Rachael R. Baiduc

University of Colorado Boulder, Department of Speech, Language, and Hearing Sciences 2501 Kittredge Loop Drive 409 UCB, Boulder, CO 80309 Tel: (303) 492-6417 | Email: Rachael.Baiduc@colorado.edu

Laboratory Website: https://www.colorado.edu/lab/heard/

EDUCATION

PhD Northwestern University, Evanston, IL

Communication Sciences and Disorders, 2014

Dissertation Title: Beyond Audiometric Phenotype: Physiological and Behavioral Exploration of

Sensory/Neural Hearing Loss Advisor: Dr. Sumitrajit Dhar

Northwestern University Feinberg School of Medicine, Chicago, IL MPH

Public Health, 2013

BS Miami University, Oxford, OH

Speech Pathology and Audiology (Linguistics minor); magna cum laude, 2008

INTERESTS

Research	Cardiovascular disease risk factors (diabetes, hypertension, smoking) for hearing loss, hearing						
	health in racial/ethnic minorities, otoacoustic emissions, peripheral auditory function						

Teaching Audiological assessment, evidence-based practice in audiology, hearing loss epidemiology, research methods, scientific and medical writing

PROFESSIONAL EXPERIENCE

Assistant Professor (tenure-track), University of Colorado Boulder, Department of Speech,
Language, and Hearing Sciences, Boulder, CO
Adjunct Instructor, Northwestern University Feinberg School of Medicine, Northwestern
University Clinical and Translational Sciences Institute, Chicago, IL.
Research and Evaluation Associate, Searle Center for Advancing Learning and Teaching,
Northwestern University, Evanston, IL
Associate Evaluator, Searle Center for Advancing Learning and Teaching, Northwestern
University, Evanston, IL

2014

Postdoctoral Research Assistant, Auditory Research Laboratory (PI: Dhar), Northwestern University, Evanston, IL

2011-2012 Public Health Intern, Consortium to Lower Obesity in Chicago Children, Chicago, IL 2009-2013 Graduate Research Assistant, Auditory Research Laboratory (PI: Dhar), Northwestern

University, Evanston, IL

RESEARCH GRANTS AND AWARDS

Current Research Support

Baiduc RR. (Role: Principal Investigator). Assessment of Cochlear Dysfunction in Black and White Adults with Stage 2 Hypertension Using High-Frequency Distortion Product Otoacoustic Emissions. National Institutes of Health (National Institute on Deafness and Other Communication Disorders) - Early Career Research Award (R21). Total Amount: \$375,000. Award Duration April 2023-March 2026. Award No. 1R21DC020561-01A1

Completed Research Support

Baiduc RR. (Role: co-Principal Investigator with Anderson M). Sex Differences in Association between Hearing Loss and Cardiovascular Disease Risk Burden. American Hearing Research Foundation - General Grant. Total Amount: \$45,000. Award Duration 2020-2021.

- Baiduc RR. (Role: Principal Investigator). Hearing Loss and Cardiovascular Disease Risk Burden: Epidemiological and Physiological Data. *Hearing Health Foundation Emerging Research Grant.* Total Amount: \$28,431. Award Duration 2018-2019.
- Baiduc RR. (Role: Principal Investigator). Hearing Loss and Cardiovascular Disease Risk Burden. *University of Colorado Boulder Innovative Seed Grant*. Total Amount: \$49,603. Award Duration 2017-2018.

Federal Research Awards

- Baiduc RR. High-Frequency Distortion Product Otoacoustic Emission Evaluation in Black and White Adults with Stage 2 Hypertension. *National Institutes of Health* Health Disparities Research Loan Repayment Program Award. Award Duration 2023-2024. Award No. L60 DC019810-02.
- Baiduc RR. Exploring Disparities in Auditory Dysfunction Related to Cardiovascular Disease Risk Factors. *National Institutes of Health -* Health Disparities Research Loan Repayment Program Award. Award Duration 2021-2023. Award No. L60 DC019810-01.

