Fatima T. Husain, Ph.D.

Associate Professor

Department of Speech and Hearing Science,

The Neuroscience Program and

The Beckman Institute for Advanced Science and Technology

Affiliate, Center on Health Aging and Disability

Affiliate, Computational Science and Engineering

Fellow, Center for Wounded Veterans in Higher Education

University of Illinois at Urbana-Champaign

901 S. Sixth Street, Champaign, IL 61821

Email: husainf@illinois.edu, Phone: 1-217-333-7561

Education

Ph.D. Cognitive and Neural Systems. Boston University, Boston, Massachusetts, May 1999 Dissertation: Investigations of Auditory Category Learning: Experiments and Models.

Mentor: Frank Guenther

M.S. Computer Science, North Dakota State University, Fargo, North Dakota, May 1995

Thesis: ClaNNet: An Unsupervised Neural Network for Classification of Unknown Words.

Mentor: Paul Juell

B.E. Computer Engineering. University of Mumbai, Mumbai, India, August 1992

Professional Experience

Post-Doctoral Fellow (1999-2001), National Institute on Deafness and Other communication Disorders, National Institutes of Health, Bethesda, MD

Research Fellow (2001-2007), National Institute on Deafness and Other communication Disorders, National Institutes of Health, Bethesda, MD

Assistant Professor (2008-2014), Department of Speech and Hearing Science, University of Illinois at Urbana-Champaign

Associate Professor (2014-present), Department of Speech and Hearing Science, University of Illinois at Urbana-Champaign

Part-time faculty (2008-present), Beckman Institute for Advanced Science and Technology, University of Illinois at Urbana-Champaign

Faculty (2008-present), Neuroscience Program, University of Illinois at Urbana-Champaign

Teaching Experience

University of Illinois at Urbana-Champaign (2008-present)

Psychoacoustics (SHS 540): Spring 2008, Spring 2009, Spring 2011, Fall 2011, Spring 2013, Spring 2014, Fall 2014, Spring 2017.

Speech and Hearing Acoustics (ECE 538/SHS503): Fall 2008

Seminar on Tinnitus (SHS 593): Fall 2009, Fall 2011, Fall 2013, Fall 2015

General Speech Science (SHS 301): Spring 2010, Spring 2011, Spring 2013, Spring 2014, Spring 2015, Spring 2017

Foundations of Audiology (SHS593): Fall 2010, Fall 2012, Fall 2014

Boston University, Department of Cognitive and Neural Systems. (Fall 1996).

Teaching Fellow for a graduate course on computational modeling of biological neural systems.

North Dakota State University, Department of Computer Science. (1992-1995).

Teaching Fellow. Was solely responsible for the teaching and grading of introductory undergraduate courses on using computers (IBM and Macintosh), word processing (WordPerfect, MS Works) and programming (FORTRAN). Taught 9 courses spread over 6 semesters to undergraduates.

North Dakota State University, Department of Computer Science. (Fall 1994). **Teaching Assistant**. Graded a graduate course on Artificial Intelligence.

Mentoring Experience

Postdoctoral Fellows

Kwaku Akrofi October 2010-January 2013. PhD in Electrical and Computer

Engineering, Texas Tech University. Functional and Anatomical

Neural Networks of Chronic Tinnitus and Hearing Loss.

Benjamin Zimmerman October 2016- present. PhD in Neuroscience, UIUC. *Identifying*

Subgroups of Tinnitus Using Novel Resting State fMRI Biomarkers

and Cluster Analysis.

Primary Mentor: Doctoral Students

Aiguo Han August 2008-August 2009.

Corinne Heller August 2010-May 2012. AuD student. Capstone Project: *Passive*

Listening & Auditory Discrimination Therapy: A Sound Therapy for

Tinnitus Management. Graduation, May 2012.

Jake Carpenter-Thompson August 2010-2015, MD/PhD student. Dissertation: *Tinnitus, Physical*

Activity and Improved Quality of Life: Investigation of the Neural Correlates of Tinnitus and Potential Treatment Options. Graduation,

May 2015.

Sara Schmidt August 2011-present, PhD student, Neuroscience program

Jaclyn Utz August 2011 – 2015, AuD student. Capstone Project: Expectations for

Tinnitus Treatment and Outcomes: A Survey Study of Audiologists and

Patients. Graduation, May 2015.

Allison Sherren January 2012 – 2015 AuD student. Capstone Project: Zwicker Tone

and Tinnitus: Understanding Phantom Perceptions. Graduation, May

2015.

Jenise Chappell August 2012-2016, AuD student. Capstone Project: Dissociating

Mechanisms of Tinnitus and Hyperacusis: A Survey. Graduation, May

2016.

Richard Bido Medina August 2014- 2016, PhD student Neuroscience program

Anthony Tsao May 2015- present, AuD student, Speech and Hearing Science
Megan Finnegan August 2015- present, PhD student, Speech and Hearing Science
Yihsin Tai August 2015- present, PhD student, Speech and Hearing Science
Nora Prachar January 2016-present, AuD student, Speech and Hearing Science
Sarah Albelaikhi August 2016-present, AuD student, Speech and Hearing Science

Committee Member: Doctoral Students

Heidi Ramrattan AuD student, October 2009-August 2010 (preliminary and final

defense)

Sarah Lewandowski AuD student, May 2010 – March 2011 (preliminary)

Julie Kenney AuD student, January 2011 – May 2011 (preliminary and final

defense)

Yihe Zhu PhD student (SHS), December 2010- May 2012 (preliminary and

final defense)

Kathleen Burke AuD student, August 2011 – May 2012 (preliminary and final

defense)

Sarah King PhD student (ECE), January 2012 – (preliminary and final defense)

Christopher Boven PhD student (NSP), January 2012- (qualifying exam, preliminary

and final defense)

Lydia Nguyen PhD student (NSP), August 2015 – (early research project,

qualifying exam)

Haley Hix AuD student, November 2014-June 2015 (preliminary and final

defense)

Lyndsey Yarde AuD student, August 2015 – May 2016 (preliminary and final

defense)

Shraddha Shende PhD student (SHS), August 2016 – present (early research project)

Committee Member: Master's Students

Lara Hosey MA in Psychology, American University, 2001 (final defense

committee)

Corinne Nakashima MS in Electrical and Computer Engineering, UIUC, 2015 (co-

director of Master's thesis)

Graduate Research Assistants

Sarah Lewandowski, AuD student

William Miller, AuD student

Corinne Heller, AuD student

Jan 2009 – May 2009

Aug 2010 – May 2011

Jake Carpenter-Thompson, MD/PhD student

Jaclyn Utz, AuD student

Aug 2012 – June 2015

Aug 2011- June 2013

Sara Schmidt, PhD student Aug 2011- present Jenise Chappell, AuD student Aug 2013-July 2015 Richard Bido Medina, PhD student Aug 2014-June 2016 Megan Finnegan, PhD student August 2015-present Yihsin Tai, PhD student August 2015-present Anthony Tsao, AuD student August 2015-present Mary-Angelica Gramcko-Tursi, PhD student May-Aug 2016, 2017 Ivan Thomas, MS (Mechanical Engineering) January 2017-present

Citizen-scientist Research Assistants

July 2011- February 2011 Helen Thursh

Undergraduate Summer Research Students from other Universities (SROP, Grad College, UIUC)

Krystal Hill May-August 2008 Amy Nelloms May-August 2010 Chloe Bunch May-August 2011 Ambra Terrell May-August 2011

Undergraduate Research Assistants

- 1. Caroline Davis
- 2. Roberto Medina
- 3. Jaclyn Utz
- 4. Kristina Rutas
- 5. Stephanie Willard
- 6. Jenise Chappelle
- 7. Emeka Anekwe
- 8. Ciara Nally
- 9. Shannon O'Donoghue
- 10. Louay Jajay
- 11. Erika Lindgren
- 12. Melissa Tednes
- 13. Jessica Blodgett
- 14. Madeline Thomas
- 15. Ariana Romero
- 16. Mohammed Zeeshan
- 17. Rahul Kanianchalil
- 18. Kelly Utz
- 19. Emily Kay

Visiting Postdoctoral Fellows and Graduate Students

October 2011-December 2011 Phillip Gander, Postdoctoral Fellow, National Biomedical Research Unit in Hearing, National Institute for Health Research, Nottingham, UK.

