Research Newsletter

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DEPARTMENT OF ALLIED HEALTH SCIENCES





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Center for Literacy and Disability Studies set to expand Tar Heel Reader platform with \$2.5 million grant

A literacy initiative housed in the UNC Department of Allied Health Sciences has received a five-year, \$2.5 million grant from the U.S. Department of Education's Office of Special Education to encourage learning through reading among children with severe cognitive disabilities.

Tar Heel Reader (THR), an eight-year collaborative venture between the DAHS' Center for Literacy and Disability Studies and Dr. Gary Bishop of UNC's Department of Computer Science, will use the grant to enhance the THR platform. The center's director, Dr. Karen Erickson, and her team will use research to develop a new interface for THR,

called Tar Heel Shared Reader (THSR). The shared reader experience will help educators, clinicians and families teach children with disabilities by using books from the THR library.

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Dr. Bing Yu, a professor in the Division of Physical Therapy at the UNC School of Medicine, helps prepare the USA Track & Field athletes for the 2016 Olympic Games by utilizing biomechanics research and technology to train the team.

Full story on page 2

ALLIED HEALTH SCIENCES
RESEARCH ADVISORY
COMMITTEE

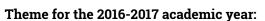
Study12

Grace Baranek
Brian Boyd
John Bulluck
Jennifer Daniel
Richard Faldowski
Adam Jacks
Patty Kinneer
Karen McCulloch
Eniko Rak
Barbara Renner
Gabrielle Scronce
Linda Watson
Sharon Williams

Learn about the new AHS research model inside. See how our mission of building a strong interdisciplinary research culture, generating knowledge in allied health sciences, and translating that knowledge addresses the needs of our local, national, and global communities.

See page 5

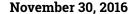
FALL 2016 RESEARCH FORUMS



Expanding Opportunities & Fostering Interdisciplinary Research in Allied Health Sciences

September forum: "Showcasing the AHS Research Model with Examples." Dr. Grace Baranek, Dr. Mike Lewek, Dr. Clare Harrop

October forum: "Making Research Connections and Campus-Wide Team Building" Nathan Blouin, Deputy Director, UNC Office of Research Development



11:30 a.m.-12:45 p.m., Bondurant 2020 "Expanding Research Opportunities With Intervention Science"

All DAHS faculty, research staff, post-docs, and PhD students are welcome. Lunch is included!





STUDENT SPOTLIGHT

Marziye Eshghi, a PhD student in the Division of Speech and Hearing Sciences,

recently received the designation of best paper, from the 171st meeting of Acoustical Society of America in Salt Lake City, Utah. Ms. Eshghi's research focuses on patterns of nasal coarticulation in early childhood development. Coarticulation refers to the overlapping of articulatory gestures during production of adjacent sounds in connected speech production. Investigation of early development of coarticulation patterns is important, as it can reveal information about the mechanical characteristics of speech production as well as when young children master adult-like motor planning skills in speech production. Ms. Eshghi became interested in studying nasal coarticulation in children after recognizing the lack of research in nasalization for young infants. Ms. Eshghi's research is promising for two reasons. First, a novel nasal ram pressure (NRP) technique was used in this study to obtain physiological information about the status of the velopharyngeal port in the transition from a nasal consonant to a vowel or from a vowel to a nasal consonant. This approach has not been used previously. Second, this study investigated nasal coarticulation by infants at three age points: 12, 14, and 18 months of age. Coarticulation data from early infancy fills the gap in the literature and extends our understanding about early motor planning skills. Results of the study revealed that while only 20 percent of vowels showed either

carry-over or anticipatory nasal coarticulation at 12 months of age, this amount increased to 62 percent and 77 percent of vowels produced at 14 and 18 months of age, respectively. Findings of the study may

also shed light on



Marziye Eshgh

contradictory findings in the literature by showing that while nasal coarticulation occurs in the speech of young children, it develops gradually over time from a more segmental to a syllabic level. Ms. Eshghi said the results of this

segmental to a syllabic level. Ms. Eshghi said the results of this study will also be significant in establishing a base from which subsequent investigations of nasal

coarticulation patterns in other populations, such as children with cleft lip and palate, can be conducted.

