Curriculum Vitae

Karim Joharikhatoonabad (Johari), Ph.D.

Director of Human Neurophysiology&Neuromodualtion Lab
Department of Communication Sciences and Disorders
Louisiana State University
Address: 86 Hatcher Hall, Field house drive, Baton Rouge, LA,70803.
Office phone:225-578-3934
Email: karimjohari@lsu.edu
Lab website: https://faculty.lsu.edu/johari/

EDUCATION

Ph.D. Communication Sciences and Disorders, University of South Carolina (2015-2019)

Dissertation: Behavioral and Neural Correlates of Aging Effects on Temporal Predictive Mechanisms During Speech Production and Limb Movement

M.Sc. Speech Therapy, Tehran University of Medical Sciences (2008-2011)

Thesis: Inflectional Morphology in Patients with Parkinson's Disease

B.Sc. Speech Therapy, Iran University of Medical Sciences (2004-2008)

ACADEMIC POSITIONS

2021-present: Assistant Professor, Department of Communication Sciences and Disorders
Louisiana State University.

2020-2021: Postdoctoral Research Scholar, University of Iowa, Department of Neurosurgery

Project: Neural Correlates of Speech Production and Limb Movement in Patients with Parkinson's Disease: Insights from Local Field Potentials and Single Neurons Activities Within Subthalamic Nuclei

2019-2020: Postdoctoral Research Scholar, University of South Carolina, Department of Psychology

Project: Effects of High-Definition transcranial Direct Current Stimulation (HD-tDCS) on Language-Motor Coupling and Lexico-semantic Processing in Healthy Individuals

2015-2019: Graduate Research Assistant, University of South Carolina, Department of Communication Sciences and Disorders

2011-2014: Instructor, Tabriz University of Medical Sciences, Department of Speech Therapy

2009-2012 Research Assistant, Shahid Beheshti University of Medical Sciences, Functional Neurosurgery Research Center

RESEARCH INTERESTS

1. Neural Correlates of Speech and Limb Motor Control
2. Normal Aging Effects on Speech and Limb Motor Control
3. Speech and Language Impairments in Parkinson's Disease
4. Motor-language coupling and embodied semantic

RESEARCH SKILLS

1. Non-invasive Human Electrophysiology (EEG, ERP, Time Frequency)
2. Invasive Human Electrophysiology (Neural Spikes and LFPs)
3. Non-invasive Neuromodulation (HD-tDCS, HD-tACS, tDCS)
4. Machine Learning and Statistical Analysis
5. Signal Processing and Computational Modeling
6. Programming in Pyhton, Matlab, R and Linux

PROFESSIONAL AFFILIATION

1. Society for Neuroscience
2. Society for Neurobiology of Language
3. Society for Psychophysiology

PUBLICATIONS (Google Scholar, ResearchGate)

1. **Johari K** & Tabari F. HD-tACS over the Left Frontal Aslant Tract Entrains Theta Activity Associated with Speech Motor Control. Brain Research (2025).

2. Bakhtiar M& **Johari K**. The Application of Neuromodulation in Stuttering: Current Status and Future Directions. Journal of Fluency Disorders (2025).

3. Tabari F, Berger J, Bakhtiar M, Johari K. Personalized Beta Band HD-tACS Improves Speech Reaction Times by Modulating Low-Frequency Prefrontal Oscillations. Brain Stimulation (2025). **Conference Paper**

4. Bakhtiar M, Ouyang G, Johari K. Exploring the impact of tACS on the neural oscillations involved in speech motor control: a proof-of-concept study. Brain Stimulation (2025). **Conference Paper**

5. Tabari F, Berger J, Flouty O, Copeland B, Greenlee J, & **Johari K**. Speech, Voice, and Language Outcomes Following Deep Brain Stimulation in Parkinson's Disease and Essential Tremors: A Systematic Review of Literature. Plos One (2024).

6. **Johari K** & Joel Berger. Theta Oscillations within Right Dorsolateral Prefrontal Cortex Contribute Differently to Speech vs. Limb Inhibition. Journal of Neuroscience Research (2024).

7. Tabari F, Parton C, Cryer H & **Johari K**. HD-tDCS Over Left Supplementary Motor Area Differentially Modulated Neural Correlates of Motor Planning for Speech vs. Limb Movement. International Journal of Psychophysiology (2024).

8. **Johari K**, Berger J. High-Definition Transcranial Direct Current Stimulation Over Right Dorsolateral Prefrontal Cortex Differentially Modulates Inhibitory Mechanisms for Speech vs. Limb Movement . Psychophysiology (2023).

