

Preparation of LEND Audiology Trainees to Serve Children with Autism and Other Neurodevelopmental Disabilities



LEND Audiology Trainees Representing 12 LEND Programs: Megan Bartoshuk, BS, University of North Carolina at Chapel Hill; MaryKate Bisailon, BS, University of Connecticut, Storrs; Mobolaji Falomo, MSc, University of Texas at Dallas; Julia Garrick, BS, University of Cincinnati; Mari Peterman, BA, University of Colorado, Boulder, CO; Lauren Rynders, BA, San Diego State/UCSD

What is LEND?

Leadership Education in Neurodevelopmental and Related Disabilities (LEND) programs are funded in five-year cycles on a competitive basis under the federal Autism Collaboration, Accountability, Research, Education and Support (CARES) Act and administered by the U.S. Maternal and Child Health Bureau (MCHB). There are 52 LEND programs located in 44 US states, with an additional six states and three territories reached through program partnerships. LEND programs:

- Provide long-term, graduate level interdisciplinary training as well as interdisciplinary services and care
- Operate within a university system or children's hospital, often as part of a University Center for Excellence in Developmental Disabilities (UCEDD) or other entity; many work in collaboration with local hospitals or health care centers

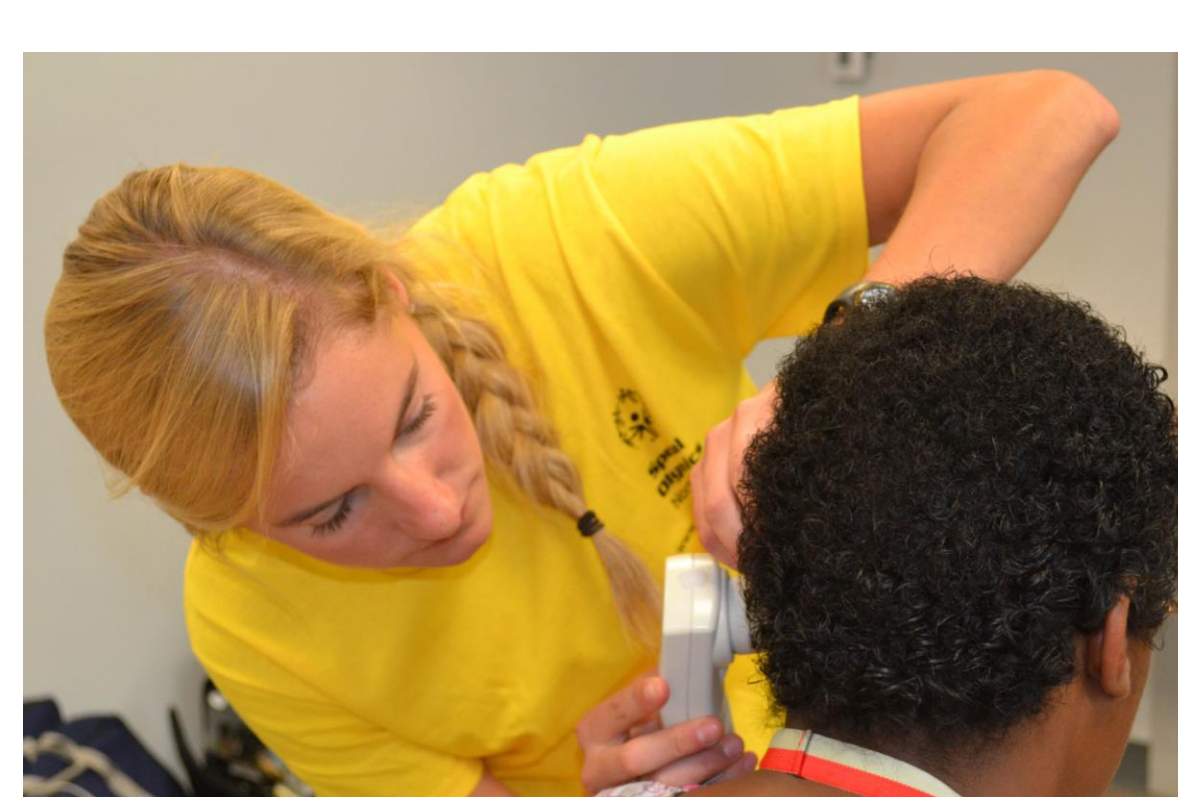
Each LEND program is unique with its own focus and expertise, but all provide interdisciplinary training, have faculty and trainees in a wide range of disciplines, and include parents or family members as program participants; many include self advocates (people with disabilities) as well. They also share the following overarching objectives:

- Advancement of healthcare delivery systems for children with developmental disabilities
- Delivery of high-quality interdisciplinary education
- Promotion of community-based partnerships
- Modeling of innovative practices to enhance cultural competency, family-centered care, and interdisciplinary partnerships



What is the LEND Audiology Supplement?

