

For Halloween, 1st year AuD students dressed up as spondees!

AuDs & Ends:

News about CU's AuD Program

Spring 2023

IN THIS ISSUE

Whew... Here we are: 2023.

by Tammy Fredrickson

I feel like each year since 2020 we've collectively said (sometimes to ourselves, other times out loud): Whew – glad that year is over! The next one *has* to be better! And well... that's not necessarily been the case!

As some of you may know, Kristin Sommerfeldt resigned from her position as a clinical faculty member here at CU Boulder in December. So while I'd like to say: 2023 *has* to be better than 2022 – it's tough to say that when a fantastic colleague who did so much to support students isn't here on my team anymore!

So, I'm going to do what I encourage students to do: We have the power to choose how we look at things. So rather than focusing on the 'bad' aspects of Kristin leaving, I'm going to focus on the good aspects: She and her family are going on a new adventure – which is exciting! And she'll be able to share her gifts with patients, colleagues, and students in a new place.

I've really enjoyed working with Kristin through the years – her passion for audiology is obvious! Her compassionate nature helps patients and students by making them feel comfortable and know that they are cared about. She is a wonderful example of a life-long learner – always striving to provide the best and most current care to her patients as well as aiming to be the best teacher she can be by keeping up on new teaching tools, technologies, and pedagogy. I can only hope to have such an impact on my colleagues and students!

As always, THANK YOU to preceptors for all you do for our audiology program and for our students – you are vital to our students' success! And THANK YOU to our alumni who have taught me a lot while, hopefully, learning a lot themselves!

Tammy

We discuss opportunities to earn free CEUs and learn more about precepting and supervision in [Perspectives on Precepting](#)

Our [Student Academy of Audiology \(SAA\)](#) is (once again) up to all kinds of good!

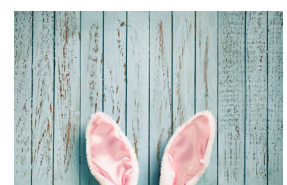
Hannah Wilson shares her capstone with us in the [Capstone Corner](#).

[Extern update:](#) Where are they at?

Get an update from [Dr. Baiduc's HEARD lab](#)

[CU at CAA!](#)

Are you an alum who'd like to share an update with fellow alumni and preceptors via this newsletter? Let me know! fredrict@colorado.edu



Perspectives on Precepting

By Tammy Fredrickson

Today's topic:

Continuing Education in the areas of Precepting & Supervision

I've still got lots to learn!

I admit it: I've still got a lot to learn when it comes to Precepting and Supervision! Some days I feel like I'm doing a great job and then – suddenly – something comes up and I need to

have a 'difficult conversation' and realize that I need to stop and think and plan that conversation.

Sometimes I'll see some technology (such as Padlet or PlayPosit) discussed in a forum and wonder – what the heck is that? Other times, an article pops up about student learning and pedagogy that I save to review later.

Let's face it: things are always changing! There are always new developments and things to learn!




Good news: we can do something about it!

I've shared this information with you previously but wanted to do it again: the Council of Academic Programs in

Communication Sciences and Disorders (CAPCSD) has eLearning

courses about topics in Precepting and Supervision – and they're FREE for you. CAPCSD recently informed us that they plan to phase out these handy online learning tools, so take advantage of them while you can! (We've heard the plan is to phase them out in a year or two, so you've got some time to plan your CEUs out!)

See the image below for log in information... I hope you enjoy them and that you learn lots!

Free Online Learning Courses in Clinical Education!

Training in Clinical Education/Supervision Matters!

Your work as a highly skilled clinical educator of graduate students in audiology is important to the success of our profession!

ASHA now requires that preceptors have a minimum of two hours of professional development in the area of supervision, post-certification.

To help meet this need, CU Boulder is pleased to offer their clinical preceptors the opportunity to participate in the CAPCSD Clinical Education eLearning Courses **at no charge!**

ASHA CEUs are available **at no charge** for successful completion of each course module!