AWARDS AND HONORS

- 2023 Nominee, Excellence for Teaching with Technology Award, Arts and Sciences Support of Education through Technology, University of Colorado Boulder
- 2021 Professional Poster Award (1 of 7 top professional posters), American Academy of Audiology
- 2021 Meritorious Poster Submission (one of 60 posters selected from 1253 submitted), American Speech-Language-Hearing Association
- 2021 New Investigator Award, American Auditory Society
- 2020 National Center for Faculty Development and Diversity Faculty Success Grant, University of Colorado Boulder
- 2019 American Speech-Language-Hearing Foundation Lessons for Success Travel Grant
- 2019 One of the highest rated professional poster submissions, American Academy of Audiology
- 2013 John D. and Lucille H. Clarke Dissertation Fellowship, Northwestern University
- 2012 American Speech-Language-Hearing Foundation New Century Scholars Doctoral Program
- 2012 Howard Hughes Medical Institute Mentoring Fellow, Northwestern University
- 2012 Student Conference Award, National Hearing Conservation Association
- 2012 Graduate Student Conference Grant, The Graduate School, Northwestern University
- 2008- Phi Beta Kappa (Honorary Society)
- 2008 Mary Thew Fowler Scholarship, Miami University
- 2007 Mary Thew Fowler Scholarship, Miami University
- 2007 Summer Scholars Scholarship and Research Stipend, Miami University
- 2007 Outstanding Student Award, Ohio Speech Hearing & Language Association
- 2007 Southwest Ohio Speech-Language-Hearing Association
- 2007 Deans Scholar Research Stipend, Miami University
- 2006 Mary Thew Fowler Scholarship, Miami University
- 2006 Deans Scholar Research Stipend, Miami University
- 2006 Undergraduate Research Award, Miami University

PEER-REVIEWED SCIENTIFIC PUBLICATIONS

Complete List of Published Work in NIH National Library of Medicine: My Bibliography

Stickel A, Tarraf W, Kaur S, Baiduc RR, Zeng D, Dinces, E, Daviglus M, Testai F, Lee DJ, Isai CR, Paredes, A.M. (Accepted / In press – JAMA Otolaryngology Head & Neck Surgery). Relationships between hearing impairment with cognitive change and mild cognitive impairment: results from the Study of Latinos - Investigation of Neurocognitive Aging (SOL-INCA).

^{*} Denotes student author (mentee).

