The Duke-Ruhuna Collaborative Survives and Thrives in 2022

Due to the economic crisis in Sri Lanka, work and daily life slowed down considerably. Inflation soared to 65%, fuel, food and medicines were in short supply, and the government collapsed. However, our Sri Lankan partners didn’t give up and, with resilience and support from the Collaboration, were able to continue their research activities, even hiring new staff and initiating two new studies on dengue and respiratory infections.

In recent weeks, Dr. Gayani Tillekeratne reports that the situation has stabilized somewhat. The political crisis has cooled, and International Monetary Fund and other foreign countries have stepped in to provide financial support for the nation.

Duke has also stepped up to assist our colleagues in Galle by providing funds to support raises in salaries for the administrative and research staff, as well as sending a shipment of surplus hospital supplies from Duke to Karapitiya Hospital.

You can follow the work in Sri Lanka on the Duke-Ruhuna Collaborative website here: https://sites.duke.edu/rcid/

HYC Establishes an Advisory Committee

The advisory committee (AC) comprises 11 Duke faculty with relevant interests in global health from across the School of Medicine and Health System. The AC serves in an advisory capacity to the HYC Senior Management Team on key topics including strategic goals, development activities, ongoing progress, and offers recommendations accordingly. The inaugural HYC advisory committee meeting occurred on 30 September 2022, and the meeting agenda can be found at the following Duke Box link: https://duke.box.com/s/96kpmn97rq034bsmat6q1hckv3i61bd

Meet the Newest Members of HYC Senior Management Team

Tim Veldman is now the HYC Managing Director. In this new role, Tim will have primary responsibility for overall center administration and strategic management of HYC programs with support from the HYC operations team. Tim was Deputy Director of DGGI Myanmar Malaria Program prior to joining HYC. Tim is a graduate of Georgetown University where he earned a PhD in molecular cancer biology and completed a postdoc fellowship at Duke Department of Pharmacology and Cancer Biology. He brings nearly 15 years’ industry and academic experience as a Research Scientist and Program Leader. We are excited to have Tim in this important role to help facilitate the progress of HYC 2.0.

Rebecca Lumsden has joined HYC as the Director of Clinical Education. Becca is an alumna of the GHP program during which she spent time in Eldoret, Kenya researching women’s health and cardiovascular disease. She is currently a Medical Instructor in the Department of Medicine and works clinically as a Hospitalist at Duke University Hospital. In her new role, Becca will oversee the short-term global health elective rotations for Duke residents, including designing and leading a global health curriculum for trainees that explores topics such as cultural competency, ethics of short-term clinical electives, death and dying in under-resourced settings, etc. She will also oversee the bilateral exchange for international scholars coming to Duke for clinical experiences.
Ongoing Upgrades Enhance Capacity at Global Partner Sites

Generous Donation Improves Cardiac Critical Care in Kenya

Thanks to a generous gift from the Michel family, a space designated for private patient and family conferences has been completed at the Moi Teaching and Referral Hospital (MTRH) CCU. The Michel family became aware of this need from their daughter, Cory Miller, former Duke CCU nurse, who has made many trips over the years to conduct nurse training. Her poignant stories about the dedication of the nursing staff and courageous patients, in the face of difficult conditions, inspired the Michel family to make this gift.

A very special thank you for the support and guidance of the MTRH/CCU administration, and nursing staff for their organizational, management and decorating skills.

ELDORET, KENYA:  MTRH has also broken ground for a new interventional cath lab. In addition to the completion of the CCU Family Conference Room, the Duke-MTRH Cardiovascular Fellowship Program is pleased to welcome our third class of fellows, Drs. Rebecchah Ayoti and Edgar Karanga. They joined in October 2022. Our first class of CV fellows, Drs. David Lagat and Joan Kiyeng, have passed their exams and are now on faculty at Moi University/MTRH. Congratulations Drs. Lagat and Joan! Our second class of fellows, Drs. Hazel Mburu and Eric Anyira, are working on their research projects, completing external rotations at Karen Hospital in Nairobi, and serving as attendings in the MTRH CCU.

