

CURRICULUM VITAE **Hamilton Farris, PhD**

Current Title: Assistant Professor-Research

Business Address: Neuroscience Center, 2020 Gravier St, New Orleans, LA 70112

Business Telephone: 504-599-0865; 504-599-0891

Business email Address: hfarri@lsuhsc.edu

Education:

Undergraduate

1. University of Mississippi, BA, 1992, Biology

Graduate/Medical

1. University of Mississippi, MSc., 1994, Biology
2. Cornell University, PhD, 2000, Neurobiology & Behavior

Post-Doctoral Fellowships

1. University of Texas-Austin, 00-02, Integrative Biology
2. Louisiana St. University Health Sciences Center, 02-06, Neuroscience

Academic, Professional, and Research Appointments:

- 1992-1994 **Research Assistant**, National Center for Physical Acoustics, University of Mississippi. **Teaching Assistant**, introductory biology for majors, University of Mississippi.
- 1992-1995 **Teaching Assistant**, introductory biology for majors, Cornell University.
- 1995-2000 **National Institute of Mental Health (NIMH) trainee**, Cornell University.
- 2000 **Teaching Assistant**, Principles of Neurophysiology, Cornell University.
- 2000 **Teaching Assistant**, Principles of Neurophysiology, Cornell University.
- 1994-2000 **Doctoral Candidate**, Neurobiology and Behavior, Cornell University.
- 2000-2002 **Post-Doctoral Scientist**, Integrative Biology, Univ. Texas-Austin.
- 2001-2003 **Visiting Researcher**, Smithsonian Tropical Research Institute.
- 2002-2003 **Post-Doctoral Scientist**, Center for Neuroscience, LSUHSC
- 2003-2006 **NIH NRSA Post-Doctoral Fellow**, Center for Neuroscience, LSUHSC
- 2007-2012 **Visiting Researcher**, Smithsonian Tropical Research Institute
- 2006-present **Assistant Professor of Research**, Neuroscience /
Otorhinolaryngology / Cell Biology and Anatomy (2012) /
Communication Disorders (2013) LSUHSC

Membership in Professional Organizations:

- Society for Neuroscience (current)
- Acoustical Society of America (current)
- International Society for Neuroethology (current)
- Association for Research in Otolaryngology
- International Society for Behavioral Ecology

Animal Behavior Society
Association for Research in Vision and Ophthalmology

Awards and Honors:

1998 Best student paper in animal bioacoustics:

Farris, H.E. and Hoy, R.R. Two-tone suppression of the ultrasound induced startle response in a cricket. *16th International Congress on Acoustics and the 135th meeting of the Acoustical Society of America*. Seattle, WA. USA, 20-26 June, 1998.

2003-2005 NIH NRSA Post-Doctoral Fellowship:

Title: Mechanical Tuning in Auditory Sensory Hair Bundles

2005-2006 NIH NRSA Post-Doctoral Fellowship:

Title: Quantifying the role of Calcium in Mechanotransduction

2009 Grass Faculty Award. Marine Biological Laboratory, Woods Hole, MA.

Title: Neurophysiology of sound localization in túngara frogs

2012 Aesculapian Society Excellence in Teaching Nominee

L1 Spring

2013 Aesculapian Society Excellence in Teaching Award

L1 Spring

2014 Allen A. Copping Excellence in Teaching Award, School of Medicine

2015 Aesculapian Society Excellence in Teaching Award

TEACHING EXPERIENCE AND RESPONSIBILITIES

Curriculum Development/Implementation

Medical School: L1 and L2 year curriculum redevelopment workgroups.
Responsible for developing a new Medical Neuroscience curriculum in the 1st and 2nd years.

Interdisciplinary Program: Biological Systems (INTER 132; Neuroscience block) curriculum director. Also, developed the first course webpage (prior to institutional use of Moodle).

As director of **Medical Neuroscience**, I have implemented the use of Mediasite podcasts, a powerful teaching tool often overlooked in the medical curriculum.

Creation of Enduring Teaching Materials

1999 Beta tested and implemented Crawdad Neurophysiology Lab Manual
<http://www.sinauer.com/detail.php?id=9474>

Developed a computer resource for generating acoustic choruses of insects. This resource is now available to the general public at the Audubon Institute Insectarium in New Orleans.