[†] Denotes co-first authorship

- 2. Brennan C, Smith ML, **Baiduc RR**, O'Connor L. (Accepted / in press *Journal of Speech, Language, and Hearing Research*). Speech, language, hearing, and otopathology results from the international Smith-Magenis Syndrome (SMS) patient registry.
- 3. **Baiduc RR**, Bogle B, Gonzalez F, Dinces E, Lee DJ, Daviglus M, Dhar S, Cai J. (*Accepted / in press Journal of the American Academy of Audiology)*. Hearing loss and cardiovascular risk profiles: data from the Hispanic Community Health Study/Study of Latinos.
- 4. Zheng DD, Lam BL, Joslin CE, Gonzalez HM, **Baiduc RR**, Tarraf W, Stickel A, Daviglus M, Garcia-Bedoya O, Schneiderman N, Gonzalez II F, Lee DJ. (2024). Associations between self-reported visual and hearing functioning and cognitive function among Hispanics/Latino: Hispanic Community Health Study (HCHS/SOL). *Innovation in Aging*. igae006, https://doi.org/10.1093/geroni/igae006. PMID: not yet available
- 5. Lemons K*, Archambault E*, Anderson M, Kaizer A, **Baiduc RR.** (2023). Recovery from idiopathic sudden sensorineural hearing loss: association with cardiovascular disease risk. *American Journal of Audiology*. Epub ahead of print. doi: 10.1044/2023_AJA-22-00135. PMID: not yet available
- 6. **Baiduc RR**, Spankovich C, Vu T-H, Arteaga AA, Bishop C, Schweinfurth JM. (2023). Jackson Heart Study: aggregate cardiovascular disease risk and auditory profiles. *Laryngoscope Investigative Otolaryngology*, 8(2): 495-504. PMID: 37090882.
- 7. **Baiduc RR**, Sun J*, Berry CM*, Anderson M, Vance EA. (2023). Relationship of cardiovascular disease risk and hearing loss in a clinical population. *Scientific Reports*, 13(1): 1642. PMID: 36717643.
- 8. **Baiduc RR**, Sun J*, Spankovich C, Vance EA. (2022). Tobacco, but neither cannabis smoking nor co-drug use, is associated with hearing loss in the National Health and Nutrition Examination Survey, 2011 to 2012 and 2015 to 2016. *Ear & Hearing*, 43(5): 1582-1592. PMID: 35383601.
- 9. Jordan J[†], **Baiduc RR**[†], Spankovich C. (2022). Hearing screening age considerations for adults: National Health and Nutrition Examination Survey. *Journal of the American Academy of Audiology*, 33(2): 58-65. PMID: 36049752.
- McManus B, Harbarger C, Grillis A, Prewitt MG, Baiduc R, Block D, Paul O, Spankovich C. (2022). Otoscopy and tympanometry outcomes from the National Health and Nutrition Examination Survey (NHANES). American Journal of Otolaryngology, 43(2):103332. PMID: 34953248.
- 11. **Baiduc RR**, Berry C*, Lemons K*, Vance EA. (2021). Electrocochleography and auditory brainstem responses in persons with non-optimal blood pressure. *Journal of the American Academy of Audiology*, 32(9): 576-587. PMID: 35176801.
- 12. **Baiduc RR**, Ramsey M*, Sanders A*, Vance EA. (2021). Association between nonoptimal blood pressure and cochlear function. *Ear & Hearing*, 42(2): 393-404. PMID: 32826511.
- 13. **Baiduc RR**, Mullervy S*, Berry C*, Brumbach S*, Prabhu S*, Vance E. (2020). An exploratory study of early auditory evoked potentials in cannabis smokers. *American Journal of Audiology*, 29(3):303-317. PMID: 32510971.
- 14. Brumbach S*, Goodman S, **Baiduc RR**. (2019). Behavioral hearing thresholds and distortion product otoacoustic emissions in cannabis smokers. *Journal of Speech, Language, and Hearing Research*, 62(9):3500-3515. PMID: 31525116.
- 15. **Baiduc RR** & Helzner E. (2019). Epidemiology of diabetes and hearing loss. *Seminars in Hearing*, 40(4):281-291. PMID: 31602091.
- 16. **Baiduc RR** & Dhar S. (2018). Exploring optimal stimulus frequency ratio for measurement of the quadratic f₂-f₁ distortion product otoacoustic emission in humans. *Journal of Speech, Language, and Hearing Research*, 61(7):1794-1806. PMID: 29946695.
- 17. **Baiduc RR**, Lee J, Dhar S. (2014). Toward a test battery for differential categorization of age-related hearing loss. *Journal of Indian Speech Language and Hearing Association*, 28(2):25-40. PMID: NA.
- 18. **Baiduc RR**, Lee J, Dhar S. (2014). Spontaneous otoacoustic emissions, threshold microstructure, and psychophysical tuning over a wide frequency range in humans. *Journal of the Acoustical Society of America*, 135(1):300-314. PMID: 24437770.
- 19. **Baiduc RR**, Poling GL, Hong O, Dhar S. (2013). Clinical measures of auditory function: The cochlea and beyond. *Disease-a-Month*, 59(4):147-156. PMID: 23507354.

20. Hutchinson KM, Alessio H, **Baiduc RR**. (2010). Association between cardiovascular health and hearing function: pure-tone and distortion product otoacoustic emission measures. *American Journal of Audiology*, 19(1):26-35. PMID: 20086042.

STEM PEER-REVIEWED PEDAGOGY PUBLICATIONS

- 1. McCartney M, Childers C, **Baiduc RR**, Barnicle K. (2018). Annotated primary literature: A professional development opportunity in science communication for graduate students and postdocs. *Journal of Microbiology & Biology Education*, 19(1), 1-11.
- 2. Brace J, **Baiduc RR**, Lo S, Drane D, Flores L, Beitel G. (2018). Design, implementation, and evaluation of a multi-disciplinary professional development program for research mentors. *Mentoring and Tutoring: Partnerships in Learning*, 26(4): 377-399.
- 3. **Baiduc RR**, Flores LC, Beitel G. (2017). A research preparatory program for first year college students: student selection and preparation leads to higher science self-efficacy and persistence in STEM. *Innovative Higher Education*, 42:269-284. doi:10.1007/s10755-016-9377-4
- 4. **Baiduc RR**, Linsenmeier RA, Ruggeri N. (2016). Mentored Discussions of Teaching: an introductory teaching development program for future STEM faculty, *Innovative Higher Education*, 41:237-254.