LEON, NICARAGUA:  HYC purchased a cryogenic freezer for Drs. Megan Reller and Filemon Bucardo’s lab at Universidad Nacional Autonoma de Nicaragua-Leon (UNAN-Leon). The purchase of the freezer will allow for the safe storage of their samples for their ongoing research around febrile illness. Their staff, including nurses and bio-analysts, have performed fever surveillance at three health facilities in Leon since 2018, resulting in the enrollment of more than 1800 cases. They’ve collected clinical and epidemiological samples and have caught two dengue outbreaks. They are performing molecular clock analysis to study in depth the dengue serotypes circulating in Nicaragua. They look forward to having fourth year medical student, Alexis Domeracki join them later this year.

The room, designed with input from palliative care, cardiology, and nursing teams, contains a conference table and chairs, storage cabinets for families’ personal items, and a smart TV for viewing imaging and test results. Calming blue-green walls, plants, and tasteful artwork round out the room. The gift also allowed the HYC to purchase fifteen new bedside tables for the CCU along with two reclining hospital chairs so patients can get out of bed.

Faculty Achievements:

MOSHI, TANZANIA:  Dr. Deng Madut, GHP graduate and current Duke ID faculty, received an NIH Diversity Supplement award to conduct a study with Dr. Matt Rubach’s R01 SiCK study exploring whether the genomic data from the SiCK study can be leveraged to determine infectious disease states. The SiCK study aims to characterize clinical and molecular subtypes of sepsis in Tanzania.

Ruhuna, Sri Lanka:  Dr Gayani Tillekeratne, Duke ID faculty, GHP Graduate and HYC Affiliate Faculty, received a NIH R01 award to evaluate a Lower Respiratory Tract Infection diagnostic and treatment algorithm that integrates surveillance and patient data, point-of-care pathogen and biomarker test results, and cost to reduce inappropriate antibacterial use and that is cost-effective.

Congratulations to Dr. Lauren Franz, a GHP alumna and current Duke Assistant Professor of Psychiatry, and her team at the Duke Center for Autism and Brain Development on their recent $12 million federal grant from the National Institute for Child Health and Human Development. This prestigious award recognizes the team’s use of artificial intelligence to better detect autism spectrum disorder in infancy, as well as identifying brain-based bio-markers for autism spectrum disorders.
**Educational Exchange News**

**Dr. Tessa Barclay**, a third year pediatrics resident, traveled to Northern Navajo Medical Center (NNMC) in Shiprock, New Mexico during March and April 2022. She was the first resident to be able to complete a short-term global health elective rotation since early 2020 due to the pandemic! While in Shiprock, Dr. Barclay spent time at the medical center and was able to participate in a street medicine clinic called Sih Hasin, meaning “hope” or “reflection” in Navajo. “It was gratifying,” she says, “to engage with the Navajo community and help support [them] outside of the clinic. We were present in the community, connecting patients with resources, triaging medical complaints, prescribing necessary meds, and drawing labs. My comfort zone was challenged, and I saw a new way to practice patient care with a more holistic emphasis on the patient.”

In August, Duke welcomed two Moi University medical students, **Daphne Were and Jeremy Lishenga**, for a six-week visiting observership as part of the bilateral exchange program in partnership with AMPATH. Daphne and Jeremy are both sixth year medical students at Moi University School of Medicine and were able to participate in rounds and clinical learning opportunities while at Duke.

Jeremy says, “In the Cardiac ICU, I was able to see and learn how a balloon pump works and see a cardiac catheterization procedure. I savored every minute of it!” For Daphne, it was “like a dream come true, seeing the things [in real life that] you read about in books” such as laparoscopic surgery while on the OBGYN rotation. “This opportunity was among the best things that happened to me...I grew mentally and gained a stronger will. I realized I have many opportunities to do my residency and I started thinking outside the box on ways to explore beyond my boundaries. [This rotation] was life changing.”

They took in some local Durham culture and socialized with Duke faculty and staff during their downtime. They discovered Elmo’s Diner, Durham Bulls baseball, and what a Saturday game day looks like at Wallace Wade Stadium!

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**Global Health Pathway Updates**

**Dr. Ganga Moorthy**, GHP Pediatric Infectious Diseases Fellow is spending the year in Moshi, Tanzania conducting research focused on improving therapeutic and diagnostic capacity, decreasing mortality from pediatric and neonatal sepsis, and reducing the prevalence of antimicrobial resistant infections in Tanzania.

**Dr. Anna Strasma**, GHP Nephrology Fellow will travel to Costa Rica to conduct research on community perceptions of research and kidney disease in CKDu endemic regions of Costa Rica. The goal will be to cultivate a philosophy of community engagement and partnership between communities and research teams in a way that promotes mutual respect.

