

PERSONAL DATA

Legal Name: Erin Sara Maloff Christianson

Place of birth: Pocatello, Idaho, USA

Citizenship: USA

EDUCATION

BACHELOR OF SCIENCE | ARIZONA STATE UNIVERSITY

May 2000

- Major: Communication Sciences and Disorders – Speech and Hearing Sciences

MASTER OF SCIENCE | ARIZONA STATE UNIVERSITY

May 2002

- Major: Audiology

DOCTOR OF PHILOSOPHY | VANDERBILT UNIVERSITY

May 2010

- Major: Audiology
- Emphasis: Neuroscience

MASTER OF BUSINESS ADMINISTRATION | EASTERN WASHINGTON UNIVERSITY

March 2022

POSTGRADUATE TRAINING

CLINICAL AUDIOLOGY FELLOWSHIP

July 2002 – July 2003

California Ear Institute at Stanford, Palo Alto, CA

FACULTY POSITIONS HELD

ASSISTANT PROFESSOR | OTOLARYNGOLOGY HEAD & NECK SURGERY

September 2024 – Present

University of Washington, Seattle, WA

HOSPITAL POSITIONS HELD

RESEARCH AUDIOLOGIST

February 2018 – May 2023

Seattle Children's Hospital, Seattle, WA

RESEARCH MANAGER-SURGICAL SERVICES | ASPIRE

May 2023 – August 2024

Seattle Children's Hospital, Seattle, WA

CHIEF OF PEDIATRIC AUDIOLOGY

August 2024 – Present

Seattle Children's Hospital, Seattle, WA

HONORS

ARIZONA STATE UNIVERSITY, RESEARCH ASSISTANTSHIP AWARD

1999 – 2002

DEPARTMENT OF EDUCATION, RESEARCH ASSISTANTSHIP AWARD

2006 – 2007

NIH, RESEARCH ASSISTANTSHIP AWARD

2007 – 2010

NIH NIDCD MENTORED STUDENT POSTER TRAVEL AWARD | AAS CONFERENCE

2008

AMERICAN SPEECH-LANGUAGE, HEARING ASSOCIATION RESEARCH TRAVEL AWARD

2009

NIH NIDCD MENTORED STUDENT POSTER TRAVEL AWARD | AAS CONFERENCE

2009

NIH NIDCD MENTORED STUDENT POSTER TRAVEL AWARD | AAS CONFERENCE

2010

SIGMA XI, SCIENTIFIC RESEARCH SOCIETY

2010 – 2017

BOARD CERTIFICATION

AMERICAN SPEECH-LANGUAGE-HEARING ASSOCIATION, CERTIFICATE OF CLINICAL
COMPETENCE – AUDIOLOGY

Initial date received: April 2003

CURRENT LICENSE TO PRACTICE

WASHINGTON STATE CLINICAL AUDIOLOGY LICENSE

License #LD 60186165

DIVERSITY, EQUITY AND INCLUSION ACTIVITIES

CHESTNUT HILL ACADEMY | CHAPTER BOARD MEMBER

Partnership with community-based diverse educational organization. Approximately 10 hours per week commitment.

2023 – 2024

UNIVERSITY OF WASHINGTON DIVERSITY COMMITTEE

Approximately 2 hours per week commitment.

