# FY 2024 Annual Report



**Center for Global Health** 

colorado school of public health

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## Message from the Interim Director

This year (July 2023-June 2024) has been a time of strengthening our programs and services, resolving outstanding matters, and planning for the future. Dr. Steve Berman's vision and spirit have continued to propel us forward, he would never have remained idle, and neither have we. Now, we're excited to welcome Dr. Elizabeth Brickley to lead our Center to new horizons.

I am so honored and humbled to have the support of our CGH family and of so many at CU Anschutz who share a passion for global health work. I am grateful for having the back of our leadership and have been reminded, again and again, that CGH can open doors to learners who want to work in the global health space.

I am also reminded of the words in the Preamble to the Constitution of the World Health Organization (1946; constitution-en.pdf): That every person has the fundamental right to the highest attainable standard of health without distinction of race, religion, political belief, economic or social condition. This reminds me of how much more we all have to do in a world embroiled in conflict, affected by devastating climate impact and trying to save lives during outbreaks and pandemics. Health affects us all and the right to health is our work.



<u>May Chu PhD</u> Clinical Professor, Interim Director (Center for Global Health)

## A Guide to this Report

We have structured this annual report to provide: 1) what is new and coming followed by updates of our Signature site in Trifinio, Guatemala, our Education program, a section featuring our Center research projects and an updated list of those who are part of our expanding faculty. Not all of our work is presented in detail and if you have questions, please reach out to us for the information.

#### -New to CGH



Center for Global Health at the Annual CU-Anschutz Block Party 2024. Julia Poje and Olivia Pluss, CGH Professional Research Associates

## Hew Home for CCA

We truly mean that we are moving forward. By this time next year, you will find CGH in our new home in the Fitzsimmons Building, and we invite you to eagerly anticipate what's next for CGH.







Renewed interest in our **Signature Site** 

We have ensured that our stewardship of our Signature Site in Trifinio, Guatemala continues and engaged with donors, faculty and community leaders to reinforce, reinvigorate our CU commitment. We have advanced laboratory capabilities to provide near real time results improving surveillance work decisions and will institute Spanish language requirements to ensure high quality service in the clinical setting. Our successes can be replicated elsewhere and we are looking to add Signature Sites elsewhere, for example, in Kisii, Kenya.



We have a searchable database of projects that CU-Anschutz is engaged with global partners. This Directory can be found on the CGH website and we have plans to update and refine the map annually. From the data we have for 2021-early 2023, there are nearly 400 projects, our faculty works with 46 networks, and more than 80 faculty/trainees have visited at least 80 countries. This is a resource that has been used by our Schools to search for synergy at site, develop multi disciplinary projects and founded a cross-campus liaison group to share resources and reduce duplication.





New Research Project **Directions** 



**Featuring** our Global Health **Education** Work



Throughout 2024, we have worked towards establishing a core global health graduate medical education (GME) curriculum for all resident and fellow learners throughout the CU School of Medicine. 14 departments are represented in this curriculum, which will be rolled out in 2025 as part of a formal implementation study.

We also have applied for and are in the last stages of formal accreditation for the Stephen Berman Memorial Pediatric Global Health Fellowship, accredited via the Academic Pediatric Association (APA). Our first accredited fellow will graduate in Spring 2025, with hopes of continuing this program with 1-2 pediatric fellows annually. This fellowship will run concurrently with our general global health fellowship, open to any medical specialty.

We have been funded for multiple CDC projects, several of them in Guatemala, led by Dr. Daniel Olson built on many years of effort to ensure that, though remote, our Trifinio research site can provide near real time results for better research management. We are engaging in understanding what factors lead to clean air in primary school children's health (Air Quality Study), to build a coalition to have access to global human specimens before/during pandemics for research, to serve as technical advisors to the Global Fund's partner countries (up to 143 countries).

## Global Health Central Hub

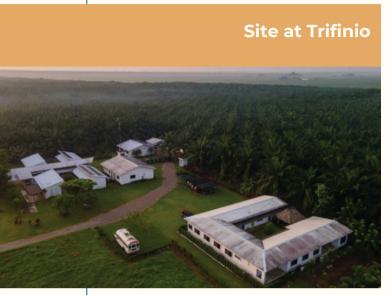
Under the Chancellor's direction, CGH is collaborating with the School of Medicine, College of Nursing, School of Pharmacy, School of Dental Medicine and the Office of International Affairs to develop a centralized map and database of CU-Anschutz activities, projects and research outside of the continental US. The map serves as a reference tool to help connect individuals and locate those interested in projects within specific countries. We continuously gather updated information from these schools on an annual basis.

The visibility of the map has already yielded our campus the opportunity to apply for larger, complex multi-discipline service and educational grants and contracts as a campus-wide effort. We have created The Integrated Global Health Resilience or TIGHRe team. This innovative approach lifts our individual schools and disciplines to then join in large projects as with the State Department, the Centers for Disease Control and Prevention, United States Agency for International Development and the Global Fund (GF). TIGHRe has competed successfully as the GF as Senior Technical Advisors to work with national public health and clinical services in 14 West African countries.



## Center for Global Health Signature Activities

#### -Guatemala Health Site



Established in 2012 in partnership with Agroamerica, the signature site in rural Guatemala (Trifinio) has continued to expand its comprehensive activities in research, education, service and advocacy in the areas of maternal-child health, agricultural worker's health, emerging infectious diseases, One Health, and school and family health. In the academic year 2022-2023, Trifinio restarted its global health rotations for CU students, residents and faculty after the COVID-19 pandemic pause. The Child Health Associate/Physician Assistant program hosted 22 students for their month-long rotation, 7 pediatric residents and 2 internal medicines provided direct supervised-service at the FUNSALUD clinic, and the College of Nursing began clinical and field rotations for Nurse Practitioner and Nursing Students.

To facilitate and ensure delivery of excellent care and learning experience, CGH has established a certified Spanish language requirement to come into force Fall 2025. Participants must complete one of the following certification programs: ALTA Health Care Testing, the CANOPY Learn medical Spanish course, or the CHCO Qualified Bilingual Staff Exam. Additional language learning resources are available, but they do not substitute for the required certifications, and travelers are responsible for any associated costs. This policy ensures medical professionals are prepared to interact with Spanish-speaking patients and enhances their overall experience in Guatemala.

The policy aims to enhance educational experiences while ensuring patient safety and care quality. It applies to all medical professionals involved in clinical care during their rotation.

Program leaders are responsible for ensuring that medical professionals meet the Spanish proficiency requirements and support them in obtaining certification. Medical professionals must obtain the required certification, engage with relevant departments for support, and prepare for their roles. FUNSALUD will provide ongoing educational support during the rotation, while the Center for Global Health will facilitate pre-departure orientation and confirm certifications.

#### **FUNSALUD Clinic**

The FUNSALUD Clinic, first opened in 2014, provides direct health care to workers employed by AgroAmerica and their families as well as being accessible to the 22 communities nearby with a population of 25,000. The clinic has urgent care capacity, two minimum-risk labor and delivery rooms, three clinics, ultrasound, laboratory and pharmacy on site. Two Guatemalan physicians, including the Director, Dr. Bolaños, provide direct care and supervise a number of trainees from both Colorado and Guatemala and two nurses, providing an average of 3,000 consultations per year. The clinic became a key source of health care and support for the communities during the pandemic. It coordinated the vaccination of agricultural workers with 97% coverage of two-doses of the COVID-19 vaccine. During their visiting rotations CU students present on various clinical topics and carry out qualitative improvement projects to improve the care and capacity of the clinic. The site is now implementing an electronic medical record system, which will be transitioned to smaller clinics within the farm to capture longitudinal health outcomes.

