

CURRICULUM VITAE

Erich D. Jarvis

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EDUCATION

1979-1983 High School: Dance Major, High School of the Performing Arts, NY
1979-1983 Scholarships to Geoffrey Ballet and Alvin Ailey Dance Schools, NY
1983-1988 Undergraduate: B.A., Double major: Biology & Mathematics. Minor: Chemistry. Hunter College, NY
1988-1995 Graduate: Ph.D., Molecular Neurobiology & Animal Behavior, The Rockefeller University, NY
1995-1998 Postdoctoral: Molecular Neurobiology & Animal Behavior, The Rockefeller University, NY

RESEARCH & PROFESSIONAL POSITIONS

1984-1988 Undergraduate research: Molecular biology of protein synthesis genes in bacteria; studied with Dr. Rivka Rudner, Hunter College, NY
1988-1995 Graduate research: PhD *A Window into the Molecular Biology of Song Associative Learning and Memory in Songbirds*, with Dr. Fernando Nottebohm, The Rockefeller University, NY
1995-1998 Post-Doctoral research: Molecular biology of vocal learning, with Dr. Fernando Nottebohm, The Rockefeller University, NY
1996 Research Associate, Adjunct: Hunter College, NY. Supervised lab of former undergraduate advisor Dr. Rivka Rudner for 6 months while she was on sabbatical.
1998-2002 Assistant Professor, Adjunct: The Rockefeller University, NY
1998-2005 Assistant Professor, Department of Neurobiology, Duke University Medical Center (DUMC), NC
1999-2005 Assistant Professor, Fellow: Center for Cognitive Neuroscience, Duke University, NC
2000-2005 Assistant Professor, Center for Bioinformatics & Computational Biology, Duke University, NC
2000-2005 Assistant Professor, Allied Faculty: Psychological & Brain Sciences, Duke University, NC
2001-2005 Assistant Professor, Faculty: Development Biology Program, DUMC, NC
2005-present Associate Professor, Tenure: Neurobiology & departments above, Duke University, NC
2008-present Investigator, Howard Hughes Medical Institute (HHMI). Successful renewal in 2015

TEACHING & RELATED COMMITTEES

1992-1998 Trained inner-city high school students of under-represented backgrounds to gain laboratory research experience, Science Outreach Program of NY
1998-present Trained high school, undergrad & graduate students in neuroscience research, DUMC, NC
1999-2008 Medical student core neuroscience course, DUMC, NC
2000-present Graduate Student Steering Committee, Department of Neurobiology, DUMC, NC
2000-present Graduate Student Admissions Committee, Department of Neurobiology, DUMC, NC
2000-2003 Cognitive neuroscience graduate course, Duke University, NC
2001-2002 Graduate core neuroanatomy course, DUMC, NC
2001-2005 Undergraduate neuroscience course, DUMC, NC
2001 Graduate neuroethology course, DUMC, NC
2006-2008 Graduate neuroscience lecture training course, DUMC, NC
2006-2008 Graduate student core neuroscience course, DUMC, NC
2008-2013 Director, Graduate Concepts in Neuroscience course: Cellular & Molecular Neurobiology, DUMC, NC
2013 Vocal learning graduate course, Department of Neurobiology, DUMC, NC
2013-present Synaptic plasticity graduate course, Department of Neurobiology, DUMC, NC