9. **Johari K**, Tabari F& Desai, R. Right Frontal HD-tDCS Reveals Causal Involvement of Time perception Networks in Temporal Processing of Concepts. Scientific Reports (2023).

10. **Johari K,** Kelley R, Tjaden K, Patterson C, Rohl A, Berger J, Corcos D& Greenlee J. Subthalamic Nucleus Neurons Differentially Encode Speech and Limb Movement in Parkinson's Disease. Frontiers in Human Neuroscience (2023).

11. Desai R.H, Hackett T, Lai V, Riccardi N& **Johari K**. Spatiotemporal Characteristics of the Neural Representation of Event Concepts. Brain&Language (2023).

12. **Johari K,** Lai V, Riccardi N&Desai R. Temporal Features of Concepts Are Grounded in the Time Perception Neural Networks:An EEG study. Brain&Language (2023).

13. Shaheen N, Shaheen A, Sarica C, Singh A, Zanaty M, **Johari K**, Yang A, Zesiewicz T, Dalm B, Bezchlibnyk Y, Lozano A & Flouty O. Deep brain stimulation for substance use disorder: a systematic review and meta-analysis. Frontiers in Psychiatry (2023).

14. **Johari, K.** Causal and Clinical Evidence Support Motor-Language Coupling in Neurotypical Adults and Individuals with Parkinson's Disease." Advances in Cognitive Science (2023). **Conference Paper**

15. Berger J, **Johari K**, Kovach C & Greenlee J. Speech Artifact is also Present in Spike Data. Neuroimage (2022).

16. **Johari K**, Riccardi N, Malyutina S, Modi M & Desai R. HD-tDCS of Primary and Higher-order Motor Cortex Affects Action Word Processing. Frontiers in Human Neuroscience (2022).

17. Rohl A, Gutierrez S, **Johari K,** Greenlee J, Tjaden K, Roberts A. Speech dysfunction, cognition, and Parkinson's disease. Progress in Brain Research (2022).

18. Kopf L, Rohl A, Nagao T, Bryant K, **Johari K**, Tjaden K, Greenlee J. Voice Handicap Index in Parkinson's patients: Subthalamic versus Globus Pallidus Deep Brain Stimulation. Journal of Clinical Neuroscience (2022).

19. **Johari K**, Riccardi N, Malyutina S, Modi M, Desai R. HD-tDCS over Motor Cortex Facilitates Action Sentence Processing. Neuropsychologia (2021).

20. **Johari K,** Behroozmand R. Neural Correlates of Speech and Upper Limb Motor Timing Deficits Revealed by Aberrant Beta Band Desynchronizations in Parkinson's Disease. Clinical Neurophysiology (2021).

21. Gill A, **Johari K,** Fitzpatrick M, Thompson E, den Ouden D, Behroozmand R. Improving Speech and Upper Limb Motor Reaction Times through High-definition transcranial Direct Current Stimulation of the Left Ventral Motor Cortex. Brain Stimulation (2021). **Conference Paper.**

22. **Johari K,** Behroozmand R. Event-related Desynchronization of Alpha and Beta Band Neural Oscillations Predict Speech and Limb Motor Timing Deficits in Normal Aging. Behavioural Brain Research (2020).

23. Behroozmand R, **Johari K**, Bridwell K, Hayden C, Fahey D, den Ouden DB. Modulation of Vocal Pitch Control through High-Definition Transcranial Direct Current Stimulation of the Left Ventral Motor Cortex. Experimental Brain Research (2020).

24. Phillip Johnson L, Sangtian S, **Johari K,** Behroozmand R, Fridriksson J. Slowed Compensation Responses to Altered Auditory Feedback in Post-Stroke Aphasia: Implications for Speech Sensorimotor Integration. Journal of Communication Disorders (2020).

25. Reifegerste J, Estabrooke I.V, Russell L.E, Veríssimo J, **Johari, K,** Wilmarth B, Pagan F.L, Moussa C and Ullman. Can Sex Influence the Neurocognition of Language? Evidence from Parkinson's Disease. Neuropsychologia(2020).

26. Behroozmand R, **Johari K,** Kelley R, Kapnoula E, Narayanan N, Greenlee J. Effect of Deep Brain Stimulation on Vocal Motor Control Mechanisms in Parkinson's Disease. Parkinsonism & Related Disorders (2019).

27. Behroozmand R, **Johari K.** Pathological Attenuation of the Right Prefrontal Cortex Activity Predicts Speech and Limb Motor Timing Disorder in Parkinson's Disease. Behavioural Brain Research (2019): **Equally Contributed**.