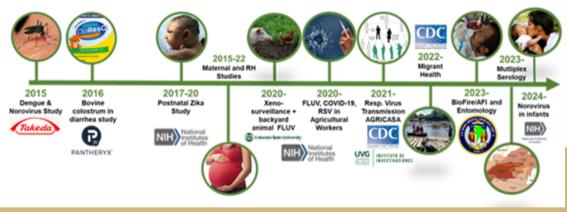
#### Research

Over the past 10 years, Trifinio was key to developing and implementing translational, clinical, and public health research in emerging infectious diseases, advanced diagnostics, and maternal-child health. Supported now by.

2 grants from the Strategic Initiative for Research from the CU School of Medicine as well as infrastructure support from Colorado State University and CDC, Trifinio has developed research and laboratory capacity to lead transformative projects in Global Health.

Directed by Dr. Daniel Olson and his Guatemalan counterpart, Dra. Mirella Barrientos Calvimontes, the Trifinio site, stands out in its unique ability to carry out longitudinal cohort studies with advanced molecular diagnostics in a rural, resource-limited region of Guatemala. The AGRI Cohort, originally funded by Dr. Olson's K23 award, and now funded by CDC, studies the clinical and economic impacts of respiratory and other emerging infectious diseases on

agricultural workers and their families as well as the intersection with chronic diseases, such as chronic kidney disease. As part of a new 5-year CoAg with CDC, the cohort will be expanded to 5,000 workers in 2025. The AGRI-CASA cohort studies the burden and household transmission dynamics of respiratory viruses, focusing particularly on younger households as RSV and influenza vaccines become more available in the community. Additional CDC-funded projects include measuring the burden of respiratory illness in migrants, household domestic animals, and the local regional hospital. The projects include on-site PCR, whole genome sequencing, real-time diagnostics reporting, and a specimen biobank. The CDC-funded projects were recently presented to CDC Director Cohen and her team on a recent visit to Guatemala.



\*The timeline above shows the major studies being carried out at the Trifinio site

Additional studies include a collaboration with Colorado State University to study xenosurveillance for detecting emerging pathogens in mosquito blood meals (see NPR story), a collaboration with Dr. Ross Kedl of CU School of Medicine (SOM) to implement multiplex serologic testing for arboviruses sponsored by Merck Inc.), multiplex PCR testing of individuals with febrile and respiratory illness and mosquito surveillance (US Navy), and a collaboration with University of North Carolina to study maternal-infant immunity to norovirus infection (NIAID R21). Building off this existing capacity, multiple additional grants are in development, including five R01 proposals.

NPR News. Insectazooka

## Center for Global Health Signature Activities

## -Community Health Programs

#### **Creciendo Sanos**



The maternal-child health community programs were established in 2012 by Drs. Edwin Asturias and Stephen Berman to tackle the increasing levels of food insecurity and malnutrition, poor child development and neonatal morbidity and mortality in the area. This decade-long program is a developing model for nurse-family partnerships in rural Guatemala using evidence-based interventions to ensure the well-being of mothers and children in 12 rural communities. The program is currently being implemented by Pamela Prag (College of Nursing), Melisa Jaenisch (SPH/CGH), Claudia Rivera (FUNSALUD) and Dr. Lisa Umphrey (CGH and CHCO).

Creciendo Sanos program enrolls women during their pregnancy and provides home visits that include education, collecting basic health data, and standard screening tests. Once the child is born, the mother is able to continue in the Ninos Sanos program which comprises the same components, but the intervention is focused on the child.

The Creciendo Sanos program continues to provide a unique learning opportunity for nursing and medical students and pediatric residents/fellows to learn about rural maternal/child health programs, get a glimpse into home environments. During their time at the site they learn from and support the local staff. This opportunity provides them with skills and knowledge to better serve immigrant populations in the US.

The Magdalena Ramirez scholarship fund was established to provide opportunities for Guatemalan nurses working with the program to advance their education. This past year, 3 nurses at the site were able to pursue advanced nurse training/degrees.



#### **Madres Sanas Continued**

In 2022, the CU College of Nursing stepped in to form a natural partnership and provide support for the Madres Sanas program. They work hand in hand with the local Guatemalan nurses to provide regular programmatic and technical support. From routine monthly training to supporting more intensive ultrasound training, capacity building is a main focus. Based on a need identified by the Madre Sanas nurse teams, CU Nursing developed a 3 month ultrasound virtual training program using a Butterfly Ultrasound machine that was purchased for the nurses to use in the homes of the women enrolled in the MS program. This was intended to reduce the barrier that exists for women who are unable to access the clinic services and need important information regarding their pregnancy identified. Additionally, during 2024, the Community nurse teams have prepared and presented complicated cases from their workload each month to the College of Nursing team to explore best practices and improve care delivery.

The Madres Sanas program enrolled ~200 pregnant women last year who received an average of 5 home-care visits during their pregnancy ensuring a healthy pregnancy and postpartum. In 2023, with the collaborative work between Dr. Nancy Krebs' Global Network for Women and Children Health Research (NICHD) based in the highlands of Chimaltenango, the Madres Sanas pregnancy registry and program will be incorporating the latest evidence of care developed by the network partners.

During 2024, the Creciendo Sanos program joined forces with the local ministry of health officials to provide training and midwifery kits to local midwives who are responsible for a large percentage of deliveries in the region. These training programs directly impact the health outcomes for women and children in the Trifinio region. Project Cure has provided over 63 midwifery kits. Guatemalan and US Medical students rotating through the site participate in training the midwives as well.

## Niños Sanos

Niños Sanos is a program initiated in parallel with Madres Sanas in 2013 to improve growth and development of young children. During the home visits, nurses cater child health education to individual households and caregivers.

This past year, nurses conducted 3,100 visits to 497 children. Over 96 referrals for follow up with a doctor were provided. Children enrolled in the program are eligible for free doctor visits at the FUNSALUD clinic. Of the 243 children who were screened for anemia, 168 tested positive for anemia and were provided with immediate iron treatment.

In 2023, Peter Durst provided a 5-year grant to add 2 nurses to the program, one of which leads the adolescent mother program detailed below. The same funding also supports a nurse/social worker who supervises the maternal mental health program (ALMA) described below.

#### **Niños Sanos Continued**

The program for adolescent mothers (in which they receive weekly visits for the first 6 months of their child's life) had 23 participants this past year. Since it started, over 50 adolescent mothers, ranging in age from 14-18 years old, have benefited from the program.

In addition, a family planning pilot program was made possible with funding from The Summit Foundation. The pilot which ended last—year—provided family—planning counseling to all mothers with children enrolled in the Ninos Sanos program. Three different family—planning methods were provided free of charge to women in their homes at no cost. The response was overwhelmingly positive from mothers who reported reduced barriers to accessing family planning methods. We are in the process of securing funding to integrate family planning counseling and provision of free limited methods as a permanent part of the Ninos Sanos program in efforts to improve child spacing.



#### **ALMA (Maternal Mental Health)**

ALMA is a peer mentoring program for depressed pregnant or postpartum women that was co-created by Dr. Sona Dimidjian and the CREST Lab at CU Boulder. In Creciendo Sanos, program nurses train mothers in basic helping skills and skills of behavioral activation. Behavioral activation seeks to increase contact with sources of reward by helping them get more active and, in so doing, improve one's life context. They are also taught to identify values that help them guide the selection of activities to increase mood. Behavioral activation has a significant evidence base and is simple enough to be delivered by non-mental health professionals with sufficient training and supervision.