MEMBERSHIPS, ADVISORY & EDITORIAL BOARDS, CONSULTING, & COMMITTEES

- 1988-present Member, Society for Neuroscience
- 1998-present Member, J.B. Johnston Neuroscience Organization
- 1999-2006 Organizer, Avian Brain Nomenclature Consortium that changed the 100-year old outdated understanding of the avian and thus vertebrate brain evolution
- 1999-2002 Council Member, Duke University President's Council on Black Affairs, NC
- 2001-2005 Founding Member, Black Collective at Duke (BCD), Duke University, NC
- 2003-present Member, Society for Advancement of Chicanos & Native Americans (SACNAS)
- 2004-present International Society for Neuroethology
- 2004-2006 Invited Advisor, NSF Task Group for Enhancing Support for Transformative Research.
- 2005-2006 Elected Member, Duke University Medical Center Basic Sciences Faculty Steering Committee
- 2005-present Committee on Diversity in Neuroscience (C-DIN), The Society for Neuroscience. Renamed Diversity in Neuroscience Subcommittee (DINS) in 2009.
- 2006, 2008 Invited Panelist, NIH Director's Pioneer Award Reviewer
- 2007 Invited Panelist, NIH Director's New Innovator Award Reviewer
- 2007 Invited Advisor, NIH Fostering Innovation Workshop.
- 2007-2008 Advisory Committee to the NIH Director (ACD; Elias Zerhouni): Subcommittee on Peer Review; Reviewed, developed and recommended new mechanisms for funding more innovative and transformative research, and implemented by NIH beginning 2009.
- 2008-present Nominated member, The Dana Alliance for Brain Initiatives
- 2008-present Director and PI, Neuroscience Scholars Program, The Society for Neuroscience
- 2009-present Duke Center for Proteomics Board
- 2011-2012 NIMH National Advisory Mental Health Council, ad-hoc.
- 2010-present Genome 10K co-organizer (G10K leadership 2014-present).
- 2013-present External Advisory Committee for Science, Hunter College, NY
- 2013-present ENSEMBL database Science Advisory Board
- 2013-present Editorial Board, the Journal of Comparative Neurobiology
- 2013-present Editorial Board, Neuroscience Research
- 2013 NSF workshop on Obama Brain Mapping Initiative
- 2013-present Co-coordinator and co-founder of B10K project to sequence genomes of all bird species.
- 2014-2015 Distinguished Editor, Editorial Review Board, NIH Director's New Innovator Award
- 2014-present Advisory Board, Society for Neuroscience – Neuroscience Scholars Program.
- 2014-present Duke Basic Sciences Faculty Steering Committee
- 2014-present Duke Medical School Deans Advisory Council on Underrepresented Minority Faculty
- 2015-present Editorial Board of Language Sciences, Frontiers in Psychology.

AWARDS & HONORS

- 1984 NIH-Minority Biomedical Research Support (MBRS) Traineeship
- 1986 First Place Award for Excellence in Biomedical Research, NIH-MBRS Annual Symposium
- 1986 NIGMS-Minority Access to Research Careers (MARC) Honors Undergraduate Fellowship
- 1988 MARC-NIGMS Pre-Doctoral National Research Service Award
- 1988 FORD Foundation Pre-Doctoral Fellowship
- 1995 Society for Neuroscience Travel Fellowship for Under-Represented Scientists
- 1995 NIMH Dissertation Grant
- 1995 NIMH Neuroscience Postdoctoral Training Grant
- 1995 Rockefeller University Kluge Postdoctoral Fellowship
- 2000 George H. Hitching's Young Investigator Award, NC Triangle Foundation, one person/year
- 2000 Esther & Joseph Klingenstein Award in Neuroscience
- 2000 Whitehall Foundation Award in Neuroscience, 2nd highest score
- 2000 David and Lucille Packard Foundation Award
- 2000 Hall of Fame: Hunter College Search for Education, Elevation & Knowledge (SEEK), NY
- 2001 Duke University Provost Bioinformatic Award
- 2002 Duke University Provost Computational Biology Award
- 2002 Hall of Fame: Alumni Association of Hunter College
- 2002 Human Frontiers in Science Program Young Investigators Award