2024 – Current

PROFESSIONAL ORGANIZATIONS

AMERICAN CLEFT PALATE AND CRANIOFACIAL ASSOCIATION | MEMBERSHIP COMMITTEE

1999 – 2001

AMERICAN SPEECH-LANGUAGE-HEARING ASSOCIATION

2000 – Current

AMERICAN ACADEMY OF AUDIOLOGY

2001 – 2016

INTERNATIONAL EVOKED RESPONSE AUDIOMETRY STUDY GROUP

2005 – 2013

ASSOCIATION FOR RESEARCH IN OTOLARYNGOLOGY

2007 – 2017

AMERICAN AUDITORY SOCIETY

2007 – 2017

NATIONAL FUTURE DOCTORS OF AUDIOLOGY

2007 – 2008

SOCIETY FOR NEUROSCIENCE

2008 – 2012

SIGMA XI, SCIENTIFIC RESEARCH SOCIETY

2010 – 2017

CHILDHOOD COMMUNICATION CENTER COMMITTEE | PARTICIPANT AT LARGE

2017 – 2022

ACI ALLIANCE | COCHLEAR IMPLANT WA STATE CHAMPION

2017 – Current

VISTAGE CEO GROUP | CE08576

2022 – Current

CHILDHOOD COMMUNICATION CENTER COMMITTEE | EXECUTIVE COMMITTEE

2024 – Current

AMERICAN BALANCE SOCIETY

2025 – Current

EDUCATION AND TRAINING ACTIVITIES

INVITED LECTURES | AU.D. PROGRAM

2007 – 2008

Vanderbilt University, Hearing and Speech Sciences Department, Nashville, TN

Course Title: Clinical Use of the Auditory Brainstem Response

INVITED LECTURES | DEAF EDUCATION MASTERS PROGRAM

2007 – 2008

Vanderbilt University, Hearing and Speech Sciences Department, Nashville, TN

Course Title: Interpretation of the Auditory Brainstem Response

MONTHLY PEDIATRIC RESIDENT LECTURES

2008 – 2010

Vanderbilt University, Hearing and Speech Sciences Department, Nashville, TN

Course Title: Clinical Audiology Basic Assessment

TEACHING ASSISTANT | DANIEL ASHMEAD, PH.D.

2009

Vanderbilt University, Hearing and Speech Sciences Department, Nashville, TN

Course Title: Clinical Research Design

TEACHING ASSISTANT | TODD RICKETTS, PH.D.

2009

Vanderbilt University, Hearing and Speech Sciences Department, Nashville, TN

Course Title: Cochlear Implants in Infants and Children

LECTURES AND LABS: COCHLEAR IMPLANT TECHNOLOGY REVIEW

2011 – 2013

University of Washington, Speech and Hearing Sciences Department, Seattle, WA

Clinical training for Audiology students.

INVITED LECTURES: COCHLEAR IMPLANT REVIEW

2012 – 2013

Western Washington University, Speech and Hearing Sciences Department, Bellingham, WA

LECTURES AND LABS: USE OF ELECTROPHYSIOLOGY MEASURES IN PATIENTS WITH IMPLANTABLE TECHNOLOGY

2012 – 2014

Idaho State University, Speech and Hearing Sciences Department, Pocatello, ID
Clinical training for Audiology students.

INVITED TALK: ADVANCED BAHA TECHNOLOGY REVIEW

2013

Northern Hearing Services, Inc., Anchorage, AK

Overview of Baha technology and clinical training for Audiology professionals.

AU.D. CAPSTONE COMMITTEE | UNIVERSITY OF WA / SEATTLE CHILDREN'S HOSPITAL

2018 – 2020

Seattle Children's Hospital, Seattle, WA

Au.D. Capstone Title: Cortical Auditory Evoked Potentials.

Provided guidance and oversight of all data collection, presentation preparation for national professional conference (American Auditory Society), and final paper preparation.

STUDENT INTERNSHIP EXPERIENCE

Summer 2022

Seattle Children's Hospital, Seattle, WA

Developed and led 4-week educational student experience. Included basic introduction to hearing-related topics about anatomy and physiology, Audiology principles, and diagnostics.

EDITORIAL RESPONSIBILITIES

Reviewer, Language, Speech, and Hearing Services in Schools

Reviewer, American Journal of Audiology

Reviewer, Scientific Reports

SPECIAL RESPONSIBILITIES AND SERVICE

AMERICAN CLEFT PALATE AND CRANIOFACIAL ASSOCIATION | MEMBERSHIP COMMITTEE

1999 – 2001

CHILDHOOD COMMUNICATION CENTER COMMITTEE | PARTICIPANT AT LARGE

2017 – 2022

ACI ALLIANCE | COCHLEAR IMPLANT WA STATE CHAMPION

2017 – Current

CLINICAL ASSOCIATE

August 2017 – Current

University of Washington, Seattle, WA

- Provide guidance and support to medical and audiology doctoral students engaged in research activities in the Childhood Communication Center within Seattle Children's Hospital, as required.

