

OT NICU LAB Newsletter



Spring/
Summer
2017

OT Students Past and Present and Friends of the NICU Lab:

It has been another busy year in the NICU lab!

Currently, the lab is working on the pilot phase of the **Supporting and Enhancing NICU Sensory Experiences (SENSE) Project** and looking to jump straight into the randomized control trial. This project involves providing positive sensory experiences for infants in the NICU as well as educating parents on how to provide for their child's sensory needs every day of NICU hospitalization. When parents do not engage in the NICU, a sensory support team addresses the infant's sensory needs. The sensory support team is made up of OT graduate students who provide positive sensory exposures to infants in the NICU at the bedside. We thank the University Research Strategic Alliance and the Betty and Gordon Moore Foundation for their support of the SENSE project.

We are excited to have been awarded an SBIR grant from NIH for the development of a new bottle technology, the **Preemie Pacer**. The goal of this bottle is safe oral feeding through paced feedings during a time when suck-swallow-breathe coordination is suboptimal. The first phase of the grant involves prototype development, laboratory testing, and focus groups.

Baby Bridge started as a pilot program in January of 2016 in order to address a gap in therapy services for infants following discharge from the NICU. Since the onset of the program, Baby Bridge has seen 70 infants in the NICU and in their homes. Baby Bridge has seen many changes in the past year and now provides treatment for infants born preterm as well as others who are eligible for First Steps early intervention programming and live in the immediate St. Louis area and surrounding counties. We welcome Elizabeth Heiny as our newest occupational therapist in the OT NICU lab, who serves as the Baby Bridge therapist.

The development of the **Neonatal Eating Outcome (NEO) assessment** was completed September 2016, and now the tool is available to the public for research and clinical practice. The NEO is a developmental feeding assessment of oral motor and feeding skills, designed for preterm infants prior to and at term equivalent age. It attempts to gauge normal versus abnormal progression of feeding across differing postmenstrual ages (PMA). It can be used with breast or bottle-fed infants. Reliability and validity have been assessed. RASCH analysis and other psychometrics continue.

The NEO assessment can be obtained at-cost at:

<https://otm.wustl.edu/technologies/neonatal-eating-outcome-neo-assessment/>

To reach us in the OT NICU Lab, you can email:

pinedaniculab@gmail.com



Current NICU Lab Students

Congratulations to the May 2017 Graduates!

Rachel Harris (OTD '17)

Maternal Mental Health During the Neonatal Period: Relationships to the Occupation of Parenting



Justin Ryckman (OTD '17)

Sensory Processing Patterns in Preterm Infants at Age Five Years and Relationships to Early Neurobehavior



Lisa Shabosky (MSOT '17)

Parent Visitation, Holding, and Skin-to-skin Care in the Neonatal Intensive Care Unit: Predictors and Relationships to Early Neurobehavior



Bailey Hall (MSOT '17)

Parent Visitation, Holding, and Skin-to-skin Care in the Neonatal Intensive Care Unit: Predictors and Relationships to Early Neurobehavior



-OTD Class of 2018-



Anna Annecca

NICU Room Type: Impact on Developmental Outcomes



Sarah Wolf

Baby Bridge Programming: Reducing Gaps in Therapy Service following Discharge from the NICU

Thank you!

Graduate Assistants:

Gabrielle Blenden (MSOT '17)

Melissa Thomas (OTD '18)

Mallory Varnum (OTD '18)

Isabelle Laposha (OTD '18)

-Welcome New NICU Lab Students-



Maggie Crabtree OTD/S

Relationship between Neurobehavior at NICU Discharge to Outcomes at Age 3-5 years old



Molly Grabill OTD/S

Evaluating the Predictive Validity of the NEO Feed Assessment on Neurobehavior and Medical Factors



Amy Jacobson MSOT/S

Using Technology to Engage Parents in the NICU



Maggie Kindra MSOT/S

Using Technology to Engage Parents in the NICU



Lara Liszka OTD/S

Quality and Variations of Auditory Exposure within the NICU, Newborn Nursery, and Home Environment