December 2011 Jeff Davies, AuD, PhD student, Nottingham Trent University and National Biomedical Research Unit in Hearing, National Institute for Health Research, Nottingham, UK.

June 6-July 25, 2016 Kelly Roth, 2nd year Medical Student, Southern Illinois University-Medical School, Springfield, IL, as part of the Mentored Professional Enrichment Experience.

Undergraduate and Graduate research assistants at NIDCD, NIH

Summer 2001 Micheal Chen, BESIP Intern
Summer 2002 Thomas Lozito, BESIP Intern
Aug 2003 – July 2004 Deborah Patkin, Graduate Intern
Summer 2004 William King, BESIP Intern
Summer 2005 Jaymi Della, BESIP Intern

May 2002-Aug2004 Huan Luo, Graduate (Ph.D.) Intern May 2005 – Dec 2007 Feng Rong, Graduate (Ph.D.) Intern

Sep 2006 – Aug 2008 Nathan Pajor, Post-Baccalaureate IRTA Fellow

*BESIP: Biomedical summer internship program, a competitive program supporting 16 Biomedical Engineering Juniors each summer at NIH. For details see http://www.nih.gov/od/ors/dbeps/besip/

Research Grants Awarded

- 1. **Husain, F.T** (PI), *Neural Modeling and Imaging of Tinnitus*. Tinnitus Research Consortium. Awarded for Sep 1 2006 -Aug 31 2008, \$75,000.
- 2. **Husain, F.T** (PI) and Allen, J. (co-PI), *Identifying differences in hearing loss groups with and without tinnitus: A combined behavioral and mathematical modeling study in older adults* Mary Jane Neer Research Fund of the College of Applied Health Sciences at the University of Illinois. Awarded for May 2008-May 2009, \$15,000.
- 3. **Husain, F.T** (PI), *Mapping attentional networks in hearing loss and tinnitus*. Campus Research Board of the University of Illinois. Awarded for 2010-May 2011, \$13,070.
- 4. Grindrod, C., (PI) and **Husain, F.T.** (co-PI), *Age-Related Changes in the Cerebral Hemispheric Contributions to Sentence-Level Integration* Awarded by the CHAD Pilot Grant Program, College of Applied Health Sciences, University of Illinois. Awarded for April 2010-May 2011, \$15,000.
- 5. **Husain, F.T** (PI), Functional and Anatomical Neural Networks of Chronic Tinnitus and Hearing Loss. Tinnitus Research Consortium. Awarded for Aug 1 2010 July 31 2014, \$300,000.
- 6. **Husain, F.T.** (PI), *Tinnitus and Hearing Impairment: Use of Novel Brain Imaging Methods*. William and Flora Hewlett International Research Grants. Awarded for June 2011-May 2012, \$3,000.
- 7. Carpenter-Thompson, J.R.(student), **Husain, F.T.** (mentor). *The Effect of Exercise on Tinnitus Severity*, American Tinnitus Association. May 1, 2013-April 30, May 2015. \$10,000.

- 8. **Husain, F.T.** (PI), McAuley, E. (co-PI), *Understanding the Role of Physical Fitness in Mitigating Tinnitus Severity: An fMRI Study*, Center for Health, Aging and Disability seed grant, August 16, 2013-January 15, 2015, \$20,000.
- 9. Chappell, J. (student), **Husain, F.T.** (mentor). *Dissociating Mechanisms of Tinnitus and Hyperacusis: A survey and Behavioral Study*, American Tinnitus Association., \$10,000 (Direct Costs), June 1 2014-May 31 2015.
- 10. **Husain, F.T. (PI),** Hirani (collaborator), Baryshnikov (collaborator), Esquivel (collaborator), Sherman (collaborator). *Identifying Subgroups of Tinnitus Using Novel Resting State fMRI Biomarkers and Cluster Analysis*, Department of Defense, Congressionally Directed Medical Research Programs (CDMRP), Peer Reviewed Medical Research Program (PRMRP) Investigator-Initiated Research Award, \$1,188, 886 (Direct Costs), \$1,591,913 (Total Costs), September 15 2015 September 14 2018.
- 11. Mudar, R. (PI), **Husain, F.T.** (**Co-PI**). Impact of Hearing Loss on Brain and Cognition in Older Adults. Center on Health Aging and Disability Pilot Grants, College of Applied Health Sciences, \$20,000, August 16, 2015-February 16, 2017.
- 12. **Husain, F.T.** (**PI**), Gobin, R. (co-PI), Baryshnikov, Y. (co-PI). *Assessing Mindfulness Based Cognitive Therapy (MBCT) in Veterans and Civilians with Tinnitus using fMRI*. Center for Wounded Veterans in Higher Education Seed Grant, supported by Office of the Vice-Chancellor for Research, College of Applied Health Sciences and Beckman Institute for Advanced Research and Technology, \$45,000, January 15-2016-December 31, 2016.
- 13. **Husain, F.T.** (**PI**). *Study of Intermittent Tinnitus using Brain Imaging*, International Research Travel Grant, Illinois International Programs, \$3,000, 2016-2017 academic year.
- 14. **Husain, F.T. (PI),** Van Dijk, P. (PI). NWO (Nederlandse Organisatie voor Wetenschappelijk Onderzoek = Netherlands Organisation for Scientific Research) Visitors Travel Grant to study intermittent tinnitus, €4,500 (=\$5,123), 2016-2017.

Other Grants Awarded

- 1. **Husain, F.T.**, Scholarship to attend "Lessons For Success Developing the Emerging Scientist" workshop hosted by American Speech-Language and Hearing Association in Rockville, MD, April 2009.
- 2. **Husain, F.T**. Scholarship to attend "ERP boot camp" workshop hosted by the Center for Mind and Brain, University of California, Davis, CA, July 20-29, 2009.
- 3. Jones, D.L. (PI), Coleman, T., Fabiani, M., Wickesberg, R. (co-Investigators), NeuroEngineering IGERT: A unified educational program for systems engineering and neuroscience. One of twenty founding associate faculty (**Husain, F.T**.). National Science Foundation, Awarded for July 2009-2014, \$,2,000,000.
- 4. Gratton, G. (PI), *Diffusive optical tomography at the Biomedical Imaging Center*, One of twenty founding associate faculty (**Husain, F.T**.). Biomedical Research Support Shared Instrumentation Grants, NCRR, National Institutes of Health, September 2010-August 2011, \$600,000.
- 5. Gander, P. (PI), Understanding the tinnitus brain at rest: Characterising the effect of a tinnitus intervention on inter-regional connectivity, Supervisor in host lab (**Husain, F.T.**). Pauline Ashley Prize, Deafness Research UK, 2011/2012, £5,000.