During participation in the prenatal (Healthy Mothers) and well child visits of the Growing up Healthy program, women are screen every 3 months using a depression screening tool as well as risk factors. Women who qualify are invited to participate in ALMA sessions which include behavior activation and relaxation techniques. This past year, 174 women were screened. Of those that were screened, 38 qualified and 27 enrolled in the ALMA program. Program nurses delivered 137 sessions.

The scarcity of mental health services combined with the prevalent stigma, make with women pre/postpartum depression especially vulnerable. By bringing the program to women in their homes the barriers are reduced, breaking down the stigma associated with mental health services, and providing support for women. The program has adapted to local needs to include relaxation techniques to help women relax when they face a crisis, a crisis plans for women who reported suicidal ideation. The crisis plan has been successfully used with 19 women. This past year an emergency plan was piloted to help vulnerable women who had recently ended relationships that exposed them to physical violence and/or psychological abuse, to identify strategies and resources they can access to mitigate their exposure to danger.

#### **Malnutrition (PROGRESAN)**

In the fall of 2019, a malnutrition program dedicated to helping children 6-59 months old with chronic and/or acute malnutrition was established with funds from Agroamerica, Dr. Steve Berman, and the Rowan Family. This program is becoming a model for nutritional intervention integrating a comprehensive monitoring, nutritional recovery, and research of moderate to severe malnutrition.

During the past year, 91 children between 6-24 months old participated in the program which conducted over 1,700 home visits. Just over 25 % of the children in the program entered the 9 month home visit program with acute malnutrition and over half were stunted. The program also enrolls children who are at risk for either acute or chronic malnutrition with the aim of getting the child back on track for normal growth. This program is now opening opportunities for research on nutritional interventions led by Dr. Doug Taren and Dr. Mirella Barrientos.

#### **Big Decisions School Program**

Big Decisions (BD) is a comprehensive sexual health education program for adolescents that seeks to reduce unplanned pregnancies and sexually transmitted diseases so teenagers can reach their goals and dreams. The Big Decisions program began in 2016, led by Claudia Luna-Asturias, LCSW and Nimsy Ramos, MHE; it has 8 lessons that were adapted to serve young people from 11 to 19 years of age in the community of Trifinio. In 2023, it was noted that younger teens are getting pregnant for which the program plans to initiate lessons for 5th graders.

This year two of the three facilitators were asked to assist in other Funsalud programs, Alma and Adolescent mothers, for which Big Decisions lessons had to be tailored to avoid leaving students without finishing the curriculum.

In September 2022-24, Big Decisions students participated in a Mental Health evaluation to obtain their knowledge and perceptions of concepts related to depression, anxiety and mental health. This research project had two components; gathering information via focal groups and administering the PHQ-9 and GAD-7 questionnaire to 300 students of different age, gender and school. Phase 2 took place in Feb. 2024. Results and plans for future work will follow, however a pamphlet was created to inform students and the clinic population of what is Depression and Anxiety, symptoms and how to manage and/or seek help. This project was coordinated by William Herold who has continued helping in the plans to provide mental health relief to adolescents in the area.

In July the BD program organized the 3rd Health Fair for adolescents that took place on the grounds of Funsalud. Students were invited by communicating with school administrators, they were given an invitation/passport to participate in 12 informational tables and 13 games. This year 608 students were registered and given a prize for their participation.

## Additional Signature Sites-

Though underdevelopment to finalize our plans, we wish to share the CGH plan to take the Trifinio model and set up additional Signature Sites to provide a fuller, more comprehensive educational experience for CU Anschutz faculty, students and trainees. Before the end of this calendar year, we aim to complete the agreement for a signature site at Kisiii, Kenya in partnership with Community Health and Empowerment Club. We have the potential to support collaborative sites where we build sustainable operations at multiple sites.

## **World Health Organization**

## -WHO Organization Activities

#### **WHO Collaborating Center**

The CGH is currently working on the redesignation of the WHO application as the only WHO collaborating regional Center for 'family and child health' in the Americas. Our work is in partnership with the Pan-American Health Organization arm (PAHO) of the WHO. This collaborating center gives CGH the ability to collaborate within PAHO and WHO in the areas of immunization, neonatal health, disaster preparedness, and integrated management of childhood illness and health.

#### **WHO Advisory and Committee Roles**

Dr. Edwin Asturias served in 2022 as a member of the Malaria Vaccine Advisory Group (MALVAC) and is now collaborating with WHO on the development of an artificial intelligence systems for evaluating causality of adverse events following immunization (AEFI), and maternal immunization causality assessment.



Dr. Thomas Jaenisch serves as the co-chair of the WHO Zika Virus Individual Patient Data Meta-Analysis consortium (IPD-MA) for Zika Virus pregnant women and children's cohorts. He is a member of WHO's Zika research and development roadmap for medical countermeasures. He has also served in the past as a member of the WHO Advisory Group on Dengue Burden Estimation and the WHO Expert Panel for the review of the causality framework between Zika virus infection and neurological disorders.

Dr. May Chu has served, since 2020, as the co-chair of the WHO COVID-19 Infection Prevention and Control (IPC) Committee setting IPC policy and directing the IPC research agenda as well as being the co-chair of the WHO COVID-19 IPC Guidelines Development Group (GDG). She is a member of the Laboratory Diagnostics Group for COVID-19 and Emerging New Diseases and a member of the subworking group on Reference Standards. She is a long-time member, since 2014, of the WHO GDG on Ebola and Marburg Hemorrhagic Fever Personal Protective Equipment (PPE) for Health Care Facilities and Research Prioritization for PPE.

## **Education Opportunities and Outreach**

## -New achievements in this past year

This past year, the Center has focused on strengthening our educational and training programs on the Anschutz Medical Campus. Our global health fellowship program, under the leadership of Dr. Daniel Olson (outgoing) and Dr. Lisa Umphrey (incoming) as fellowship directors, continues to expand to more disciplines and attract highly qualified candidates. The Center is facilitating better coordination among the schools and departments that are offering international training experiences. In 2023, Pediatric Global Health became an accredited Academic subspecialty through the Pediatric Association, and Dr. Umphrey applied for CGH's



Jodi Cattich going around the room showing participants the Neo-Natalie Live

fellowship to be an accredited Pediatric Global Health Fellowship. The 2024-2025 academic year will involve site

Fellowship. The 2024-2025 academic year will involve site visits and finalization of this process. Several changes to the fellowship structure, partner-site requirements, and educational programming for the fellowship will take effect into 2024 to meet updated recommendations for graduate medical education in global health.



The College of Nursing, under the leadership of Pamela Prag CNM, MS, MPH, is taking the lead on offering a suite of courses including Helping Babies Breathe, Helping Babies Survive, and Helping Mothers survive. The Center is facilitating discussions on possible global health multidisciplinary educational collaborations with all schools on campus.

In the global educational arena, with the leadership of Dr. PK Vedanthan, the Center continues to cosponsor the fellowship training in allergy, asthma, and immunology at the Postgraduate Institute of Medical Education and Research Chandigarh, India. The Center is also a co-sponsor of a new successful program called Diploma in Pediatric Sleep Medicine. The co-directors of this program include Dr. Bharath Kumar Reddy (Shishuka Children's Specialty Hospital), PK Vedanthan, and Stephen Hawkins, a pediatric sleep medicine physician at Children's Colorado Hospital. The program involves many Departments of Pediatrics faculty in pulmonary, ENT, and psychology.