INVITED BOOK CHAPTER

*Denotes student author (mentee).

1. Lemons K*, Sanders A*, **Baiduc RR**. (2023). Lifestyle and auditory function: relationships with elevated blood pressure, tobacco smoking, and cannabis use. In: Alessio H and Hutchinson-Maron K, eds. *Health and Hearing*. World Scientific.

MANUSCRIPTS UNDER REVIEW AND IN PREPARATION

*Denotes student author (mentee).

Under Review / In Revision

- 1. Cui Q, Swarat SL, Drane DL, **Baiduc RR**, Lo SM. (*Under Review*). Relationships among conceptions of teaching, instructional practices, and student outcomes: a case study.
- 2. Brennan C, **Baiduc RR.** (*Under Review*). Subtle differences with overlapping hearing, language, and communication profiles in individuals with Smith-Magenis Syndrome (SMS) due to a genetic deletion versus an RAI1 mutation.

In Preparation

- 1. **Baiduc RR**, Sun J*, Berry C*, Anderson M, Vance EA. (*In Preparation*). Sex-based differences in audiometric phenotypes related to cardiovascular disease risk: a machine learning approach.
- 2. Chung A*, Brennan C, **Baiduc RR.** (*In Preparation*). Case report: mild gain amplification devices for hearing difficulties improved quality of life following mTBI.

PEER-REVIEWED CONFERENCE PRESENTATIONS

*Denotes student author (mentee)

- Mendoza A, Stickle AM, Tarraf W, Kuwayama S, Kaur S, Morlet Paredes A, Daviglus ML, Testai FD, Zeng D, Isasi CR, Baiduc RR, Dinces E, Lee DJ, Gonzalez HM. (2022). Relationships between hearing impairment with 7-year cognition and cognitive change: results from the Study of Latinos- Investigation of Neurocognitive Aging (SOL-INCA). Podium presented at Alzheimer's Association International conference
- 2. Lemons K*, **Baiduc RR**, Anderson M. (2021, November). Sudden sensorineural hearing loss in relation to cardiovascular disease risk factors. Presented at the American Speech-Language-Hearing Association conference (virtual).
 - Meritorious poster submission (one of 60 posters selected out of 1253 submitted); ASHA 2021