Formal Course Responsibilities – Lecture, Lab, Seminar/DxR/Ethics

Teaching (class and lecture hours)

LSUHSC

School of Graduate Studies:

- INTER 132: **Director** and lecturer (10 hours) of the Neuro-block in the interdisciplinary program (IDP). 80 post-graduate students (graduate, physical therapy, physician assistants)
- NEURO 203 (Investigative Neuroscience): Lecturer (4 hours) Audition, language and speech. 4-8 students (graduate)
- NEURO 250 (Molecular Neuroscience): Lecturer (4 hours) Learning, memory, synaptic plasticity, second messenger processing. 4-8 students (graduate)
- NEURO 264 (Synaptic Organization of the Brain): Lecturer (4 hours) auditory brainstem (not offered this semester)
- INTER 132 (see below: combined school course)

School of Allied Health:

- ANAT 195 (Neuroanatomy): Lecturer (4 hours) Auditory and Visual systems. 80 students (physical and occupational therapy); Lab (4 hours)
- INTER 132 **Director** and lecturer (10 hours) of the Neuro-block in the interdisciplinary program (IDP). 80 post-graduate students (graduate, physical therapy, physician assistants)
- SPTHAUD 6235 – **Director**/lecturer (50 hours) Psychoacoustics and Speech Perception (12 Audiology, 1 Graduate student).

School of Medicine:

- NEURO 100 (Medical Neuroscience): **Director** and Lecturer; 41 class lecture hours. Sensory systems, learning and memory, thalamic and cortical anatomy, attention, neural repair and regeneration. Neuroanatomy laboratory instructor (8 hours). Exam construction and feedback.
- SPM 100 and 200 (Science of the Practice of Medicine): Instructor / Mentor. 20 lecture hours. Ethics of medicine and research. 28 medical students (L1&L2).
- PSYC 448 Consultation Psychiatry– Neuroscience – Pharmacology Elective: (32 lecture hours) 12 students: L3, L4, PGY2 and PA.

Louisiana Universities Marine Consortium (LSU is a member)

Neurobiology at LUMCon (2 hours) yearly (2011-13; not offered 2014)

Departmental/Interdisciplinary Teaching Conferences

Department of Otorhinolaryngology Didactic Conference (1 hour) 2013

Teaching Awards:

- 2012: Nominee: Aesculapian Society: Medical Neuroscience
- 2013: Winner: Aesculapian Society Excellence in Teaching, L1 Spring
- 2014: Allen A. Copping Excellence in Teaching Award, School of Medicine
- 2015: Winner: Aesculapian Society Excellence in Teaching

Graduate Students Trained: (as Major Professor or Thesis Advisor)

Abhilash Ponnath (graduated PhD 2011 Neuroscience LSUHSC)

Thesis and Dissertation Committees:

MD / PhD Advisor or committee member: **8** students: LSUHSC: A. Ponnath, K. Sheets, M. Ertel, E. Knott, S. Wang, V. Medillina, K. Kian. UT-Austin: X. Bernal, A. Lea

Post-Doctoral or Post-Residency Fellows Trained:

3: K. Imaizumi; J. Lentz; A. Ponnath (all at LSUHSC)

Summer Undergraduate in Neuroscience Mentor 2009 - present:

8: students trained (7 undergraduate; 1 LSU Medical Student)

Extracurricular training

Co-director: Auditory Neuroscience Journal Club (monthly, 10 students, 4 faculty)

RESEARCH AND SCHOLARSHIP

Overview: My research examines sensory processing in non-human animals at multiple levels of analysis. These research interests require integrating the experimental and analytic methods of psychophysics, neurobiology, physiology, physics and evolutionary biology. This interdisciplinary or integrative approach, often called Neuroethology or Bioacoustics, is powerful, for it leads to a more complete understanding of sensory processing. Using this approach I have published papers in journals such as *Science* (article with editorial feature), *Nature Medicine*, *Nature Communications* (featured article) and *Scientific Reports* (Nature.com). Beyond grant funding and publications, my goal is to help reconstitute the Kresge Hearing labs, which successfully employed this integrative approach.