- 2002 NSF Alan T. Waterman Award. NSF's highest award for young investigators given annually to one scientist or engineer under the age of 35 who made a significant discovery/impact in science. Awarded for molecular approach and findings to map brain areas involved in behavior.
- 2002 Wall of Fame: Duke University Medical Center
- 2003 The 2003 Distinguished Alumni Award of the City University of New York
- 2004 Intranet Linguists of the Year for 2004
- 2005 Dominion Award: Strong Men and Women of Excellence: African American Leaders. Prior awardees include Arthur Ash, Maya Angelou, Oprah Winfrey, and Michael Jordan.
- 2005 American Philosophical Society Award
- 2005 NIH Director's Pioneer Award. Given annually to top ~1.5% of applicants.
- 2005 NOVA Science Now documentary of Dr. Jarvis and his research.
- 2005 National Science Foundation top 10 science stories of 2005; avian/vertebrate brain evolution.
- 2006 Discover magazine top 100 science discoveries of 2005; avian brain nomenclature listed at #51.
- 2006 Diverse magazine's top 10 emerging scholars of 2006.
- 2006 Popular Science Magazine's Brilliant 10 of 2006 under the age of 45
- 2006 People Magazine's, Sexiest Brain Researcher, 2006.
- 2007 Mental Floss Magazine's 10 Trail blazing scientist of 2007
- 2007 Creator Synectics' top 100 geniuses
- 2008 HHMI Investigator Award
- 2009 Ruth & A Morris Williams Prize. Duke University Medical Center's highest award under the age of 45
- 2009 Duke University's 50 most powerful living men & women, past & current, Duke Towerview magazine
- 2010 History Makers Documentary: African American Leaders in Science. Chicago, IL
- 2010 North Western University "Distinguished Role Model in Science" award. Evanston, IL
- 2013 Futurish magazine's 2014 Citizens of the Next Century (<http://www.future-ish.com/2010/12/next-century-citizens.html>)
- 2014 Co-recipient of Summit Award from the American Society for Association Executives (ASAE) for the Society for Neuroscience's Neuroscience Scholars Program, for URM.
- 2015 Science magazine working life article on Jarvis. **Science by any means necessary.** (2015) *Science* 347 (6222):686. <http://www.sciencemag.org/content/347/6222/686.short>
- 2015 Science Careers article on Jarvis. **Following the birdsong of Science.** (2015) http://sciencecareers.sciencemag.org/career_magazine/previous_issues/articles/2015_01_19/caredit.a1500015
- 2015 American Society for Cell Biology's Ernest Everett Just award for impact on diversity in science

NAMED, HONORARY, & KEYNOTE LECTURES (106 out of >260 invited lectures since 1996)

- 1999
 - Speaker: International Emperor's Award in Biology, Nagoya, Japan
- 2000
 - Plenary Speaker: Research Centers for Minority Institutions (RCMI)-Symposium, Puerto Rico
- 2001
 - Distinguished Speaker: 10th Annual Puerto Rico Neuroscience Conference, Isle Verde, PR
 - Plenary Lecturer: Atlantic Symposium on Computational Biology, Genome Systems & Tech, NC
- 2002
 - Baptista Memorial Symposium: International Ornithology Conference, Beijing, China
 - Lecture and Discussant: Gordon Research Conference in Neuroethology, Oxford, UK
 - Leaders in Scientific Discovery: Conversations with two nobel laureates (Cech & Gilman) and a Waterman awardee (Jarvis). Celebrating 40 years of NIGMS & 30 of MBRS, New Orleans, LA
 - Lecturer: The National Academy of Science's US-Japan meeting, Irvine, CA
 - Keynote Speaker: Duke University Undergraduate Visitation Week, minority student recruitment.
- 2003
 - Topical Lecturer: AAAS meeting, Denver, CO
 - Keynote Speaker: National Science Foundation, African American History Month Series, Washington, DC
 - Keynote Speaker: Howard University Graduate School, Washington, DC
 - Keynote Speaker: Society for Advancement of Chicanos & Native Americans, Albuquerque, NM
- 2004

