



In this Issue

Ethan Assefa to Present at ACTS 2022 Meeting	1
iTHRIV Researcher Check in: Pappas and Lieberman	3
iTHRIV Under the Microscope: Sophie Wenzel	4
Meet an iTHRIV Scholar Mentor: Stephanie DeLuca	5
Portal Highlight - Research Methods Core Seminar Series	6

Ethan Assefa to Present at ACTS 2022 Meeting

"It's not something I thought I would be doing at this point" proclaims a smiling Ethan Assefa when asked about his upcoming poster presentation at the 2022 Association of Clinical and Translational Science (<u>ACTS</u>) meeting. Assefa will present his research to a national audience of trainees, educators, researchers, physician investigators, and other health professionals engaged in clinical and translational science. Truly a highlight for any researcher, especially for such a young one.

Assefa, a recent graduate of UVA, participated in the UVA-Historically Black Colleges and Universities (**HBCU**) Summer Research Bridge to Data Science program (Bridge) as a research fellow. This program is cosponsored by integrated Translational Health Research Institute of Virginia (<u>iTHRIV</u>), the UVA School of Data Science (<u>UVA SDS</u>), Oracle, and Deloitte. According to the UVA SDS, the UVA-HBCU Summer Research Bridge to Data Science program brings together a diverse team of highly-motivated students and researchers to address fundamental questions in health equity in Charlottesville and Albemarle communities. Deloitte and Oracle provide participating students with mentorship and educational materials on data science and artificial intelligence, as well as career development resources ranging from a monthly speaker series to capstone engagement and virtual job shadowing.

In this program, Assefa and other participants used data analysis and visualization techniques to explore health equity related topics. Assefa and several partners focused on issues related to stroke and COVID. "Our research was essentially a health equity analysis of a population of patients with concurrent ischemic stroke and COVID positivity. We wanted to see whether they had parity of care across race/ethnicity." The team hypothesized that there would be a disparity in patient care. To test their hypothesis, the team accessed data from the National COVID Cohort Collaborative (N3C), an analytics platform containing clinical data from the electronic health records from over 72 sites around the country. This data from COVID positive patients (and matched controls) helps scientists further understand the disease, including potential risk factors, protective factors, and long-term health consequences, as well as other issues concerning COVID. Coding in N3C requires that researchers learn novel software interfaces and workflows, and often even new languages that support distributed computation.

The Bridge student team was oriented to the N3C Enclave with the help of N3C Logic Liaisons, led by iTHRIV's Director of Informatics and Bridge project mentor, Johanna Loomba. "It was an honor to



Ethan Assefa

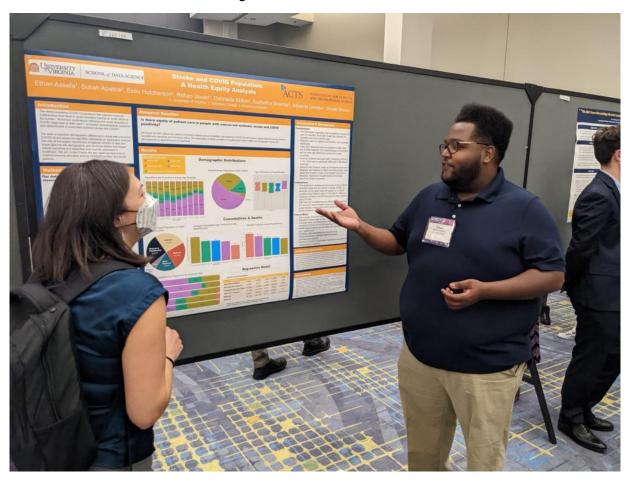
support these students in their exploration of the data and learning what questions were appropriate to ask of this type of observational data. They exhibited the patience and critical thinking that are essential to good data analytics."

Assefa insists he "couldn't imagine getting through the project without the help of everyone involved at iTHRIV. Johanna, in particular, would come to meetings and give her guidance as well. Her knowledge and expertise regarding the Enclave and Palantir systems where our data were stored was essential when we were first getting started."

The team spent several weeks collecting and analyzing the data. What Assefa and his teammates found was surprising. "Anyone looking at the national COVID mortality rates could tell there was a racial disparity but for some reason, those patterns weren't appearing in our [stroke and COVID-19] data." What their data did reveal is that there is a significant association between insurance status and extracorporeal membrane oxygenation (ECMO) treatment, with Medicaid patients having significantly lower odds of receiving that particular treatment.

Follow up analysis by the team showed the largest proportion of Medicaid patients were Black/African-American non-Hispanic. "So, the racial disparity was there, it was just interrelated with socio-economic status and required some further digging to reveal itself" explains Assefa.