Grants and Contracts:

Funded

2003-2005 NIH NRSA Post-Doctoral Fellowship: **PI**

Title: Mechanical Tuning in Auditory Sensory Hair Bundles (\$48,148/year)

2005-2006 NIH NRSA Post-Doctoral Fellowship: **PI**

Title: Quantifying the role of Calcium in Mechanotransduction (\$50,548)

2009 Grass Faculty Award. Marine Biological Laboratory. **Co-PI**

Title: Neurophysiology of sound localization in túngara frogs (\$24,000)

(Junior PI) 2007-2012 CoBRE (Center of Biomedical Research Excellence) **J-PI** NIH.

Title: Mentoring Neuroscience in LA: A biomedical Program to Enhance Neuroscience Grant # P20RR016816 (N. Bazan PI)

(Junior PI) 2012-2017 P30 RR032142-02 CoBRE (Center of Biomedical Research Excellence) **J-PI and Imaging Core Co-Director** Title: Mentoring Neuroscience in LA: A biomedical Program to Enhance Neuroscience Phase III (N. Bazan PI)

2012-2014 CoBRE Pilot Project (**PI**): Descending modulation in auditory processing: \$100,000 (externally reviewed)

2014-2017 NSF REU Site: Research Experiences for Underrepresented Minority Undergraduates in Basic Science and Genetic Research (Co-I with Fern Tsien PI)

Journal Publications:

Refereed (24)

- Forrest, T.G., **Farris, H.E.** and Hoy, R.R. (1995). Ultrasound acoustic startle response in scarab beetles. *Journal of Experimental Biology*, **198**, 2593-2598.
- Forrest, T.G., Read, M.P., **Farris H.E.**, and Hoy R.R. (1997). A tympanal hearing organ in scarab beetles. *Journal of Experimental Biology*, **200**, 601-606.
- Farris, H.E.**, Forrest, T.G. and Hoy, R.R. (1997). The effects of calling song spacing and intensity on the attraction of flying crickets (Orthoptera: Gryllidae: Nemobiinae). *Journal of Insect Behavior*, **10**, 639-653.
- Farris, H.E.**, Forrest, T.G. and Hoy, R.R. (1998). The effect of ultrasound on the attractiveness of acoustic mating signals. *Physiological Entomology*, **23**, 322-328.
- Farris, H.E.**, and Hoy, R.R. (2000). Ultrasound sensitivity in the cricket, *Eunemobius carolinus* (Gryllidae, Nemobiinae). *Journal of the Acoustical Society of America*, **107**, 1727-1736.
- Farris, H.E.**, and Hoy, R.R. (2002) Two-tone suppression in the cricket, *Eunemobius carolinus* (Gryllidae, Nemobiinae). *Journal of the Acoustical Society of America*, **111**, 1475-1485.
- Farris, H.E.**, Rand, A.S. and Ryan, M.J. (2002). The effects of spatially separated call components on phonotaxis in túngara frogs: Evidence for auditory grouping. *Brain, Behavior and Evolution*. **60**, 181-188.
- Farris, H.E.**, Mason, A.C. and Hoy, R.R. (2004) Identified auditory neurons in the cricket *Gryllus rubens*: temporal processing in calling song sensitive units. *Hearing Research*, **193**, 121-133.
- Wytenbach, R. and **Farris, H.E.** (2004) Insect psychoacoustics. *Microscopy Research and Technique*, **63**, 375-387.
- Farris, H.E.**, LeBlanc, C.L., Goswami, J. and Ricci, A.J. (2004) Probing the pore of the auditory hair cell mechanotransducer channel in turtle. *Journal of Physiology*, **558.3**, 769-792.
- Witte, K., **Farris, H.E.**, Ryan, M. and Wilczynski, W. (2005) How cricket frog females deal with a noisy world: habitat-related differences in auditory tuning. *Behavioral Ecology*, **16**, 571-579.
- Farris, H.E.**, and Ricci, A.J. (2005) Voltage-clamp errors cause anomalous interaction between independent ion channels. *Neuroreport*, **16**, 943-947.

