptiles, Knoxville, Tennessee

Reviewer for:

journals: American Naturalist, Animal Behaviour, Biological Journal of the Linnean Society, Copeia, Ecology, Evolution, Herpetologica, Journal of Herpetology, Nature, Oxford University Press, Philosophical Transactions of the Royal Society, Princeton University Press, Proceedings of the National Academy of Sciences, Science, Systematic Zoology, University of Chicago Press

granting institutions: National Science Foundation, National Geographic, Smithsonian Institution Scholarly Studies Program

prizes: AAAS- Cosmos Prize (government of Japan); Cleveland Prize (American Association for the Advancement of Science); Craawford Prize (government of Sweden)

external reviews: Biology Department, Univerist of California, Irvine; Biology Department, Univeristy of Minnesota; Biology Department, University of Utah; Biology Department, Texas A&M University; Biology Department, University of Cincinnati; Department of Organismic and Evolutionary Biology, Harvard University; Max Planck Institute for Ornithology, Seewiesen,

Germany; Center for Integrative Studies of Animal Behavior, Indiana University

Research Interests:

Evolution and Mechanisms of Animal Behavior, especially Animal Communication and Sexual Selection

Publications:

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3. Ryan, M.J. 1978. Parental care in salamanders. *Bulletin of the New York Herpetological Society* 13:23-27.
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5. Prieto, A.A; Ryan, M.J. 1978. Some observations on the social behavior of the Arizona chuckwalla, *Sauromalus obesus tumidus* (Reptilia, Lacertilia, Iguanidae). *Journal of Herpetology* 12:327-336.
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8. Ryan, M.J.; Tuttle, M.D.; Taft, L.K. 1981. The costs and benefits of frog chorusing behavior. *Behavioral Ecology and Sociobiology* 8:273-278.
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10. Rand, A.S.; Ryan, M.J. 1981. The adaptive significance of a complex vocal repertoire in a Neotropical frog. *Zeitschrift fur Tierpsychologie* 57:209-214.
11. Tuttle, M.D.; Ryan, M.J. 1981. Bat predation and the evolution of frog vocalizations in the Neotropics. *Science* 214:677-678.
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 14. Bucher, T.L.; Ryan, M.J.; Bartholomew, G.W. 1982. Oxygen consumption during resting, calling and nest building in the frog *Physalaemus pustulosus*. *Physiological Zoology* 55:10-22.
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 17. Tuttle, M.D.; Taft, L.K.; Ryan, M.J. 1982. Evasive behaviour of a frog in response to bat predation. *Animal Behaviour* 30:393-397.
 18. Ryan, M.J. 1983. Frequency modulated calls and species recognition in a Neotropical frog. *Journal of Comparative Physiology* 150:217-221.
 19. Ryan, M.J. 1983. Sexual selection and communication in a Neotropical frog, *Physalaemus pustulosus*. *Evolution* 39:261-272.
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