- The ISIS 2004 Keynote Inspirational Speaker: University of North Carolina, Chapel Hill, NC
 - The 2004 Howard Hughes Professor's Lecture: Columbia University, New York, NY
 - Keynote Speaker: NC Health Careers Access Program, Greensboro, NC
- 2005
- The 2005 Chancellor's Scholars Lecturer: Fayetteville University, Fayetteville, NC
 - Keynote Speaker: Education for Sustainable Development Conference, Yale University, CT
 - Keynote Speaker: NIMH intramural annual conference, Gettysburg, VA.
 - Keynote Speaker: Society of Neuroethology Congress, Budapest, Hungary.
 - Langford Lecture Award: Duke University's outstanding research for tenure promotion.
 - Keynote Speaker: RCMI 20th Anniversary Symposium, City College, NY
 - Annual Duke Perkins Library Lecturer, Duke University, Durham, NC.
- 2006
- Keynote Speaker: HBCU-UP National Research Conference, Baltimore, MD
 - Keynote Speaker: National Institutes of Aging, Black History Month Lecturer, Bethesda, MD
 - NIMH Director's Lecturer, Bethesda, MD
 - NIDCD Council Lecturer, Bethesda, MD
 - Plenary Lecturer: 24th International Ornithology Congress, Hamburg, Germany
 - Distinguished Lecturer: NC Central University, Durham, NC
 - The 2006 James Holland Memorial Lecturer, Indiana University, Bloomington, IN
 - Symposium Speaker: Deciphering Evolution, American Society for Cell Biology, San Diego, CA
- 2007
- Keynote Speaker: 2007 NEURON Conference, Simmons College, Boston, MA
 - Keynote Speaker: 2007 Beta Kappa Chi Honor Society & National Institute of Science Conference, Greensboro, NC
 - The 2007 Darwin Day Lecturer: Virginia Commonwealth University, Richmond, VA
 - BioX Lecturer: Stanford University, Stanford, CA
 - Honored Guest Speaker: Adventures of the Mind youth conference, Morehouse University, GA
 - Public Symposium Speaker: Conference on Birdsong, Speech, & Language, Utrecht, Netherlands
 - Keynote Speaker: University of Colorado HSC, Annual Neuroscience Retreat, Keystone, CO.
 - Keynote Speaker: National Association of Biology Teachers, Atlanta, GA
 - Symposium Speaker: International Seminar on Language Evolution, St. Andrews, UK
- 2008
- The 2008 Dodgen Lecturer: Mississippi Academy of Sciences, Olive Branch, MS
 - Keynote Speaker: Biology Leadership Conference, Isle of Palms, SC
 - Keynote Speaker: South East Nerve Net Conference, Atlanta, GA
 - Keynote Speaker: NIGMS Institutional Research & Academic Career Development Awards Conference, UNC Chapel Hill, NC
 - The 2008 Martinez-Townsel Endowed Lecturer, MBL, Cold Spring Harbor, MA
 - Friday Evening Lecturer, MBL, Cold Spring Harbor, MA
 - Presidential Symp Lecturer: Society for Behavioral Neuroendocrinology, Groningen, Netherlands
 - FENS Symposium Speaker: Developing and Wiring the Brain, Geneva, Switzerland
 - Plenary Lecturer: 11th RCMI Symposium on Health Disparities, Honolulu, Hawaii
- 2009
- Keynote Lecturer: Annual Neonatal-Perinatal Research Conference, Duke University, NC
 - National Academy of Science (NAS) Evolution of Medicine Lecturer, Celebrating Darwin's 200th Birthday, Washington, DC
 - New Scientist's Magazine Keynote: 1st NYC Minority Graduate Student Network conference, NYU Langone Medical Center, New York, NY
 - Keynote Speaker: Neonatal Perinatal Institute Annual Lecture, Duke University, Durham, NC.
 - Keynote Speaker: HHMI summer EXROP conference, Chevy Chase, MD
 - Keynote Speaker: NC Triangle Area HHMI Alumni Conference, Durham, NC.
 - 200th Birthday Celebration Lecture. Darwin's Evolution, Swedish Museum of Natural History, Stockholm, Sweden
 - Keynote Speaker: AUDUBON North Carolina Statewide Conference, Durham, NC.
 - Keynote Speaker: American Ornithology Union Conference, University of Pennsylvania, PA
 - Barack Distinguished Lecturer: University of Vermont, Burlington, VT
 - Invited symposium lecturer, Darwin and Brain Evolution, Society for Neuroscience, Chicago, IL
 - World Science Festival Speaker: Avian Einstein's, New York University, NY

2010

- 1st USA Science and Engineering Festival, Meet the Scientist, Washington, DC
- Scientist Role Model. Science Makers, African Americans in Science, Chicago, IL.
- Plenary Speaker: Roche 454 Sequencing Corp. North American Users Group Meeting. Providence, RI.
- Symposium Speaker: Neuroethology Congress, Salamanca, Spain.
- Plenary Speaker: 11th Science of Aphasia Conference, Potsdam, Germany.
- Symposium Speaker: NIH symposium, 25th Anniversary of OLAW "Animal Welfare and Scientific Research, Bethesda, MD.
- The 2011 Distinguished Role Model in Life Sciences Lecturer, Northwestern University, Chicago, IL.