#### -Global Health & Disasters Course

The Global Health and Disasters course is an in-person course that prepares its participants for international experiences and future global health work. The interactive training incorporates readings, lectures, small group problem-based learning exercises, technical skill sessions, a career panel and a disaster simulation exercise. Course lectures and activities are presented by faculty with extensive experience in global health and disaster response. Our two-week Global Health and Disasters course was held in-person in October 2023 with international faculty joining virtually via Zoom platform for week two. Our course directors are Dr. Daniel Olson and Molly Lamb for week one, global health and Dr. Joseph Wathen and Lisa Umphrey for week two, pediatrics in disasters. Dr. Lisa Umphrey led the effort to write up our experience and the article has been published in the Fall Edition of Advances in Pediatrics Journal.

Throughout the 2023-2024 year, Drs. Umphrey and Wathen worked in partnership with the Kenyan Pediatric Association to co-direct the Pediatrics in Disasters portion of the course, and this course was offered to a group of Kenyan healthcare providers in February 2024. The Kenyan and US teams are working with a CU PhD candidate and Dr. Molly Lamb on course evaluation project and manuscript comparing the perceptions of US versus Kenyan participants in the course. The team also finished a revision of the course's manual, which was accepted by Springer publishing as a textbook and which will be available in 2025.



#### -Essential Newborn Care Course



Celebrating Julieth Issay, a nurse from Tanzania birthday week

Dr. Maureen Cunningham, Dr. Susan Niermeyer, Rose Danaher, Rosemary, and Patty Kelly were the facilitators who led the Essential Newborn Care Course this year. The course was held in person and there were around 20 participants. The Essential Newborn Care Course 2nd edition is designed for health workers who care for newborns in low resource settings. The updated course focuses on contemporary learning methods so that learners can train at their own pace and trainers can deliver content in person or virtually.



Participants are in groups working on cases.

Case 1: Preparation for Birth Case 2: The Golden Minute

Case 3: Ventilate

Case 4: Improve Ventilation



Dr. Susan Niermeyer providing ENCC Updates



Group practice on Overcoming Breastfeeding Difficulty

### -Global Health Project Fair

2023 via Zoom. More than twenty global health players and organization attended, such as the Global Livingston Institute, the Prevention Research Center for Family and Child Health from University of Colorado, Locally Haiti, Partners for Conservation, ATLAS International Inc, Community Volunteer Services Tanzania, International Asthma Services dba Saahns, the Community and Behavioral Health department from CU Anschutz, and many more CU Anschutz-based researchers. These organizations met to discuss their work and research opportunities with more than fifty Colorado School of Public Health and CU Anschutz medical students interested in pursuing global health opportunities. Those who attended learned about global health opportunities in areas such

as Uganda, Rwanda, El Salvador, Nicaragua, Haiti, villages in Western

Kenya, East Africa, Eastern Uganda, India, Indonesia, Philippines,

The Center hosted our annual Global Health Project Fair in January of

Colombia, Panama, Mexico, Tanzania, Guatemala, and Nepal. Students were played into breakout groups depending on their organization or geographic area of interest where they could connect with the organization or researcher to hear more about their work and any opportunities. For our 2024 Global Health Project Fair, we will distribute evaluations to the global health organizations and to those students who attend to get a more comprehensive idea on how to be the most impactful.

## -Scholarship Program

Every year the Center for Global Health offers scholarships for students with a focus in global health. The Robinson Durst Scholarship, Rotary Scholarship, Global Chest Initiatives Scholarship, and the Calvin L. Wilson Scholarship for Future Leaders in Global Health are the four different types of s cholarship the Center offers. All graduate students in the health professions through the university are eligible for the award. This year, we have opened our scholarships to all schools on campus, including Colorado State University and the University of Northern Colorado.

We plan to offer opportunities within our scholarship

program at two locations, Trifinio, Guatemala and our new Kisii, Kenya site. Our sponsored sites share the values and goals of our scholarship mission, focusing on fostering strong relationships to enhance resources, contribute to the community and create more opportunities for deserving students. These partnerships aim to enrich students' education through various initiatives.

## **Types of Scholarships**







#### Rotary Scholarship:

Rotary clubs from the Denver Metropolitan Area have been generous supporters of our students. These scholarships provide our students with exceptional educational opportunities that fits with the core values of Rotary, including fellowship, service, and ethical conduct. The Center administers the scholarship in close collaboration with Rotary leadership.

#### Robinson Durst Scholarship:

The Center for Global Health coordinates the scholarship that was founded by Professor Emeritus William Robinson, MD, PhD, and Denver sculptor/ceramicist Peter Durst. Philosophically, the scholarship committee and its founders strongly believe in the long-lasting, positive value of global health endeavors in broadening personal and academic perspectives.



Dr. Calvin L. Wilson, a physician whose career spans many countries and cultures, served as director of the Center for Global Health from 2004 through 2010. The model and leadership of Dr. Wilson inspired this scholarship so that the University of Colorado students have an opportunity to engage in a culturally diverse clinical and/or research experience during their graduate training. Philosophically, this scholarship is grounded in a deep commitment to the long-lasting, positive value of international health care as it relates to broadening personal and academic perspectives.

#### Global Chest Initiative Scholarship:

Global Chest Initiative (GCI) supports pulmonary and allergy related scholarships that combine both fieldwork (doing a survey, epidemiology research) and hospital-based (clinical, lab work). The funds are provided by Dr. Pudupakkam Vedantha and his wife.

## Report of our 2024 Scholarship Cycle Activities





Mary Bevilacqua received the Calvin L Wilson scholarship to "identify common themes and points of failure in the implementation of imported biomedical technology" in Rural Guatemala.

Chandler Bradley received the Rotary Club is Denver Northeast Rotary Club scholarship to "observe study evaluating changing anti-DENV IgG seroprevalence and risk factors within an existing farm worker cohort and cross-sectional school-based survey in a dengue-endemic region of Rural Guatemala."

Ryan Brubaker received the William Robinson/Peter Durst scholarship to "aid researchers already working on the mHealth (mobile health program) project in evaluating the outcomes after 1 year of work" by improving reporting of potential zoonotic disease and outbreaks in Bwindi Uganda.



Ryan Brubaker worked with focus groups in Bwindi, Uganda after rolling out the first version of the mHealth app.

# Report of our 2024 Scholarship Cycle Activities Continued





Ryan Brubake is taking a work break to look at hippos in Queen Elizabeth National Park

Ammar Campwala received the Aurora Fitzsimons Rotary Club scholarship "Using Skills Transfer and Mentorship to Improve Access to Cardiac Care in Remote and Rural Settings in Rwanda- Team Heart activity profile at five selected District Hospitals".

**Zoe Caswell** received the Aurora Fitzsimons Rotary Club scholarship to "Investigate Maternal Group B Strep Colonization" in Rural Guatemala

Marika Rossetto received the Northglenn-Thornton Rotary Club scholarship to provide "Trauma Care Guidelines" in Ayacucho, Peru.

Conner Secora received the Evergreen Rotary Club scholarship to "Implement EMR Platform" in Rural Guatemala.

Andrea Zuzarte received the William Robinson/Peter Durst scholarship for "Nutritional Education through Conditional Cash Transfer Programs" in Cartagena, Colombia.