Continued on page 6

Dr. Yu Provides Recommendations to USA Track & Field Team for 2016 Olympic Games

Dr. Bing Yu, a Professor in the Division of Physical Therapy, used biomechanics research and technology to train the USA Track & Field team as athletes prepared for the 2016 Olympic Games in Rio de Janeiro, Brazil. Yu has worked with the national track and field team using biomechanics to improve athletes' overall performance in the past seven Olympic Games, starting in 1988. Yu is in charge of the performance of discus and javelin athletes.

Dr. Yu and a team of other scientists used specialized videotape methods and multiple cameras to reconstruct athletes' performances as they trained and competed. Dr. Yu and the research team

combined those video images to calculate technical parameters, such as speed, rotation, joint angles, and mechanical parameters. From there, scientists perform biomechanical analytics to uncover technical limitations and make recommendations to coaches as they prepared athletes for the Olympic Games.

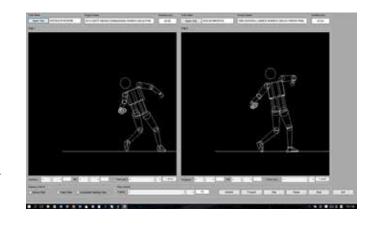
"As biomechanists, our major responsibility is to help athletes improve performance through improving their techniques," Dr. Yu said. "We need to find problems in current techniques."

Biomechanics analysis of human motions can be a useful tool for professional athletes to improve performance; research and large databases have advanced the USA Track & Field team through the years. Dr. Yu believes the United States is more advanced in terms of using biomechanical methods to optimize techniques and predict athlete performance.

For Dr. Yu, seeing athletes reach their goals, including bringing home medals, is the most rewarding part of working with Olympians.

"It's very rewarding to say that your work is appreciated," Dr. Yu said. "You're working to help someone. You can see you've really improved their performance and helped them realize their dreams."

Continued on page 5



Occupational Science PhD Candidate Khalilah Johnson highlights the importance of meaningful participation for adults with intellectual disabilities



Khalilah Robinson Johnson, occupational science PhD student, successfully defended her dissertation this spring. She will graduate in December 2016 after studying the institutionalization and deinstitutionalization of adults with intellectual disabilities. Johnson will celebrate two things as she graduates, including the successful completion of her research and being the first African-American to receive her doctorate in occupational science from UNC-Chapel Hill.

Currently, Johnson is teaching in the Division of Occupational Science and Occupational Therapy. Her advisor was Nancy Bagatell, PhD, OTR/L, FAOTA.

What is your dissertation topic?

My dissertation is an institutional ethnographic study with adults with intellectual disabilities (ID) and staff members of a developmental center. The decision to pursue adult ID as a research topic stemmed from my experiences as an occupational therapist working in developmental centers; in particular, I was really touched by the limitations and restrictions placed on what I was able to do in these centers, as well as in seeing that the adults who I was serving didn't have real opportunity to incorporate activities that were meaningful to them in their everyday lives. I learned that what I was experiencing was a consequence of the regulations these centers had to abide by.

Editor's note: Conclusions from this research include the need for a deeper understanding of how opportunities for meaningful participation in occupation for institutionalized adults with ID are situated within and influenced by institutional systems and structures. Johnson's research demonstrates utility in identifying and addressing occupational concerns for institutionalized adults with ID, who face barriers to meaningful participation in daily life.

What do you hope to do now that you've earned your PhD?

I would like to continue focused research training through a postdoctoral fellowship and then obtain a tenure-track position in a research-intensive university. I would also like to continue working in the front lines with other occupational therapists working with children and adults with intellectual disabilities. I feel immensely prepared to be able to walk into any university and do quality work. Our division has an incredible reputation in occupational therapy and occupational science, so I feel very well prepared.

Center for Literacy and Disability Studies Department of Education Grant

Continued from Page 1

Currently, the Tar Heel Reader (THR) platform invites people from around the world to write and publish free, easy-to-read, user-generated books available on a wide range of topics. People of all reading abilities create drafts of books and use open-source image website, Flickr, to illustrate them.

Children and adults with cognitive disabilities, many of whom have autism, cerebral palsy, or Down syndrome, also often have communication disorders. As many as 40 percent of children with cognitive disabilities also have vision loss, and 30 percent can't hold a book by themselves. Books published on the THR platform address these needs through multiple online supports. The books can also be downloaded to read offline or in printed format.