Danielle Prince OTD/S

Premie-Pacer



Rachel Munoz MSOT/S

Using Technology to Engage Parents in the NICU



Maddy Rolling OTD/S

The Neonatal Eating Outcome Assessment: A Reliability Study

-Congratulations 2016 STAR Students-

Last summer, the OT NICU Lab welcome three high school students through the Students and Teachers as Research Scientists (STARS) summer research program sponsored by University of Missouri-St. Louis (UMSL). This is an intensive summer program that requires students to complete their own research projects from start to finish in only 6 weeks!

- J Katie Kersting from St. Joseph's Academy completed her project titled "Neurobehavioral Outcomes of Preterm Infants Whose Mothers Were and Were Not Administered Antenatal Steroids Prior to Delivery."
- J Alhan Sayyed from Clayton High School completed her project titled "The Influence of Cerebral Injury on Early Neurobehavior."
- J Anthi Luong from Ladue Horton High School completed her project titled "Predictors of pacifier Use and Relationships to Feeding Performance."
- J Katie and Alhan both won the LMI Aerospace Awards for Excellence in Research. We look forward to welcoming 8 STAR students for summer 2017!

Bobbi Updates

- ❖ Bobbi is co-chair of the Neonatal Therapy National Certification Board (NTNCB), that administers a program for neonatal therapists to become Certified Neonatal Therapists. Visit www.ntncb.com
 - Applications opened November 1st, 2016 with a positive response of more than 100 therapists, and the first certificants were announced April, 2017.
- ❖ Bobbi received the Award for Research Excellence from the National Association of Neonatal Therapists.
- ❖ Bobbi did a webinar for Innara Health on Sensory Based Interventions in the NICU August, 2016.
- ❖ Bobbi conducts 2-day conferences on therapy in the NICU for Education Resources.

Welcome New Staff!

- ❖ Elizabeth Heiny (MSOT '16) joined January 2017 as the Baby Bridge Occupational Therapist
- ❖ Kristy Connell (PT, DPT, PCS) joined September 2016 and is conducting neurobehavioral assessments, infant assessments, and parent education on the SENSE study
- ❖ Anna Bukhshtaber (MOT, OTR/L) joined June 2017 and is conducting infant assessments and parent education on the SENSE Study
- ❖ Crista Thompson joined June 2017 as an OT Aide to help with the SENSE Study
- ❖ Kaydee Harper joined June 2017 as an OT Aide to help with the SENSE Study
- ❖ Anthi Luong (STAR 2016 Students) joined September 2016 as a clerk for the lab
- ❖ Alhan Sayyed (STAR 2016 Students) joined June 2017 as a clerk for the lab

How to Join the Lab

Interested in joining the NICU lab?

Individuals are hired under research grants currently supporting the work of the lab. Students in the lab are a part of the Program in Occupational Therapy or the Rehabilitation and Participation Science PHD program at Washington University School of Medicine in the Program in Occupational Therapy.

*Applications for the RAPS PhD are accepted each December for admission the following Fall.

-Other Shout-Outs-

A HUGE THANK YOU to Jessica Roussin, Research Coordinator, for all her hard work and being the glue that holds us all together!

Current Happenings

Student Congratulations!

- ❖ Anna Annecca & Lisa Shabosky on their presentation *Occupational Therapy's Role in the NICU* at the MOTA 2016 conference (pictured right)
- ❖ Rachel Harris and Justin Ryckman on their presentation *Maternal Mental Health: Relationships to Parental Role, Confidence, and Engagement in the NICU* at the NANT (2017) conference
- ❖ Justin Ryckman for the acceptance of his OTD paper to *Early Human Development*.