#### **Global Health Pathway**







Chandler Bradley and Dean Cathy Bradley at Mr. Chandler's poster during CU Anschutz Science Research Exchange Day

The Global Health Pathway Program was created in 2012 by Dr. Edwin Asturias, Marsha Anderson, Becky Gaensbauer, and Gretchen Domek. The inaugural class of residents started in 2013. The Global Health Pathway Program is designed for those pediatric residents who plan to have a career focus in Global Health or plan to incorporate care of international populations into their practice (e.g., regular international experiences, work in resource limited settings, work with displaced populations). The overarching goals of the pathway are to:

- 1. Provide educational opportunities and professional development for pediatric residents, so they can successfully recognize and address health disparities in international and domestic populations in need.
- 2. Train physician leaders in pediatric clinical medicine, teaching, health policy, and research in global health.

#### **Global Health Pathway Continued**



The Global Health Pathway Program, now under the leadership of director Dr. Leana May Moser, and co-directors, Drs. Jessica Landry and Lisa Umphrey, continue to grow every year. In 2023, we had 13 residents total in the Pathway Program and had 4 residents graduate in June. Throughout our 2023-2024 academic year, the Global Health Pathway directors implemented several modules from the Simulation Use for Global Away Rotations (SUGAR) Prep curricula, which include clinical simulation sessions, pre-trip sessions for global health away rotations, and local global health advocacy sessions. In our 2023-2024 academic year, directors coordinated 8 global health journal clubs co-facilitated with our third-year residents and our global health fellows.

#### **Global Health Pathway Residents & Fellows**

#### Graduated in 2023:

- -Nathan Howell
- -Kathryn Kalata
- -Celia Lenarz-Gerisen
- -Faith O'Brian
- -Chloe Stiggelbout
- -Maggie Tashjian

#### Fellows:

-Hai Nguyen-Tran

#### Graduated in 2024:

- -Carly Muller
- -Sheridan Schulte
- -Valerie Teano
- -Isabel Hardee

#### Fellows:

- -Mary Bevilacqua
- -Yo Nishihara

#### Graduating in 2025:

- -Mollie Lesser
- -Alice Burgess
- -Sandra Zoubovsky
- -Hanna Ravi
- -Samuel Ruchman

#### Graduating in 2026:

-Lucas Morgan

#### Fellows:

- -Angeline Sawaya
- -Kelsey Berry

#### Graduating in 2027:

- -Grace Newell
- -Kathleen Doyle

#### Graduating in 2028:

- -Alyssa Zlatkin
- -Regan Denny

During the FY24, for the Global Health Fellowship, Dr. Lisa Umphrey completed an accreditation package with the Academic Pediatric Association and recruited two new pediatric global health fellows: Angeline Sawaya and Kelsey Berry.

# Research Feature of the Year: Report on Infectious Disease and Respiratory Disease Transmission

CGH has been steadily expanding the research and service activities - with a focus to broaden and deepen our 'pandemic preparedness posture' and to engage in more 'child health/ development studies'. The CGH is nationally and internationally recognized for research, education, and service in these thematic areas. In addition, the Arbovirus Research Consortium at CGH provides a home for interdisciplinary research on "Arthropod-Borne Viruses" (which are transmitted by mosquitoes or ticks) and include climate-sensitive diseases like Dengue, Chikunguyna and emerging Oropuche viruses. intergrated with respiratory viruses like influenza, SARS-CoV-2 and RSV.

The power of field site research strategy is unmistakably where we make the most difference in the communities we work in, please refer to the successes in our Trifinio site, led by Dr. Daniel Olson.

-Harnessing the power of serological data for surveillance

and pandemic preparedness

CGH has stepped up during the COVID-19 pandemic with public health information and community service at home as well working with global partners around PPE use and decontamination, diagnostic testing, seroprevalence estimation, and schoolchildren health. This portfolio of activities has extended during and is fueled by a number of different grants, which are mostly focused around viral pathogens and their diagnosis and control.

After the COVID-19 pandemic, we are convinced that the full potential of serological data for surveillance and preparedness can be harnessed with additional work that we are invested in. Our vision is a serological 'observatory' which serves surveillance purposes as well as builds a backbone for data sets that can be analyzed by scientists in various regards, much like GISAID or NEXTSTRAIN for virological data. We have linked the research focus around 'Arboviruses' with preparedness by focusing on the utility of serosurveillance for preparedness. General efforts and outputs with regard to pandemic prepa-

redness include multiple publications published by the faculty that highlight the efforts towards pandemic preparedness and supporting our global coordination effort to standardize, harmonize data, test results across the globe.

## -African Serosurveillance Program for Emerging and New-Infectious Diseases (ASPEN-ID)

ASPEN-ID is a Gates Foundation funded project on multipathogen serosurveillance using Luminex multiplex serology platform (led by Dr. May Chu), we are collaborating with four countries in Africa (Kenia, South Africa, Malawi, Sierra Leone) to create a harmonized dashboard for serosurveillance aimed at informing decision makers and harnessing the power of serology for preparedness research and for interventions (for example for vaccine-preventable diseases). CGH serves as the standardization (laboratory and data) and new methods lead for this effort.

## -Global Health at home, "Local" - Indoor Air Quality in Schools and Transmission of Respiratory Pathogens

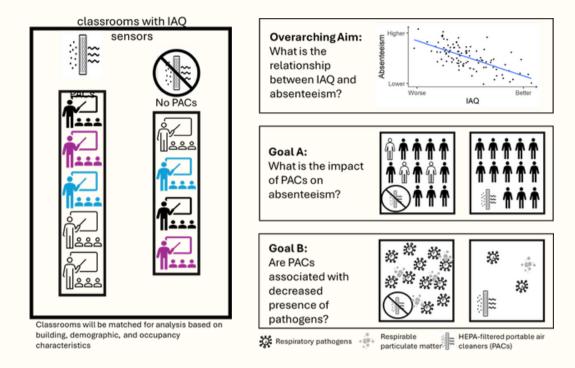
As described in last year's report, our faculty worked with local schools to establish CDC's Test-to-Stay in School COVID-19 testing in 2022, which provided us with local recognition and led successful funding for a 'spin off' research project on the association of Air Quality Interventions in schools and School Absenteeism (as a proxy of respiratory illness). This 3-year contract awarded to us by the CDC in August 2023 aims to elucidate how Air Quality interventions in schools have the potential to translate to better health outcomes for students and teachers across the state of Colorado in 2,300 classrooms (led by Dr. Thomas Jaenisch). The project is in collaboration with Dr. Mark Hernandez, Professor of Civil, Environmental and Architectural Engineering and the Environmental Division of the Colorado Department of Public Health and Environment.

This project builds upon the CDC's and the Colorado Department of Public Health and Environment's Clean Air for Schools program, which installed portable air cleaners (PACs) and indoor air quality (IAQ) monitors in thousands of classrooms across Colorado in the summer of 2023. The researchers hypothesize that PAC operations can improve air quality in classrooms, which in turn can decrease the students' exposure to disease agents like Flu, COVID-19, and RSV. Our protocol will sample desktops, enroll students to self swab noses and collect from parents causes of the student's absenteeism.

The study will compare air quality in classrooms with and without PACs . If the PACs are improving exposure conditions, we would expect to see declines in absenteeism rates. PACs effectively filter all airborne microbes (SARS-CoV-2, Influenza, RSV), pollens and other forms of air pollution, which can trigger allergies and asthma. If we see a difference in the presence of potential pathogens between the classrooms with and without filters, it indicates that the filters help to decrease classroom exposures. PACs are a relatively cheap, flexible way to improve air quality in schools. The results of this study could help school districts nationwide evaluate if installing PACs would be a benefit to the students, teachers and staff.