CLINICAL ACTIVITIES

CLINICAL AUDIOLOGY FELLOWSHIP

July 2002 – July 2003

California Ear Institute at Stanford, Palo Alto, CA

- Clinical duties encompassed conducting diagnostic audiology, vestibular and evoked potential evaluations across all age groups. Employed optimal clinical methodologies for fitting and programming hearing devices, including hearing aids and cochlear implants, across all age demographics.
- Led a research endeavor investigating the feasibility of the stacked auditory brainstem response in adults with small acoustic tumors in a clinical setting. This project was directed by Manuel Don, PhD and coordinated by his research team at the House Ear Institute in Los Angeles, CA.

CLINICAL AUDIOLOGY SUPERVISOR

October 2003 – July 2004

Idaho State University, Pocatello, ID

- Championed the establishment of southeast Idaho's inaugural vestibular rehabilitation program, orchestrating collaboration between Idaho State University's Department of Communication Sciences & Disorders, and Education of the Deaf, Department of Physical and Occupational Therapy, Portneuf Medical Center, and local medical professionals.
- Managed and conducted follow-up evaluations for the Infant Hearing Screening Program at Portneuf Medical Center.
- Provided supervision to audiology graduate students.

RESEARCH FUNDING

Project title: Tele-Audiology practice in the Seattle Children's cochlear implant program.

Funding source: Seattle Children's internal funding- Childhood Communication Center

Date awarded: January 2021

Funding amount: \$14,187

Role: PI

Status: Active

Project title: SSD Outcomes.

Funding source: Seattle Children's internal funding- Childhood Communication Center

Date awarded: March 2022

Funding amount: \$12,475

Role: Co-Investigator

Status: Active

Project title: Cisplatin and Vestibulotoxicity

Funding source: Seattle Children's internal funding- Childhood Communication Center

Date awarded: August 2022

Funding amount: \$1,000

Role: Co-Investigator

Status: Active

BIBLIOGRAPHY

Peer-Reviewed Publications

Dorman, M., Loizou, P., Spahr, A., and Maloff, E. (2002). A comparison of the speech understanding provided by acoustic models of fixed-channel and channel-picking signal processors for cochlear implants. *Journal of Speech, Language, and Hearing Research*, 45, 783-788. doi: 10.1044/1092-4388(2002/063). PMID: 12199407.

Dorman, M., Loizou, P., Spahr, A., and Maloff, E. (2002). Factors that allow a high level of speech understanding by patients fit with cochlear implants. *American Journal of Audiology*, 11, 119-123. doi: 10.1044/1059-0889(2002/014). PMID: 12691222.

Don, M., Elberling, C., and Maloff, E. (2009). Input and output compensation for the cochlear traveling wave delay in wide-band ABR recordings: Implications for small tumor detection. *Journal of the American Academy of Audiology*, 20, 99-108. doi: 10.3766/jaaa.20.2.3. PMID: 19927673; PMCID: PMC3102764.

Ashmead, D.A., Grantham, D.W., Maloff, E.S., Hornsby, B., Nakamura, T., Davis, T.J., Pampel, F., and Rushing, E.G. (2012). Auditory perception of motor vehicle travel paths. *The Journal of Human Factors and Ergonomics Society*, 54(3), 437-53. doi: 10.1177/0018720811436083. PMID: 22768645; PMCID: PMC3448288.

Maloff, E., Grantham, D.W., and Ashmead, D. (2013). Human sensitivity to differences in the rate of auditory cue change. *Journal of the Acoustical Society of America*, 133(5), 2867-2875. doi: 10.1121/1.4796102. PMID: 23654392; PMCID: PMC3663864.

Maloff, E. and Hood, L. (2014). A comparison of auditory brain stem responses elicited by click and chirp stimuli in adults with normal hearing and sensory hearing loss. *Ear and Hearing*, 35(2), 271-282. doi:10.1097/AUD.0b013e3182a99cf2.

Walker, B., Norton, S., Phillips, G., Christianson, E., Horn, D., Ou, H. (2018). Comparison of MRI in pediatric cochlear implant recipient with and without retained magnet. *International Journal of Pediatric Otolaryngology*, 109, 44-49. doi: 10.1016/j.ijporl.2018.03.013. Epub 2018 Mar 16. PMID: 29728183.

Holmer N., Artola E., Christianson E., Lynn A.M., Whitlock K.B., Norton S. (2019). Feasibility of acupuncture to induce sleep for brainstem auditory evoked response testing. *American Journal of Audiology*. 16;28(4):895-907. doi: 10.1044/2019_AJA-19-0069. Epub 2019 Nov 20. PMID: 31747523.