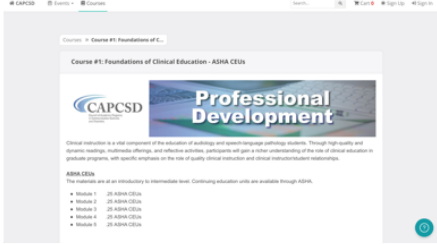
Access the courses here:

Course 1 – Foundations in Clinical Education: <https://www.pathlms.com/capcsd/courses/21495>

Course 2 – Effective Student-Clinical Educator Relationships: <https://www.pathlms.com/capcsd/courses/21574>

Course 3 – Feedback in the Clinical Education Environment: <https://www.pathlms.com/capcsd/courses/21579>

Course 4 - Assessing Student Performance: <https://www.pathlms.com/capcsd/courses/21586>



Each course has five (5) modules that may be completed independently of the others. Course modules contain readings, video tutorials and interactive learning activities that you may complete on your own schedule.

Questions? Contact Tammy at 303-579-6347 or fredict@colorado.edu

Capstone Corner:

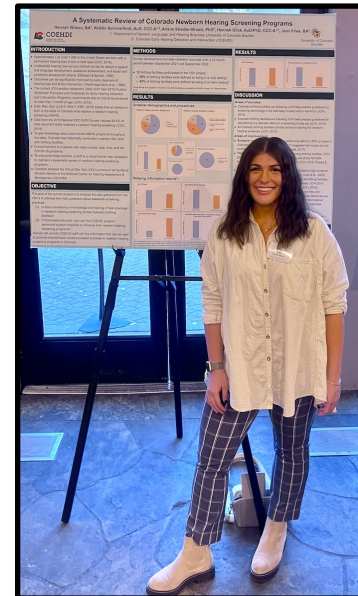
A systematic review of Colorado newborn hearing screening programs

by Hannah Wilson

Hi! I'm Hannah Wilson, a 3rd year AuD student. Prior to starting my AuD, I had a strong interest in early identification and intervention for children with hearing loss. In fact, I was recently reviewing a research paper assignment I completed during undergrad where I stated that I wanted to work as a pediatric audiologist who advocated for and was involved in research in universal newborn hearing screening protocols and procedures! In my 2nd year of the AuD program, I became a Leadership Education In Neurodevelopmental Disabilities (LEND) trainee. When Dr. Kristin Sommerfeldt introduced me to a project working with Colorado Early Hearing Detection and Intervention (COEHDI) to systematically interview and review newborn hearing screening programs across the state, I quickly jumped at the opportunity! This experience furthered my inspiration for providing the highest quality auditory care, leading to improved outcomes and quality of life for children.

Approximately 1 to 3 per 1,000 in the United States are born with a permanent hearing loss in one or both ears (CDC, 2019). Undetected hearing loss can put children at risk for delays in speech and language development, academic achievement, and social and emotional development (Davis, Efenbein & Bentler, 1986). These outcomes can be significantly improved by early diagnosis of hearing loss and timely intervention. (Yoshinaga-Itano et al., 1988). Early identification of hearing loss begins with reliable newborn hearing screenings. Historically, EHDI programs have used in-person site visits with birthing facilities to monitor their newborn hearing screening programs. Though, barriers to these in-person visits include cost, time, and most recently, the COVID-19 pandemic. To overcome these barriers, a shift to a virtual format was necessary. In Fall of 2021, Colorado adopted the Virtual Site Visit (VSV) curriculum led by Randi Winston-Gerson at the National Center for Hearing Assessment and Management (NCHAM) and as part of my LEND and capstone projects, I adapted this interview tool to fit the needs of COEHDI to virtually interview newborn hearing screening programs in Colorado to assess consistency in knowledge about best practices in newborn hearing screening across Colorado birthing facilities.

Over a 12-month period between September 2021 and September 2022, 12 birthing facilities participated in the VSV project.



Overall, the birthing facilities in Colorado have demonstrated numerous strengths in newborn hearing screening practices and procedures. However, areas of improvement were also identified through this project.

See those areas of success and areas for improvement on the next page!