The expertise of the group in indoor air quality research in schools led to being part of an additional large project application in spring/summer 2024 (ARPA-H), which at the time of finalizing the report was successfully secured. We also see growing interest from our global partners to replicate this study in Southeast Asia, Africa and Latin America.

## -Global Health at home, "Local" - Indoor Air Quality in Schools and Transmission of Respiratory Pathogens Continued



## -How to combine data sets on emerging pathogens?

One of the problems faced in past pandemics has been that the number of infections in explosive outbreaks increased and then subsequently decreased rapidly. A research response, involving human ethics clearance, training of local partners, and acquisition of funding, has often been too late - and in the case of Zika virus for example only captured the tail end of the outbreak, with limited numbers of cases included for natural history studies. In addition, the local resources were strained in outbreak situations. 'All hands on deck' meant that there was no additional personnel that could be dedicated to research activities.

Frequently, research during outbreaks runs into the same problems and lessons learned from the past are not applied. Uncoordinated research efforts are initiated and resulting data sets are often too small and need to be pooled after the fact. However, to meaningfully merge heterogeneous datasets is not trivial. Within the ReCoDID project, led by Dr. Thomas Jaenisch

("Reconciliation of Cohort Data for Infectious Diseases", funded by the European Commission), the focus was to develop methods as well as the infrastructure (legal/ethical as well as technological) to merge not only heterogenous infectious disease cohort data but also to bridge the divide between the clinical epidemiological data as well as the high dimensional laboratory data. The work on data sharing for infectious disease cohorts also includes a collaboration with WHO (as mentioned in the WHO section). After the ReCoDID project ended in December 2023, a new research project was successfully secured, again funded by the European Commission with the focus on "Cohort Network To Be Activated Globally In Outbreaks - CONTAGIO". The kick-off meeting took place in Heidelberg, Germany, in December 2023, together with the final dissemination meeting of the ReCoDID consortium.

## -How to combine data sets on emerging pathogens? Continued

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## -Virtual Biorepository System- Preparedness to Develop Diagnostic Tools to Calibrate Laboratory Test Results

The Virtual Biorepository System (VBS) is predicated on building a sustainable, long-term infrastructure that provides access to specimens all the world over, specimens related to outbreak-prone infectious diseases with the aim to improve preparedness to respond to epidemics; a system that provides equitable and transparent process to access samples. We pull together the assets from Trifinio (as pilot evaluation site), ReCoDID (standardization) along with partners like The Global Health Network (Oxford University, UK), Foundation for Innovative Diagnostics (Geneva, Switzerland), the

Center for Research in Emerging Infectious Diseases (NIH: Duke University FioCruz, Duke University and others) with the Pandemic REsponse REpository through Microbial and Immune Surveillance and Epidemiology Pandemic Response Emerging Repository (NIH), Coalition for Epidemic and Pandemic Initiative, ZikAlliance and SeroTracker. In 2022-2023, we completed an online



Launch of the Virtual Biorepository System, inaugural 10 X10 group as part of CONTAGIO. Representatives from Colombia, France, Guatemala, Tahiti, Senegal, Moldova, Bangladesh, USA

Delphi process (oDp) led by Dr. Amy Price of Stanford Medical School that provided prioritization and direction for the tasks ahead. Our main task at first is to establish a partnership of 10 diverse regional sites to each provide 10 ml characterized human plasma/ serum from healthy individuals (10X10 project) as the force multiplier for later expansion. We aim to also expand to include disease- specific materials and the use of humanized monoclonal antibodies as reference materials. These materials will allow for diagnostic test calibration, for determining vaccine efficacy and for research. The initial work of the 10X10 has been funded in work package 4 of the European Commission-funded CONTAGIO project for 3 years.

## -Child Development

Our center continues to produce important research around child development. During the past year we have published extensively on methodological approaches around child development, the high prevalence of microcephaly in rural Guatemala, and the predictors and neurodevelopmental consequences of microcephaly.

The Zika virus epidemic has put the spotlight on microcephaly, and as a result we have discovered a high prevalence of microcephaly at our site in rural Guatemala, regardless of Zika infection status. Most children with microcephaly have a head circumference 2-3 standard deviations below the mean, which is classified as 'moderate microcephaly', with a few children having 'severe microcephaly' (> 3 standard deviations below the mean) as well. The big research questions are a) if this is a new phenomenon, or an overlooked existing phenomenon, and b) how much of this microcephaly is due to 'chronic' aetiologies (generational malnutrition, environmental factors) vs. acute aetiologies (eg. Infectious disease before and after birth). Methodological issues also need to be addressed - for example how to correctly measure and categorize microcephaly in a given population, and how to account for gestational age in a population in which gestational age is rarely known, and without which the current WHO Intergrowth standard cannot be applied. Additional research questions concern the long-term neurodevelopmental consequences of microcephaly and other congenital abnormalities.

The CGH has assembled an expert group that meets every 3-4 months, which includes researchers from Children's Hospital as well as from CGH in order to streamline and strengthen the role of CSPH and CU Anschutz researchers in this broadly applicable research area.

The partnership with PAHO has resulted in the creation of a tool for the assessment of neonatal sepsis in low resource settings, which will be disseminated in the next year in collaboration with PAHO.

## -Arbovirus Research Consortium

Arthropod borne viruses' include Dengue, Zika, Yellow Fever, and West Nile Viruses, all transmitted by mosquito vectors. The arbovirus research consortium was initiated in 2019 to support and condense the ongoing research efforts on arboviruses in the Center for Global Health, at medical school and the AMC Anschutz hospitals, in collaboration with the center vector borne disease research center at CSU Fort Collins. A number of papers on Dengue



case definition and risk factors for severe dengue were published in the last years, which date back to consortia led by Thomas Jaenisch in the past. Current activities include the preparation of a Memorandum of Understanding (MOU) with CDC Fort Collins - vector-borne disease unit, which has been slowly advancing for the past years.

#### -Arbovirus Research Consortium Continued

In November of 2023, Drs. Thomas Jaenisch and Edwin Asturias coordinated and co-hosted a symposium on the State of Zika Virus Cohorts and risk for congenital anomalies at the American Society for Tropical Medicine (ASTMH) annual meeting. We summarized the knowledge gained by the large Zika virus consortia, leveraging the role of CGH researchers in various research efforts around Zika. Thomas Jaenisch and Edwin Asturias have subsequently been involved in WHO consultations with several policy papers in preparation coordinated by WHO and colleagues at the Center for Infectious Disease Research and Policy (CIDRAP) at University of Minnesota. In addition, the WHO Zika Individual Patient Meta-Analysis (IPD-MA) consortium, co-chaired by Thomas Jaenisch, has analyzed pooled cohort data from Zika cohorts around the world and submitted for publication. Thomas Jaenisch is also part of an international group to operationalize clinical endpoints for Dengue virus, which are needed for future intervention studies, including vaccines as well as antivirals.

The mosquito vectors transmitting arboviruses are spreading north due to climate change and global warming, with migration and travel providing ample opportunities for introduction of new viruses into local mosquito populations. Mapping of environmental covariates for transmission has been an important tool for projecting future emergence scenarios and therefore we have invested into mapping expertise at the CGH, which is currently included in several of our research projects.