As of late August, THR's authors have published more than 50,000 books, which readers have accessed more than 9.5 million times. Users from more than 200 countries have read books on the site. While most of the books are geared toward beginner-level readers with disabilities learning to read English, books on the THR site are also read by adults learning English as a second language, high school students learning languages other than English, and people across the world accessing books on the site in 26 languages other than English.

"We designed Tar Heel Reader with an eye toward making it as simple as possible," Dr. Erickson said. "In its simplicity, it is meeting a big need."

*Continued on page 10**

From Dr. Grace Baranek, Associate Chair for Research

This letter is especially difficult for me to write, knowing it is my last in the role of Associate Chair for Research in our

department. I look back with awe and admiration for what we've accomplished as a team in building the DAHS Office of Research (DAHS-OOR).

At a departmental retreat a few years ago, we set out a strategic plan with four research initiatives, and it's time to see how we've measured up. First and foremost, we invested in our greatest resource, our faculty, to support their programs of

research and bolster successes in grant funding through increased infrastructure, more efficient administrative systems, and a grant reinvestment fund for successful teams. Secondly, we established our four interdisciplinary foci including:



Dr. Grace Baranek

(a) children, families and development,

(b) aging, rehabilitation and participation,

(c) community health, education, and wellness, and

(d) tools, technology & methodology.

I hope that the "centerfold model" in this newsletter caught your

eye – this research model depicts these interdisciplinary strengths as a department, and is the culmination of two years of thought and hard work by the Research Advisory Committee. It features the translational processes through which AHS researchers generate knowledge, prepare scientists, and build evidence-based interventions that impact health, well-being and social-participation for our clients and communities. (FYI, it's newly launched on the DAHS research webpage http://www.med.unc.edu/ahs/research, tagging all active research projects in order to showcase our strengths and broad reach.) Third, we have fostered a culture of interdisciplinarity as reflected in the dynamic discussions among faculty and students during our monthly research forum series. The innovative research methods modular courses are in their second year and are taught by interdisciplinary faculty across three PhD programs. These courses have had vast successes with interdisciplinary grants and scholarly projects locally, nationally, and globally.

Finally, we have been working to build capacity for research, training the highest caliber of students and post-docs to be the next generation of career scientists and leaders in AHS research, and supporting junior and mid-career faculty through mentoring committees and the establishment of three new awards to recognize faculty achievements and innovations. Before this semester ends, we will also have launched a new student research travel fund, and we are generating ideas for ways to support faculty leaves to pursue creative works or embark on new areas of scholarship.

I am eternally grateful to the founding and current members of the Research Advisory Committee, aka "Grace's Aces," who have dedicated their precious time and expertise in support of our common vision. They have been steadfast and loyal, despite numerous shortcomings in resources and my leadership style. I extend my sincere thanks to our stellar staff, particularly Patricia Kinneer, Jennifer Daniel, and John Bulluck, who have shouldered so much "behind the scenes" on a day-to-day basis. I am also grateful to my colleagues and students, without whom this job would be meaningless. Last, but not least, I want to acknowledge Dr. Stephen Hooper, current Associate Dean/Chair, and his predecessor Dr. Lee McLean, for affording me the incredible opportunity to serve as your Associate Chair for Research for the past seven years, and for dedicating the resources and mentoring to make it work. I look forward to opportunities for ongoing collaborations coast-to-coast, and wish all of you the very best in the years ahead.

STAFF SPOTLIGHT

Marcia Rodriguez, a speech-language pathologist (SLP) and researcher, has joined Dr. Adam Jacks, as a research assistant in the Division of Speech and Hearing Sciences to study aphasia and targeted brain stimula-

tion. Ms. Rodriguez, who has worked as an SLP for more than 35 years, most recently found herself working at WakeMed doing outpatient work with people who face stroke and brain injury. During a research participant recruitment visit at WakeMed, Rodriguez heard about Dr. Jacks' work studying aphasia and brain stimulation and wanted to learn more about his research study.