- Farris, H.E.**, Rand, A.S. and Ryan, M.J. (2005) The effects of time, space and spectrum on auditory grouping in túngara frogs. *Journal of Comparative Physiology A*. **191**, 1173-1183.
- Farris, H.E.**, Wells, G.B. and Ricci, A.J. (2006) Steady-state adaptation of mechanotransduction modulates the resting potential of auditory hair cells, providing an assay for endolymph $[Ca^{2+}]$. *Journal of Neuroscience*. **26**, 12526-12536.
- Farris, H.E.**, Oshinsky, M., Forrest, T., and Hoy, R.R. (2008) Auditory sensitivity of an acoustic parasitoid (*Emblemasoma sp.*, Sarcophagidae, Diptera) and the calling behavior of potential hosts. *Brain , Behavior and Evolution*, **72**, 16-26.
- Lentz, L. Gordon W.C. **Farris, H.E.**, MacDonald, G. Robbins, C.A., Tempel, B.L., Bazan, N.G., Rubel, E., Oesterle, E., Keats, B. (2010) Deafness and retinal degeneration in a novel USH1C knock-in mouse model. *Developmental Neurobiology*, **70**, 253-67.
- Ponnath, A. and **Farris, H.E.** (2010) Calcium-dependent control of temporal processing in an auditory interneuron: a computational analysis. *Journal of Comparative Physiology A*. **196**, 613–628.
- Farris, H.E.**, and Ryan, M.J. (2011) Relative comparisons of call parameters enable auditory grouping in frogs. *Nature Communications*. Vol. **2**: doi: 10.1038/ncomms1417.
- Akre, K.L., **Farris, H.E.***, Lea, A.M., Page, R.A., and Ryan, M.J. (2011) Signal perception in frogs and bats and the evolution of mating signals. *Science*. **333** (6043), 751-2. ***equal author contributions**
- Jones, P., **Farris, H.E.**, Page, R., Ryan, M. (2013) Do frog-eating bats perceptually bind the complex components of frog calls? *Journal of Comparative Physiology A* doi: 10.1007/s00359-012-0791-5
- Ponnath, A., Hoke, K. and **Farris, H.E.** (2013) Stimulus change detection in phasic auditory units in the frog midbrain: frequency and ear specific adaptation. *Journal of Comparative Physiology A* doi:10.1007/s00359-013-0794-x
- Lentz, J., Jodelka, F, Hinrich, A., McCaffrey, K., **Farris, H.E.**, Spalitta, M., Bazan, N., Duelli, D., Rigo, F., Hastings, M. (2013) Rescue of hearing and vestibular function by antisense oligonucleotides in a mouse model of human deafness. *Nature Medicine* doi:10.1038/nm.3106
- Imaizumi, K., Shih, J.Y. and **Farris, H.E.** (2013) Global hyper-synchronous spontaneous activity in the developing optic tectum. *Scientific Reports* (*Nature.com*) doi:10.1038/srep01552
- Ponnath, A and **Farris H.E.** (2014). Sound-by-sound thalamic stimulation modulates midbrain auditory excitability and relative binaural sensitivity in frogs. *Front. Neural Circuits* 8:85. doi: 10.3389/fncir.2014.00085

Published Abstracts and Proceedings

- Farris, H.E.** and Forrest, T.G. (1994). Acoustic sensitivity in the sugarcane beetle, *Euetheola humilis*. *Animal Behavior Society*. Seattle, WA, USA, 23-28 July, 1994.
- Farris, H.E.** and Hoy, R.R. (1996). Ultrasound sensitivity in a Nemobiine, *Eunemobius carolinus*. *10th International Meeting on Insect Sound and Vibration*. Woods Hole, MA, USA, 8-11 September, 1996.