During the first half of 2024, a new virus emerged in the Americas. Oropouche virus (OROV), transmitted by midges and in the past confined to the peri-sylvatic ecosystems in Amazonia, has caused larger outbreaks in Brazil and surrounding countries, including an outbreak in Cuba. There have been anecdotal reports about congenital anomalies and sexual transmission and the question at this point is if OROV is going to be a growing concern in the future, much like Zika virus was in the past. At the time of the finalization of this report, the outbreaks have subsided. The group at CGH, together with partners in South America in the CONTAGIO consortium, are actively involved in creating better research response tools for the next wave of outbreaks (eCRFs, protocols).

### -Additional Global Health Research Areas

Virtual global health research program (PI Lisa Umphrey). During the COVID-19 pandemic, global health partnerships suffered greatly due to travel restrictions, communication disruptions, and worldwide clinical uncertainty and practice disruptions. CU's own global health partners were hit hard, when learners from US-institutions were suddenly evacuated back to their homes in early March 2020, and most partnership initiatives were halted. To compound this, partners were no longer able to participate in global health initiatives given the clinical loads, staff illnesses, and lockdowns in-country. Subsequently, partners worked together on multiple initiatives to identify the ways in which virtual engagement could sustain partnerships throughout the pandemic, and further how virtual activities could address some of the challenges in global health, such as inequitable partnerships, lack of bidirectionality, and agenda-setting that focused on high-income country partners. Work in this program has contributed to the global health ethics, research, and partnership literature in the backdrop of decolonization and improving equity in global health.

#### -Additional Global Health Research Areas Continued

- I. Virtual Global Health Activities (VGHA) Survey Project (2022-2023): cross-sectional survey study examining access, interest and equity considerations for VGHAs during the pandemic
- 2. Virtual Global Health Activities (VGHA) Qualitative Analysis Project (2022-2024): mixed-methods analysis of income-based disparities in perceived benefits and challenges of VGHAs during the pandemic.

Global health partnership practice research (PI Lisa Umphrey): Many structural and power imbalances inherent to colonialism are both subtly and overtly in play within global health collaborations, and consequently a recent theme of scholarly work and writing in this area has been on ethical global health partnership practices and the decolonization of global health movement. Work in this area has contributed to an ongoing ethics and best practice discussion for global health engagement.

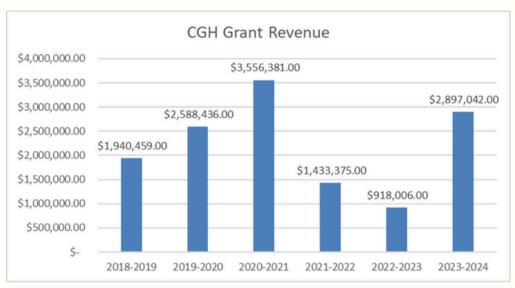
- 1. "Exploring Bidirectionality in Global Health Partnerships for US Pediatric Residency Programs" (2022-present): project with the Global Health Learning Community (GHLC), Association of Pediatric Program Directors (APPD); cross-sectional qualitative survey study examining bidirectional activities and equity with global health partnerships in US-training institutions; 1 oral presentation, 1 publication under review.
- 2. Global Health Partnership Assessment and Collaboration Tool (Glo-PACT) Project (2023-present): project with the Global Health Learning Community (GHLC), Association of Pediatric Program Directors (APPD); project to design, implement, and examine (via mixed-methods multi-institutional study) a novel tool to improve communication, academic planning, and equity within global health partnerships, project ongoing; I workshop presentation

**Decolonization of global health research:** research and scholarship specifically examining decolonization topics.

- I. Global Health Education for Health Equity, Anti-Racism, and Decolonization (GHEARD) curriculum: a multisite effectiveness-implementation study in U.S. medical education programs, 2023-present: to examine the effectiveness I) of the GHEARD curriculum on U.S. medical learners and 2) of the initial Implementation Strategies across various U.S. global health programs.
- 2. Examining academic equity in pediatric global health: a mixed methods study, Association of Pediatric Program Directors (APPD), 2024-present: Principle Investigator (2023-present): To evaluate access and barriers to participation in US academic events, opportunities to present or publish global health work, and networking with academicians among pediatricians from low- and middle-income countries.

#### **Grants**

## Funding Sources Fiscal Year 2024



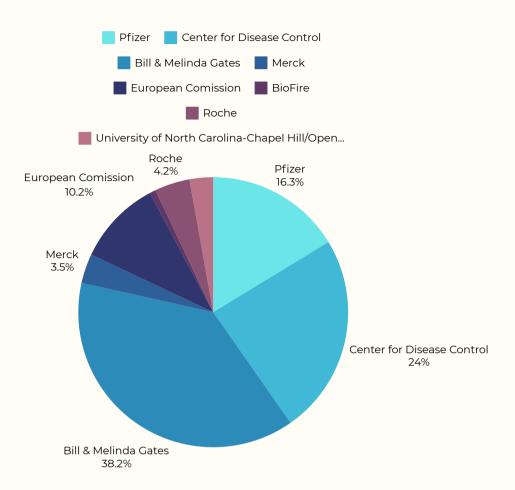
FY 2024 Grants at the Center for Global Health and in collaboration with other Department/Centers at the University of Colorado Anschutz Medical Campus

The Center for Global Health welcomed a diverse group of Sponsored Project funders in Fiscal Year 2024. Centers for Disease Control made up the majority of federal and public funding, with contributions also coming from partnerships with the University of North Carolina-Chapel Hill and international funding from the European Commission. The Bill and Melinda Gates Foundation served as our largest nongovernmental organization funder, supporting multiple research grants within the Center. Rounding out the remainder of our Sponsored Project support was our private sector collaborations with Pfizer, Merck, Roche, and BioFire. These projects included dengue research, human clinical trials, and serosurveillance testing.

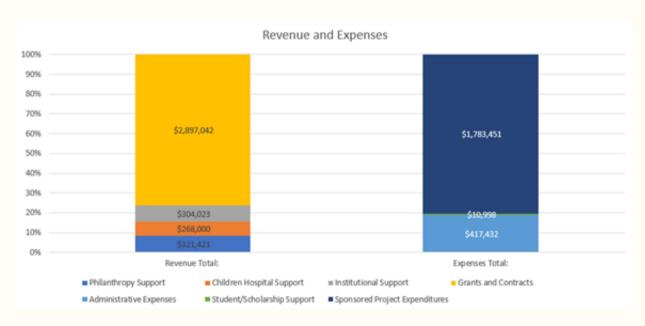
### **MOU** Agreements

In partnership with the Office of International Affairs, the Center for Global Health has 11 unique MOUs across 6 different countries. These MOUs set up collaborations with partners to better spread CGH's mission worldwide. In addition to the countries where we have MOU agreements, we also include the countries with longstanding research collaborations.

## Funding Sources Fiscal Year 2024 Continued



### Financials:



FY 2024 Sponsored Project revenue was up this year, seeing a total revenue generated of \$2,897,042. This was in concurrence of keeping expenses lower this Fiscal Year with expenses coming in at \$1,783,451.

## **Travel Support - Deployment to FSIG**

The CGH acts as a liaison to facilitate, conduct, and guide residents, students, and other professionals from the School of Medicine, School of

Dental, School of Pharmacy, College of Nursing, other Allied Health Schools, and Children's Colorado to have an international experience. As part of this process, CGH takes measures to ensure smooth and incident free travel to Guatemala. The Center will be involved and support travel arrangements for all travelers going to Trifinio. Making sure travelers are prepared with important documentation, updated vaccinations, water and food guidelines, communication plan, familiarity of culture, medical/health, and other factors from pre-departure to post travel. We appreciate the service and guidance provided by the Office of International Affairs- Global Education, FSIG (Fundacion Integral para la Salud de los Guatemaltecos), and the International SOS to make sure we have a comprehensive plan. Every year, we create an Emer-

gency Action Plan specifically designed for Trifinio, Guatemala where travelers stay. In addition to this step, we also submit a yearly travel appeal on behalf of everyone traveling. This incorporates common health, security, and general risks associated with their stay and travel in Guatemala, which is assessed and approved by International SOS. This process allows for a convenient and faster process of approval and planning of trips to Guatemala.