28. **Johari K,** den Ouden DB, Behroozmand R. Behavioral and Neural Correlates of Normal Aging Effects on Motor Preparatory Mechanisms of Speech Production and Limb Movement. Experimental Brain Research (2019).

29. **Johari K ,** Walenski M, Reifegerste J, Ashrafi F & Ullman M.T.Sex, Dopamine, and Hypokinesia: A Study of Inflectional Morphology in Parkinson's disease. Neuropsychology (2019).

30. **Johari K,** Walenski M, Reifegerste J, Ashrafi F, Behroozmand R, Daemi M, Ullman MT. A Dissociation between Syntactic and Lexical Processing in Parkinson's Disease. Journal of Neurolinguistics (2019).

31. Behroozmand R, Phillip L, **Johari K,** Bonilha L, Rorden C, Hickok G, Fridriksson J. Sensorimotor Impairment of Speech Auditory Feedback Processing in Aphasia. Neuroimage (2018).

32. Behroozmand R, **Johari K.** Sensorimotor Impairment of Speech and Hand Movement Timing Processing in Parkinson's Disease. Journal of Motor Behavior (2018): **Equally Contributed.**

33. **Johari K,** Behroozmand R. Functional Dissociation of Temporal Processing Mechanisms during Speech Production and Hand Movement: An ERP Study. Behavioural Brain Research (2018).

34. **Johari K,** den Ouden DB, Behroozmand R. Effects of Aging on Temporal Predictive Mechanisms of Speech and Hand Motor Reaction Time. Aging Clinical and Experimental Research (2018).

35. **Johari K,** Behroozmand R. Premotor Neural Correlates of Predictive Motor Timing for Speech Production and Hand Movement: Evidence for a Temporal Predictive Code in the Motor System. Experimental Brain Research (2017).

36. **Johari K,** Behroozmand R. Temporal Predictive Mechanisms Modulate Motor Reaction Time during Initiation and Inhibition of Speech and Hand Movement. Human Movement Science (2017).

37. **Johari K,** Ashrafi F, Zali A, Ashayeri H, Fabbro F, & Zanini S. Grammatical Deficits in Bilingual Azari – Farsi Patients with Parkinson's Disease. Journal of Neurolinguistics (2013).

38. Ashrafi F, Mohammadhassanzadeh H , Shokraneh F, Valinejadi A, **Johari K** & Saemi N. Iranians' Contribution to World Literature on Neuroscience. Health Information & Libraries Journal (2012).

39. Ashrafi F, Zali A, Pakdaman H & **Johari K**.Cognitive Impairments in Parkinson's Disease: Evidence from Iranian's Population. Iranian Journal of Neurology (2012).

40. **Johari, K** & Ashayeri H. The Grammatical Deficit in Regular Past Tense Formation: Study of Persian Speaking Population with Parkinson Disease. Stem-, Spraak- en Taalpathologi (2012).

PAPERS UNDER REVIEW

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1. **Johari K**, Tabari F. HD-tACS Over Left Frontal Aslant Tract Enhances Prefrontal Theta Activity During Action Verbal Fluency in Parkinson's Disease. Neuropsychologia.
2. Tabari F, Berger J& Van Gemert, A, Kunduk M& **Johari K.** Personalized HD-tACS Over the Left SMA Surpasses HD-tDCS in Improving Speech and Limb Reaction Times. Behavioural Brain Research.
3. Tabari F, Berger J& Van Gemert, A, Kunduk M& **Johari K**. Personalized Beta Band HD-tACS over the Left SMA Improves Speech and Limb Movement by Modulating Prefrontal Delta Oscillations. Journal of Neural Engineering.
4. Tabari F, **Johari K**. The Role of the Supplementary Motor Area in Speech Production: Implications from Neurostimulation Studies. Journal of communication disorders
5. **Johari K,** Rohl A, Berger J& Greenlee J. Dissociation Between Simple and Complex Speech Motor Tasks Within Bilateral Motor Thalamus. eNeuro.
6. Riccardi N, **Johari K,** Rorden C, Fridriksson J & Desai R.H. Lexical and semantic impairments after anterior temporal and temporoparietal lesions. Journal of Neuroscience.

PAPERS IN PREPARATION

1.Tabari F, **Johari K**. Theta HD-tACS over the Left frontal Aslant Tracts Modulates Prefrontal activity during Speech production in Parkinson's Disease.

2. Tabri F, Shaheeen A, **Johari K**. Non-invasive Brain Stimulation Improves Word Retrieval in Parkinson's Disease: A Meta analysis of Randomized Trials

3.Parras S, Xiao C, Crouse S, Riccardi N, **Johari K**& Desai D. The Role of Anterior Temporal Lobe in Reading: a tDCS study.