Manuscripts

- Dunsirn, S., Smyser, C., Liao, S., Inder, T., & Pineda, R. (2016). Defining the nature and implications of head turn preference in the preterm infant. *Early human development, 96*, 53-60.
- Nwabara, O., Rogers, C., Inder, T., & Pineda, R. (2016). Early Therapy Services Following Neonatal Intensive Care Unit Discharge. *Physical & occupational therapy in pediatrics, 1-11*.
- Ross, K., Heiny, E., Conner, S., Spener, P., & Pineda, R. (2017). Occupational therapy, physical therapy and speech-language pathology in the neonatal intensive care unit: Patterns of therapy usage in a level IV NICU. *Research in Developmental Disabilities, 64*, 108-117.
- Pineda, R., Guth, R., Herring, A., Reynolds, L., Oberle, S., & Smith, J. (2016). Enhancing sensory experiences for very preterm infants in the NICU: an integrative review. *Journal of Perinatology, 16*(June), 1-10.
- Pineda, R. G., Reynolds, L. C., Seefeldt, K., Hilton, C. L., Rogers, C. L., & Inder, T. (2016). Head lag in infancy: What is it telling us? *The American Journal of Occupational Therapy, 70*(1).
- Pineda, R., Durant, P., Mathur, A., Inder, T., Wallendorf, M., & Schlaggar, B. L. (2017). Auditory Exposure in the Neonatal Intensive Care Unit: Room Type and Other Predictors. *The Journal of Pediatrics, 183*, 56-66.
- Ryckman, J., Hilton, C., Rogers, C., Pineda, R. Sensory processing disorder in preterm infants during early childhood and relationships to early neurobehavior. *Early Human Development, 113*(October), 18-22.

Updates on Former Students

Alison Lynch—MSOT'10

Ali is currently taking time off from her career to focus on raising her 10-month old baby. She will be working a summer school contract this year, and is hoping to go back to work part time in the fall. Her and her husband are loving parenthood with their wild and fun little man. Per usual, they travel every chance they can! She has published one manuscript in a peer reviewed journal, and is still interested in reading research pertaining to pediatric therapy. Alison is focusing on putting her roles as a mom and wife first, and also volunteers in the children's ministry at her church. She hopes to present some information about working with kids with various disabilities to the volunteers and staff in the near future. alisonleelynch@gmail.com



Amanda Brown—MSOT'11

Amanda and her family continue to live in and love Nashville! Amanda is primarily mama to her now 1-year-old daughter Emmaline but also works part time in the preschool setting. She provides OT trainings to local preschools when they are requested and was invited to guest lecture at Belmont University on the topic of occupational therapy in the spinal cord injury rehab setting. Amanda loved getting the chance to travel back to Saint Louis in February and visit with Bobbi and her NICU lab (Emmaline also loved the attention). Amanda and her husband Will are becoming more involved with a local development center/ integrated preschool and look forward to volunteering and fundraising for them! amandasbrown123@gmail.com

Cori (Zarem) Cohen—OTD'12

Cori has changed her name to Cohen since she got married (two years ago in April!). She has been at Cleveland Clinic for almost 4 years, and practices in the critical care team for both pediatric and adult ICU's. She is part of a new initiative to implement a formal cognitive rehabilitation program in both acute care general floors and intensive care, including coma stimulation, which she is so excited about! Her and her husband are waiting to see where his career will take him when he finishes his fellowship next year, so she is unsure where she will wind up! For now, they will remain in Cleveland with their fur baby, Rori. She presented at Johns Hopkins Critical Care Rehabilitation national conference on the development and implementation of an ICU dedicated PT/OT team. She practices clinically in the NICU/PICU, medical, neurologic, cardiovascular and coronary ICUs at Cleveland Clinic. She works in the NICU when needed, as well as currently teaches at Cleveland State University. She remains interested in research and is participating in 3 research projects at this time. cszarem86@gmail.com

