

**Guilherme Moraes Balbim, MS**

Doctoral student in the College of Applied Health Sciences

University of Illinois at Chicago HBRN Scholar
May 2017 – present

Mentor: David X. Marquez, PhD

Could you tell us about your background, and what drew you to this field?

I am from Brazil, where I earned my Bachelor of Science and Master's degree in Kinesiology. There, I held a temporary faculty position and was the instructor for five classes at a public university for two years. This time spent teaching provided a pivotal experience that opened my mind to broader issues related to aging and physical activity. In 2015 I was sure that a PhD would be my next challenge. In the past, my grandfather was diagnosed with Parkinson's disease and mild cognitive impairment, and physical activity was the treatment that provided the most positive impact for him. Putting together my experiences as faculty and those with my grandfather, I decided to follow the research area of aging, physical activity, and health disparities. After talking to a colleague who was a PhD student in this area, I contacted my current advisor, Dr. David X. Marquez. Our research interests matched and I came to Chicago as his PhD student in August 2016. Since then I have been diving into how physical activity can influence the health of older Latinos.

What's a recent accomplishment you'd like to brag about?

On November 2017 I participated as a presenter in a Symposium at the Annual Meeting of the American College of Sports Medicine - Midwest Chapter. That was my first oral presentation in a conference as a graduate student in the U.S.

What opportunities have you had to collaborate with other HBRN Scholars and with the HBRN more broadly as part of your work?

I have been working with the HBRN memory messaging study. The study involved 4 HBRN centers. With the quantitative and qualitative data analysis now complete, we are writing up manuscripts. My mentor and I are specifically working on the Introduction of a manuscript in collaboration with the Oregon Health & Science University HBRN center.

Balbir (cont'd)

Based on your time as an HBRN Scholar, how do you see yourself contributing to the field?

Being an HBRN Scholar has provided me with the notion of how important is to have a multidisciplinary team to promote cognitive health and healthy aging. I can see myself as a part of a big engine seeking to educate and empower the aging population on how one might achieve a better quality of life, by changing behavior. In the future as researcher and faculty (I hope!), I intend to put into action all the experiences I have been living with the HBRN.

How has the Healthy Brain Research Network contributed to your career goals?

The HBRN has helped me build a strong network with experts on cognitive health and aging. Also, HBRN is providing research and collaborative skills which make clear the importance of partnerships and collaboration in the development of evidence-based science to apply to community-based approaches.

What areas of work would you like to be involved in over the next year or two?

I would like to be involved in understanding how physical activity can impact cognitive function, and brain structure and function, ultimately contributing to healthy aging and better quality of life.

What keeps you motivated to do the work that you do?

My motivation is to somehow contribute to healthy aging and help older adults become more physically active and aware of the importance of being active in their lives. I believe that we can make a difference in many lives with evidence-based research in physical activity promotion.

What do you like to do for fun?

In my free time I like to run, watch basketball and Brazilian Soccer, spend time with my wife, cook, and watch TV shows.



Caroline Mills

Bachelor of Science student in the Enid Zuckerman College of Public Health and Bachelor of Arts student in Economics in the Eller College of Management

University of Arizona HBRN Scholar
May 2017 – present

Mentor: Jane Mohler, NP-C, MSN, MPH, PhD

Could you tell us about your background, and what drew you to this field?

I grew up in the beautiful city of Denver, Colorado and I am passionate about aging research. I'm interested in helping to develop screening tools for frailty and cognitive impairment, which is connected

Mills (cont'd)

to my personal experience with my aging grandmother. I'm hoping to pursue a master's degree in epidemiology and continue research and elder advocacy through work with non-profits.

What's a recent accomplishment you'd like to brag about?

An abstract I co-authored was accepted to the American Geriatrics Society Conference.

What opportunities have you had to collaborate with other HBRN Scholars and with the HBRN more broadly as part of your work?

During my year with the Healthy Brain Research Network, I've had the chance to collaborate with other University of Arizona HBRN Scholars while working on a HBRN grant funded pilot study. The collaboration aspect has been great and I enjoy learning from other HBRN Scholars' expertise and experience. Learning from HBRN engineers and epidemiologists alike at the University of Arizona has been extremely helpful.

Based on your time as an HBRN Scholar, how do you see yourself contributing to the field?

I'm looking forward to contributing to projects in cognitive aging and looking at the effects of dual tasking in older adults. There is still much to learn about how dual tasking relates to fall risk, frailty, and longevity and this information can help inform clinical practice.

How has the Healthy Brain Research Network contributed to your career goals?

The Healthy Brain Research Network has provided a wonderful opportunity to learn from experts in the cognitive aging field. My career goal is to continue aging research and the Healthy Brain Research Network has provided that opportunity by funding the research I participate in for my internship at the Arizona Center on Aging. My experiences have influenced my decision to apply to graduate programs with HBRN affiliation.

What areas of work would you like to be involved in over the next year or two?

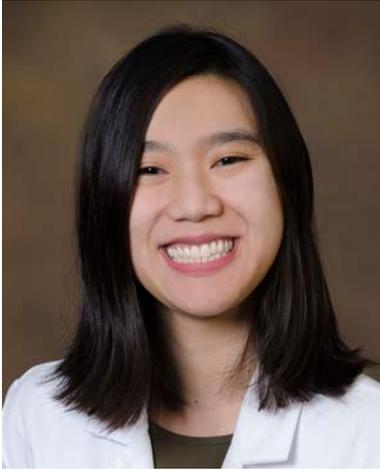
I hope to be in graduate school pursuing research on cognitive aging. I would like to work more on screening tools for mild cognitive impairment that are also cost effective.