4.Riccardi N& **Johari K**& Desai R. Anodal HD-tDCS of Left Anterior Temporal Lobe Enhances Lexical, but not Nonverbal Semantic Processing.

FUNDING

1. **PI:** Effect of Personalized Beta Band Transcranial Alternating Current Stimulation (HD-tACS) Over Motor Cortex on Speech and Language Functions in Parkinson's Disease (Louisiana Broad of Regents Research Competitiveness Grants. 2022-2025, Total Award: $ 261,891.00
2. **Co-investigator**: Core Semantic Systems of the Human Brain. R01 Subaward. National Institute of Deafness and Communication Disorders. 2023-2025. Total LSU Subaward: $ 35,337
3. **Co-PI**: Can Feedback-Modulated Brain Stimulation Enhance Attention? LSU Provost Fund for Big Research Ideas, phase II. 2023-2024. Total Award: $75,000
4. **Mentor:** The Effect of HD-TACS over the Right Frontal Aslant Tract Stimulation on Speech and cognition. Henri Noel. LSU discover research grant, 2024. Total award: $3000
5. **Co-investigator**: Prefrontal Cortex, Cognition, and Speech Symptoms in Parkinson's Disease. P20 Subaward, National Institute of Neurological Disorders and Stroke. 2023. Total LSU subaward: $33,912
6. **PI:** Effect of High-Definition transcranial Direct Current Stimulation Over Right Dorsolateral Prefrontal Cortex on Speech and Upper Limb Movement. Manship Summer Research Funding, College of Humanity and Social Sciences, Louisiana State University.2022. Total Award: $5,000
7. **Student:** Validation of High-Definition Transcranial Direct Stimulation (HD-tDCS) over Left Frontal and Parietal cortex as a Potential Clinical Method to Improve Motor Timing Deficits Related with Speech Production and Hand Movement in Parkinson's disease. CAPCSD Scholarship Awarded, 2018-2019. Total Award: $20,000

8. **Student:** Effects of Neurostimulation on Speech Production and Hand Movement in Parkinson's Disease. USC Arnold School of Public Health's Graduate Scholar in Aging. 2017, Total Award: $1,000

GRANTS IN PREPARATION/PEDNING

PI: The Role of Subthalamic Nucleus and Prefrontal Cortex in Speech Production. R21, National Institute of Deafness and Communication Disorders, revisions submitted November 2024.

PI: Immediate and Short-Term Effects of High-Definition Transcranial Direct Current Stimulation Over the Left Supplementary Motor Area on Voice and Speech functions in Parkinson's Disease. R21, National Institute of Deafness and Communication Disorders. Under revisions.

Student's Grant supervisor

The Modulatory effect of High-Definition Transcranial Alternating Current Stimulation (HD-tACS) Targeting the Supplementary Motor area (SMA) on Speech motor Control in Patients with Parkinson's Disease. Fatemeh Tabari. CAPCSD, 2025. Total award: $12000.

Investigating the Effect of HD-TACS over the left Frontal Aslant Tract Stimulation on Speech Production in aging population. Herni Noel. LSU discover research grant, 2024. Total award: $5000

Investigating the Effect of HD-TACS over the left Frontal Aslant Tract Stimulation on Speech Production. Celeste Patron. LSU discover research grant, 2023. Total award: $3000

AWARDS, HONORS &TRAVEL GRANTS

1. Travel grant to attend the 6th international Brain Stimulation Conference, 2025, awarded by the LSU College of Humanity and Social Sciences, Total award: $1000
2. Travel grant to attend Society for Neuroscience 2024 awarded by the LSU Office of Research Development, Total award: $1000
3. Travel grants to attend Society for Neuroscience 2022 awarded by the LSU Office of Research Development, Total award: $1000
4. Travel grant to attend the 4th international Brain Stimulation Conference,2022, awarded by the LSU College of Humanity and Social Sciences, Total award: $1000

5. Arnold School of Public Health Ph.D. Research Assistantship, University of South Carolina, 2015-2018; $99000
6. Travel Grant to Present in Society for Neurobiology of language conference, Graduate School, University of South Carolina, 2017; $1500.
7. Travel Grant to Present in Cognitive Aging Conference, Arnold School of Public Health South Carolina, 2018; $1000.
8. Travel Grant to Present in Society for Neuroscience, Graduate School, University of South Carolina, 2018; $1000.