- 3. Archambault E*, Lemons K*, Kaizer A, Anderson M, **Baiduc RR**. (2021, October). Cardiovascular disease risk factors and idiopathic sudden sensorineural hearing loss severity. Presented at the Colorado Academy of Audiology conference.
- 4. Anderson M, Sanders A*, Sun JW, Vance EA, **Baiduc RR**. (2021, April). Exploring associations between cardiovascular disease risk and hearing loss in a clinical population. Presented at American Academy of Audiology conference (virtual).
 - ^ Professional poster award; AAA 2021
- 5. **Baiduc RR**, Sun, JW*, Spankovich C, Vance EA. (2021, March). Hearing loss and smoking: National Health and Nutrition Examination Survey. Podium presented at the American Auditory Society conference (virtual).
- 6. Lemon, K*, Berry C*, Vance EA, **Baiduc RR**. (2021, March). Blood pressure level, auditory brainstem responses, and electrocochleography. Presented at the American Auditory Society conference (virtual).
- 7. Smith-Hooley T*, **Baiduc RR**. (2020, April). The effects of plasma cholesterol levels on hearing outcomes. Poster presented at American Academy of Audiology conference. Conference canceled due to COVID-19 pandemic; poster displayed virtually.
- 8. **Baiduc RR**, Sun JW*, Anderson M, Vance EA, Dowd K. (2020, August). The link between hearing loss and diabetes: scientific overview and The Audiology Project outreach efforts. Presented at the Association of Diabetes Care and Education Specialists conference, remote.
- 9. Masters J* & **Baiduc RR**. (2019, October). Auditory profiles of individuals with low vs. high cardiovascular disease risk burden. Disease Risk Burden. Presented at the Colorado Academy of Audiology conference, Breckenridge, Colorado.
- 10. **Baiduc RR** & Cates M. (2019, June). The Audiology Project: diabetes-related hearing and balance issues. Presented at the American Association for Diabetes Educators | Colorado Department of Public Health and Environment Spring Meeting, Denver, Colorado.
- 11. Sanders A*, Lemons K*, **Baiduc RR.** (2019, February). Blood pressure level, hearing sensitivity, and distortion product otoacoustic emissions. Presented at the American Auditory Society conference, Scottsdale, Arizona.
- 12. **Baiduc RR** & Dowd K. (2019, March). The Audiology Project statewide advocacy: promoting awareness of diabetes, hearing loss, and risk of falls. Presented at the American Academy of Audiology conference, Columbus, Ohio.
- 13. **Baiduc RR**, Sanders A*, Dowd K. (2019, March). The Audiology Project: diabetes, hearing loss, and risk of falls. Presented at the American Academy of Audiology conference, Columbus, Ohio.
 - ^ One of the highest rated professional posters; AAA 2019
- 14. Brumbach S*, Mullervy S*, Prabhu S,* **Baiduc RR**. (2018, October). Distortion product otoacoustic emissions and auditory brainstem responses in cannabis smokers. Presented at the Colorado Academy of Audiology conference. Breckenridge. Colorado.
- 15. Brumbach S*, Mullervy S*, Prabhu S,* **Baiduc RR**. (2018, November). Auditory behavioral and physiological findings in young cannabis users. Presented at the CORE Cannabis Research Perspective conference, Boulder, Colorado.
- 16. **Baiduc RR**. (2018, October). The Audiology Project: Promoting awareness and treatment of the diabetic ear. Presented at the Colorado Academy of Audiology conference, Breckenridge, Colorado.
- 17. Brumbach S* & **Baiduc RR**. (2018, June). Cannabis use is associated with reduced otoacoustic emission amplitudes in young adults. Presented at the Hearing Across the Lifespan conference, Lake Como, Italy.
- 18. **Baiduc RR,** Bogle B, Gonzalez F, Dinces E, Lee DJ, Daviglus M, Dhar S, Cai J. (2018, March). Cardiovascular disease risk factor burden is associated with hearing loss in young men: The Hispanic Community Health Study/Study of Latinos. Presented at the American Heart Association | Epidemiology Lifestyle conference, New Orleans, Louisiana.
- 19. Ruggeri N, **Baiduc RR**, & Woods L. (2016, November). Analyzing teaching statements in the context of a graduate teaching development program. Presented at the Professional & Organizational Development Network in Higher Education conference, Louisville, Kentucky.