- Audiology has been a professional discipline within LEND programs since its inception, and is a core discipline in 31 of the 52 LEND programs
- Beginning in 2009, MCHB provided supplemental funding to 10 LEND programs in support of universal newborn hearing screening and intervention, in response to a need for more audiologists skilled at working with infants and young children and their families.
- LEND Audiology Supplements were re-competed in 2016 and the number of five-year awards was expanded to 12, this time with a focus on children who have autism and/or other developmental disabilities in addition to hearing loss
- Each of the 12 programs receives funding to increase the number of LEND pediatric audiology trainees and to expand content and clinical experiences in these areas

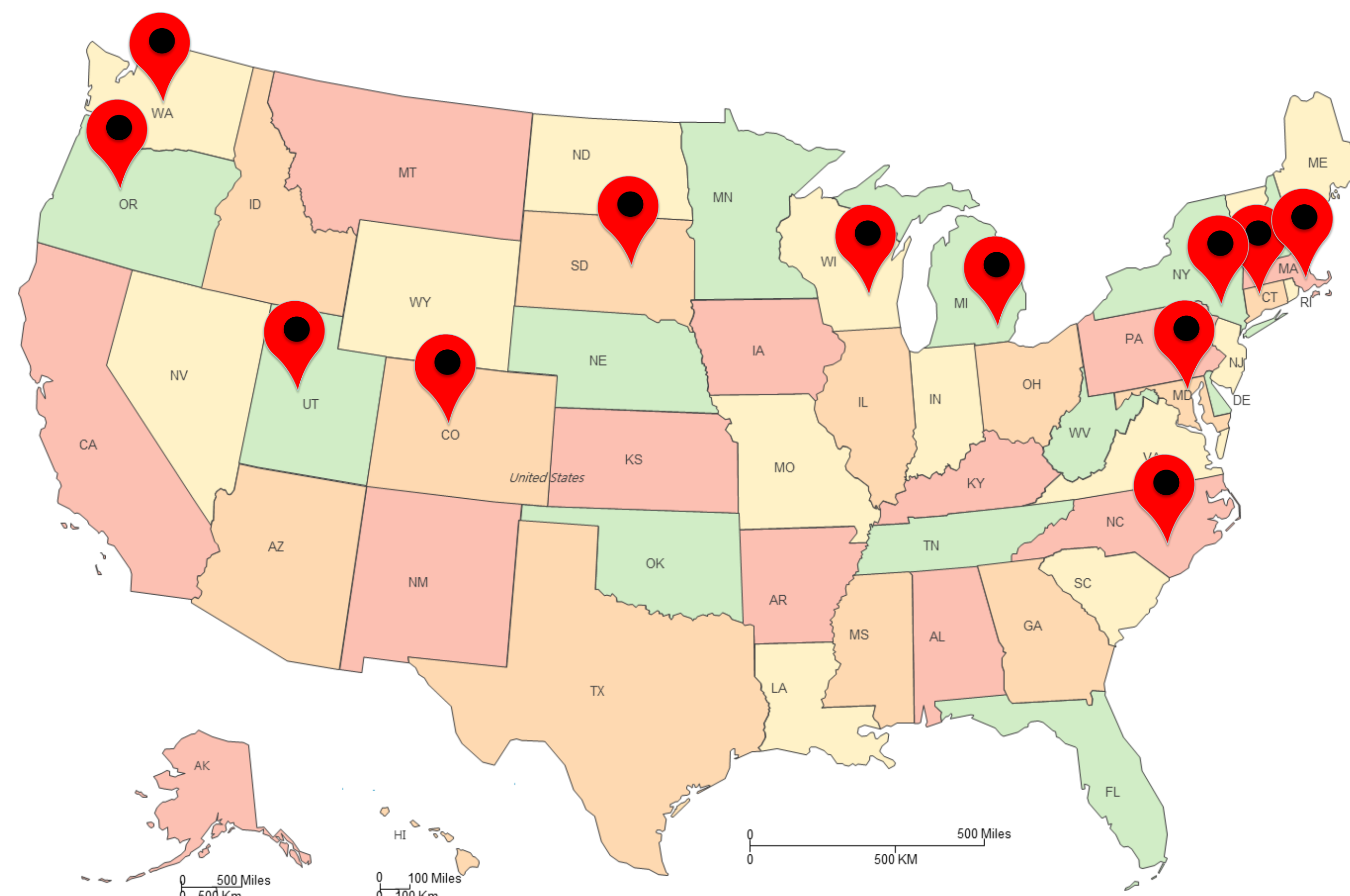


Goals of the Audiology Supplement

The current supplement supports the clinical and leadership training of pediatric audiology trainees within LEND programs and includes the following goals:

- To strengthen screening, treatment, and follow-up for infants and young children confirmed to be deaf or hard-of-hearing with autism spectrum disorder (ASD) and/or other related neurodevelopmental disabilities (DD)
- To increase the number of pediatric audiologists with clinical and leadership skills, utilizing these unique skills in delivering care to infants and young children with ASD and/or other DD, and to work across disciplines to better serve children with hearing loss and their families
- To enhance the systems' capacity to increase enrollment of infants/children with ASD and/or other DD who are confirmed to be deaf or hard-of-hearing, into early intervention programs.

MCHB, 2016



Audiology Supplement Grantees, 2016-2021

- Boston Children's Hospital, Institute for Community Inclusion, Boston, MA
- JFK Partners - University of Colorado, Aurora, CO (in partnership with the University of Colorado, Boulder)
- University of Connecticut, Papanikou Center for Excellence in Developmental Disabilities, Farmington, CT
- Kennedy Krieger Institute, Baltimore, MD
- Wayne State University, Developmental Disabilities Institute, Detroit, MI (in partnership with The University of Michigan, Central Michigan University, & Western Michigan University)
- University of North Carolina at Chapel Hill, Carolina Institute for Developmental Disabilities, Chapel Hill, NC
- Albert Einstein College of Medicine, Rose F. Kennedy Children's Evaluation and Rehabilitation Center, Bronx, NY
- Oregon Health and Science University, Institute on Development and Disability, Portland, OR