The study, funded by Soterix Medical, Inc., will grant more than \$330,000 to determine the effects of targeted brain stimulation paired with behavioral treatment for naming impairment in adults with aphasia. Several universities, including UNC-Chapel Hill, the University of South Carolina, the City College of New York and Georgetown University, are collaborating on the three-year study.

Ms. Rodriguez is responsible for recruitment, data collection, testing, and in-home brain stimulation. The in-home component requires participants to have their brain stimulated every day for three weeks; pre and post-testing also occurs. Dr. Jacks and his team are working to figure out if people carry over long-term benefits after brain stimulation.



Marcia Rodriguez

"It's been really fascinating for me to see some of the people who have only gotten to four weeks post," Ms. Rodriguez said. The double-blind study theorizes that people who receive the stimulation will carry over long-term benefits.

The potential benefits of the stimulation, which uses sponge-pad electrodes, have been demonstrated in small pilot studies for motor rehabilitation after stroke and for the treatment of aphasia after stroke.

"I've come from the hospital to get in the academic mode," Ms. Rodriguez said. "In the hospital, you make quick decisions and have to work on your toes. It has been a lot of fun working here, because I'm able to think things out a little bit."

Ms. Rodriguez, who has previously published research, has studied stroke and aspiration pneumonia. She hopes to continue research at the university level and perhaps work in a clinical setting. Ms. Rodriguez would also like to continue working with graduate students.

"The students I've worked with, it's almost an eye-opener when they get there," Ms. Rodriguez said. "They have no idea about the spectrum that a speech-language pathologist works on; it's exciting for me to watch these students grow."

When she's on campus, Ms. Rodriguez works out of the Center for Aphasia and Related Disorders (CARD) office with colleagues Dr. Jacks and Tyson Harmon, a PhD candidate. Ms. Rodriguez also still works per diem at WakeMed.

"I just like lifting people up and watching them make progress," she said. "I'm such a positive person, and I just love my career."

Dr. Yu Provides Recommendations to USA Track & Field Team for 2016 Olympic Games

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Dr. Yu credits his time growing up in Beijing, China, for his love of the biomechanics of sports. While in high school, Dr. Yu trained as a discus and javelin thrower.

Dr. Yu notes, researching the biomechanics of sports has evolved from using film to record athletes' performance to using more advanced, lightweight cameras. Dr. Yu was part of a larger group of nutritionists, physical therapists and athletic trainers who worked with the Olympians. His work is funded through a contract with USA Track & Field. His work is housed in the Department of Allied Health Sciences' Center for Human Movement Science.

He traveled to Eugene, Oregon, at the end of June to meet with the Olympic team. In August he headed to Houston, Texas, to assist with the Olympic team's training camp.

CHILDREN, FAMILIES & DEVELOPMENT



POPULATIONS

Autism Spectrum Disorder Cerebral Palsy Cleft Palate Developmental Disabilities Hearing Impairment Language Impairment Learning Disabilities Physical Disabilities

DEVELOPMENTAL PROCESSES

Cognitive
Hearing
Literacy
Motor
Occupational
Sensory & Perceptual
Social & Emotional
Speech & Language

TOOLS, TECHNOLOGY & METHODOLOGY



Assistive Technology
Diagnostics
Imaging
Intervention
Outcome Measures
Protocols
Screening
Task & Environmental Design

AHS RES



Allied Health Sciences Researchers: We generate known evidence-based intervention for health, well-being, and

EARCHERS



wledge, prepare scientists, and build social participation.

COMMUNITY HEALTH, EDUCATION & WELLNESS



Global Community Health Services Inclusive Enviroments Military Prevention Schools **Underserved Populations** Workforce

AGING, REHABILITATION & PARTICIPATION



POPULATIONS

Alzheimer's & Dementia Cancer Chronic Illness Mental Iliness Multiple Sclerosis **Musculoskeletal Disorders Neurological Disorders** Sensory Impairments **Sleep Disorders**

Sports Injury

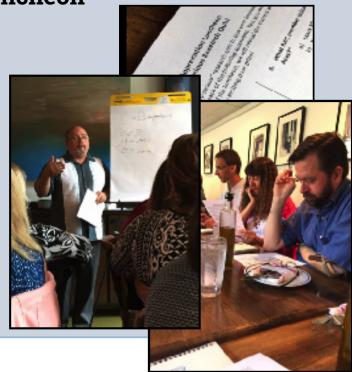
Traumatic Brain Injury

CHANGE PROCESSES Cognitive **End of Life Environmental Contexts** Injury & Recovery Occupational Engagement & Roles **Psychological** Sensory & Perceptual Speech & Language