Mitchell R.M., Christianson E., Ramirez R., Onchiri F.M., Horn D.L., Pontis L., Miller C., Norton S., Sie K.C.Y. (2020). Auditory comprehension outcomes in children who receive a cochlear implant before 12 months of age. *The Laryngoscope*, 130(3):776-781. doi: 10.1002/lary.28061. Epub 2019 May 14. PMID: 31087657

Noble, A.R., Christianson E., Norton S.J., Ou H.C., Phillips G.S., Khalatbari H., Friedman S.D., Horn D.L. (2020). Reliability of measuring insertion depth in cochlear implanted infants and children using cochlear view radiography. *Otolaryngology-Head and Neck Surgery*. doi: 10.1177/0194599820921857.

Epstein, S., Christianson, E., Ou, H., Norton, S., Sie, K., Horn, D. (2022). Educational environments and secondary school outcomes among students who are D/deaf or hard of hearing in special education. *Language, Speech, and Hearing Services in Schools*. doi: 10.1044/2022_LSHSS-21-00148.

Gallagher, E., Wu, D., Christianson, E., Wang, X., Whitlock, K., Formsma, P., Sie, K. (2022). Characterization of hearing status in children under 3 years of age with cleft palate. *International Journal of Pediatric Otorhinolaryngology*. Nov;162:111295. doi:10.1016/j.ijporl.2022.111295. Epub 2022 Sept 5. PMID: 36084477.

Scherer, K., Christianson, E., Wang, X., White, R., Dunnell, J. (2023). Pilot cap acoustic transparency for pediatric amplification devices. *American Journal of Audiology*, doi: 10.1044/2023_AJA-22-00171.

Chang, G., Christianson, E., Barr, R., Wang, X., Dunnell, J., Sie, K. (2024). Reliability of the uniHELO instrument for children with single-sided deafness. *American Journal of Audiology*, doi: 10.10.44/2024_AJA-24-00040.

Cychosz, M, Scapelli, C, Stephens, K., Marija Sola, A, Kolhede, K., Ramirez, R, Christianson, E., Chan, V, Chan, D. (2025). Rapid increases in children's spontaneous and responsive speech vocalizations following cochlear implantation: implications for spoken language development. *Ear and Hearing*.

White Paper Publications

Christianson J. and Christianson E. (2020). Using telehealth in the emergency department to minimize risk to health care providers and conserve resources during the COVID-19 response [white paper]. InDoc, PA. www.indocsolutions.com

TALKS AND PRESENTATIONS

Dorman, M., Loizou, P., Poroy, O., Spahr, A., and Maloff, E. (1999). The effect of intensity of quantizing on the intelligibility of speech transmitted by signal processors using a small number of output channels. Presented at the 1999 Conference on Implantable Auditory Prostheses, Asilomar, Monterey, California.

Dorman, M., Loizou, P., Spahr, A., Maloff, E., and Van Wie, S. (2001). Speech understanding with dichotic presentation of channels: results from acoustic models of bilateral cochlear implants. Presented at the 2001 Conference on Implantable Auditory Prostheses, Asilomar, Monterey, California.

3-DAY INSTRUCTIONAL COURSES | HOUSE EAR CLINIC & NATUS/BIOLOGIC, INC.
2004 – 2006

House Ear Institute, Los Angeles, CA

Course Title: Use and Interpretation of the Stacked Auditory Brainstem Response and Cochlear Hydrops Analysis Masking Procedure.

Don, M., Maloff, E., and Waring, M. (2005). The effect of click rate on derived-band ABRs and the stacked ABR. Presented at the XIV International Evoked Response Audiometry Study Group Symposium, Havana, Cuba.

INVITED INSTRUCTIONAL COURSE | AMERICAN ACADEMY OF AUDIOLOGY ANNUAL CONFERENCE
2006

Minneapolis, MN

Course Title: A Brief Review of Cochlear Hydrops Analysis Masking Procedure (CHAMP)

Don, M., Elberling, C., and Maloff, E. (2007). Stacked ABRs in small tumor patients: Normal peak alignment vs. mean cochlear delay values used in the construction of chirp stimuli. Presented at the XX International Evoked Response Audiometry Study Group Biennial Symposium, Bled, Slovenia.