CONFERENE PRESENTATION

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1. Bakhtiar M, Ouyang G & **Johari K**. Exploring the Impact of tACS on the Neural Oscillations Involved in Speech Motor Control: A proof-of-Concept Study. 6th International Brain Stimulation Conference, Kobe, Japan, (2025).
2. Tabari F, Berger J, Bakhtiar M & **Johari K**. Personalized Beta Band HD-tACS Improves Speech Reaction Times by Modulating Low-Frequency Prefrontal Oscillations. 6th International Brain Stimulation Conference, Kobe, Japan, (2025).
3. **Johari K**, Tabari F & Patron C. Entrainment of Theta Oscillations Associated with Speech Inhibition through Synchronization of Left SMA and IFG. Society for Neuroscience, Chicago IL., USA (2024).
4. Tabari F, Berger J &**Johari K**. The Neuromodulatory Effects of Personalized HD-tACS over Left SMA on Speech and Limb Motor Planning. Society for Neuroscience, Chicago IL., USA (2024).
5. Gauss T, Tabari F, **Johari K**& Hondzinski J. Benefits from Left Frontal Aslant Tract Stimulation Do not Degrade Postural Sway in People With Parkinson's Disease. Society for Neuroscience, Chicago IL., USA (2024).
6. Xiao Ch, Arheix-Parras S, **Johari K,** Riccardi R& Desai R. Semantic Neighborhood Effects with Anterior Temporal Lobe Stimulation. Society for Neurobiology of Language, Brisbane, Australia (2024).
7. Tabasi F, Cole R, Rohl A, **Johari K**, Narayanan K& Greenlee J. Evoked Frontal Rhythms in Parkinson's Disease During Interval Timing Task Performance. Society for Neuroscience, Washington DC., USA (2023).

8. Journand Z, Berger J, Rohl A, Kovach K, **Johari K**, Greenlee J. The Representation of Syllable Repetition, Sentence production and Orofacial Movement in the Subthalamic Nucleus. Society for Neuroscience, Washington DC., USA (2023).
9. **Johari K** & Berger J. Differential Modulation of Theta Band Activity for Speech vs. Limb Movement Inhibition Through Non-invasive Prefrontal Cortex Stimulation. Society for Psychophysiology Research, New Orleans, LA, USA. (2023).
10. Patron C, Cryer H, Tabari F& **Johari K**. HD-tDCS Over Left Supplementary Motor Area Improves Speech Reaction Time by Modulating Pre-movement EEG Activity in Neurotypical Adults. Society for Psychophysiology Research, New Orleans, LA, USA. (2023).
11. Tabari F, Berger J & **Johari K**. Personalized Transcranial Alternating Current Stimulation over Supplementary Motor Area Improves Speech Motor Control in Neurotypical Adults. Society for Psychophysiology Research, New Orleans, LA, USA. (2023).
12. Cryer H, Patron C, Tabari F & **Johari K**. The Contribution of Left Supplementary Motor Cortex in Speech and Limb Movement: A Preliminary Report. LSU Discover Day. Baton Rouge, LA, USA. (2023).
13. Tabari F, Desai H. R& **Johari K** & Berger J. Temporal Features of Concepts are Subserved by Time Perception Network in the Human Brain: An EEG/HD-tDCS Study. Cognitive Neuroscience Society, San Francisco, CA, USA (2023).
14. **Johari K** & Berger J. HD-tDCS of Right Prefrontal Cortex Differently Modulates P3 for speech vs. limb Movement Inhibition. Society for Neuroscience, San Diego, CA, USA (2022).
15. **Johari K**, Riccardi N, Malyutina S, Modi M & Desai R. HD-tDCS of Primary and Higher-order Motor Cortex Affects Action Word Processing. Society for Neurobiology of Language, Philadelphia, PA, USA (2022).
16. Jourahmad Z, Berger J, Rohl A, Tabasi F, **Johari K,** Greenlee J. Speech and orofacial-related modulation of subthalamic neuronal activity in Parkinson's patients. Society for Neuroscience, San Diego , CA, USA (2022).
17. **Johari K,** Riccardi N & Desia R. Lexical vs. Semantic Processing in the Temporal Lobe: An HD-tDCS Study. 13th Annual Meeting of Society for the Neurobiology of Language (SNL), Held Virtually (2020)
18. **Johari K**, Behroozmand R. Neural Correlates of Impaired Speech and Hand Motor Timing Processing in Parkinson's Disease. IMB Conference on Executive Function in Mind and Brain, University of South Carolina, Columbia, SC (2019)