- 6. **Husain, F.T. (PI),** Grindrod, C.M. (PI), Initiative on Aging and Communication Research (I-Care), Focal Point Project, Graduate College, University of Illinois at Urbana-Champaign, 2012-2014, \$15,000.
- 7. Roth, K. (student), **Husain, F.T.** (mentor). *Tinnitus Severity and Gray Matter: A Characterization of Subgroups*. Mentored Professional Enrichment Experience, Southern Illinois University-Medical School grant to conduct research in mentor's lab, (total cost) \$3,779, June-August 2017.
- 8. Mary-Angelica Gramcko-Tursi (PhD student, Mathematics) (student), Baryshnikov, Y. (mentor), **Husain, F.T.** (mentor). Program for Interdisciplinary and Industrial Internships at Illinois, \$4,300 (yearly) for 2 summer months, 2016 and 2017.
- 9. Tai, Y. (PhD student, SHS), **Husain, F.T.** (mentor). Research Mentoring-Pair Travel Award to attend the 26th Annual Research Symposium at ASHA Convention on Advances in Auditory Attention Research: Processing Complex Auditory Stimuli, November 19, 2016, Philadelphia, PA.

Awards and Honors

1992-1995	Graduate Teaching Fellowship	Department of Computer Science, North Dakota State University
1995-1999	Graduate Research Fellowship	Department of Cognitive and Neural Systems, Boston University
2008	Distinguished Mentor Award	Post-baccalaureate Intramural Research Training Award (IRTA) Committee, National Institutes of Health
2011-2012	Fellow	Center for Advanced Study, University of Illinois at Urbana-Champaign
2012-	Member	Scientific Advisory Committee, American Tinnitus Association
2015-	Member	Group 3 – Neuroimaging, TINNET COST (Tinnitus Network, European Cooperation in Science and Tachnelogy)
2016-2017	Fellow	Science and Technology) Center for Wounded Veterans in Higher Education, UIUC
2017	Graduate Student Mentor Award	College of Applied Health Sciences, UIUC

Publications

Peer-reviewed Journals

1. **Husain, F**. and Juell P. (1997). A self-organizing neural network for the classification of unknown words. VIVEK: A Quarterly in Artificial Intelligence, vol. 10, no.1, 2-11, NCST, Mumbai, India.

- 2. Guenther, F.H, **Husain, F.T**., Cohen, M.A., and Shinn-Cunningham, B. G. (1999). *Effects of categorization and discrimination training on auditory perceptual space*. Journal of the Acoustical Society of America, 106(5): 2900-12.
- 3. Horwitz, B., **Husain, F.T.**, Braun, A.R., Tagamets, M.-A (2001). Simulating PET/fMRI studies of visual and auditory pattern recognition using biologically realistic large-scale models. Proceedings of the INNS-IEEE International Joint Conference on Neural Networks, Washington D.C., July 2001: 878-883.
- 4. **Husain, F.T.**, Nandipati, G., Braun, A.R., Tagamets, M.-A., Horwitz, B. (2002). *Simulating transcranial magnetic stimulation during PET with a large-scale neural network model of the prefrontal cortex and the visual system*. NeuroImage, 15(1):58-73.
- 5. **Husain, F.T.**, Tagamets, M.-A, Fromm, S.J., Braun, A.R., Horwitz, B. (2004). *Relating neuronal dynamics for auditory object processing to neuroimaging activity: A computational model and fMRI study*. NeuroImage, 21, 1701-1720.
- 6. **Husain, F. T.**, Lozito, T., Ulloa, A., Horwitz, B. (2005). *Investigating the neural basis of the auditory continuity illusion*. Journal of Cognitive Neuroscience, 17(8), 275-1292.
- 7. Horwitz, B., Warner, B., Fitzer, B., Tagamets, M.-A., **Husain, F.T.**, Long, TW. (2005). *Investigating the neural basis for functional and effective connectivity. I. Application to fMRI and PET*. Proceedings of the Royal Society of London. B Biol Sci. May 29; 360(1457):1093-108
- 8. Horwitz, B., **Husain, F.T.**, Guenther, F.H. (2005). *Auditory object processing and primate biological evolution*, Behavioral Brain Sciences, 28: 134.
- 9. Luo, H., **Husain, F. T.**, Horwitz, B., Poeppel, D. (2005). *Discrimination and categorization of speech and non-speech sounds in an MEG delayed-match-to-sample study*. NeuroImage, 28(1):59-71.
- 10. **Husain, F.T.**, McKinney, C.M., Horwitz, B. (2006). *Frontal cortex functional connectivity changes during sound categorization*. Neuroreport. 17(6): 617-621.
- 11. **Husain, F.T.**, Fromm, S.J., Pursley, R.H., Hosey, L.A., Braun, A.R., Horwitz, B. (2006). *Neural bases of categorization of simple speech and nonspeech sounds*. Human Brain Mapping, 27(8): 636-651.
- 12. **Husain, F.T.,** Horwitz, B. (2006) *Experimental-neuromodeling framework for understanding auditory object processing: integrating data across multiple scales*. The Journal of Physiology Paris, 100(1-3): 133-41.
- 13. Wen, S., Ulloa, A., **Husain, F.T.**, Horwitz, B., Contreras-Vidal, J.L. (2008) *Simulated neural dynamics of decision-making in an auditory delayed match-to-sample task*. Biological Cybernetics, 99(1):15-27.
- 14. Ulloa, A., **Husain, F.T.** Kemeny, S., Xu, J., Braun, A.R., Horwitz, B. (2008). *Neural mechanisms of auditory discrimination of long-duration tonal patterns: A neural modeling and fMRI study*. Journal of Integrative Neuroscience, 7(4): 501-27.
- 15. **Husain, F.T.,** Patkin, D., Thai-Van-H., Braun, A.R., Horwitz, B. (2009). *Distinguishing the Processing of Gestures from Signs in Deaf Individuals: An fMRI Study*. Brain Research, 1276: 140-150.
- 16. Han, W., & **Husain, F. T**. (2009). *Neural mechanisms and models of tinnitus generation. Korean Journal of Audiology*, 5:13-19.
- 17. Smith, J.F., Alexander, G.E., Chen, K., **Husain, F.T.**, Kim, J., Pajor, N., Horwitz, B. (2010). *Imaging systems level consolidation of novel associate memories: a longitudinal neuroimaging study*. NeuroImage, 50(2): 826-36.