2011

- Roche 454 Sponsored Speaker: Plant and Animal Genome Meeting, San Diego, CA
- University-Wide Keynote Speaker: Morris College Science in Action Week, Sumter, SC.
- The 2011 Karlovitz Memorial Lecturer: Georgia Institute of Technology, Atlanta, GA.
- The 2011 Juanita Greer White Memorial Lecturer: University Nevada, Las Vegas, NV
- The 2011 Schmidt-Nielson Memorial Lecture: Duke University, Durham, NC
- Keynote Speaker: North Carolina High School Science Festival, Durham, NC
- Keynote Speaker: Annual Baylor Graduate School of Biomedicine Symposium, Houston, TX
- Symposium Speaker: 30th Anniversary Scholars in Neuroscience Symposium, Society for Neuroscience, Washington, DC.

2012

- The 2012 Isabelle Sprague Lecturer: Mt Holyoke College, South Hadley, MA
- NIH Director's Wednesday Afternoon Lecture Series, Bethesda, MD
- Keynote Lecturer: Pacific Rim Brain and Evolution Science Conference, Tokyo, Japan
- Plenary Lecture: Biennial Symposium on Brain and Mind in the Asia and Pacific, Tokyo, Japan.
- Keynote Lecturer: Avian Systems Biology Conference, Nagoya, Japan
- Distinguished Neuroscience Lecturer: University Texas, San Antonio, TX
- Keynote Lecture: Duke Bouchet Society Black Tie Dinner, Durham, NC

2013

- The 2013 Curtis L. Parker Lecturer: Morehouse School of Medicine, Atlanta, GA
- Symposium Speaker: AAAS meeting, Language Organ, Boston, MA
- Keynote Speaker: Graduate Student Symposium, University Maryland Baltimore County, MD
- Congressional Hearing Lecture: Diversity in Science, Washington, DC
- Keynote Speaker: SPIRE Summer Research Program, University North Carolina, NC.
- Symposium speaker: 20th Anniversary of Institute Symposium, Networks in the Nervous System, National Autonomous University of Mexico, Queretaro, Mexico.

2014

- Featured Speaker: USA Science & Engineering Festival Nifty Fifty Event, Woodrow Wilson High School, Washington DC
- Commencement Speaker: University of Texas San Antonio's Medical Center graduate student graduation, San Antonio, TX
- Public Lecture: Ensembl Science Public Lecture Day, Wellcome Trust, Hinxton, UK
- Keynote speaker: Ultrasonic Communication in Rodents Meeting, Tokyo, Japan
- Distinguished lecturer: 126th International Ornithological Congress, Tokyo, Japan
- Brain & Behavior Distinguished Lecture Series, Georgia State University, Atlanta, GA
- New Horizons in Science Speaker: Shaking the bird family tree, ScienceWriters Conference, Columbus, OH.
- Symposium Lecture: Evolution of Nervous Systems, Society for Neuroscience, Washington, DC
- Smithsonian Lecture for Opening Ceremony of Institute of Biodiversity Genomics, and Special avian genomes issue in *Science* magazine, Washington, DC

2015

- Plenary Lecture: Advances in Genome Biology & Technology Conference (AGBT), Marco, FL
- Distinguished Fellow SAGE Speaker: SAGE Center for the Study of the Mind, University of California, Santa Barbara, CA
- Keynote Speaker: University of Alabama 1st NEURAL conference, Birmingham, AL
- Symposium Speaker: 3rd Annual Cracking the Neural Code Symposium, Stanford, CA

- Sharon Silbiger Lecture Award: Albert Einstein College of Medicine, New York, NY
- Theodosia Hamilton Hadley memorial lecturer award: Western Michigan University, MI
- Ernest Everett Just Lecture Award: American Society For Cell Biology, San Diego, CA
- Donders Lecturer: Max Planck Institute for Psycholinguistics, Nijmegen, The Netherlands