19. Behroozmand R, Phillip L, **Johari K,** Bonilha L, Rorden C, Hickok G, Fridriksson J. Sensorimotor Impairment of Speech Production and Motor Control in Post-Stroke Aphasia: Evidence from Behavioral and Neurophysiological Biomarkers. Motor Speech Conference, Savannah, GA (2018)
20. Behroozmand R, Sangtian S, Phillip L, **Johari K,** Bonilha L, Rorden C, Hickok G, Fridriksson J. Brain Lesion Associated with Impaired Sensorimotor Processing of Speech Auditory Feedback in Aphasia. Neuroscience Community Retreat, University of South Carolina, Columbia, SC (2018)
21. **Johari K,** Behroozmand R. Neural Correlates of Impaired Speech and Hand Motor Timing Processing in Parkinson's Disease. 48th Annual Meeting of Society for Neuroscience (SfN), San Diego, CA (2018)
22. **Johari K,** Behroozmand R. Age-related Changes in Temporal Processing Mechanisms of Speech Production and Hand Movement: An ERP Study. Cognitive Aging Conference, Georgia Tech University, Atlanta, GA (2018)
23. **Johari K,** Behroozmand R. Cathodal Stimulation Improves Motor Timing Deficits in Parkinson's Disease during Speech Production and Hand Movements. University of South Carolina Discovery Day, Columbia, SC (2018)
24. Hyatt K, Sovde N, McDuffie C, **Johari K,** Behroozmand R. Effect of Altered Auditory Feedback on Sensorimotor Deficits in Aphasic Individuals. University of South Carolina Discovery Day, Columbia, SC (2018)
25. Fitzpatrick M, Thompson E, **Johari K,** Behroozmand R. Effects of high definition transcranial direct current stimulation (HD-tDCS) on motor reaction time during speech production and hand movement. University of South Carolina Discovery Day, Columbia, SC (2018)
26. Behroozmand R, **Johari K,** Herath P, Greenlee JG. Neural Correlates of Impaired Motor Timing Processing during Speech Production and Hand Movement in Parkinson's disease. 47th Annual Meeting of Society for Neuroscience (SfN), Washington, DC (2017)
27. Behroozmand R, Phillip L**, Johari K,** Bonilha L, Rorden C, Hickok G, Fridriksson J. Brain Lesion Associated with Impaired Sensorimotor Processing of Speech Auditory Feedback in Aphasia. 9th Annual Meeting of Society for the Neurobiology of Language (SNL), Baltimore, MD (2017)
28. den Ouden DB, **Johari K,** Bridwell K, Hayden C, Behroozmand R. Modulation of the Speech Motor Control Network through High-Definition Transcranial Direct Current Stimulation. 7th International Conference on Speech Motor Control, Groningen, the Netherlands (2017)

29. **Johari K,** Reifegerste J, Walenski M, Ashrafi F, Behroozmand R, Ullman M. Language impairment and improvement in Parkinson's disease: what, when, and why. 9th Annual Meeting of Society for the Neurobiology of Language (SNL), Baltimore, MD (2017)
30. Reifegerste J, **Johari K,** Walenski M, Ashrafi B, Behroozmand R, Ullman M. A Comprehensive Examination of Language in Parkinson's Disease: Evidence from Syntax, Morphology, and Lexical Processing. 24th Annual Meeting of Cognitive Neuroscience Society (CNS), San Francisco, California (2017)
31. Hurst E, Johnson M, Neal S, **Johari K,** Herath P, Behroozmand R. Neurobasis of Impaired Voice Motor Control in Parkinson's Disease. University of South Carolina Discovery Day, Columbia, SC (2017)
32. **Johari K,** Herath P, Behroozmand R. Neural correlates of impaired temporal processing before initiation and inhibition of speech production and hand movement: Evidence from Parkinson's disease. University of South Carolina Discovery Day, Columbia, SC (2017)
33. Behroozmand R, Herath P, **Johari K,** Kelley R, Kapnoula, Bryant K, Narayanan N, Greenlee JDW. Effects of STN deep brain stimulation on voice motor control in Parkinson's disease. Annual Meeting of Society for Neuroscience (SfN),San Diego, CA (2016)
34. Behroozmand R, Herath P, **Johari K,** Kelley R, Kapnoula, Bryant K, Narayanan N, Greenlee JDW. Effects of STN deep brain stimulation on voice motor control in Parkinson's disease. University of South Carolina Neuroscience Retreat, Columbia, SC (2016)
35. **Johari k**, Walenski M, Ashrafi F, Daemi M & Ullman M. Sex Differences in Farsi Past-Tense Formation in Patients with Parkinson's Disease. The 5th International Conference of Cognitive Science (ICCS 2013). Tehran, Iran (2013).
36. **Johari k** &Ashayeri H. The Grammatical Deficit in Regular Past Tense Formation: Study of Persian Speaking Population with Parkinson Disease". 13th Science of Aphasia, SOA, Groningen, The Netherlands (2012).
37. **Johari k** & Ashayeri H. Syntactic Impairments in Bilingual Patients with Parkinson's Disease". The 11th National Conference of Speech Therapy, Isfahan, Iran (2012).
38. **Johari k,** Ashayeri H ,Ashrafi F, Zali A & Dabirmoghadam M. Past tense Formation in PD Patients :Evidence from DP Model". Fifth Symposium of Neuropsychology, Tehran, Iran (2011)
39. **Johari k** & Ashayeri H. Language Organization in Bilingual Brain. 4th Symposium of Neupsychology, Tehran, Iran (2009).