- University of South Dakota, Center for Disabilities, Sioux Falls, SD
- University of Washington, Center on Human Development and Disability, Seattle, WA
- Utah Regional LEND, Salt Lake City and Logan, UT (in partnership with the University of Utah, Utah State University, and Idaho State University)
- University of Wisconsin, Waisman Center, Madison, WI

LEND Trainee Activities

The LEND audiology supplement is funding trainees at all levels ranging from 1st year AuD students to 4th year externs. All are involved in a variety of pediatric audiology experiences.

Clinical Activities

- Participation in interdisciplinary teams assessing children who have developmental disabilities and hearing loss
- Delivery of pediatric audiology services in a variety of settings that include children with autism and other neurodevelopmental disabilities
- Development of clinical materials to facilitate audiologic assessment of children with developmental disabilities

Educational Activities

- Participation in workshops and seminars related to diagnosis of autism and other developmental disabilities in children who are deaf or hard of hearing
- Skill development with standardized patients acting as parents and family members
- LEND projects focused on a variety of topics related to the coexistence of hearing loss and developmental disabilities

Community / Outreach Activities

- Outreach to diverse cultural communities
- Collaboration with state EHDI programs to raise awareness of developmental disabilities in children who are deaf or hard of hearing
- Development of informational materials related to cytomegalovirus (CMV) and hearing loss

Dissemination and Networking

- Dissemination through presentations at local, state and national meetings
- Engagement and networking with other trainees at the annual EHDI Conference



Bibliography

- Association of University Centers on Disabilities (2017, August 28). *About LEND*. Retrieved from: <https://www.aucd.org/template/page.cfm?id=473>.
- Maternal and Child Health Bureau, Pediatric Audiology Competitive Supplement to Leadership Education in Neurodevelopmental and Related Disabilities (LEND), Notice of Funding Opportunity Announcement, June 28, 2016.
- Roush, J. and Kaufman, B. (2017). Developing future pediatric audiology leaders. Invited article, *ASHA Leader*, 22, 18-21.
- Roush, J. Preparation of pediatric audiologists to serve children with autism and other neurodevelopmental disabilities. Poster presentation, Annual Convention of the Association of University Centers on Disabilities, Washington, DC, November, 2017.

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