- 20. Ruggeri N, **Baiduc RR**, & Woods L. (2016, November). Analyzing teaching statements in the context of a graduate teaching development program. Presented at the Professional & Organizational Development Network in Higher Education conference, Louisville, Kentucky.
- 21. **Baiduc RR** & Ruggeri N. (2015, November). Disciplinary conceptions of teaching in a graduate teaching development program. Presented at the Professional & Organizational Development Network in Higher Education conference, San Francisco, California.
- 22. **Baiduc RR**, Linsenmeier R, Ruggeri N. (2015, October). CIRTL at Northwestern: preparing future faculty for innovative teaching in STEM. Presented at the Association of American Universities conference, St. Louis, Missouri.
- 23. **Baiduc RR**, Linsenmeier R, Ruggeri N. (2015, April). Mentored Discussions of Teaching. Presented at the Center for the Integration of Research, Teaching, and Learning (CIRTL) Network Forum, College Station, Texas.
- 24. Lo SM, Drane DL, **Baiduc RR**, Swarat SL, Light GJ. (2015, April). Sustainable changes in instructional practices from faculty development: relationships with changes in conceptions and approaches to teaching. Presented at the American Educational Research Association conference, Chicago, Illinois.
- 25. Lo SM, Drane DL, **Baiduc RR**, Swarat SL, Light GJ. (2014, October). Relationship among changes in faculty conceptions, approaches, and practices of teaching from professional development: a case study. Presented at the International Society for the Scholarship of Teaching & Learning conference, Quebec City, Canada.
- 26. **Baiduc RR** & Dhar S. (2013, February). Exploring stimulus conditions for measurement of the quadratic f₂-f₁ distortion product otoacoustic emission. Presented at the Association for Research in Otolaryngology conference, Baltimore, Maryland.
- 27. **Baiduc RR**, Poling G, Daviglus ML, Garside DB, Vu H-T, Dhar S. (2012, October). Association of cardiovascular risk status and hearing loss in older adults after thirty-nine years of follow-up: Chicago Healthy Aging Study (CHAS) preliminary findings. Presented at the American Public Health Association conference, San Francisco, California.
- 28. **Baiduc RR**, Lee J, Dhar S. (2012, February). The influence of spontaneous otoacoustic emissions on threshold microstructure and psychophysical tuning. Presented at the Association for Research in Otolaryngology conference, San Diego, California.
- 29. **Baiduc RR**, Charaziak K, Siegel J. (2012, February). Spatial distribution of stimulus-frequency otoacoustic emission generators in humans. Presented at the Association for Research in Otolaryngology conference, San Diego, California.
- 30. **Baiduc RR**, Poling GL, Daviglus ML, Dhar S. (2012, February). Chicago Healthy Aging Study (CHAS): evaluation of cardiovascular disease risk and hearing in older adults. Presented at the National Hearing Conservation Association conference. New Orleans. Louisiana.
- 31. Abdala C, Dhar S, Williams T, **Baiduc RR**. (2009, March). DPOAE component analysis in newborns and adults. Presented at the American Auditory Society conference, Scottsdale, Arizona.
- 32. Hutchinson K, Alessio H, **Baiduc RR**, Maldonado CJ, Cartaya S, Swafford J. (2008, March). Influence of cardiovascular health on hearing acuity: otoacoustic emissions and suppression. Presented at the Ohio Speech, Hearing and Language Association conference, Columbus, Ohio.
- 33. Hutchinson K, Alessio H, **Baiduc RR**, Maldonado CJ, Cartaya S, Swafford J. (2007, November). Influence of cardiovascular health on hearing acuity: otoacoustic emissions and suppression. Presented at the American Speech-Language-Hearing Association conference, Boston, Massachusetts.
- 34. **Baiduc RR** & Bulanda RE. (2010, April). Long distance relationships. Presented at the Miami University Undergraduate Research Forum, Oxford, Ohio.

INVITED PRESENTATIONS

- 1. **Baiduc RR**. (2020, Jan). Exploring the link between cardiovascular disease risk factors and hearing loss. University of Colorado Anschutz School of Medicine. T32 symposium, Aurora, Colorado.
- 2. **Baiduc RR.** (2019, March). Diabetes and hearing loss: evidence from the literature and ongoing research efforts. University of Colorado Anschutz School of Medicine Department of Endocrinology, Aurora, Colorado.

- 3. **Baiduc RR** & Cates M. (2019, June). The Audiology Project: Diabetes-related hearing and balance issues. American Association for Diabetes Educators | Colorado Department of Public Health and Environment Spring Meeting, Denver, Colorado.
- 4. **Baiduc RR** & Cates M. (2019, June). Diabetes-related hearing and balance issues: increasing diabetes self-management education and support participation utilizing complementary services for innovative solutions, Denver, Colorado.
- 5. **Baiduc RR** & Cates M. (2019, June). The Audiology Project: the link between diabetes, hearing loss, and increased risk of falls. Rocky Mountain Group, National Diabetes Prevention Program Advisory Group, Colorado.
- 6. **Baiduc RR**. (2017, September). Cardiovascular disease Risk factors and sensorineural hearing loss: what is the relationship and how is it measured? University of North Carolina Chapel Hill Cardiovascular Epidemiology Group, North Carolina.