This data was presented at the Colorado Academy of Audiology 2022 Fall Convention as a poster and oral presentation. The poster can be found here: [A Systematic Review of Colorado Newborn Hearing Screening Programs.pdf](#) Updated data will be presented at the 2023 EHDI Conference in March! Many thanks to the entire VSV team including Kristin Sommerfeldt, Arlene Stredler-Brown, Hannah Glick, and Jami Fries.

If you have any questions don't hesitate to reach out to me at hannah.wilson-3@colorado.edu.

Capstone Corner (cont'd):

A systematic review of Colorado newborn hearing screening programs

by Hannah Wilson

Areas of success:

- 100% of Colorado birthing facilities are following JCIH best practice guidelines for screening and rescreening protocol well-baby nursery and in the NICU (JCIH, 2019).
- 100% of Colorado birthing facilities provide hands-on training for newborn hearing screeners (JCIH, 2019)

Areas of improvement:

- *Screener competency:* Nurses are responsible for performing newborn hearing screenings in 60% of cases in Colorado. Newborn hearing screening falls well within the scope of practice for a nurse, however, a study performed by Roberts and Jones in 2017 suggests that nurses may not be comfortable with and prepared to perform newborn hearing screenings and relay results (Robert & Jones, 2017). Although all birthing facilities provide some type of training for screeners, the type of training varies. JCIH 2019 and Robert & Jones 2017 recommend the use of the NCHAM Newborn Hearing Screening Training Curriculum (JCIH, 2019; Robert & Jones, 2017). COEHDI should promote the use of the NCHAM Newborn Hearing Screening Training Curriculum during initial training and for continuing education in addition to the current hands-on training being utilized to promote standardized training across the state.
- *Turnover rate:* In 63% of cases in the current data, a high turnover rate was reported. As reported by Low and colleagues in 2005, a high staff turnover can make it difficult to maintain trained and competent screeners which can affect the quality of the newborn hearing screening program (Low et al., 2005).
- *Use of informational brochures/videos:* 75% of birthing facilities included in this analysis do not provide informational brochures/videos. These are free and available resources for all birthing facilities, however, these resources are largely unused in Colorado. JCIH 2019 promotes use of informational brochures/videos to help families retain information and to maximize follow-up (JCIH, 2019).
- *Relaying results to the healthcare provider:* There are inconsistencies in how newborn hearing screening results are being relayed to the primary healthcare provider in Colorado. 67% of birthing facilities indicated that results are only written on the discharge summary. 33% of birthing facilities indicated that results are faxed to the healthcare provider in addition to being written on the discharge summary. Suggestion to standardize how results are provided to healthcare providers to ensure facilitation of appropriate follow-up (Shulman et al., 2010; Russ et al., 2010).

Support SAA!

Purchase a mug, water bottle, or T-shirt and support SAA!

Email SAA at saa@colorado.edu to learn more or to make a donation!

SAA's 2022-2023

Board of Directors



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Olivia Ruggiano, Graduate &
Professional Student Government
Representative

Kyle Freeman, Undergraduate
Representative

Student Academy of Audiology

CU's SAA group has been busy! Check out what great things they've been up to....

Trivia Night is Coming!

Last spring, SAA organized a virtual trivia night to raise money for community members who were impacted by the Marshall Fire. The event received rave reviews and raised over \$1000 for the Boulder County Wildfire Fund.

SAA is planning another trivia night for this spring. *Email SAA if you'd like to hear about it!*

ASHA Convention

Can you believe it? *TWO* of our AuD students/SAA members are on the NSSHLA Board at the national level?! Emily Heneman-Lee and Sierra Morrow (below) are fantastic leaders! Both were recognized on stage at the ASHA Convention in New Orleans.



Doing good while having fun

On Ask Me About Audiology Day, SAA members handed out bookmarks and shared audiology jokes with passers-by on Pearl Street.



SAA members went ice skating in August (indoors, of course!), hit the pumpkin patch in October, held a toy drive for the Boys and Girls Club and made holiday cards for senior citizens at a local senior living facility.