WEB SITES

Jarvis Lab: <http://www.jarvislab.net/>

Avian Brain Hub: <http://avianbrain.org/>

Songbird Brain Transcriptome Database: <http://songbirdtranscriptome.net>

Comparative avian genome resource: <http://aviangenomes.org/>

Avian phylogenomics: <http://avian.genomics.cn/en/index.html>

B10K bird all 10,000 genomes project: <http://b10k.genomics.cn>

G10K vertebrate 10,000 genomes project: <https://genome10k.soe.ucsc.edu>

PUBLICATIONS

Peer-reviewed publications: pdfs can be found at <http://www.jarvislab.net/Publications.html>.

Publications from undergraduate research (7 articles)

1. LaFauci G, Widom RL, Eisner R, **Jarvis ED**, Rudner R. Mapping of rRNA genes with integrable plasmids in *Bacillus subtilis*. (1986) *J. Bacteriol.* 165:204-214.
2. Widom RL, **Jarvis ED**, LaFauci G, Rudner R. Instability of rRNA operons in *Bacillus subtilis*. (1988). *J. Bacteriol.* 170:605-610.
3. **Jarvis ED**, Widom R, LaFauci G, Setoguchi Y, Richter IR, Rudner R. Chromosomal Organizations of rRNA operons in *Bacillus subtilis*. (1988) *Genetics* 120:625-635.
4. **Jarvis ED**, Cheng S, Rudner R. Genetic structure and DNA sequences at junctions involved in the rearrangements of *Bacillus subtilis* strains carrying the *trpE26* mutation. (1990) *Genetics* 126:785-797.
5. Rivas MV, **Jarvis ED**, Rudner R. The structure of the *trpE*, *trpD* and 5' *trpC* genes of *Bacillus pumilus*. (1990) *Gene* 87:71-78.
6. Rudner R, Severestt A, Buchholz S, Studamire B, White AM, **Jarvis ED**. Two tRNA gene clusters associated with ribosomal RNA operons *rrnD* and *rrnE* in *Bacillus subtilis*. (1993) *J. Bacteriol.* 175:503-509.
7. Rudner R, Studamire B, **Jarvis ED**. Determination of restriction fragment length polymorphisms in bacteria using ribosomal RNA genes. (1994) *Methods in Enzymology* 235:184-196.

Publications from graduate research (3 articles)

8. **Jarvis ED**, Mello CV, Nottebohm F. Associative learning and stimulus novelty influence the song-induced expression of an immediate early gene in the canary forebrain. (1995) *Learning & Memory* 2:62-80. *Cited by the journal as one of the top 10 articles of the year.*
9. Chew SJ, Mello CV, Nottebohm F, **Jarvis ED**, Vicario D. Decrements in auditory responses to a repeated conspecific song are long-lasting and require two periods of protein synthesis in the songbird forebrain. (1995) *Proc. Natl. Acad. Sci.* 92:3406-3410.

10. Rivas M, **Jarvis ED**, Morisaki S, Carbonado H, Gottlieb AB, Krueger J. Identification of aberrantly regulated genes in diseased skin using the cDNA differential display technique. (1997) *J. Invest. Derm.* 108:188-194.

Publications from postdoctoral research (10 articles)