What keeps you motivated to do the work that you do?

My colleges are wonderful and I'm so thankful to work every day with curious and smart people. I believe the research we do is important and thinking about how much I've learned motivates me to keep pushing forward. I also have a personal connection to the research we conduct and with the growing population of older adults; there is a growing need for research-backed health practices.

What do you like to do for fun?

I love reading and I am currently going through the Foundation series by Isaac Asimov.



Coco Victoria Gomez Tirambulo, BS

Research specialist in a pre-medical program within the School of Medicine

University of Arizona Center on Aging HBRN Scholar
May 2017 – present

Mentors: Jane Mohler, NP-C, MSN, MPH, PhD

Could you tell us about your background, and what drew you to this field?

I was born and raised in Tucson, Arizona. I had an unusual upbringing as a child of Filipino immigrants, who opened an adult assisted living home. Early on, I was exposed to the stark realities of the social determinants of health, and the cultural and economic health disparities facing the older adults seeking long-term care in my family's assisted living home. It felt unfair to see how families with frail older loved ones struggled to find financial resources to help provide care. Through my many experiences at the care home, I realized the importance and the limitations of Medicare and the Arizona Long Term Care programs. I am aware that there are many vulnerable populations that encounter limitations in accessing healthcare every day, from veterans denied ready access to care and adequate behavioral health services; families undergoing bankruptcy after prolonged hospitalization; undocumented and homeless without access to care; and rural Arizonans without access. As a result, I have developed strong feelings of responsibility and commitment to advocate and serve these vulnerable populations in order to provide them the necessary healthcare that they deserve. I am currently volunteering at two clinics catering to the underserved and conducting research at the Arizona Center on Aging with the hopes of pursuing medical school and continuing to serve my community.

What's a recent accomplishment you'd like to brag about?

I am very excited to have been accepted to present at the Cognitive Aging Conference 2018 that will be held at the Georgia Institute of Technology. This will be my first experience presenting my research at a conference, representing the Arizona Center on Aging.

What opportunities have you had to collaborate with other HBRN Scholars and with the HBRN more broadly as part of your work?

Within the Healthy Brain Research Network, I have had the opportunity to work with Hossein Ehsani and Caroline Mills, who are both HBRN Scholars. Through our collaboration, we hope to uncover the neural correlates involved in cognitive-motor dual-task challenges for those with and without cognitive impairment. I hope to collaborate with the HBRN network more broadly in the future, so we can combine our knowledge and discover ways we can prevent and/or slow the cognitive aging process.

Based on your time as an HBRN Scholar, how do you see yourself contributing to the field?

As an HBRN Scholar, I see myself contributing to the field through our research on cognitive impairment and dual-task challenges. We are using functional magnetic resonance imaging, cognitive-motor dual-task

Tirambulo (cont'd)

challenges (i.e., walking and talking on the phone simultaneously), and neuropsychology assessments to discover the underlying correlates involved with dual-task challenge difficulty and how it relates to attentional limitations in cognitive aging and cognitive impairment.

How has the Healthy Brain Research Network contributed to your career goals?

Since joining the Healthy Brain Research Network, I have been able to advance my educational and professional career. I have expanded my research interests in cognitive aging, fall risk prevention, frailty, and resilience in later life. In addition to strengthening my research skill sets, I have been privileged to work with many amazing individuals and connect with many research subjects. The Healthy Brain Research Network has tremendously helped me to continue to pursue my career goals of becoming a physician-scientist and solidified my interest and passion in contributing to research and advocating for the geriatric population.

What areas of work would you like to be involved in over the next year or two?

Over the next year or two, I am interested in continuing our research on cognitive aging and impairment. This research is so vital because the mechanisms of the underlying neural correlates are not well understood and defined. Discovering the neural correlates would help the medical research community create interventions and dictate what should be done for fall risk stratification and prevention. Research has become such an important part of my pre-medical journey and I hope to continue research in this field as a physician-scientist.

What keeps you motivated to do the work that you do?

My family, friends, mentors, co-workers, HBRN-collaborators, and our research subjects keep me motivated to do the work that we do. I am honored to be working with such compassionate, intelligent, and humble individuals. They make the work we do so much more fun and meaningful, that in the end it doesn't really feel like work.

What do you like to do for fun?

I love going on photography and food adventures with my friends and family. I am a big foodie and love trying new foods, especially at local restaurants. So, if you ever need food recommendations in Tucson, AZ, I have you covered. I also enjoy photography as a fun hobby because it allows me to be creative, express myself, and capture memories that my friends and I can look back on. But when I am super busy on the work grind, I like to do yoga or go hiking to de-stress and rebalance myself. Practicing self-care is super important, and I am trying to do it more often as well as remind those around me to practice it as well.

The [Healthy Brain Research Network](https://depts.washington.edu/hprc/research/thematic-networks/hbrn/) (HBRN) was created by the Centers for Disease Control and Prevention in 2014 to address a pair of growing public health challenges: promoting cognitive health and addressing the needs of increasing numbers of older Americans living with cognitive impairment. The HBRN Coordinating Center is located at the University of Washington. For more information, visit <https://depts.washington.edu/hprc/research/thematic-networks/hbrn/> or contact HBRN@uw.edu.