Research Update: HEARD lab

Rachael R. Baiduc, PhD, MPH



Hello! I'm Rachael and I'm an assistant professor in the Department of Speech, Language, and Hearing Sciences at CU Boulder. The Department is home to lots of exciting research and here, I'd like to tell you a bit about mine. Broadly speaking, my program of research is centered on improving understanding of modifiable risk factors for hearing loss. I'm especially interested in how cardiometabolic risk factors (think diabetes, hypertension, tobacco smoking) play a part in increasing people's risk of hearing loss.

In 2020 (yes, right as the pandemic hit) Dr. Melinda Anderson and I were awarded a grant from the American Hearing Research Foundation to explore relationships between audiograms and cardiovascular disease (CVD) risk factors using UHealth patient records. This research required manual data entry of 7000 audiograms. Certainly, no easy feat! But we got it done and ever since, we have been using this dataset to answer questions related to hearing health and CVD risk. There are two studies I'd like to highlight.

First, we are using this dataset to understand basic relationships between the standard clinical audiogram and CVD risk. Our findings so far suggest that a high-risk factor load (such as having two or more CVD risk factors) is associated with hearing loss. We are also seeing some interesting sex-based differences. For example, our analysis shows that hypertension is associated with hearing loss in patients who identify as male, but not female. As that project wraps up, we are moving our efforts to machine

learning. With the use of mathematical modeling, we will explore how audiogram configuration is related to risk factors like diabetes. We're also trying to understand how overall cardiovascular condition relates to the audiogram.

The other project I wish to highlight is Kate Lemons' capstone. Kate is a third year AuD student who used UHealth records to gain a better understanding of how CVD risk is related to recovery from sudden sensorineural hearing loss (SSNHL). So far, our analysis of 90 patient records shows that tobacco smokers have a lower likelihood of SSNHL recovery than nonsmokers. Interestingly, though, other CVD risk factors seem unrelated to SSNHL recovery.

Many thanks to Kate Lemons, Amy Sanders, Emily Archambault, and my HEARD Lab team for their dedication to this research!

I am often asked what is the clinical significance of this research? Persons with some CVD risk factors (especially diabetes) may experience hearing loss earlier in life than individuals without such factors. Audiological management of these patients may be further challenged by ototoxic drug use, which is common amongst persons with diabetes. Our data suggest that baseline audiological assessment of persons with CVD factors is prudent. Holistic evaluation is also valuable. Our research highlights the importance of being mindful of a patient's health status from a more global perspective. For instance, you might query patients about their diabetes, hypertension, and smoking status just as you would noise exposure or exposure to ototoxic drugs. You might also recommend ongoing audiological monitoring, especially for individuals with diabetes. If these patients also report noise exposure and/or ototoxic drug use, this is especially important.

We are excited to announce that the first paper to use UHealth audiological records for research purposes will soon be published in the journal *Scientific Reports*. Keep an eye out for it if you are interested in learning more about our work.

Colorado Academy of Audiology Conference Beaver Creek

A number of AuD and PhD students attended this fall's CAA conference. Some students presented their capstone research – Katie Lohr even presented hers as a learning session (sorry, no picture as I was presenting at the same time!)

Congratulations to all our students for getting out there and networking with colleagues!