11. **Jarvis ED**, Nottebohm F. Motor-driven gene expression. (1997) *Proc. Natl. Acad. Sci.* 94:4097-4102.
12. **Jarvis ED**, Schawbl H, Ribeiro S, Mello CV. Brain gene regulation by territorial singing behavior in freely ranging songbirds. (1997) *Neuroreport* 8:2073-2077.
13. Holzenberger M, **Jarvis ED**, Chong C, Grossman M, Nottebohm F, Scharff C. Selective expression of insulin-like growth factor II in the songbird brain. (1997) *J. Neurosci.* 17:6974-6987.
14. **Jarvis ED**, Scharff C, Grossman M, Ramos JA, Nottebohm F. For whom the bird sings: context-dependent gene expression. (1998) *Neuron* 21:775-788. *News and views in Neuron, Schmidt 2008.*
15. Rudner R, Martsinkevich O, Leung W, **Jarvis ED**. Classification and genetic characterization of pattern forming Bacilli. (1998) *Molec. Microbio.* 27:687-703.
16. Krebs CJ, **Jarvis ED**, Pfaff DW. The 70 kDa heat shock cognate protein (Hsc73) gene is enhanced by ovarian hormones in the ventromedial hypothalamus. (1999) *Proc. Natl. Acad. Sci.* 96:1686-1691.
17. Krebs CJ, **Jarvis ED**, Chan J, Lydon JP, Ogawa S, Pfaff DW. A membrane-associated progesterone-binding protein, 25-Dx, is regulated by progesterone in brain regions involved in female reproductive behaviors. (2000) *Proc. Natl. Acad. Sci.* 97:12816-12821.
18. Li XC, **Jarvis ED**, Alvarez-Bordo B, Lim D, Nottebohm F. A relation between behavior, neurotrophin expression and neuronal survival. (2000) *Proc. Natl. Acad. Sci.* 97:8584-8589.
19. **Jarvis ED**, Mello CV. Molecular mapping of brain areas involved in parrot vocal communication. (2000) *J. Comp. Neurol.* 419:1-31. *Cover photo.*
20. Nehrbass N, **Jarvis ED**, Scharff C, Nottebohm F, Mello CV. Site-specific retinoic acid production in the brain of adult songbirds. (2000) *Neuron* 27:359-370.

Publications from tenure track Assistant Professor research at Duke (17 articles)

21. **Jarvis ED**, Ribeiro S, Vielliard J, DaSilva M, Ventura D, Mello CV. Behaviorally-driven gene expression reveals hummingbird brain song nuclei. (2000) *Nature* 406:628-632. *Featured article in Natural History Magazine and Discovery.com*
22. **Jarvis ED**, Smith VA, Wada K, Rivas MV, McElroy M, Smulders TV, Carnici P, Hayashisaki Y, Dietrich F, Wu X, Yu J, Wang PP, Hartemink AJ, Lin S. A framework for integrating the songbird brain. (2002) *J. Comp. Physiol. A* 188:961-980.
23. Smith VA, **Jarvis ED**, Hartemink AJ. Evaluating functional network inference using simulation of complex biological systems. (2002) *Bioinformatics* 18:216S-224S.
24. Ribeiro S, Mello CV, Velho T, Gardner TJ, **Jarvis ED**, Pavlides C. Induction of hippocampal long-term potentiation during waking leads to increased extrahippocampal zif-268 expression during ensuing rapid-eye-movement sleep. (2002) *J. Neurosci.* 22:10914-10923.