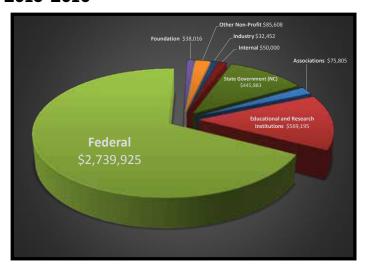
Office of Research Appreciation Luncheon

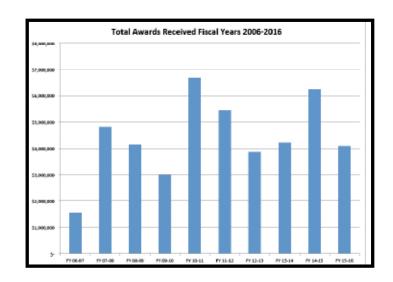
In June, nearly 30 faculty and staff members from the Department of Allied Health Sciences met at Kipos Greek Taverna to celebrate another successful year for the DAHS Office of Research.

Highlights included a "Very Serious Research Quiz" and a presentation by Dr. John Sideris, a scientist at the Frank Porter Graham Child Development Institute. Sideris, who sidelines as an improv comedian, provided a humorous look at how research is conducted. Thanks to all who support the DAHS Office of Research!



Department of Allied Health Sciences: Total funding received during fiscal year 2015-2016





Student Spotlight

Continued from Page 2

Ms. Eshghi said she is happy to see the hard work invested in this study rewarded through this honorable recognition from the Acoustical Society of America, which she described as the light at the end of the tunnel. She credits her mentors for supporting her through this study by providing insightful comments and guidance. She is especially thankful to Dr. David Zajac, Professor of Dental Ecology and Adjunct Associate Professor in Speech and Hearing Sciences, for instilling in her the drive to continue in her intellectual pursuits through his encouragement and motivation.

Ms. Eshghi currently holds a PhD degree in linguistics, and her research interest is in the neural basis of speech production and perception. Upon her completion of the doctorate program in 2017, she hopes to spend her post-doctoral phase examining neural functional activity in various brain areas during speech production and perception.

"This recognition makes me grateful and reminds me that I am on the right track. However, this is just the beginning of my journey. I will continue to work hard and strive to achieve higher goals."

-Public relations and communications interns Mackenzie Hudson and Brianna Cooper

NEW GRANTS AWARDED (January-July 2016)

TITLE	TEAM	AWARD AMOUNT	FUNDING AGENCY (SUBCONTRACT)
Susceptibility to and Release from Masking in Infancy and Childhood	Buss, Emily; Lockhart, Steve; Hodson, Hannah	\$151,757	Boys Town (Sponsor); National Institute of Health (Prime)
Susceptibility to and Release from Masking in Infancy and Childhood (Library Supplement)	Buss, Emily; Renner, Barbara; McGraw Kathleen; Hayes, Barrie	\$37.927	Boys Town (Sponsor); National Institute of Health (Prime)
Chronic Kidney Disease in Children (CKiD)	Hooper, Stephen	\$36,293	Children's Hospital of Philadelphia (Sponsor); National Institute of Health
VISTA: PTC Therapeutics, Inc.	LeGrys, Vicky; Moon, Tara; Laux, Jeff	\$16,262	Cystic Fibrosis Foundation Therapeutics
The Influence of Stance Phase Knee Control on Spatiotemporal Characteristics of Gait in People with Subacute Stroke Undergoing Inpatient Rehabilitation	Scronce, Gabrielle	\$1,500	LSVT Global
Modifying Corticomotor Excitability in the Rehabilitation of Knee Osteoarthritis	Givens, Debby	\$50,000	NC TraCS
Exceptional Children Physical Therapist	Ray, Laurie; Givens, Debby; McLemore, Amy	\$161, 030	North Carolina Department of Public Instruction
Exceptional Children Occupational Therapist	Holahan, Lauren; Humphry, Ruth; McLemore, Amy	\$159,674	North Carolina Department of Public Instruction
Exceptional Children State Audiology Consultant	Dunn, Andrea; Roush, Jack; McLemore, Amy	\$98,132	North Carolina Department of Public Instruction
Special Education - Assessing and Facilitating Literacy Skills in Students with Significant Cognitive Disabilites	Erickson, Karen; Hatch, Margaret	\$15,000	North Carolina Department of Public Instruction
Examining Person and Environment Factors Associated with Community Participation for Adults with Autism Spectrum Disorder (ASD)	Chan, Dara; Klinger, Mark	\$30,000	Organization for Autism Research
SBIR: Targeted tDCS Aphasia Trial	Jacks, Adam; Roth, Heidi	\$118,556	Soterix Medical Inc.
KS DLM Contract	Erickson, Karen; Greer, Claire; Ryan, Skip	\$161,336	University of Kansas Center for Research
Bridging the Gap Between Research and Practice	Crais, Betsy; Baranek, Grace; Able, Harriet; Watson, Linda	\$250,000	US Department of Education
Promoting ASAP Collaboration through Technology (PACT): An Intervention Modification to Enhance Home-School Collaboration	Boyd, Brian; Baranek, Grace; Crais, Betsy; Reszka, Stephanie; Watson, Linda; Zhang, Wanqing	\$1,460,908	US Department of Education
2016 Scientific Service Program for Elite Discus Throwers	Yu, Bing	\$18,000	USA Track & Field