With the 2022 ACTS meeting and his presentation fast approaching, Assefa remains contemplative. Reflecting on his experience with the Bridge summer program, remarking "the actual process of research, it is not as clean and formulaic as they teach you in class. Real data is messy and at times, so is data analysis, but there is a cathartic sense of satisfaction to creating some order out of the chaos."



Assefa presents his findings at ACT 22

iTHRIV is a cross-state translational research institute that combines the expertise of clinical translational biomedical researchers and data scientists to create infrastructure and investigator resources for using data to improve health across the Commonwealth of Virginia. Partner sites include the University of Virginia, Virginia Tech, Carilion Clinic and Inova Health System. iTHRIV is funded by the National Center for Advancing Translational Sciences, part of the National Institutes of Health, under award UL1TR003015 and KL2TR003016.

On a final note, Assefa wishes to express gratitude to his teammates:

"I am so glad to have had this opportunity to meet and work with some amazing, erudite scholars and peers from fellow institutions. My teammates included Esau Hutcherson from Howard University, Dahnielle Milton and Suliah Apatira from Spelman College, and Rehan Javaid from the University of Virginia. Over the summer, I got to know them over multiple weekly Zoom calls and daily messages, we collaborated together to clean data and run statistical analyses, we joked around and learned about each other, we presented our work together and I am very lucky that I got to be a member of this team alongside them."

Researcher Check-in: Diane Pappas and Michaela Lieberman

Michaela Lieberman, a staff attorney and the Health Justice Legal Fellow at the Legal Aid Justice Center in Charlottesville, noticed that while many noncitizen children are legally eligible for Medicaid, they remain uninsured...

Watch the video here: https://youtu.be/TSzbBXRPCTk



Improving Access to Medicaid for Noncitizen Children





Dianne Pappas, MD, JD

Micheala Lieberman, JD

iTHRIV Under the Microscope: Sophie Wenzel

Sophie Wenzel is Associate Director for the Center for Public Health Practice and Research, and Assistant Professor in the Department of Population Health Sciences at Virginia Tech. She joined Virginia Tech in 2013 and has been part of the iTHRIV Community and Collaboration core since its inception. Her main responsibility with iTHRIV is coordinating the community seed grants. She has loved working with colleagues at UVA, Carilion, and Inova and amazing community partners.

Sophie started her career in public health when she joined the Peace Corps and was sent to rural Paraguay to promote maternal, child, and adolescent health. In her current role, Sophie promotes collaboration between faculty, students, and community partners to enhance public health in Southwest Virginia and beyond. She oversees multiple evaluation and research projects across the region and state. Sophie's research and professional interests include maternal child and adolescent health, youth risk behaviors, international health, sexual and reproductive health, community engaged research and participatory methods, and evaluation of public health programs. Her position is partially supported by the New River Health District of the Virginia Department of Health, for which Sophie coordinates the New River Academic Health Department. Sophie likes to call herself a "pracademic"- a practicebased academic- she is happiest when she is out in the community!



When she is not working, Sophie enjoys road and mountain biking, hiking, cross country skiing, and basically just being outdoors. She also enjoys reading, spending time with friends and volunteering at the local animal shelter. What she adores most is spending time with her two daughters, Solette and Lila, husband Todd, and four rescue kitties. She enjoys the connections that she builds every day with her neighbors in her co-housing community (look it up!)

Sophie holds a DrPH in Public Health Leadership from the University of Illinois at Chicago, an MPH in International Health and Population Studies from Emory University, and a BS in Linguistics and Spanish from Georgetown University.

Meet an iTHRIV Scholar Mentor

Stephanie DeLuca

Associate Professor, Co-Director - Neuromotor Research Clinic Virginia Tech

"I won the lottery when Dr. Deluca was assigned as my iTHRIV mentor. She is a successful researcher and international expert in the development of interventions for children with cerebral palsy. She has been a very supportive and encouraging mentor that provides valuable critical feedback effectively. Our programs of research are very complimentary and we are currently collaborating on writing a new NIH grant proposal. We are excited to develop a low cost, scalable transitional music intervention for children with cerebral palsy." - Lisa C. Letzkus, PhD, RN, CPNP-AC



Portal Highlight - Research Methods Core Seminar Series

A seminar series presented by the Research Methods Core in collaboration with departments and divisions at iTHRIV institutions. Seminars are presented by experts in their field, and cover timely topics in the domain of research methods: biostatistics, epidemiology, research design, ethics, and regulatory knowledge. Seminars are free for attendees and are presented virtually during the pandemic. You must register in advance to receive the Zoom link.

Access the service here: https://portal.ithriv.org/#/resource/885