40. **Johari k** & Ashayeri H. Paradoxical Successive Recovery in Bilingual Aphasia. 10th Science of Aphasia, SOA, Antalya, Turkey (2009).

INVITED TALKS

1. **Johari K**. The Application of Non-invasive Brain Stimulation Protocols to Improve Speech and Voice Deficits in Parkinson's Disease. University of Utah. March 2024.
2. **Johari K**. The role of Subcortical Structures in Speech production: Evidence from Spike Activities, and Local Field Potentials. C-STAR lecture series, University of South Carolina. November 2023.
3. **Johari K**. Causal and Clinical Evidence Support Motor Language Coupling in Neurotypical Adults and Individuals with Parkinson's Disease. The First International Conference on Science of Language and the Brain. May 2023
4. **Johari K.** Neural Correlates of Speech and Hand movement in Patients with Parkinson's Disease. 9th Iranian Neuropsychology Conference, February 2022
5. **Johari K.** Temporal Predictive Codes in Speech and Hand Motor System in Patients with Parkinson's Disease. Louisiana State University, February 2021
6. **Johari K.** Temporal Predictive Codes in Speech and Hand Motor System in Patients with Parkinson's Disease. University of Colorado at Boulder, February 2020
7. **Johari K.** Neural Correlates of Impaired Temporal processing of Speech Production in Patients with Parkinson's Disease. University of Wisconsin at Madison, June 2019.
8. **Johari K.** Temporal Predictive Mechanisms for speech and hand movement. The University of Southern Mississippi, April 2019.
9. **Johari K.** Neural Basis of Temporal Predictive Mechanisms in the Motor System: Evidence from Parkinson's disease. University of Texas, Medical center. March 2019.
10. **Johari K.** Neural basis of Temporal Predictive Mechanisms in the Motor Systems. University of California at San Francisco, February 2019.
11. **Johari K.** Temporal Predictive Mechanisms for Speech and Hand Motor System. Boston University, January 2019
12. **Johari K.** Temporal Predictive Codes in the Motor System. The University of Iowa, November 2018.

JOURNAL EDITOR

Editorial board member: Frontiers in language science: Neurobiology of language

Invited guest editor of special research topic in Frontiers Human in Neuroscience: *Beyond the speech motor disorders in Parkinson's disease: mechanisms, neural substrates, and potential therapeutic interventions.*

JOURNAL REVIEWER

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1. Journal of Neurophysiology
2. Neurobiology of Disease
3. European Journal of Neuroscience
4. Neuroimage:Clinical
5. Journal of Cognitive Neuroscience
6. Cognitive Neuroscience
7. Cortex
8. Frontiers in Psychology
9. Frontiers in Aging Neuroscience
10. Frontiers in Computational Neuroscience
11. Neuropsychologia
12. Brain and Language
13. Brain and Behavior
14. Neurobiology of Language
15. Psychophysiology
16. Language, Cognition and Neuroscience
17. Behavioral Brain Research
18. Experimental Brain Research
19. Biological Psychology
20. Journal of Speech, Language &Hearing Research
21. Aging, Neuropsychology and Cognition
22. Clinical Linguistics and Phonetics

CONFERENCE REVIEWER/ COMMITTEE MEMBER

2024-American Speech–Language–Hearing Association: Member of Committee for Speech Motor Disorder Through Life Span