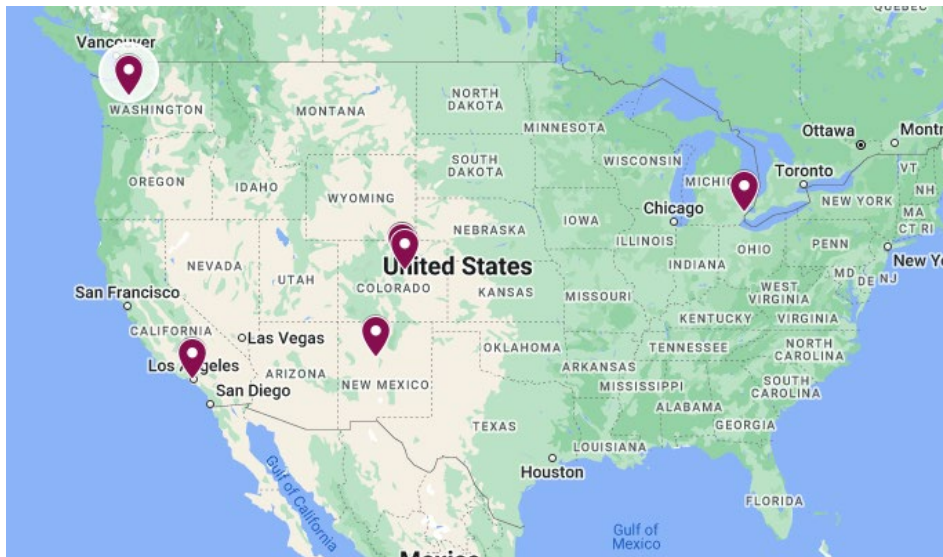


Extern Updates!

Our students are going places!

Graduation day (my favorite day of the year!) is only 4 months away! Our externs are spread across the country - we're excited for them to share their passion and skills with their communities! Get a closer look here:

<https://www.google.com/maps/d/u/0/edit?mid=1b9B6qX00R3PYa2eUWxBV4bYTexpDVQU&usp=sharing>

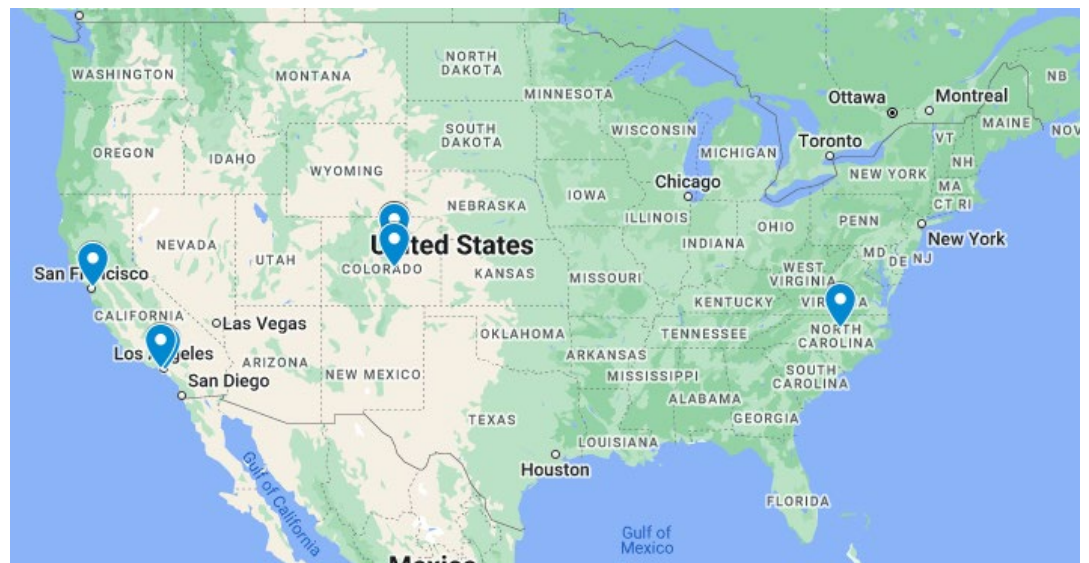


2022-2023
Externship site
locations

Our 2023-2024 externs will be spread across the country too! We're excited for them to spread their wings! For a closer look:

https://www.google.com/maps/d/u/0/edit?mid=11E5imZEOW_w0ELlnnjEOYfaUkg3jjJQ&usp=sharing

2023-2024
Externship site
locations



AuDs & Ends: News about CU's AuD Program

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I hope you've enjoyed this issue of our AuDs & Ends newsletter! We'd like to share news with you twice per year – every fall and spring.

If you think you know someone who'd be interested in receiving this newsletter, please share it with them!

Thank you for supporting our students and our program!

Visit our website: slhs.colorado.edu