- 18. **Husain, F.T.,** Medina, R.E., Davis, C.W., Szymko-Bennett, Y., Simonyan, K., Pajor, N.M., Horwitz, B. (2011). *Neuroanatomical changes due to hearing loss and chronic tinnitus: a combined VBM and DTI study*. Brain Research, 1369: 74-88.
- 19. Rong, F., Holroyd, T., **Husain, F.T.,** Contreras-Vidal, J., Horwitz, B. (2011). *Task-specific modulation of human auditory evoked responses in a delayed-match-to-sample task.* Frontiers in Auditory Cognitive Neuroscience, 2: 1:15.
- 20. **Husain, F.T.** Pajor, N.M., Smith J.F., Kim, H.J., Rudy, S., Zalewski, C., Brewer C., Horwitz, B. (2011). *Discrimination task reveals differences in neural bases of tinnitus and hearing impairment*. PLoS ONE, 6(10)1:e26639, 1-12
- 21. Akrofi, K., Sutton, B.P., Ouyan, C., **Husain, F.T.** (2011). Cluster sizes in Interleaved Steady State (ISSS) imaging. Conference proceedings of the 33rd International Conference of the IEEE EMBS, 7001-7004.
- 22. **Husain, F.T.,** Patkin, D., Kim, J., Braun, A.R., Horwitz, B. (2012). *Dissociating neural correlates of meaningful emblems from meaningless gestures in deaf signers and hearing non-signers*. Brain Research, 1478: 24-35.
- 23. **Husain, F**.T. (2013). *Effect of tinnitus on DPOAEs varies with hearing loss*. American Journal of Audiology, 22(1): 125-24.
- 24. Roberts, L.E., **Husain, F.T.,** Eggermont, J.J. (2013). Role of Attention in the Generation and Modulation of Tinnitus. *Neuroscience and Biobehavioral Reviews*, *37*(8), 1754-1773.
- 25. Schmidt, S.A., Akrofi, K., Carpenter-Thompson, J.R., **Husain, F.T.** (2013). Default mode and dorsal attention networks exhibit differential functional connectivity in tinnitus and hearing loss. *PLoS ONE*, 8(10): e76488, 1-12.
- 26. **Husain, F.T.,** Schmidt, S.A. (2014). Using resting state functional connectivity to unravel networks of tinnitus. *Hearing Research*, 307:153-62
- 27. **Husain, F.T.,** Carpenter-Thompson JR, Schmidt SA. (2014). The effect of mild-to-moderate hearing loss on auditory and emotion processing networks. *Front Syst Neurosci.* 8:10.
- 28. Carpenter-Thompson, J.R., Akrofi, K., Schmidt, S.A., Dolcos, F., **Husain, F.T.** (2014). Alterations of the Emotional Processing System may Underlie Preserved Rapid Reaction Time in Tinnitus. *Brain Research*.1567: 28-41.
- 29. Carpenter-Thompson J.R., McAuley, E., **Husain, F.T.** (2015). Physical Activity, Tinnitus Severity and Improved Quality of Life. *Ear and Hearing*. 36(5): 574-81.
- 30. Carpenter-Thompson, J.R., Schmidt, S.A., **Husain, F.T**. (2015). Neural Plasticity of Mild Tinnitus: An fMRI Investigation Comparing Those Recently Diagnosed with Tinnitus to Those That Had Tinnitus for a Long Period of Time. *Neural Plast*. 2015:161478. doi: 10.1155/2015/161478.
- 31. **Husain, F.T.**, Akrofi, K., Carpenter-Thompson, J.R., Schmidt, S.A. (2015). Alterations to the attention system in adults with tinnitus are modality specific. *Brain Research*. 1620:81-97.
- 32. Carpenter-Thompson, J.R., Schmidt, S., Mcauley, E., **Husain, F.T.** (2015). Increased Frontal Response May Underlie Decreased Tinnitus Severity. *PLoS One* 10 (12):1-23, e0144419. doi: 10.1371/journal.pone.0144419.
- 33. **Husain, F.T.** (2016). Neural networks of tinnitus in humans: Elucidating severity and habituation. *Hearing Research*. 334: 37-48.
- 34. Mudar, R. A., Husain, F.T. (2016). Neural Alterations in Acquired Age-Related

- Hearing Loss. Front Psychol. 2016 Jun 2;7:828. doi: 10.3389/fpsyg.2016.00828.
- 35. **Husain, F.T.**, Gander, P.E., Jensen, J.N., Shen, S. (in press). Expectations for Tinnitus Treatment and Outcomes: A Survey Study of Audiologists and Patients. *J. of Am. Acad. Audiology*.

Book chapters

- 1. **Husain F**. and Juell P. (1996). A self-organizing neural network for the classification of unknown words. In *Knowledge Based Computer Systems: Research and Applications*, K.S.R Anjaneyulu, P. Sasikumar, S.Ramani, eds. Narosa Publishing House (New Delhi, India).
- 2. Horwitz, B., **Husain, F.T.**, and Tagamets, M.-A. (2003). Connectionist approach in functional imaging. In *Psychiatric Neuroimaging*, V. Ng et al., eds. Ios Pr. Inc. (Burke, VA, USA and Amsterdam, NL).
- 3. Horwitz, B., and **Husain, F. T.** (2007). Simulation Frameworks for Large-Scale Brain Systems. In *Handbook of Brain Connectivity*, V. Jirsa, and A. R. McIntosh, eds. Springer-Verlag (Berlin).
- 4. **Husain, F.T.** (2007). Neural Network Models of Tinnitus. In *Tinnitus: Pathophysiology* and *Treatment, Progress in Brain Research Series*, B. Langguth, G. Hajak, T. Kleinjung, A. Cacace, A.Møller, eds. Elsevier (Amsterdam, NL).

Bulletins or Reports

- 1. **Husain, F.T.**, Negishi, M., Cohen, M.A. and Guenther, F.H. (1999). *Model of the classification of English vowels by Spanish speakers*. Boston University Technical Report, CAS/CNS-99-025: 1-25.
- 2. **Husain, F.T.,** Tai, Y., Finnegan, M.K. (2016). Emotional processing and non-auditory based interventions in tinnitus. *Perspectives of the ASHA special interest group 7: Aural Rehabilitation and Its Instrumentation*, Vol.1, Part 1, 2016: 21-28.
- 3. Husain, F.T. (2016). Tinnitus and its relation to emotion, exercise. *The Hearing Journal*, 69(9), 16.

Invited Presentations (*keynote/co-chair presentations)

- 1. **Husain, F.T.** (2001). Understanding auditory pattern recognition through experiments and modeling. Dec 26 2001. Department of Computer and Information Sciences, University of Hyderabad, Hyderabad 500046, India.
- 2. **Husain, F.T.** (2001). Auditory perception and categorization: Experiments and modeling. Nov 15 2001. As part of the Cognitive Neuroscience of Language Lecture Series, Cognitive Neuroscience Laboratory, Linguistics Department, University of Maryland, 1401 Marie Mount Hall, College Park, MD 20742.
- 3. Horwitz, B. and **Husain, F.T.** (2003). "Using Neural Modeling and Functional Neuroimaging to Study the Neural Basis of Auditory Object Processing", Annual Meeting of the Acoustical Society of America, Nashville, TN. J. Acoustical Soc. Am. 113: 2209-2210 (2003).