## Staff



Use the following QR code for a full list of staff and faculty members.

## Center for Global Health - Senior Investigators

The Center for Global Health Senior Investigators (SIs) play a crucial role in advancing our educational research and development. Our SIs are experienced professionals that have led various projects aimed at improving teaching, curriculum design, and student outcomes. With their extensive backgrounds in education, health, medicine, science, or related fields, our SIs conduct studies, analyze data and findings for all educators. The SIs ensure the Center for Global Health remains at the forefront of educational excellence and reform. Please see below a list of SIs within the Center.

# Center for Global Health - Senior Investigators Continued



Madiha Abdel-Maksoud, MD, PhD



Lisa L. Abuogi, MD, MSc



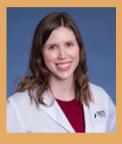
Edwin Asturias, MD



Corey Bills, MD, MPH



Kelly Bogaert, MD



Lauren Bull, MD, FAAFP



Thomas Campbell, MD



Megan Cherewick, PhD, MPH



Kylie Culp, MD



Julia Dixon, MD



Gretchen Domek, MD, MPhil



Cameron Gibson, MD FACS



Blair Gifford, PhD



Karen Hampanda, PhD MPH



Thomas Jaenisch, MD, PhD

# Center for Global Health - Senior Investigators Continued



Melisa Jaenisch, MPH



Malik Y. Kahook, MD



Molly M. Lamb, PhD



Jessica Landry, MD



Claudia Luna-Asturias, MSW, SWC



Sandra Luna-Fineman, MD



Nee-Kofi Mould-Millman, MD, PhD, MSCS



Leana May Moser, DO, MPH, MSPH



Susan Niermeyer, MD, MPH



Daniel Olson, MD, PhD



Daniel Pastula, MD, MHS



Allison Wolfe, MD



Lisa Umphrey, MD



Tien Vu, MD



Joe Wathen, MD

## **Senior Investigators Continued**

For a full list and description of what each senior investigator has done this year please scan the QR code provided below. There you will find their main appointment, collaboration with the CGH, and a summary of the projects FY 2024.



### **Executive Committee Members**

Adams, Jimi, PhD, MA, Associate Professor of Health and Behavioral Science and Director, Undergraduate Program in Public Health, University of Colorado, Denver Campus

Bradley, Cathy, PhD, MPA, Dean of the University Colorado School of Public Health, Anschutz Medical Campus

Calvello-Hynes, Emilie, MD, MPH, Associate Professor of Emergency Medicine, Lead of Global Emergency Care Initiative, School of Medicine, University of Colorado Anschutz Medical Campus

Campbell, Thomas, MD, Professor of Infectious Diseases, Associate Dean, School of Medicine, Departments of Internal Medicine, Division of Infectious Disease and Microbiology at the School of Medicine, University of Colorado Anschutz Medical Campus

Chopra, Vineet, MD, Professor and Robert W. Schrier Chair of Medicine, Department of Medicine, School of Medicine, University of Colorado Anschutz Medical Campus

Daniels, Stephen, MD, PhD, Professor and Chair, Department of Pediatrics at the University of Colorado School of Medicine, Anschutz Medical Campus and Pediatrician in-Chief L Joseph Butterfield Chair in Pediatrics at Children's Hospital Colorado

Gifford, Blair, PhD, Professor of International Health Management in the Business School, University of Colorado Denver and the Colorado School of Public Health, University of Colorado Anschutz Medical Campus

Hausmann, Jena, MHA, President and Chief Executive Officer, Children's Hospital Colorado

Holguin, Fernando, MD, Director, Asthma Program at the Center for Lungs and Breathing and Executive Director, Latino Research and Policy Center at the Colorado School of Public Health, University of Colorado Anschutz Medical Campus

## **Executive Committee Members Continued**

Jones, Alana, Associate Vice Chancellor, Office of International Affairs, University of Colorado Denver and Anschutz Medical Campus

Sampson, John, MD, PhD, MHSc, MBA, Richard D. Krugman Endowed Chair, Vice Chancellor for Health Affairs, and the Dean of the University of Colorado School of Medicine, University of Colorado Anschutz Medical Campus

Saseen, Joseph, PharmD, Associate Dean for Clinical Affairs and Professor at the University of Colorado Skaggs School of Pharmacy and Pharmaceutical Sciences, Anschutz Medical Campus

Mould-Millman, Nee-Kofi, MD, Associate Professor of Emergency Medicine, School of Medicine, University of Colorado Anschutz Medical Campus

Muramoto, Myra, MD, MPH, FAAFP, Woodward-Chisholm Visiting Professor and Chair, Department of Medicine, University of Colorado Anschutz Medical Campus

Prag, Pam, CNM, MS, MPH, Certified Nurse Midwife, College of Nursing, Global Health Program Director, University of Colorado Anschutz Medical Campus

Newman, Lee, MD, MA, FCCP, FACOEM, Distinguished Professor of Environmental and Occupational Health and Epidemiology, Director of the Center for Health, Work, and Environment, Colorado Anschutz Medical Campus.

Simoes, Eric, MBBS, DCH, MD, Professor of Pediatrics, Section of Pediatric Infectious Disease, School of Medicine and Professor of Epidemiology at the Colorado School of Public Health, University of Colorado Anschutz Medical Campus

Wynia, Matthew, MD, MPH, FACP, Director, Center for Bioethics and Humanities, University of Colorado, Anschutz Medical Campus

Zaslow, Zach, Vice President, Advocacy and Community Health, Children's Hospital Colorado

## Supporters, Partners, Publications

#### Partners

Department of Pediatrics, School of Medicine, College of Nursing, World Health Organization (WHO), Pan American Health Organization (PAHO), Center for Health, Work & Environmental at the Colorado School of Public Health, Colorado School of Public University, University of Northern Colorado, Denver Health, Colorado School of Public Health

## Supporters, Partners, Publications Continued

#### **Supporters**

- -Chancellor for the University of Colorado Anschutz Medical Campus
- -University of Colorado Office of the Provost
- -Academic and Student Affairs
- -Colorado School of Public Health
- -School of Medicine
- -Skaggs School of Pharmacy and Pharmaceutical Sciences
- -College of Nursing
- -School of Dental Medicine
- -Children's Hospital Colorado
- -Aurora Fitzsimons Rotary Club
- -Castle Pines Rotary Club
- -Denver Rotary Club
- -Denver Northeast Rotary Club
- -Denver Metro South Rotary Club
- -Evergreen Rotary Club
- -Foundation of Mountain Foothills Rotary Club
- -Northglenn-Thornton Rotary Club
- -Southwest Rotary Club
- -Global Chest Initiative Group
- -Peter Durst
- -Dr. Calvin Wilson

#### **Publications**

The Center for Global Health
Faculty members have made major
contributions to the fields as
evidenced by an impressive list of
119 publications and 58
presentations completed between
July 2023 – June 2024.





## Thank You



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Center for Global Health



Events