PROFESSIONAL AFFILIATIONS

American Auditory Society

Clinical Translational Sciences Institute, University of Colorado

Center for Research and Education Addressing Cannabinoids and Health, University of Colorado

Council of Academic Programs in Communication Sciences and Disorders

PROFESSIONAL DEVELOPMENT

Center for Teaching & Learning, Active Learning Academy - Learning by Design Program (University of Colorado Boulder), 2023

American Speech-Language-Hearing Association Faculty Development Institute [Partial completion due to medical leave], 2021

ASSETT Summer Teaching Course Redesign Workshop, 2020

National Center for Faculty Development and Diversity Faculty Success Program, 2020

American Auditory Society Mentoring Conference, 2020

Principal Investigator Academy Certificate (University of Colorado Boulder), 2020

ASSETT Faculty Fellow (University of Colorado Boulder), 2018-2019 Project "Evaluating Changes in Student Attitudes and Beliefs in Hearing Health: Results from SLHS 3014, Hearing Loss Epidemiology"

American Speech-Language-Hearing ASHFoundation Lessons for Success, 2019

Faculty Teaching Excellence Program - New Assistant Professor Program, Certificate of Completion, 2017

Faculty Teaching Excellence Program - Teaching Certificate (University of Colorado Boulder)

Graduate Teaching Certificate (Northwestern University), 2014

TEACHING					
Graduate Courses					
2024 – Current	Hearing Loss Prevention through a Public Health Perspective				
2023	Independent Study on Evidence-Based Practice, University of Colorado Boulder (1 student)				
2022 - Current	Evidence-Based Practice & Research Methods, University of Colorado Boulder				
2016 – Current	AuD Capstone, University of Colorado Boulder				
2016 – 2022	Adult Audiological Assessment, University of Colorado Boulder				
2015 – 2016	Writing and Peer Review for Publication, Northwestern University, Clinical and				
	Translational Sciences Institute, Feinberg School of Medicine				
2015	Students Reading Real Science: Bringing Primary Literature into the Undergraduate Classroom (Online, co-instructor), Northwestern University for the CIRTL Network				

Undergraduate Courses

2016 – Current	Audiological Evaluation, University of Colorado Boulder
2018 – 2020	Hearing Loss Epidemiology, University of Colorado Boulder
2020	Independent Study on Hearing Loss Epidemiology (1 student)

STUDENT MENTORSHIP

I have mentored (or am mentoring) the following AuD capstones and undergraduate honors and MA-SLP theses.

Student Name	My Role	Project Type	Project Title	Date of Completion
Mayara Bryant Amaral	Thesis Co- advisor	Undergraduate Honors Thesis	Senior honors thesis in SLHS (will defend by spring 2024), title: Sensorineural hearing loss exacerbated by deep vein thrombosis (DVT): A Case Study	In Progress
Acayla Chung	Capstone Advisor	AuD Capstone	Case Report: Mild Gain Amplification Devices for Hearing Difficulties and Quality of Life following mTBI	In Progress
Grace Mumford	Thesis Advisor	Undergraduate Honors Thesis	Racial Differences in Distortion Product Otoacoustic Emissions	In Progress
Emily Laff	Committee Member	MA SLP Thesis	Literacy Skills in Individuals with Smith-Magenis Syndrome (SMS) Based on International SMS Patient Registry Data	In Progress
Mara Smith	Thesis Co- advisor	Undergraduate Honors Thesis	Hearing Health and Early Speech- Language Development in Individuals with Smith-Magenis Syndrome	2022
Katherine Lemons ¹	Capstone Advisor	AuD Capstone	Characterizing Cardiovascular Risk Profiles in Patients with Sudden Sensorineural Hearing Loss Hypertension's Link to Hearing	2022
	Thesis Advisor	Undergraduate Honors Thesis	loss- a look at Auditory Brainstem Responses & Electrocochleography	2020

Mehanaz Oyshi	Capstone Co-Advisor	AuD Capstone	Video Games and Portable Listening Devices, and Their Relationship with Recreational Noise Exposure: An Overview on Current Literature and Future Directions	2022
Melissa Williams	Capstone Advisor	AuD Capstone	Evaluation of Student Attitudes, Beliefs, and Behaviors in SLHS 3014	2021
Amy Sanders	Capstone Advisor	AuD Capstone	Association Between Non-Optimal Blood Pressure and Cochlear Function	2020
Trista Smith Hooley	Capstone Advisor	AuD Capstone	The Effects of Plasma Cholesterol Levels on Hearing Outcomes	2020
Eric Kinney	Capstone Advisor	AuD Capstone	Cardiovascular Risk Factor and Inflammatory Bio-marker C-Reactive Protein's Association with Hearing Loss and Cochleopathy: A Foundational Exploration	2019
Jennifer Masters	Capstone Advisor	AuD Capstone	Auditory Profiles of Individuals with Low vs. High Cardiovascular Disease Risk Burden	2019
Samantha Brumbach ²	Capstone Advisor	AuD Capstone	Cannabis Use is Associated with Reduced Otoacoustic Emission Amplitudes in Young Adults	2018