Hood, L., McCaslin, H., Maloff, E., Delgado, R. (2008). Physiologic threshold comparisons using ABR and ASSR techniques. Presented at the 2008 Annual American Auditory Society conference, Scottsdale, Arizona.

Maloff, E. and Ashmead, D. (2009). Brain activity underlying auditory motion perception in humans I: An event-related potential study. Presented at the 2009 Annual American Auditory Society conference, Scottsdale, Arizona.

Maloff, E., Grantham, D.W., Key, A., and Ashmead, D. (2010). Brain activity underlying auditory motion perception in humans II: An event-related potential study. Presented at the 2010 Annual Kennedy Center Science Day conference, Nashville, Tennessee.

Koleis, A., Maloff, E. and Ashmead, D. (2010). The role of audition in regulation of standing posture. Presented at the 2010 Annual American Auditory Society conference, Scottsdale, Arizona.

Graugnard, E., Grantham, D.W., Nakamura, T., Maloff, E., and Ashmead, D. (2011). Auditory Perception of Spatial Acceleration and Deceleration. Presented at the 2011 Annual American Auditory Society conference, Scottsdale, Arizona.

Maloff, E. and Bierer, J.A. (2011). Spectral ripple density and complex speech perception performance in normal hearing and cochlear implant listeners. Presented at the 2011 Conference on Implantable Auditory Prostheses, Asilomar, Monterey, California.

Bierer, J.A., Bierer, S.M., Maloff, E.S., and Lin, A. (2011). Cochlear implant channels with high thresholds degrade medial vowel perception. *Journal of the Acoustical Society of America*, 129(4), 2656.

Wisneski, M., Christianson, E., Kinsman, J., and Norton, S. (2016). Clinical application of CROS in children with single-sided deafness. Presented at the 2016 Annual American Auditory Society conference, Scottsdale, Arizona.

Melick A., Bourse-Archaro T., Christianson E., Whitlock K., Sie K., Norton S. (2019). Quality of life for youth with hearing loss who use spoken language. Presented at CI2019 in Hollywood, Florida.

Holmer N., Artola E., Christianson E., Kunz K., Lynn A., Norton S. (2019). Acupuncture to induce sleep for BAER in pediatric patients. Presented at the 2019 American Auditory Society conference, Scottsdale, Arizona.

Noble A., Ou H., Christianson E., Norton S., Phillips G., Paladin A., Horn D. (2019). Assessing angular insertion depth of cochlear implant electrode arrays in infants and children using x-ray: feasibility and interrater reliability. Presented at the 2019 American Society of Pediatric Otolaryngology, Austin, Texas.

Wu D., Gallagher E., Christianson E., Formsma P., Siebold B., Sie K. (2019). Hearing loss in children with orofacial clefts before age 3 years. Presented at the 2019 American Society of Pediatric Otolaryngology conference, Austin, Texas.

Gallagher E., Wu D., Christianson E., Formsma P., Siebold B., Sie K. (2019). Hearing loss in children with orofacial clefts before age 3 years. Presented at the European Cleft Palate Craniofacial Association Congress (ECPCA 2019) in Tivoli Vredenburg in Utrecht, the Netherlands.

Mitchell, R., Christianson, E., Gove, N., Ramirez, R., Durkee, L., Miller, C., Norton, S., Sie, K. (2018). Auditory comprehension outcomes in children receiving cochlear implantation at early age. Presented at the 2018 American Society of Pediatric Otolaryngology, National Harbor, MD.

Corkrum, K., Christianson, E., Meredith, M., Norton, S. (2017). An integrated approach to obtain electrically evoked stapedial reflex threshold in pediatric cochlear implant patients. Presented at the CI2017 conference, San Francisco, California.

Walker, B., Norton, S., Christianson, E., Phillips, G., Horn, D., Ou, H. (2017). Comparison of head wrap versus magnet removal for MRI in pediatric cochlear implant recipients. Presented at the 2017 American Society of Pediatric Otolaryngology, Chicago, Illinois.

Knapp, C., Phillips, G., Paladin, A., Christianson, E., Norton, S., Horn, D. (2016). Incidence of bony cochlear nerve canal stenosis in pre-lingually deaf cochlear implant users. Presented at the 2016 Combined Otolaryngology Spring Meetings, Chicago, Illinois.