- 4. **Husain, F.T.** and Horwitz, B. (2004) "Neural Bases of Categorization of Simple Sounds". From Sound to Sense: Fifty+ Years of Discoveries in Speech Communication", MIT, Cambridge, MA, June 11-13, 2004.
- 5. **Husain, F. T.** (2005). "Neural Modeling and Imaging of Auditory Perception; Application to Auditory Continuity Illusion", the MIT Speech Group Seminar Series, MIT, Cambridge, MA, April 13, 2005. http://web.mit.edu/speech/www/seminars.html
- 6. **Husain, F.T.** (2006). "Functional imaging studies of categorical and sensory processing of simple sounds and sign language gestures", Hearing and Speech Sciences Seminar, University of Maryland, July 12, 2006
- 7. **Husain, F.T.** (2006). "Functional imaging studies of categorical processing of simple sounds and sign language gestures", The GRI First Wednesday Research Seminars, Gallaudet University, Sep 13, 2006. http://gri.gallaudet.edu/News/seminar.php
- 8. **Husain, F.T.** (2007). "Math and the Brain", keynote speaker, Howard Community College Math Awareness week celebrations, Howard County, MD, April 17, 2007.
- 9. **Husain, F.T.** (2008). "The Effect of Pleasant and Unpleasant Sounding Music in Persons with Hearing Loss and Tinnitus: an fMRI Study", Otolaryngology and Surgery Branch, Southern Illinois University Medical School, Springfield, IL, August 19 2008.
- 10. **Husain, F.T.** (2010). Organized seminar on "Neuroimaging in tinnitus: Mechanisms and Networks", at the 4th International Tinnitus Research Initiative Conference, Dallas, TX, June 8-11, 2010.
- 11. **Husain, F.T.** (2011). "Functional and Anatomical Neural Networks of Chronic Tinnitus and Hearing Loss", The Auditory Group, Institute of Neuroscience, The Medical School, University of Newcastle upon Tyne, 6 September, 2011.
- 12. **Husain, F.T.** (2011). "Imaging studies of Tinnitus: At the Intersection of Aging, Hearing, and Disorder", 5th Annual Symposium of the Center on Health, Aging, and Disability, University of Illinois at Urbana-Champaign, 13 October, 2011.
- 13. **Husain, F.T.** (2011). "Functional and Anatomical Neural Networks of Chronic Tinnitus and Hearing Loss", International State-of-the-Science meeting on Blast-Related Tinnitus, Department of Defense Blast Injury Research Program, Chantilly, VA, November 15-16, 2011.
- 14. **Husain, F.T.** (2012). "Noise: At the Intersection of Hearing, Aging, and Disorder", Director's Seminar Series at Beckman Institute for Advanced Science and Technology, University of Illinois at Urbana-Champaign, 2 February, 2012.
- 15. **Husain, F.T.,** (2012). "Imaging Noise: Research at the intersection of Hearing, Aging, and Disorder", Auditory Seminar, Behavioral and Cognitive School of Neurosciences, University of Groningen, Netherlands, 8 June 2012.
- 16. **Husain, F.**T. (2015). "Tinnitus and Veterans' Health: Insights from Brain Imaging", Veteran Related Research Symposium, Chez Family Foundation Center for Wounded Veterans in Higher Education, held at Beckman Institute for Advanced Science and Technology, August 24, 2015.

- 17. **Husain, F.**T. (2015). "Indices of Tinnitus Severity: Correlates from Rest and Task Based fMRI", National Center for Rehabilitative Auditory Research (NCRAR) Seminar Series, NCRAR, VA Portland Health Care System, November 6, 2015.
- 18. **Husain, F.T.** (2016). *Resting state functional connectivity studies of tinnitus*. Tinnitus Neurocognitive Approaches from Diagnostic to Rehabilitation" (TiNA-D2R), a 3-Day Workshop jointly organized by Institute of Mathematics and Computer Science, University of Sao Paulo, Faculty of Medicine, University of Sao Paulo, Instituto Ganz Sanchez and the University of Social Welfare and Rehabilitation Sciences, Iran, May 20-22, Sao Paulo, Brazil.
- 19. **Husain, F.T.** (2016). Tinnitus heterogeneity: Neural correlates from rest and task based fMRI, Seminar Series, Institute on Neuroscience, Newcastle University, UK, November 2, 2016.
- 20. **Husain, F.T.** (2016). Tinnitus heterogeneity: Neural correlates from rest and task based fMRI. ENT Seminar series, University Medical Center Groningen, Groningen, Netherlands, December 9, 2016.
- 21. **Husain, F.T.** (2017). Understanding the Effect of Tinnitus on Auditory and Extraauditory Neural Networks, Rush University Ear Day, Chicago, IL, January 28, 2017.
- 22. **Husain, F.T.** (2017). Using resting state functional connectivity to investigate neural correlates of tinnitus. NIDCD Seminar, National Institutes of Health, Bethesda, MD, February 15, 2017.
- 23. *Husain, F.T. (2017). Neural networks of tinnitus in humans: Elucidating severity and habituation, Hearing and Balance 2017 conference, Sao Paulo, Brazil, April 6-8, 2017.
- 24. *Husain, F.T. (2017). Auditory and extra-auditory networks implicated in tinnitus: evidence from fMRI studies. International Symposium on Hearing Loss and Tinnitus Celebrating the Work of Jos J. Eggermont, Banff, Canada, September 10, 2017.
- 25. *Husain, F.T. (2017). *Brain imaging and modeling in auditory disorders*. Brain Imaging and Modeling: Research at NIH and Beyond Celebrating the work of Barry Horwitz, NIDCD, NIH, Bethesda, MD, September 8, 2017.
- 26. **Husain, F.**T. (2017). *Using brain imaging to understand the neural correlates of tinnitus severity.* 8th biennial National Center for Rehabilitative Auditory Research (NCRAR) conference on Translating Tinnitus Research Findings into Clinical Practice, Portland, OR, October 4-6, 2017.
- 27. **Husain, F.**T., Finnegan, M.F., Khan, F.F. (2017). *Bringing mindfulness into your clinical practice: evidence from current research*. Invited Short Course for the annual meeting of the American Speech-Language-Hearing Association, Los Angeles, CA, November, 9-11, 2017.