Katie Ross—OTD'16

Katie currently practices clinically in Louisville, Kentucky. She works at a 110 bed, level IV NICU and a 40 bed level III NICU at Norton Children's Hospital. Katie has also presented at 2 national conferences! She presented in April 2016 at the National Association of Neonatal Therapists Conference on "Neonatal Therapy: A Clinical Study of Therapy Usage in the NICU and Relationships to Outcome". She also presented this past April at the same conference presenting on "The Neonatal Eating Outcome (NEO) Measure: A New Developmental Feeding Assessment for Preterm Infants in the NICU". In addition to presentations, Katie published a paper in the journal *Research in Developmental Disabilities* entitled "Occupational therapy, physical therapy and speech-language pathology in the neonatal intensive care unit: Patterns of therapy usage in a level IV NICU." Although Katie remains interested in research, she is staying focused on her new clinical career as an OT. rossk@wusm.wustl.edu

Kelsey Melchior—MSOT'14

Kelsey currently lives in Norfolk, VA. Her boyfriend is in the navy and is stationed there, although he is currently on deployment. She moved down there with a traveling job in SNF, which she discovered was not for her. After about 6 months, she was lucky enough to find a job in Norfolk Public Schools. She has found the therapy department to be an amazing place, and so supportive! She has learned so much and has so many women to go to for questions. Kelsey primarily works with children with Intellectual Disabilities, but also some children with Autism and some with Specific Learning Disabilities. She was not initially sure if she would love the schools, but after a year of this setting she can definitely say she found her home in OT.

Kelsey published an article with the NICU lab shortly after graduating and presented her research at MOTA shortly before she graduated. She has not presented or published anything since then, but has remained interested in research in the abstract. Currently, becoming a good practitioner is her main focus. There is still so much to do after school! She does, however, feel that she could be interested in research again in the future, as she sees first-hand the lack of research (or more importantly, the lack of research that can effectively be implemented into the public school system with current lack of funding and buy in). There is definitely a need a need for more evidence based research and then practice in her setting! kmelchior4@gmail.com

Odo Nwabara—OTD'15

Odo currently practices OT in Gary, Indiana. She works in an outpatient setting at Methodist Hospital where she mostly works with stroke and orthopedic patients. She's really enjoying her current practice! In addition to her clinical work, Odo published a manuscript with Bobbi in December 2016. odochi.nwabara@gmail.com

Kelsey Dewey—OTD'16

Kelsey will be starting PA school at Rosalind Franklin University of Medicine and Science this summer. She conducted research with MD Anderson last year, and their study was recently presented at the ACGME conference. deweyk@wustl.edu

Kelsey's mentor, Maura Polansky, with their poster at the ACGME conference.



Stephanie Walker, MSOT'11

Stephanie is currently working at Bronson Hospital in Kalamazoo, MI. She works on all general floors and ICUs/Traumas. In her personal life, Stephanie just bought a condo and is enjoying living and working in her hometown. stephaniemaywalker@gmail.com

Laura Madlinger—OTD'12

Laura continues to work part time in the NICU at University of Illinois Hospital. She recently also began doing some sensory processing evaluations and treatments on the adolescent behavioral health unit. Last April, she welcomed her daughter Christine 7 weeks early. Her daughters are now almost 1 and almost 3 years old, happy, healthy, and antagonizing each other. She has published 3 manuscripts (one as first author) in a peer reviewed journal, as well as presented at NANT and AOTA since graduation. Laura practices clinically in pediatrics; her caseload is primarily NICU and NICU related (follow up clinic, prenatal bedrest patients), but she also sees kids in the PICU and psych units. Her first year at UIC she was a regular lab assistant, but now that she is part time she does 2 guest lectures per year. Laura does TIMP testing for her co-workers study on IVH, but otherwise is not currently involved in research. laura.madlinger@gmail.com



Polly Durant—MSOT'16

Since finishing fieldwork in December, Polly has been nannying for a lovely 6 month-old named Tilly and adjusting to life in sunny Los Angeles. Her significant other, Michael, got his dream job writing for an animated TV show, so they are giving life out here a shot, and are so far loving it. Polly will be starting a job at a pediatric clinic near Pasadena in April. The clinic gets lots of referrals from NICUs and is working on streamlining the referral process by having OTs and PTs regularly present at local NICUs on the importance of early referral, which is something she is very excited about being a part of. She will be presenting a poster at NANT on her student project from her time at the University of Minnesota NICU, and is looking forward to seeing lots of familiar faces! pollydurant@gmail.com