2024-Society for Neurobiology of Language (SNL-2024): Reviewer

TEACHING EXPERIENCE

1. 2024 Adult Neurocognitive Communicative Disorders. Department of Communication Sciences and Disorders. Louisiana State University, Baton Rouge, LA
2. 2024 Speech Motor Disorders. Department of Communication Sciences and Disorders. Louisiana State University, Baton Rouge, LA
3. 2024 Survey in Neurogenic Communication Disorders. Department of Communication Sciences and Disorders. Louisiana State University, Baton Rouge, LA
4. 2023 Neural Basis of Speech Production. Department of Communication Sciences and Disorders. Louisiana State University, Baton Rouge, LA
5. 2023 Survey in Neurogenic Communication Disorders. Department of Communication Sciences and Disorders. Louisiana State University, Baton Rouge, LA
6. 2022 Adult Neurocognitive Communicative Disorders. Department of Communication Sciences and Disorders. Louisiana State University, Baton Rouge, LA
7. 2022 Neural Basis of Speech Production. Department of Communication Sciences and Disorders. Louisiana State University, Baton Rouge, LA
8. 2021 Adult Neurocognitive Communicative Disorders. Department of Communication Sciences and Disorders. Louisiana State University, Baton Rouge, LA
9. 2017-2018 Introduction to Communication Sciences and Disorders, Department of Communication Sciences and Disorders, University of South Carolina, Columbia, Sc.
10. 2013- 2014 Differential Diagnosis in Speech and Language Disorders, Department of Speech Therapy, Tabriz University of Medical Sciences, Tabriz, Iran.
11. 2012-2014 Aphasiology. Department of Speech Therapy, Tabriz University of Medical Sciences, Tabriz, Iran.

12. 2012-2014 Language Processing. Department of Speech Therapy, Tabriz University of Medical Sciences, Tabriz, Iran.
13. 2012-2014 Specific Language Impairments Department of Speech Therapy, Tabriz University of Medical Sciences, Tabriz, Iran.
14. 2011-2014 Clinical Methods in Speech Therapy Department of Speech Therapy, Tabriz University of Medical Sciences, Tabriz, Iran.
15. 2011-2014 Communication Disorder in Aging Department of Speech Therapy, Tabriz University of Medical Sciences, Tabriz, Iran.
16. 2010-2014 Neurolinguistics & Psycholinguistics Department of Applied Linguistics, Payame Nur University, (Tehran Branch), Tehran , Iran.
17. 2009-2014 Teaching Assistant. Neurolinguistics, Cognitive Science, Neuroscience and Applied linguistics, Tehran University of Medical Sciences. Tehran, Iran.

THESIS & PROJECT ADVISOR

1. 2022-Present: Effect of Personalized tACS on Speech and Language Function in Healthy Young Subjects and patients with Parkinson's disease. Fatemeh Tabari, Doctoral Student.
2. 2012-2013 Narrative Analysis in Azeri-Farsi Bilingual people. Department of Speech Therapy, Tabriz University of Medical Sciences, Tabriz, Iran.
3. 2012-2013 Spontaneous and Narrative Speech in Bilingual Patients with Parkinson's Disease. Department of Speech Therapy, Tabriz University of Medical Sciences, Tabriz, Iran
4. 2013-2014 Handedness and Syntax Processing. Department of Speech Therapy, Tabriz University of Medical Sciences, Tabriz, Iran
5. 2013-2014 Narrative Analysis in Traumatic Brain Injury. Department of Speech Therapy, Tabriz University of Medical Sciences, Tabriz, Iran

Ph.D. Committee service:

Fatemeh Tabari	Role: Chair and primary advisor	2022- present
Gray Sims	Role: PhD committee	2021- present

DEPARTMENTAL SERVICE:

-Faculty Search Committee	Role: member	2023-2024
-Comprehensive exam committee for graduate students	Role: member	2021-present
-Feedback committee	Role: member	2021- present
- Representative at LSU faculty senate	Role: member	2021- 2024
- Admission Committee	Role: member	2024- present

CLINICAL ACTIVITITES

1. 2008- 2014 Speech Therapists for Aphasia and Related Disorders. Department of Speech Therapy, Tabriz University of Medical Sciences, Tabriz, Iran
2. 2010- 2014 Neuropsychological Assessment and Intervention for Neurodegenerative Disorders (Parkinson's Disease & Alzheimer). Department of Speech Therapy, Tabriz University of Medical Sciences, Tabriz, Iran
3. 2010- 2014 Clinical Instructor for BSc. Students in Speech Therapy. Department of Speech Therapy, Tabriz University of Medical Sciences, Tabriz, Iran

SOFTWARE

1. Eprime, (Experimental Design)
2. Plexon (Spike Sorting)
3. Endnote (Reference Manager)
4. Microsoft Office
5. Adobe illustrates

LANGUGAES

Azari, Turkish, Farsi, English

EXTRACURRICULAR ACTIVITITES

1. Sports: Racquetball, Tennis, Badminton,
2. Reading: Philosophy, Sociology, Biology

3. Favorite Movie: Theory of Everything (Life of Stephen Hawking)
4. Social Activities: Volunteering, Cultural Festivals as well as Local Events