

Michael Burt

Summer Enrichment Project

There are more than 32 million Hispanics in the U.S. – half of whom speak only Spanish – and this number is exponentially increasing. This trend is part of a broader globalization pattern in our country, as we grow into a more richly diverse nation. This globalization is, in my view, a welcome and wonderful change. Like all change, however, it brings with it some challenges: the services, policies, and infrastructure designed for an English-speaking populace must adapt proactively to these demographic changes. Healthcare, of course, is no exception to this. Language barriers in healthcare are contributors to health disparities. One study, for example, found that across six hospitals limited English proficient patients experienced more adverse events than English proficient patients; further, the adverse events they experienced were, on average, events of greater harm than those experienced by the English-speaking patients.¹ Compelled by my sense that Spanish will become an increasingly important language in healthcare, I decided to enroll in Spanish language courses this summer.

I had previously taken Spanish courses throughout high school and college. Without any occasion afterwards to keep it up, however, I never developed any semblance of fluency. For my Summer Enrichment Project, I enrolled in private Spanish lessons at The Language Academy of the Carolinas in Charlotte, NC. I took classes several times a week with my instructor, Gilberto, and studied independently in-between. Apparently, I had some residual knowledge from my previous studies, because my placement test on arrival allowed me to begin at Level 3. Over the course of the summer, Gilberto and I completed the entire level 3 course and began level 4. Level 3 included learning the use of the preterite vs. imperfect tenses, present future tense, and differentiating the uses of the verbs *ser* and *estar*. Though I am still far from fluent, I was really pleased the progress I made this summer and decided to continue taking remote classes with Gilberto throughout the academic year. It has been a nice diversion from the science-heavy coursework!

My primary medicine-related activity during the summer was working with Dr. Michelle Go, a pediatric ophthalmologist at UNC, on a research project to improve PGY1 and PGY2 ophthalmology residents' ability to complete ROP screenings on newborns with indirect ophthalmoscopy and scleral

depression. We implemented a training program using video-recorded indirect ophthalmoscopy and 3D printed model eyes to train the residents how to visualize the peripheral retina using indirect ophthalmoscopy and scleral depression. The residents were each given individual instruction sessions conducted by Dr. Go. As measures, the video recordings of the residents' ophthalmoscopy attempts were scored according to a rubric, and subjective measures of their comfort and confidence in the relevant skills pre- and post-training sessions were collected.

In addition to this project, I was allowed the opportunity to shadow several different ophthalmologists at UNC. Coincidentally, Dr. Go is fluent in Spanish, and I was surprised to see how many of her patients (pediatrics, so mainly their parents) were exclusively Spanish-speaking. "¿Habla español?" the patient would ask, "Sí", Dr. Go would seamlessly switch over to speaking Spanish, and I could see the patient was instantly put at ease. These experiences were an affirmation of what I suspected: learning to speak Spanish will have importance in serving patients, no matter which medical specialty I end up choosing. Some of the other physicians I shadowed did not speak Spanish, so when shadowing them I got to see a different approach: phone-based medical translation services. These are wonderful services, but the entire mood of these interactions felt differently; it was clear that these were not quite the same as direct physician-patient communication.

Along with Heerali and Miranda, the other two Class of 2024 Brody Scholars, I participated in a 4-day virtual "Foundations of Bioethics" course hosted by Yale University. Given the current pandemic and the state of our healthcare system, Bioethics has come to the forefront of modern dialogue in healthcare. Therefore, we felt it would be important for us at this stage in our training to spend a few days learning about Bioethics. The subjects broached by the Yale seminars were broad and spanned from the Tuskegee Syphilis Study to issues surrounding migrant care workers. I particularly enjoyed a lecture delivered by Dr. Joseph Fins about his area of expertise: the ethics surrounding disorders of consciousness. He discussed the ethics surrounding patients in a persistent vegetative state and the right to die, drawing on the Quinlan and Schiavo cases in addition to modern neuroscience. I'm looking forward to continuing to learn about this topic from his book, "Rights Come to Mind: Brain Injury, Ethics, and the Struggle for Consciousness," during my next school break.

The third and final component of my Summer Enrichment Project involves sponsoring a community tree planting with Trees Durham, a Durham non-profit that is attempting to address

environmental injustice in low-income areas that have been historically neglected with respect to their canopy coverage. Their planting season runs from October through March, so I have been in communication with the organization and will be choosing a location for a community planting soon. Stay tuned!

References:

¹ Chandrika Divi, Richard G. Koss, Stephen P. Schmaltz, Jerod M. Loeb, Language proficiency and adverse events in US hospitals: a pilot study, *International Journal for Quality in Health Care*, Volume 19, Issue 2, April 2007, Pages 60–67, <https://doi.org/10.1093/intqhc/mzl069>