Conference Podium Presentations

- 1. **Husain F. T.** and Juell P. (1996). A self-organizing neural network for the classification of unknown words. *International Conference on Knowledge-based Computer Systems*, Bombay, India, Dec 16-18.
- 2. **Husain F. T** and Negishi, M. (1999). Model of English vowel classification by Spanish speakers. *Third International Conference on Cognitive and Neural systems*, Boston University, Boston, May 28-30.
- 3. **Husain, F.T.**, Fromm, S., Pursley R., Hosey, L., Braun, A., Horwitz, B. (2002). Categorical perception of auditory stimuli: An fMRI study, 8th International Conference on Functional Mapping of the Human Brain, Sendai, Japan, Jun 2-6.
- 4. **Husain, F.T.,** Horwitz, B. (2005). Investigating the Neural Basis of Auditory Continuity Illusion with Large-Scale Modeling. *Dynamical Neuroscience XIII: Computation Cognitive Neuroscience Conference*, Washington, D.C, Nov 10-11.
- 5. **Husain, F.T,** Patkin, D., Kim, J., Thai-Van, H., Braun, A.R., Horwitz, B. (2006). Categorization of linguistic and non-linguistic gestures: an fMRI study using Deaf volunteers. *Annual Meeting of the Society for Neuroscience*, Atlanta, GA, October 14-18.
- 6. Pajor, N.M., Horwitz, B., **Husain, F.T.**, "The Effect of Pleasant and Unpleasant Sounding Music in Persons with Hearing Loss and Tinnitus: an fMRI Study", Eastern Auditory Retreat 2008, Univ. Maryland, College Park, MD, (2008).
- 7. Pajor, N.M., Horwitz, B., **Husain, F.T.** (2008). Using music to understand auditory processing in hearing loss and tinnitus: an fMRI study, *38th Annual Meeting of the Society for Neuroscience*, Washington, D.C., November 15-19, 2008.
- 8. **Husain, F.T.**, Pajor, N.M., Davis, C.W., Medina, R.E., Horwitz, B. (2010). Neuroanatomical changes due to hearing loss and chronic tinnitus, Annual Meeting of the American Auditory Society, Scottsdale, AZ, March 4-6, 2010.
- 9. **Husain, F.T. (2010).** Neural network differences in tinnitus and hearing loss: An fMRI study, 4th International Tinnitus Research Initiative Conference, Dallas, TX, June 8-11, 2010.
- 10. **Husain, F**.T., Medina, R.E., Davis, C.W., Pajor, N.M., Horwitz, B. (2011). Neuroanatomical differences in hearing loss and tinnitus: a combined VBM and DTI study, *X International Tinnitus Seminar*, Florianopolis, Brazil, March 16-19.
- 11. Akrofi, K., Carpenter-Thompson, J., Schmidt, S.A., **Husain, F.T**. "Changes Associated with Tinnitus and Hearing Loss in Functional Brain Networks Involved in Short-term Memory", 6th International Tinnitus Research Initiative (TRI) Conference, Bruges, Belgium, June 13-16, 2012.
- 12. Schmidt, S.A., Akrofi, K., Carpenter-Thompson, J., **Husain, F.T.** "The Effect of Tinnitus on Resting State Functional Connectivity", 6th International Tinnitus Research Initiative (TRI) Conference, Bruges, Belgium, June 13-16, 2012.
- 13. **Husain, F.T.**, Carpenter-Thompson, J., Functional MRI study of emotion processing in tinnitus. 2013 Scientific and Technology Meeting of the American Auditory Society, Scottsdale, AZ, March 7-9, 2013.
- 14. Schmidt, S., Carpenter-Thompson, J. R., **Husain F.T.** (2015). Resting State Functional Connectivity in Tinnitus Patients Varies with Tinnitus Duration and Severity, 9th *International TRI Tinnitus Conference*, Ann Arbor, MI, June 7-10, 2015.

- 15. **Husain, F.T.,** Schmidt, S., Romero, A. (2016). Investigating tinnitus subgroups varying in severity using Diffusion Tensor Imaging, *10th International Tinnitus Research Initiative Conference and 1st EU Action (TINNET) Conference*, East Midlands Conference Centre, University of Nottingham, Nottingham, UK, March 17, 2016.
- 16. **Husain, F.T.,** Jansen J.N., Gander P. (2016). Using regression modeling of survey data to better understand the expectations of tinnitus treatment by audiologists and patients, *10th International Tinnitus Research Initiative Conference and 1st EU Action (TINNET) Conference*, East Midlands Conference Centre, University of Nottingham, Nottingham, UK, March 18, 2016.
- 17. #Schmidt S., Carpenter-Thompson J.R., **Husain, F.T.** (2016). Decreased default mode network connectivity to the precuneus is common across tinnitus subgroups, *10th International Tinnitus Research Initiative Conference and 1st EU Action (TINNET) Conference*, East Midlands Conference Centre, University of Nottingham, Nottingham, UK, March 17, 2016.
- 18. #Schmidt, S.A., Husain, F.T. (2017). Resting state and the default mode in tinnitus, , *Rush University Ear Day*, Chicago, IL, January 28, 2017

Conference Poster Presentations

- 1. Negishi, M. and Husain, F. (1997). Extracting Formal Features from the Corpus. *Proceedings of the 10th annual CUNY conference on Human Sentence Processing*, March 1997.
- 2. **Husain, F. T.** and Guenther, F.H. (1998). Experimental tests of the neural models of the perceptual magnet effect. *Proceedings of the second international conference on Cognitive and Neural systems*, Boston University, Boston, May 28-30.
- 3. **Husain, F.T.**, Medina, R.M., Pajor, N.M., Horwitz, B. (2009) Grey-matter size differences in hearing loss and tinnitus. *39th Annual Meeting of the Society for Neuroscience*, Chicago, IL, October 17-21.
- 4. **Husain, F.T.** and Guenther F. H. (1999). Psychophysical investigations of category and discrimination learning. *Sixth Annual Meeting of the Cognitive Neuroscience Society*, Washington, D.C., April 11-13.
- 5. Nandipati, G., **Husain, F.T**., Braun, A.R., Tagamets, M.-A, Horwitz, B. (2000). Simulating TMS/PET on a large-scale neural network of the visual system. 6^{th} annual meeting of Human Brain Mapping, San Antonio, Jun 12-16.
- 6. **Husain, F.T.**, Tagamets, M.-A., Braun, A.R., Horwitz, B. (2000). A large-scale model that relates neuronal dynamics to rCBF in a match-to-sample auditory task. *30th Annual meeting of the Society for Neuroscience*, New Orleans, Nov 4-9.
- 7. **Husain, F.T.**, Tagamets, M.-A., Braun, A.R., Horwitz, B. (2001). Exploring neural aspects of transcranial magnetic stimulation (TMS) within a modeling framework. 8th annual meeting of the Cognitive Neuroscience Society, New York, Mar 25-27.
- 8. Fromm, S.J., Sevostianov, A., **Husain, F.T**., Rauschecker, J., Braun, A.R. (2001). A comparison of central responses to various auditory stimuli: A functional MRI study. Proceedings of the *31*st Annual meeting of the Society for Neuroscience, San Diego, Nov, 2001.