Langford K., Christianson, E., Mutyala A., Pearson, M., Whitlock K., Norton S. (2020). CAEP stimuli and rate differences in normal hearing young adults. Accepted for presentation at the 2020 American Auditory Society conference, Scottsdale, AZ (withdrawn due to covid-19). Presented at the 2020 Seattle Children's Virtual Otolaryngology Spring Summit conference.

Chang, G., Christianson, E., Barr, R., Wang, X., Dunnell, J., Sie, K. (2023). Validation of the uniHELO instrument in a clinical setting for children with single-sided deafness. Presented at the American Speech-Language, Hearing Association conference, Boston, Massachusetts.

Scherer, K., Christianson, E., White, R., Wang, X., Dunnell, J. (2023). Acoustic transparency of pilot caps for hearing device retention in infants and young children. Presented at the American Academy of Audiology conference, Seattle, Washington.

Cychosz, M., Sola, A.M., Scarpelli, C., Stephans, J., Kolhede, K., Ramirez, R., Christianson, E., Chan, V., Chan, D.K. (2023). Changes in infants' and toddlers' vocal activity before and immediately after cochlear implant activation. Presented at the Conference on Implantable Auditory Prostheses, Lake Tahoe, CA.

Chang, G., Christianson, E., Barr, R., Wang, X., Dunnell, J., Sie, K. (2024). Comparison of speech perception outcomes between devices in children with SSD. Presented at the American Auditory Society conference, Scottsdale, Arizona.

Brodie, K., Christianson, E., Sie, K. (2024). Demographic and socioeconomic predictors of follow-up after tympanostomy tube placement. Presented at ASPO Conference, Chicago, IL.

Chang, G., Barr, R., Christianson, E., Dunnell, J., Sie, K. (2024). Comparison of subjective and speech perception outcomes for children with SSD using non-invasive devices. Presented at the American Speech-Language Hearing Association Conference, Seattle, WA.

Meredith, M., Christianson, E., Frank, S., Barr, R. (2024). Use of telemedicine for cochlear implant programming in pediatrics. Presented at the American Speech-Language Hearing Association Conference, Seattle, WA.

Pearson, M., Mutyala, A., Christianson, E., Brown, A. (2024). Cortical auditory evoked potentials in children. Presented at the American Speech-Language Hearing Association Conference, Seattle, WA.

Noelle, M., Greiner, R., Brodie, K., Meredith, M., Christianson, E., Nyman, A., Wang, X., Horn, D. Housing insecurity is associated with delayed access to cochlear implant services: A cohort study on social determinants of health. Presented at the American Cochlear Implant Alliance conference, Boston, MA. 2025.

OTHER EMPLOYMENT

GRADUATE RESEARCH ASSISTANT | COCHLEAR IMPLANT LAB: MICHAEL DORMAN, PH.D.
April 1999 – May 2002

Arizona State University, Tempe, AZ

CONTRACTED RESEARCH AUDIOLOGIST
August 2004 – August 2006

Natus/Bio-Logic, Inc., Chicago, IL

ADVANCED RESEARCH ASSOCIATE | ELECTROPHYSIOLOGY LAB: MANUEL DON, PH.D.
August 2004 – August 2006

House Ear Institute, Los Angeles, CA

GRADUATE RESEARCH ASSISTANT | SPATIAL HEARING LAB: DANIEL ASHMEAD, PH.D.
August 2006 – May 2010

Vanderbilt University, Nashville, TN

RESEARCH ASSOCIATE, POST-DOCTORAL FELLOW | COCHLEAR IMPLANT LAB: JULIE
BIERER PH.D.

June 2010 – July 2011

University of Washington, Seattle, WA

CONTRACTED SCIENTIST

June 2011 – September 2011

Cochlear Americas | Position Based in Seattle, WA

CLINICAL APPLICATIONS SPECIALIST & TERRITORY MANAGER

September 2011 – January 2015

Cochlear Americas | Position Based in Seattle, WA

EXECUTIVE BOARD MEMBER / CHIEF EXECUTIVE OFFICER (INTERIM)

October 2018 – Present

InDoc, PA, Remote