- Farris, H.E.** and Hoy, R.R. (1996). Risk assessment and mate choice in flying crickets. *Animal Behavior Society*. Flagstaff, AZ, USA, 3-8 August, 1996.
- Farris, H.E.** and Hoy, R.R. (1997). Acoustic startle and two-tone suppression in a Nemobiine cricket, *Eunemobius carolinus*. *27th Annual Meeting of the Society for Neuroscience, New Orleans, Louisiana, USA, 25-30 October, 1997. Society for Neuroscience Abstracts*. **23**, 1070.
- Farris, H.E.** and Hoy, R.R. (1998). Two-tone suppression of the ultrasound induced startle response in a cricket. *Journal of the Acoustical Society of America*, **103**, 2826-2827.
- Farris, H.E.** and Hoy, R.R. (1998). Two-tone suppression of the ultrasound induced startle response in a cricket. *Proceedings of the 16th International Congress on Acoustics and the 135th meeting of the Acoustical Society of America*. Seattle, WA. USA. **2**, 687-688.
- Farris, H.E.** and Hoy, R.R. (2000). Temporal and spectral sensitivity in identified auditory units in the cricket, *Gryllus rubens*. *30th Annual Meeting of the Society for Neuroscience. New Orleans, LA, USA, 4-9 November, 2000. Society for Neuroscience Abstracts*. **26**(1-2). Abstract No.-368.16
- Farris, H.E.** Rand, A.S., and Ryan, M.J. (2002). Auditory grouping in the túngara frog: The roles of complex call components in what and where decisions. *Journal of the Acoustical Society of America*, **112**, 2259.
- Farris, H.E.**, LeBlanc, C. and Ricci, A.J. (2003). Pharmacological clues to the nature of the mechano-electric transducer channel. *15th Annual Greater New Orleans Neuroscience Retreat*. 1 March, 2003.
- Farris, H.E.**, Rand, A.S. and Ryan, M.J. (2003). The effect of space, time and spectrum on auditory grouping túngara frogs. *33rd Annual Meeting of the Society for Neuroscience*. New Orleans, LA, USA.
- Farris, H.E.**, Wells, G.B. and Ricci, A.J. (2005) Adaptation of mechano-electric transduction currents dictates hair cell resting potential. Program No. 849.9. Washington, DC: *Society for Neuroscience*.
- Farris, H.E.**, Well G.B. and Ricci, A.J. (2006) Mechanoelectric Transduction and Adaptation Set Hair Cell Resting Potential and Allow an Estimate of Endolymphatic Ca²⁺ Concentrations. Baltimore, MD: *Association for Research in Otolaryngology*.
- J Lentz, J Phillips, K Owens, W Gordon, **Farris, H.E.**, F Pan, S Ng, P Deininger, N Bazan, E Rubel, D Raible, M Westerfield, B Keats. (2006) A knock-in mouse model of Usher type IC. The First International Symposium on Usher Syndrome, September, Omaha, NE.
- J Lentz, WC Gordon, **Farris, H.E.**, P Deininger, NG Bazan, B Keats. (2007) Animal models of Usher type IC. The Association for Research in Vision and Ophthalmology, May, Ft. Lauderdale, FL.
- Ponnath, A. and **Farris, H.E.** (2008) Computational Model of Adaptation in an Auditory Interneuron: A Biophysical Mechanism for Variance in Temporal Processing. Washington, DC: *Society for Neuroscience*.
- Farris, H.E.**, Lentz, J.J., Varnishung, C., Li, S., Gordon, W.C., Bazan, N.G. (2011) Ush1c216AA knock-in mice have slow photoreceptor adaptation. *ARVO*
- Ponnath, A., Hoke, K. and **Farris, H.E.** (2011) Stimulus Specific Adaptation in Auditory Units of the Frog Midbrain Reveals Across-Channel Processing. *Annual Meeting of the Society for Neuroscience*. Washington DC USA.
- Farris, H.E.** and Ryan, M. J. (2011) Relative comparisons enable auditory grouping in frogs. *Acoustic Communication by Animals. Third International Symposium*. Ithaca, NY