- 9. **Husain, F.**, Fromm, S., Pursley R., Hosey, L., Braun, A., Horwitz, B. (2002). Lateralized brain activation during categorical perception for auditory stimuli: an fMRI study. *9*th annual meeting of the Cognitive Neuroscience Society, San Francisco, April 14-16, 2002.
- 10. Ulloa A., **Husain F**., Lozito T., Horwitz B. (2003). Working memory of long-duration tonal patterns: A computational model. *10th annual meeting of the Cognitive Neuroscience Society*, New York, Mar 30 –April 1, 2003.
- 11. **Husain, F.**, Ulloa, A., Lozito, T., Horwitz, B. (2003). Understanding the neural bases of auditory perceptual grouping. *10th annual meeting of the Cognitive Neuroscience Society*, New York, Mar 30 –April 1, 2003, pg. 81.
- 12. **Husain, F.T.**, Tagamets, M-A., Fromm, S., Braun, A., Horwitz, B. (2003). Relating fMRI data to predictions of a large-scale neural network model of auditory object recognition. *9*th *International Conference on Functional Mapping of the Human Brain*, New York, June 18-22, 2003
- 13. Horwitz, B. and **Husain, F.** (2003). Using large-scale neural modeling to relate neuronal dynamics for auditory object processing to fMRI activity. International conference on Auditory Cortex, Magdeburg, Germany, Sept 13-17, 2003.
- 14. Horwitz, B. and **Husain, F.T.** (2003). "Using Neural Modeling and Functional Neuroimaging to Study the Neural Basis of Auditory Object Processing", Annual Meeting of the Acoustical Society of America, Nashville, TN. J. Acoustical Soc. Am. 113: 2209-2210 (2003).
- 15. **Husain, F. T.**, Lozito, T., Ulloa, A., Horwitz, B. (2004). Determining the neurobiological bases of auditory perceptual grouping using neural modeling. *Association of Research in Otolaryngology*, Abs. 429.
- 16. Luo, H., **Husain, F.,** Poeppel, D., Horwitz, B. (2004). Differences in alpha-band activity during categorization of speech and non-speech sounds: an MEG study. *11th Annual Meeting of the Cognitive Neuroscience Society*, April 18-22, San Francisco, CA.
- 17. Wen, S., Ulloa, A., Husain, F., Horwitz, B., Contreras-Vidal, J. (2004). Neural network model of decision-making in an auditory delayed match to sample task. *11th Annual Meeting of the Cognitive Neuroscience Society*, April 18-22, San Francisco, CA.
- 18. **Husain, F.,** Fromm, S., Pursley, R., Hosey, L., Braun, A., Horwitz, B. (2004). The effects of acoustic features on categorization of sounds: an fMRI study. *11th Annual Meeting of the Cognitive Neuroscience Society*, April 18-22, San Francisco, CA.
- 19. Ulloa, A., **Husain, F**., Horwitz, B. (2004). Serial order effects in neurobiologically realistic model of auditory working memory. *11th Annual Meeting of the Cognitive Neuroscience Society*, San Francisco, CA, April 18-22.
- 20. Husain, F.T., McKinney, C., Horwitz, B. (2005). Increased functional connectivity of inferior frontal gyrus (IFG) with superior temporal cortex (STC) during categorization compared to perceptual discrimination of sounds. *12*th *Annual Meeting of the Cognitive Neuroscience Society*, New York, NY, April 9-12.
- **21. Husain, F.T.**, McKinney, C., Horwitz, B. (2005). Functional Connectivity of Frontal Cortex with Temporal Cortex during Categorization of Speech and Nonspeech Sounds. *11th Annual Meeting of the Organization for Human Brain Mapping*, Toronto, Canada, June 12-16.

- **22. Husain, F.T.**, Patkin, D., Horwitz, B. (2006). Categorical perception of meaningful and non-meaningful visual gestures: an fMRI study. *12th Annual Meeting of the Organization for Human Brain Mapping*, Florence, Italy, June 11-15
- 23. **Husain F.T.,** Pajor, N.M., Horwitz, B. (2007). Simulating Tinnitus-related Neural and Neuroimaging Data within a Large-Scale Computational Auditory Model. *13th Annual Meeting of the Organization for Human Brain Mapping*, Chicago, IL, June 9-15.
- 24. Rong, F. T., Holroyd, T., **Husain, F.T.**, Contreras-Vidal, J.L., Horwitz, B. (2007). Modulation of human auditory cortex induced by performing a short-term memory (STM) task: a MEG study. *37th Annual Meeting of the Society for Neuroscience*, San Diego, CA, November 3-7.
- 25. Smith, J.F., **Husain, F.T.**, Pajor, N.M., Goldinger, S., Chen, K., Alexander, G.E., Horwitz, B. (2007). Functional Neuroimaging of Immediate, Remote, and Linguistic Visual-to-Auditory Paired Associates Memory. *37th Annual Meeting of the Society for Neuroscience*, San Diego, CA, November 3-7.
- 26. **Husain F.T.,** Pajor, N.M., Smith, J.F., Zalewski, C., Rudy, S., Braun, A.R., Kim, H.J., Brewer, C., Horwitz, B. (2007). Auditory Processing in Persons with Hearing Loss and Tinnitus: An fMRI Study. *37th Annual Meeting of the Society for Neuroscience*, San Diego, CA, November 3-7.
- 27. Szymko-Bennett, Y., Pajor, N., Xu, K., Simonyan, K., Horwitz, B., and **Husain, F.T**. (2009) Evaluation of white matter abnormalities in patients with hearing loss and tinnitus using diffusion tensor imaging, *32nd Association for Research in Otolaryngology Midwinter Meeting*, Baltimore, MD, February 14-19.
- 28. Pajor, N.M., Horwitz, B., **Husain, F.T.** (2008). Using music to understand auditory processing in hearing loss and tinnitus: an fMRI study, *38th Annual Meeting of the Society for Neuroscience*, Washington, D.C., November 15-19.
- 29. **Husain, F.T.**, Medina, R.M., Pajor, N.M., Horwitz, B. (2009) Grey-matter size differences in hearing loss and tinnitus. *39th Annual Meeting of the Society for Neuroscience*, Chicago, IL, October 17-21.
- 30. Akrofi, K., Carpenter-Thompson, J., Medina, R.E., **Husain, F.T.** (2011). Effect of Hearing Disorders on Aging, Attention and Cognition. *Education for a Lifetime: Minds, Brains and New Literacies*, pre-Innovation Summit Workshop, University of Illinois at Urbana-Champaign, March 28.
- 31. Carpenter-Thompson, J., Akrofi, K., Husain, F.T. (2011). The effects of tinnitus on emotional processing. *41st Annual Meeting of the Society for Neuroscience*, Washington, DC, November 12-16.
- 32. Carpenter-Thompson, J., **Husain, F.T.** (2012). The effect of tinnitus on emotional processing, 19th Annual Meeting of the Cognitive Neuroscience Society, Chicago, IL, March 31-April 3.
- 33. Akrofi, K., Carpenter-Thompson, J., **Husain, F.T.** (2012). Effects of tinnitus and hearing loss on functional brain networks involved in short-term memory, 19th Annual Meeting of the Cognitive Neuroscience Society, Chicago, IL, March 31-April 3.
- 34. Schmidt, S., Akrofi, K., Carpenter-Thompson, J., **Husain, F.T.** (2012). The effects of tinnitus and age on resting state functional connectivity, *19*th Annual Meeting of the Cognitive Neuroscience Society, Chicago, IL, March 31-April 3.