25. The FANTOM Consortium & The RIKEN Genome Exploration Research Group Phase II Team. Analysis of the mouse transcriptome based upon functional annotation of 60,770 full length cDNAs. (2002) *Nature* 420:563-573. **Cover photo.**
26. Gustincich S, Batalov S, Beisel KW, Bono H, Carninci P, Fletcher CF, Grimmond S, Hirokawa N, **Jarvis ED**, Jegla T, Kawasaki Y, LeMieux J, Miki H, Raviola E, Teasdale RD, Tominaga N, Yagi K, Zimmer A, Hayashizaki Y, Okazaki Y. Analysis of the mouse transcriptome for genes involved in the function of the nervous system. (2003) *Genome Res.* 13:1395-1401. **Cover Photo.**
27. Smith VA, **Jarvis ED**, Hartemink AJ. Influence of network topology and data collection on functional network inference. (2003) *Pac. Symp. Biocomputing* 2003:164-175.
28. Haesler S, Wada K, Nshdejan A, Morrisey E, Lints EKT, **Jarvis ED***, Scharff C*. FoxP2 expression in avian vocal learners and non-learners. (2004) *J. Neurosci.* 24:3164-3175. **Cover Note.** *co-corresponding authors. *Highlighted in National Geographic Magazine and other media.*
29. Wada K, Sakaguchi H, **Jarvis ED***, Hagiwara M. Differential expression of glutamate receptors in avian neural pathways for learned vocalization. (2004) *J. Comp. Neurol.* 476:44-64 *corresponding author
30. Reiner A, Perkel DJ, Bruce L, Butler AB, Csillag A, Kuenzel W, Medina L, Paxinos G, Shimizu T, Striedter GF, Wild M, Ball GF, Durand S, Güntürkün O, Lee DW, Mello CV, Powers A, White SA, Hough G, Kubikova L, Smulders TV, Wada K, Dugas-Ford J, Husband S, Yamamoto K, Yu J, Siang C, **Jarvis ED**. Revised nomenclature for avian telencephalon and some related brainstem nuclei. (2004) *J. Comp. Neurol.* 473:377-414. *The #1 cited article of the journal for 2004, and designated among top 1% highly cited papers in their academic field (neuroscience) as of Sep/Oct 2014, controlled for publication year, by Thompson Scientific.*
31. Reiner A, Perkel DJ, Bruce L, Butler AB, Csillag A, Kuenzel W, Medina L, Paxinos G, Shimizu T, Striedter GF, Wild M, Ball GF, Durand S, Güntürkün O, Lee DW, Mello CV, Powers A, White SA, Hough G, Kubikova L, Smulders TV, Wada K, Dugas-Ford J, Husband S, Yamamoto K, Yu J, Siang C, **Jarvis ED**. The Avian Brain Nomenclature Forum: a new century in comparative neuroanatomy. (2004) *J. Comp. Neurol.* 473:E1-E6.
32. Yu J, Smith VA, Wang PP, Hartemink AJ, **Jarvis ED**. Advances to Bayesian network inference for generating causal networks from observational biological data. (2004) *Bioinformatics* 20:3594-3603. *Selected by Thomson Scientific as the article with highest citation rate for "Dynamic Bayesian Networks" as of Spring 2010 and designated among top 1% highly cited papers in their academic field (bioinformatics) as of Sep/Oct 2014, controlled for publication year.*
33. **Jarvis ED**, O Güntürkün, L Bruce, A Csillag, HJ Karten, W Kuenzel, L Medina, G Paxinos, DJ Perkel, T Shimizu, GF Striedter, M Wild, GF Ball, J Dugas-Ford, S Durand, G Hough, S Husband, L Kubikova, DW Lee, CV. Mello, A Powers, C Siang, TV Smulders, K Wada, SA White, K Yamamoto, J Yu, A Reiner, AB Butler. Avian Brain Nomenclature Consortium. Avian brains and a new understanding of vertebrate brain evolution. (2005) *Nature Rev. Neurosci.* 6:151-159. *The 2nd most cited article of its issue. Highlighted as one of the top 10 projects funded by NSF in 2005, in top 100 (#51) science stories by Discover Magazine, and in multiple media outlets, including NY Times. Designated among top 1% highly cited papers in their academic field (neuroscience) as of Sep/Oct 2014, controlled for publication year, by Thompson Scientific.*
34. Reiner A, Perkel D, Mello CV, **Jarvis ED**. Songbirds and the new avian brain nomenclature. (2004) *Ann. N.Y. Acad. Sci.* 1016: 77-108. **Cover photo.**

35. **Jarvis ED**. Learned birdsong and the neurobiology of human language. (2004) *Ann. N.Y. Acad. Sci.* 1016: 746-777. *Cover photo*.
36. Mouritsen H, Feenders G, Liedvogel M, Wada K, **Jarvis ED**. A night vision brain area in migratory songbirds. (2005) *Proc. Natl. Acad. Sci.* 102:8339-8344. *Highlighted in Discover magazine and other news media*.
37. Burmeister S, **Jarvis ED**, Fernald R. Rapid behavioral and genomic responses to social opportunity. (2005) *PLoS Biology*. 3:1996-2004.

Publications since tenured Associate Professor at Duke (81 articles)

38. Sasaki A, Sotnikova TD, Gainetdinov RR, **Jarvis ED**. Social context-dependent singing-regulated dopamine. (2006) *J. Neurosci.* 26:9010-9014. *Highlighted by BBC science broadcast*.
39. Ferreira ARJ, Smulders TV, Sameshima K, Mello CV, **Jarvis ED**. Vocalizations and associated behaviors of the Sombre hummingbird (Trochilinae) and the Rufous-breasted Hermit (Phaethornithinae). (2006) *Auk*. 123:1129-1148.
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