- Oral, E., Thompson, H., **Farris, H.E.** (2011) Analytic Problems in Two Photon Microscopy Data. *International Symposium on Biomathematics and Ecology: Education and Research*. Portland, OR
- Imaizumi, K., **Farris, H.E.** (2012) Global Synchronous Spontaneous Activity in Xenopus Optic Tectum. *The 9th annual Computational and Systems Neuroscience meeting (COSYNE)*. Salt Lake City, Utah.
- Lentz, J., Jodelka, F, Hinrich, A., McCaffrey, K., **Farris, H.E.**, Bazan, N., Duelli, D., Rigo, F., Hastings, M (2012) Correction of Deafness and Vestibular Defects in Usher Syndrome Using Antisense Oligonucleotides. *Association for Research in Otolaryngology Mid-winter meeting*. San Diego, CA
- Lentz J., F. Jodelka, A. Hinrich, K. McCaffrey, **H. Farris**, N. Bazan, D. Duelli, F. Rigo, M. Hastings (2012) Correction of Cryptic Splicing in Usher Syndrome Using Antisense Oligonucleotides. *The Association for Research in Vision and Ophthalmology*, May, Ft. Lauderdale, FL
- Ponnath, A., Hoke, K., **Farris, H.E.**, (2012) Adaptation in phasic auditory units of the frog midbrain is sensitive to changes in stimulus frequency and ear of input. *International Congress of Neuroethology*, College Park, MD.
- Musto, A., **Farris, H.**, Tsien, F., Walker, C. (2012) Neuroscience Translational Research Program for Underrepresented Minority Students in Louisiana. *Annual Meeting of the Society for Neuroscience*. New Orleans, LA
- Ponnath, A., **Farris, H.E.** (2012) Descending modulation of auditory sensitivity in the frog midbrain. *Annual Meeting of the Society for Neuroscience*. New Orleans, LA
- Hastings, M., J. Lentz, F. Jodelka, A. Hinrich, D. Duelli, F. Rigo, N. Bazan, K. McCaffrey, **H. Farris**, M. Spalitta (2012) Rescue of hearing and vestibular function in deaf mice using antisense oligonucleotides. *Annual Meeting of the Society for Neuroscience*. New Orleans, LA
- Imaizumi, K., Shih, J.Y., **Farris, H.E.** (2012) Global hyper-synchronous spontaneous activity in the developing optic tectum. *Annual Meeting of the Society for Neuroscience*. New Orleans, LA
- Ponnath, A., Jodelka, FM, Hinrich, AJ, McCaffrey, KE, **Farris, HE**, Bazan, NG, Rigo, F, Hastings, ML, Lentz, JJ. (2014) Dose Dependent Threshold Rescue using Antisense Oligonucleotides in Usher Mice. *Association for Research in Otolaryngology*. San Diego
- Rosencrans, R., Fellner, S., Vumbaco, D., Richards-Zawacki, C., **Farris, HE.** (2014) Electroretinogram analysis of light sensitivity in four species of frogs from habitats with different ambient light levels. *Annual Meeting of the Society for Neuroscience*. Washington DC USA.
- Ponnath, A, **Farris, H.E.**, Rigo, F., Hastings, M.L., Lentz, J.J. (2015) Functional Integrity of Outer Hair cells in Usher Mice. *Association for Research in Otolaryngology*. Baltimore

Research Review Committee:

2003, 2004, 2012, 2014 **NSF** IOS Neural Cluster. Ad-Hoc Reviewer

2010, 2011 **NSF** Centers of Research Excellence in Science and Technology (CREST) and HBCU Research Infrastructure for Science and Engineering (RISE). Reviewer

2012, 2013, 2014, 2015 **LaCATS** Meritorious Scholar Review Board.

2012, 2013, 2014 **LaCATS** Roadmap Scholar Review Board.

Scientific Presentations:

Invited Presentations and Seminars:

- Farris, H.E.** (1996). Dept. of Biology, Vassar College.
- Farris, H.E.** (2000). Sec. Integrative Biology, Univ. Texas-Austin.
- Farris, H.E.** (2001). Dept. of Biology, Univ. of Missouri.
- Farris, H.E.** (2002). Kresge Hearing Inst. LSUHSC
- Farris, H.E.** (2006). Dept. Biology, Loyola Univ of New Orleans.
- Farris, H.E.** (2006). Dept. Biology, Univ. of New Orleans.
- Farris, H.E.** (2006). Dept. Biology, Univ. of Mississippi.
- Farris, H.E.** (2009). Dept. Cell Biology and Anatomy, LSUHSC.
- Farris, H.E.** (2010). Dept. Ecology and Evolutionary Biology. Tulane University.
- Farris, H.E.** (2011). Dept. Biology, Univ. of New Orleans
- Farris, H.E.** (2012). Depts. Neuroscience and Biology; Colorado State University
- Farris, H.E.** (2012). Louisiana University Marine Consortium
- Farris, H.E.** (2012). Smithsonian Tropical Research Institute (Gamboa Seminar series)
- Farris, H.E.** (2012). Dept. of Biology and Museum of Natural History. LSU-Baton Rouge
- Farris, H.E.** (2012). Dept. of Biology, U. North Carolina-Chapel Hill
- Farris, H.E.** (2013). Dept. of Pharmacology, LSUHSC