- 35. Carpenter-Thompson, J., Akrofi, K., Schmidt, S.A., **Husain, F.T**. "An fMRI Study of Emotional Processing in Tinnitus using Affective Sounds" 6th International Tinnitus Research Initiative (TRI) Conference, Bruges, Belgium, June 13-16, 2012.
- 36. Schmidt, S., Akrofi, K., Carpenter-Thompson, J., **Husain, F.T.** (2012). Tinnitus, hearing loss, and resting state functional connectivity, 42nd Annual Meeting of the Society for Neuroscience, New Orleans, LA, October 13-17.
- 37. Carpenter-Thompson, J., **Husain, F.T.** (2012). Short vs. Long term effects of tinnitus on emotional processing: An fMRI study, *42nd Annual Meeting of the Society for Neuroscience*, New Orleans, LA, October 13-17.
- 38. Davies, J., Gander, P., Andrews, M., **Husain, F.T.**, Hall, D.A. (2013). *Auditory network connectivity in tinnitus patients: a resting-state fMRI study*, Abstracts of the British Society of Audiology annual conference (incorporating the Experimental and Clinical Short papers meetings), September 5-7, 2012, Nottingham, UK.
- 39. Schmidt, S.A, Akrofi, K., Carpenter-Thompson, J.R., **Husain, F.T.** (2013). A Resting State Functional Connectivity Study of Tinnitus and Hearing Loss. *Proceedings of the 19th Annual Meeting of the Organization for Human Brain Mapping*, June 16-20, 2013, Seattle, WA.
- 40. Schmidt, S.A, Carpenter-Thompson, J.R., **Husain, F.T.** (2013). Hearing Loss studied using task- and rest-based fMRI studies. *Proceedings of the 5Th Aging and Speech Communication conference*, October 2-9, 2013, Bloomington, IN.
- 41. Carpenter-Thompson, J.R., Akrofi, K., Schmidt, S.A, **Husain, F.T**. (2014). Alterations of the Limbic System Associated with Tinnitus may maintain Rapid Reaction Time to Affective Stimuli. *Proceedings of the 37th Annual Mid-Winter Meeting of the Association for Research in Otolaryngology*, February 22-26, 2014, San Diego, CA.
- 42. Husain, F.T., Akrofi, K., Carpenter-Thompson, J.R. (2014). Effects of tinnitus and hearing loss on functional brain networks involved in auditory and visual short-term memory, *Fall 2014 Meeting of the Acoustical Society of America*, October 27-31, Indianapolis, IN.
- 43. Carpenter-Thompson, J.R., **Husain, F.T.** (2015). Increased levels of physical activity associated with lower levels of tinnitus severity and increased quality of life. *Proceedings of the 38th Annual Mid-Winter Meeting of the Association for Research in Otolaryngology*, February 21-25, 2015, Baltimore, MD.
- 44. #Carpenter-Thompson, J.R., McAuley, E., Schmidt, S.A. **Husain, F.T.** (2015). Physical Activity and Tinnitus: How Physical Activity may Decrease Tinnitus Severity, 9th *International TRI Tinnitus Conference*, Ann Arbor, MI, June 7-10, 2015.
- 45. #Chappell, J. and **Husain, F.T**. (2015). Dissociating Mechanisms of Tinnitus and Hyperacusis: A Survey and Behavioral Study, 9th International TRI Tinnitus Conference, Ann Arbor, MI, June 7-10, 2015.
- 46. #Jansen, J.N., Gander, P.E., **Husain, F.T.** (2015). Complementary Surveys of Audiologists and Patients to Assess Tinnitus Treatment Expectations, 9th International TRI Tinnitus Conference, Ann Arbor, MI, June 7-10, 2015.
- 47. #Bido Medina, R.O., Carpenter-Thompson, J., Schmidt, S.A., **Husain, F.T.** (2015). Tinnitus Severity and Gray Matter, 9th International TRI Tinnitus Conference, Ann Arbor, MI, June 7-10, 2015.

- 48. #Thomas, M., Carpenter-Thompson, J.R., Schmidt, S.A., **Husain, F.T.** (2015). Gray Matter Differences in Tinnitus Sufferers, 9th International TRI Tinnitus Conference, Ann Arbor, MI, June 7-10, 2015.
- 49. #Schmidt, S.A., Schubel, M., Hirani, A.N., Baryshnikov, Y., **Husain, F.T.** (2015). Unsupervised hierarchical clustering of resting state functional connectivity data to identify patients with mild tinnitus, *45*th *Annual Meeting of the Society for Neuroscience*, Chicago, IL, October, 17-21, 2015.
- 50. #Shepard, R., Boven, C., Allen, J., **Husain, F.T.,** Wickesberg, R. (2016). The effect of elevated intensity on consonant recognition in noise by normal hearing, aged subjects. *39th Midwinter Meeting of the Association for Research in Otolaryngology*, San Diego, CA, February, 20-24, 2016.
- 51. #Schmidt, S. A., Tai, Y. H., & **Husain, F. T**.(2017). Resting state networks of tinnitus patients are replicable: a preliminary study. 40th Midwinter Meeting of the Association for Research in Otolaryngology, Baltimore, MD, February, 11-15,2017.
- 52. #Tai, Y. H., Tsao, A. L., & Husain, F. T. (2017). Effect of tinnitus severity and loudness on speech-in-noise ability in normal hearing tinnitus patients. 40^h Midwinter Meeting of the Association for Research in Otolaryngology, Baltimore, MD, February, 11-15,2017.
- 53. #Boven, C., Shepard, R., Allen, J., **Husain, F.T.,** Wickesberg, R. (2017). Comparison of Consonant Recognition in Background Noise by Normal Hearing Young and Older Subjects. *40^h Midwinter Meeting of the Association for Research in Otolaryngology*, Baltimore, MD, February, 11-15,2017.

Journal Reviewer

2011-present Review Editor, Frontiers in Auditory Cognitive Neuroscience Associate Editor, Frontiers in Auditory Cognitive Neuroscience

Ad-hoc reviewer Cognitive Brain Research

Human Brain Mapping

NeuroImage

Cognitive, Affective and Behavioral Neuroscience

Audiology and Neurotology

Journal of Speech, Language and Hearing Research

American Journal of Audiology

PLoS ONE

Journal of Neuroscience

Frontiers in Systems Neuroscience

Frontiers in Auditory Cognitive Neuroscience

Journal for the Association of Research in Otolaryngology

Hearing Research

International Journal of Audiology

Journal of American Academy of Audiology

NeuroImage: Clinical Neural Networks

Appointed Grant Reviewer

2012 – present Scientific Advisory Council, American Tinnitus Association

Ad-hoc reviewer		
2009-2010	Neuroscience and Mental Health division of The Wellcome Trust, London, UK.	
2011-2017	Health and Health Services Research Fund, Food and Health Bureau, Hong Kong Special Administrative Region.	
2011-2012	American Tinnitus Association.	
2012, 2017	Hewlett International Research Travel Grant Program, International Programs and Studies, University of Illinois at Urbana-Champaign	
2012, 2013	Neuroscience and Opthalmic Technologies (NOIT) Study Section, National Institutes of Health, USA (Early Career Investigator).	
2012	Campus Research Board, University of Illinois at Urbana-Champaign	
2012, 2013	Special Emphasis Panel RRD3, Office of Research and Development, Department of Veteran Affairs	
2012	Defense Medical Research and Development Program – Panel on Hearing and Balance Restoration and Rehabilitation, Congressionally Directed Medical Research Programs, Department of Defense	
2014	Review Panel on Neurosensory Research Award (NSRA), Congressionally Directed Medical Research Programs, DMRDP, Department of Defense, April 2-4, 2014, Baltimore, MD	
2014	Military Training Injuries – Hearing, Balance, and Ears (MTI-HBE) teleconference peer review panel, Defense Medical Research and Development Program, CDMRP, DoD, June 2014	
2014, 2017	Neurological Foundation of New Zealand, Auckland, New Zealand	
2015	Students Preparing for Academic and Research Careers (SPARC) & Audiology/Hearing Science Research Travel Award (ARTA) review panel, American Speech-Language and Hearing Association.	
2015	FY15 PRMRP Preapplication Tinnitus (PRE-TIN) teleconference peer review panel, Defense Medical Research and Development Program, CDMRP, DoD, June 2015	
2015, 2016	FY15, FY16 PRMRP Tinnitus review panel (online) for the Discovery Awards, CDMRP, DoD, July-September, 2015 & 2016	
2016	Plural Scholarships, Council of Academic Programs in Communication Sciences and Disorders (CAPCSD), March 2016	
2016	FY16 DoD/USAMRC/CDMRC/MRMC Broad Agency Announcement for Extramural Medical Research, review panel (online), May 2016	

Society Membership

Acoustical Society of America Society for Neuroscience Association for Research in Otolaryngology