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**GHP by the Numbers**

- 15 years of enrollment
- 50 graduates / 6 currently enrolled
- 19 subspecialties participating from 9 departments
- 32 MPH / MSc-GH awarded
- 11 months overseas, on average
- >400 Global Health Publications
- 39 Fogarty Global Health Training Fellowships
- 7 Early Career Development Awards
- 33 graduates with academic appointments
- 2 graduates at CDC; 2 at NIH; 5 Graduates in public health / NGO sector
Donations

The Hubert-Yeargan Center for Global Health is sustained by generous donations from and collaborations with individuals, organizations, and other academic medical centers dedicated to dramatically improving the healthcare and lives of people around the world. On behalf of our trainees, and everyone whose lives their work has touched, thank you for supporting our programs!

If you would like to support the Hubert-Yeargan Center financially, please visit https://hyc.globalhealth.duke.edu/giving-back to make an online donation.

If you would like to mail a donation, please contact us at Hubert-Yeargan@duke.edu for more information on how to do so.

Faculty & Staff Comings & Goings

After 26 years at the Duke, and more than 16 years with the Hubert-Yeargan Center, Cynthia Binanay is stepping back. While not fully retired, she has transitioned from the full-time Director of Operations to a part-time position as an HYC Senior Advisor and Project Leader for Kenya Operations. She is still actively involved in AMPATH (Academic Model Providing Access to Healthcare) and Duke’s activities in Kenya, including the Moi/MTRH Cardiovascular (CV) Center of Excellence, Moi CV Fellowship program, the NHLBI research project, and the HYC Senior Management Team. We express to her our heartfelt thanks for her tireless leadership over these years. Her vision and practical guidance were integral to the growth of the HYC in its support of trainees and Duke and international faculty and partners.

Congratulations to Bill Wilkinson, PhD on his retirement. Dr. Wilkinson has provided online research methodology courses to more than 50 international trainees through the HYC since 2009. Dr. Wilkinson’s impact on trainees around the world has been immeasurable. As reflections from his former students came pouring in, words like “dedicated”, “selfless”, “innovative” and “encouraging” appeared over and over again. Dr. Wilkinson’s impact on international trainees and their careers cannot be overstated and his dedication to teaching is unparalleled. We wish him a happy, healthy retirement!

We want to congratulate Tara Pemble on her recent promotion to Administrative Manager. Tara, who earned her bachelor’s degree in business administration from the University of Florida, has been with the HYC for more than a decade, first as Program Coordinator for the global health clinical elective and international trainee exchange programs and then as the Program Coordinator for the GHP. Her primary responsibilities as Administrative Manager will be to manage day-to-day administration and operations of the HYC, including supervising the HYC operations team. She will continue to serve as Program Coordinator for the GHP. Please join us in congratulating her on this promotion and feel free to send a shout-out to her.

HYC also added two new Research Analysts to our staff, Tianchen Sheng and Coralei Neighbors. Tianchen manages and cleans data from patients with respiratory tract infections or COVID-19 at local hospitals and presents them to the team. She is also in charge of carrying out epidemiologic data analysis to quantify the prevalence of antimicrobial use and to identify characteristics associated with acute dengue, acute respiratory tract infections, and other infectious diseases. She analyzes the trends and seasonality and performs geospatial analysis of acute respiratory tract infections in Sri Lanka.

Coralei helps monitor 127 projects across the United States and its territories and manages data for the RADx-UP Testing Core. Additionally, she carries out epidemiologic data analysis for COVID-19, dengue, leptospirosis, rickettsia, and respiratory tract infections in various countries. I also create Markov models to analyze the cost-effectiveness of vaccines for implementation into the Sri Lankan National Immunization Programme.

Staff and Faculty

Managing Director, HYC
Tim Veldman, PhD

Director of Clinical Education, HYC
Rebecca Lumsden, MD, MS-GH

HYC Senior Advisor
Project Leader Kenya Operations
Cynthia Binanay, MA, BSN

Administrative Manager, HCY
Program Coordinator, GHP
Tara Pemble
Program Coordinator, HYC
Corrie Walston
Administrative Support, HYC
Rhonda Bartley

Research Analysts
Coralei Neighbors
Tianchen Sheng

Founding Director, HYC
Ralph Corey, MD

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