Center for Literacy and Disability Studies Department of Education Grant

Continued from Page 3

Dr. Erickson and her team plan to integrate the simplicity into the THSR platform.

"It's about figuring out the next step of 'how do we help the world understand that all children can learn?" Dr. Erickson said. "We can teach; the issue is exactly how and what supports are required. Ultimately, that's my motivation."

Throughout the five-year grant, Dr. Erickson and her team will work with partner schools to develop the THSR platform as well as the resources and supports required to implement that approach across the country. If the history of Tar Heel Reader holds, the resulting implementation model will reach much further than the United States.

Dr. Erickson holds the David E. and Dolores J. (Dee) Yoder Distinguished Professor in Literacy and Disability Studies. David Yoder is chair emeritus of the DAHS; the center is part of his legacy at the UNC School of Medicine.

She said the best way for people to get involved is to go to THR, write a book or translate an existing book into a different language. Then, be sure to read that book with a child or someone learning to read.

Dr. Erikson also plans to enlist Dr. Bishop's help to build the technology required to support the THSR platform. She previously partnered with Dr. Bishop to launch the THR program, and looks forward to working with him again to help bring the platform to schools.

Dr. Bishop, who joined the faculty at UNC-Chapel Hill in May 1991, has worked to make educational materials accessible to students with disabilities.

He became involved after a chance encounter with a visually impaired student on campus, who suggested that he join a project on campus to create resources for individuals with disabilities.

Dr. Bishop said he enjoys witnessing the impact that the platform has on the individuals accessing the book collection on THR.

"They read them like crazy," he said of the platform registrants. He describes experiencing a sense of newfound purpose while working with Dr. Erickson to develop the THR platform.

Congratulations, PhD graduates!

Occupational Science:

Valerie Fox

Human Movement Science:

Robert Charles Lynall
Timothy Charles Mauntel
Barnett Samuel Frank

Drs. Adam Jacks and Vicki Mercer join DAHS legacy of Thorp Faculty Engaged Scholars program as 2016 graduates

Drs. Vicki Mercer and Adam Jacks have graduated from the Thorp Faculty Engaged Scholars Program, following in the tradition of numerous Department of Allied Health Sciences faculty members. Dr. Mercer, a professor in the Division of Physical Therapy joins Dr. Jacks, a professor in the Division of Speech and Hearing Sciences as 2016 graduates.

Drs. Mercer and Jacks have graduated from the Thorp Faculty Engaged Scholars program, an initiative started by the Carolina Center for Public Service, established in 2007 to advance faculty involvement in engaged scholarship. In 2013, an endowment honoring former chancellor H. Holden Thorp was established to support the program. During the two-year program, scholars learn about and pursue community engagement through scholarly endeavors. Since its inception, 53 faculty members have been selected, representing more than 20 departments.