¹ Recipient of the following awards: ASHA Audiology/Hearing Science Research Travel Award (2021); Caption Call Scholarship (2021); Undergraduate Research Opportunities Program Grant; Van Ek Award

I have provided research mentorship to the following students (non-capstone/thesis students):

Graduate

Michael Bouchal Anthony Brownell Kailey Durkin (recipient of Caption Call Scholarship 2018) Graham Gansar Sarah Mullervy Madison Romero

Undergraduate (SLHS unless otherwise indicated) Emily Archambault (Integrative Physiology) Kelly Keating Courtney Kempf Katarina Kurokawa

The following students have collaborated on projects and contributed to data analysis in my laboratory. Except for Mr. Prabhu, all students listed below work under the supervision of Dr. Vance and collaborate(d) with me on statistical analysis.

Caitlin Berry (PhD Student; Applied Mathematics) Shashidhar Prabhu (MS Student; Electrical Engineering) Vincent Peng (BS Student; Physics)

² Recipient of University Fellowship Award

Michael Ramsey (MS Student; Applied Mathematics Joshua Sun (BA Student; Applied Mathematics)

SERVICE

To the Department (CU Boulder)

Member, PhD and Research-MA Committee (2023-Present)

Member, Undergraduate Committee (2017-2020; 2023-Present)

Chair, AuD Admissions Committee (Spring 2023)

Member, Search Committee for Clinical Assistant Professor of Audiology (Spring 2023)

Member, Search Committee for Instructor of Audiology: Internal Applicants Only (Summer 2022)

Member, Audiology Faculty Committee (2016-Present)

Member, AuD Admissions Committee (2016-Present)

Member, AuD Comprehensive Examination Committee (2016-Present)

To the College of Arts and Sciences (CU Boulder)

Assessment Liaison, Speech, Language & Hearing Sciences (2023-Present)

Member, Search Committee for Divisional Dean of Social Sciences (2023)

Member, Social Sciences Divisional Council (2022-Present)

To the University (CU Boulder)

Faculty Representative, Emergency Management Operations Group (2018-2021)

To the Profession/Academic Community

Colorado State Lead and Advocate

The Audiology Project (national non-profit organization; 2017-Present)

Editorial Board Member

Scientific Reports

Invited Reviewer for Epidemiological Study Proposals

Hispanic Community Health Study/Study of Latinos Jackson Heart Study

Ad-Hoc Manuscript Review

American Journal of Audiology

Applied Sciences

BMJ Open

Ear and Hearing

International Journal of Audiology

International Journal of Environmental Research & Public Health

Journal of Aids Clinical Research and STDs

Journal of Cannabis Research

Journal of Clinical Medicine

Journal of the Association for Research in Otolaryngology

Journal of Speech, Language, and Hearing Research

Laryngoscope

Mentoring & Tutoring Partnership in Learning

Psychological Reports

Scientific Reports

Guest Co-Editor

Applied Sciences (special issue on Theoretical and Clinical Applications of Otoacoustic Emissions (2018-2019)

Ad-Hoc Grant Review

Hearing Health Foundation Grant Applications (2020, 2021)
University of Colorado CO-Pilot Grant Applications (2020)
United Kingdom Medical Research Council Grant Applications (2019)
University of Colorado Boulder Innovative Seed Grant Big Data Applications (2019)
University of Colorado Boulder Innovative Seed Grant General Applications (2018)

Fellowship and Scholarship Review

ASHFoundation Graduate Student Scholarships (2020)
Parents and Researchers Interested in Smith-Magenis Syndrome Fellowships (2017)

Thesis and Dissertation Review (External to CU Bolder)

Master's Thesis Reviewer | University of Cape Town, South Africa (2023) Dissertation Reviewer | University of Pretoria, South Africa (2021)