Invited Professional meetings/symposia presentations

- Farris, H.E.** (1998). Animal bioacoustics in the lab: some hows and whys of six-legged listeners. 136th meeting of the Acoustical Society of America. Norfolk, VA, USA, 12-16 October, 1998.
- Farris, H.E.** (2001). Temporal and spectral sensitivity of identified auditory units in crickets. Sixth Annual Univ. Texas Symposium on Neuroscience 10-February
- Farris, H.E.,** Rand, A.S., Ryan, M.J. (2004) Auditory grouping in túngara frogs. Animal Behavior Society, Oaxaca, Mexico.
- Farris, H.E.** (2014) Descending auditory modulation in frogs. ISBE, New York, NY
- Farris, H.E.** (2014) Descending auditory modulation in frog. JB Johnston Satellite Symposium, Society for Neuroscience, Washington DC

Editorial Activities:

Reviewed Manuscripts and Grants

NSF
Proceedings of the National Academy of Science
Journal of Experimental Psychology
Journal of Experimental Biology
Journal of Comparative Physiology A
Brain Behavior and Evolution
Journal of the Acoustical Society of America
Journal of Zoology

Behavioural Ecology
Animal Behavior
Behavioral Ecology and Sociobiology
Journal of Evolutionary Biology
Journal of Arachnology, Journal of Orthopteran Research, Journal of Insect Science

SERVICE ACTIVITIES

University/Institutional Service:

Departmental committees

1. IDP Recruitment committee; Application review and applicant interview
2. Co-Director of the Neuroscience Center Graduate Program

School of Graduate Studies

1. Graduate School Advisory council member: recruitment committee
2. Graduate School Advisory council member: Research committee: Co-organizer of graduate research day (poster and seminar judge; Chair of seminars)

School of Medicine committees

1. 2012-2013: Communication Committee
2. 2012-present: Promotions (medical student)
3. 2014: Strategic Planning Communications Committee
4. 2014-2017 SOM Faculty Assembly
5. Ongoing: L1 and L2 curriculum redesign (as Med Neuro director)
6. 2014-present: Curriculum Evaluation Committee

LSUHSC (campus) committees

1. Website Committee: Evaluate, beta test and advise LSUHSC on necessary web and network changes
2. Faculty advisor for the Student Interest Group in Music and Art (SIGMA, LSUHSC)
3. Faculty advisor for C.O.R.E.: Community Outreach Rebuilding and Education (start 2015)

LSU System committees

1. LSU 2015 Transition Advisory Team Commercialization and Technology Transfer Task Force
2. LSU 2015 System Wide Network Bandwidth Subcommittee

Professional society committees

1. International Congress of Neuroethology: Satellite symposium organizer/host (2012)

Administrative Responsibilities:

In addition to **directing** the L1 Medical Neuroscience course, as co-director of the Neuroscience Graduate Program my academic administrative responsibilities are primarily focused on graduate student education in the Neuroscience Center, overseeing every step of the graduate student educational process (application review to conferral of degree). These responsibilities overlap with those I have as a member of the Graduate School Advisory Council, including the GAC recruitment committee.

Departmental

Co-Director of the Graduate Student Program in the Neuroscience Center: Advise and direct the graduate students in the Neuroscience Center from their admission to completion of their degree. Review applications and place new graduate students with mentors.

Neuroscience Center: Co-Director of the Multi-Photon imaging core facility.

Graduate School Advisory Council Member representing the Neuroscience Center

Community Service Activities:

2010 – present. **Executive** and **founding** board member of the Greater New Orleans Drug Demand Reduction Coalition, which includes over 100 working members (too many official members to name). Recently published the New Orleans Drug Control Strategy (co-author) and Needs Assessment (co-editor and co-director). Co-chair of the Data Work Group. (term ended 2014)

2011. Member of the Louisiana High School Concussion Coalition. Wrote legislation and advised Louisiana State government on concussion treatment in high school aged athletes. Legislation passed and is now law (Louisiana Youth Concussion Act).

2012-2014. Curriculum and Marketing Strategic Planning Committees, Holy Cross High School

2013. HHS SAMHSA Grant Proposal: Drug Free Community (role: key personnel) \$125,000/year for 5 years. Unfunded

2013. City of New Orleans Health Department Fall Behavioral Health Forum:
Lecturer

2014. Organizer and Host: Special Seminar at LSUHSC by Dr. Bertha K. Madras, PhD, Professor of Psychobiology, Department of Psychiatry from Harvard Medical School. Funded by the New Orleans Drug Demand Reduction Coalition