Dr. Jacks, an associate professor in the Division of Speech and Hearing Sciences, is a speech-language pathologist who studies the impact of stroke and other neurological diseases on communication. His work focuses on identifying predictors of life participation in community-dwelling stroke and brain injury survivors with impaired communication, such as aphasia. His Faculty Engaged Scholars project focused on providing language assessments to people with aphasia in the community with no access to treatment, as well as to those who attend communication groups at Triangle Aphasia Project Unlimited (TAP), a Cary-based nonprofit. Dr. Jacks' project built relationships with speech-language pathologists in the community.

"My participation in the program provided me with a new perspective on the relationship between scholars and stakeholders," Dr. Jacks said, "I am grateful for this program and the interactions with other scholars striving for excellence in community-based research."

Dr. Mercer, an associate professor in the Division of Physical Therapy, focused on improving balance and preventing falls in older adults and individuals with neurological disorders. For her project, she expanded her work with the Community Health and Mobility Partnership (CHAMP) program. The program, developed by Dr. Mercer in 2009, works with community partners from senior centers, hospitals, physical therapy clinics, and community colleges. Through CHAMP, interdisciplinary teams of health care providers work with older adults at senior centers and other community sites to improve their balance and muscle strength and decrease their risk of falls.

"I have learned a great deal as a Faculty Engaged Scholar," Dr. Mercer said. "Through first-hand experiences with other community-based initiatives and interactions with other scholars, I've gained a much better understanding of how to build infrastructure and public relations networks to increase support for a project."

Drs. Jacks and Mercer join these additional Thorp Faculty Engaged Scholar alumni from the department, including Drs. Betsy Crais and Linda Watson from the Division of Speech and Hearing Sciences, and Dr. Karen Erickson, director for the Center for Literacy and Disability Studies. Dr. Antoine Bailliard, with the Division of Occupational Science and Occupational Therapy, joined the program in fall 2016.



Dr. Vicki Mercer of the Division of Physical Therapy graduates from the Thorp Faculty Engaged Scholars Program in August.



Dr. Adam Jacks of the Division of Speech and Hearing Sciences graduates from the Thorp Faculty Engaged Scholars Program in August.

Tiny Homes Community



The purpose of this community-based research is to develop an affordable housing option for adults with mental illness that fosters functional independence and community participation. In a collaborative partnership with Habitat for Humanity, UNC's Center for Excellence in Community Mental Health, and UNC's School of Social Work, Dr. Bailliard and team have designed a project to develop a community of Tiny Homes for adults with mental illness. They will conduct interviews and focus groups with consumers and stakeholders and measure outcomes in quality of life, community participation, recovery, and physical

and mental health. They will use their findings to inform the development of a community of five adapted Tiny Homes, measuring the impact of living in an adapted community of Tiny Homes on consumers' social participation, sense of belonging, and community integration.

Investigators:

Antoine Bailliard, PhD, OTR/L; Amy Wilson, PhD, LSW; Gary Cuddeback, PhD, MSW, MPH; Thava Mahadevan, MS, LCAS-A; Rebecca Sorensen, MSW

Research arm of the project funded by: The Felix Harvey Award. Other sources of funding for the project include Habitat for Humanity, SECU, and private donors

Improving Sweat Testing Performance: A Multi-Center Collaborative Initiative toward Earlier Diagnosis of Infants with CF and Positive CF Newborn Screening Tests

This study aims to reduce sweat testing quantity not sufficient (QNS) rates in infants who are referred to Cystic Fibrosis Foundation Accredited Care Centers for follow-up testing after a positive newborn screening (NBS) test. It is important to do this now because there is evidence of both high QNS rates at some centers. One aim is to assure that all staff who perform sweat tests, and their supervisors, receive in-depth education on optimal

sweat test collection in infants. Another aim is to distribute and implement the use of a Sweat Test Checklist designed to continuously refresh knowledge of optimal techniques for sweat test collection, supporting participating sites in local process improvement using the Checklist as a key tool 3. To build sustainable systems for maintenance of low sweat test QNS rates at participating sites.



Investigators: Vicky LeGrys PhD; Tara Moon PhD; Jeff Laux PhD

Funded by Cystic Fibrosis Foundation