Sonya Dunsirn—OTD'14

Sonya is still working at Johns Hopkins Children's Center in Baltimore, Maryland. She sees kids in all aspects of the hospital: PICU, NICU, oncology, burns, etc. She has published one article in a peer reviewed journal, and this past year presented "Quality Improvement Study for Positioning in the NICU" at the Johns Hopkins Clinical Showcase. She also presented at the national Critical Care Rehabilitation Conference about therapeutic interventions in the NICU. As for her personal life, she is getting married in August! She is still interested in research and is writing up a QI study from her NICU now. sonya@dunsirn.com

Tara Crapnell—OTD'13

Tara is working as a school-based occupational therapist with high school students and young adults. This past fall, she completed the Assistive Technology (AT) Program at California State University, Northridge, and is now working as the OT and AT specialist at the school district. Currently, they do not have an AT department, so Tara is working with two speech pathologists and the director of special education to build the AT department. In addition to her full-time job, she is working with a couple of colleagues at UCLA on two papers covering the transition to adulthood for individuals with autism spectrum disorder (ASD), which have been submitted to Pediatrics. In collaboration with the same colleagues, Tara published her first chapter in a textbook, which also covered the transition for adulthood for individuals with ASD. Aside from work life, Tara and Brad became first-time homeowners in March and are living in the Bay Area. She also recently took up ceramics as a hobby. crapnellt@outlook.com

Lauren Reynolds- OTD'12

Lauren is moving again and the final destination is Chicago! She will miss Philadelphia and the friends she made, but is ready to finalize the medical training journey and move back to the Midwest. Lauren is currently taking a work break and loves staying home with her girls. Madison turned 3 and Avery is now 3 months. Her husband is taking a vascular neurosurgery/attending position following the move, so Lauren and her husband are excited for the next chapter! Laurenreynolds912@gmail.com



Hayley Chrzastowski—OTD '15

Hayley just finished her 1-year contract with her first position as an OTR in Fredericksburg, VA at a private pediatric outpatient clinic. During this past year, she presented a short course at AOTA about curriculum development for international service learning trips and realized just how much she has missed having research in her life. She has had an exciting year full of problem solving, creativity, enlightenment, and insight into how she would like to focus my journey with OT. Currently, she is exploring PRN positions at a children's hospital in Richmond, VA and an acute care PRN position in Fredericksburg, VA. She is seeking greater flexibility with her OT schedule as she is looking into finishing her Doula certification with a local company. Her passion continues to reside with pediatrics, infants, the NICU, and most specifically pregnant women and early infant bonding/attachment. She is looking forward to how things will continue to unfold and how my path with merging OT and maternal healthcare will become more clear! hayley.chrzastowski@gmail.com

Elizabeth Heiny—MSOT '16

Elizabeth has stayed in St. Louis and has joined on as the primary therapist for the Baby Bridge Program, a clinical and research program in the NICU Lab. She helps to support infants and their families following NICU discharge with weekly in-home therapy visits. She is also helping to assist Jessica with the SENSE study as much as possible. emheiny@gmail.com



Felicia Foci (MSOT'16) feliciabfoci@comcast.net, Joy Bender (MSOT'14) joybird73@yahoo.com, Katrina Stransky (MSOT'10) katrinastransky@gmail.com, Laura Mazelis (MSOT'14) lauramazelis@gmail.com, Lisa Tiltges (OTD'13) lisa.tiltges@bannerhealth.com, Mallory Duncan (OTD'11) mallorymduncan@gmail.com, and Melissa Mara (MSOT'13) mmara889@gmail.com, were MIA for this update.

We hope they are having a great year so far and look forward to hearing from them in future newsletter updates!