



INDIANA UNIVERSITY
CENTER FOR GLOBAL HEALTH
ACTIVITY REPORT 2018-2020

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Reporting on global health activities at Indiana University from July 1, 2018-June 30, 2020

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EDUCATION: 2018-2020 Global Health Programs



Indiana University hosted 46 global health education opportunities around the world with more than 750 participants.

DIRECTOR'S MESSAGE 2020

For faculty, staff and trainees involved in any aspect of global health, the past year was truly unlike any other. The global coronavirus pandemic simultaneously interrupted existing in-person international collaborations while presenting new care, training and research challenges and opportunities to the world.

On February 1, 2020, I became the director of the IU Center for Global Health and executive director of the AMPATH Consortium of twelve North American academic health centers working in partnership with our colleagues at Moi Teaching and Referral Hospital and Moi University in Kenya. I am honored to accept this role from Bob Einterz, my friend and mentor.

In times of crisis, partnerships built on mutual respect can share crucial information that also provides mutual benefit. As the pandemic surged and abated across the globe, IU physicians and investigators collaborated with their colleagues throughout the university and the world to contribute to the global repository of knowledge.

IU's commitment to addressing health inequities extends not just to other countries, but also to low-resource communities in our own state and nation. We are committed to using the lessons we learn through our global health partnerships to improve health everywhere.

While the years ahead will certainly continue to challenge all of us and our global partners, we are grateful for the commitment of the IU community to work in true collaboration with our colleagues around the world.

No single document can capture the breadth of the many global health collaborations in which our colleagues and trainees engage, but this biennial activity report provides a foundation for exploring opportunities and new partnerships in education, care and research. The IU Center for Global Health website serves as a further resource to share ongoing and updated activities. I urge you to share your activities addressing health inequities at home or abroad with us for inclusion.

I look forward to working with you as we move closer to our goal of good health for all.



Adrian Gardner, MD, MPH
Director, IU Center for Global Health



MISSION

The IU Center for Global Health develops mutually beneficial partnerships across disciplines, schools and countries for the primary purpose of creating and implementing sustainable programs that improve health and human flourishing in underserved areas worldwide, and preparing a critical mass of health education and health research experts in these communities to become the next generation of local, national and global health leaders.

DIRECTOR'S MESSAGE 2019

Dear Friends,

It has been my pleasure to lead the Indiana University (IU) Center for Global Health since it was established in 2010. Our focus has been to develop academic partnerships across disciplines, schools and countries that improve health and achieve health equity for all people worldwide. Our university's commitment to global health is unique for many reasons including:

- Long-term commitments to our global partners based in mutual benefit, mutual trust and mutual respect.
- A Global Health Residency Track that is one of only a few in the country that is interdisciplinary, allowing residents to not only grow from their own experiences, but also from their colleagues in other disciplines.
- Research initiatives that foster collaboration and bidirectional sharing of innovations that can improve health, not only in low- and middle-income countries, but in Indiana as well.



As we embark on our second decade as a university center, we do so with incoming new leadership and a renewed commitment to nurture and grow our relationships around the university and the world to reach our goal of making IU a preeminent academic leader in global health.

The IU Center for Global Health continually seeks to promote the outstanding work of faculty, staff and leaders across the many campuses and schools of Indiana University. We appreciate the efforts of our IU colleagues to share their global health activities with us. Our new center website and expanded social media presence provide opportunities to share this work with an even wider audience beyond our university's gates.

We hope you will take advantage of these opportunities and we welcome your involvement, your expertise and your opinions as we strive to share the global health work of Indiana University.

Yours in health,

A handwritten signature in black ink, appearing to read 'Bob'.

Robert M. Einterz, MD
Director (2010-2020)

PROGRAM SPOTLIGHT

Support for Racial Equity

At the IU Center for Global Health, our mission is to improve health and human flourishing in underserved areas worldwide.

This does not and cannot mean that we focus only on inequities between high and low-income countries, but also on the inequities that exist in our own country, the state of Indiana and our own neighborhoods. Too often, where an individual is born or their ethnic heritage determines their opportunities, health status and life expectancy. Social, economic and health equity is a key value of our Center, not only as we look outward to the global community, but also as we look inward to our own country, state and community.

Over the past few months we have seen COVID-19 disproportionately ravage communities of color. Police brutality and systemic racism resulted in the deaths of George Floyd, Breonna Taylor, Rayshard Brooks and other Black men and women. Additionally, racial injustice contributes to higher infant and maternal mortality rates, higher rates of diabetes and hypertension, increased danger for LGBTQ people, more deaths from violence and other health inequities for Black people in America.

We support the initiatives presented by Indiana University and the IU School of Medicine to be more inclusive and aspire to use our unique expertise and experience to contribute to the needed societal evolution underway.

In our global partnerships, we focus on improving the social factors that impact health such as employment, education, access to healthy food and safe transportation.

We must improve these social determinants of health in our own communities to make them stronger and healthier.

In our research and clinical activities we emphasize the need for reciprocal innovations, or taking new and better ways of improving health in underserved communities and sharing them between high and low-income countries for continuous local adaptation and improvement. For example, the WeCare program to reduce infant mortality, especially for our highest risk Black infants, in Marion County successfully builds on the community health worker model used in Kenya.

We must find more ways to adapt these innovations from our global partners to improve Black lives here.

Our partners in Kenya and around the world reflect the diversity of humanity.

We must actively bring new voices and perspectives to our work by ensuring that our Center staff, faculty and trainees reflect this beautiful diversity as well.

We know that successful partnerships require authentic relationships, mutual respect and personal and cultural humility.

We are here and know our neighbors and community members are hurting. We are listening and learning so we can do better.

PROGRAM SPOTLIGHT

Surgeon General Visit

On November 20, 2019, Vice Admiral Jerome M. Adams, MD, MPH, U.S. Surgeon General, joined deans, students and leaders from throughout Indiana University to discuss a wide range of health topics and the ways that their work in global health can improve U.S. health.

Dr. Adams received his medical degree in 2002 from [IU School of Medicine](#) and previously served as Indiana State Health Commissioner.

Dr. Adams began the discussion, hosted by the [IU Center for Global Health](#), by discussing the impact of social determinants of health such as transportation, housing and a safe environment. “Health is more than healthcare. The statistics suggest that only about 15 percent of health is impacted by your access to traditional healthcare,” he said. For the third year in a row, life-expectancy in the US is going down despite spending more than any other country on healthcare, continued Dr. Adams.

He noted that there are lessons to be learned from many other countries that spend less and have better health outcomes because they are investing in other parts of health that the U.S. healthcare system does not. “There is a lot we can learn by comparing and contrasting global health and investments between the U.S. and other countries,” said Dr. Adams.

Dr. Adams said that he was passionate about global health. “There is no disease in this country right now that is more than a day’s plane ride away from us. We really need to understand that global health really is U.S. health,” he added.



Dr. Adams led a multi-disciplinary group discussion.



Vice Admiral Jerome Adams, MD, MPH, with deans and students from throughout the university.

[Robert Einterz, MD](#), director of the IU Center for Global Health, said that the center’s mission is to “awaken the inherent power of academic health centers through partnership and focusing that power on health disparities particularly in low-resource, low-income communities, be it outside our borders or inside our borders.” Einterz said that working both locally and globally provides unique benefits. “I am convinced that there a synergy that happens that makes this a stronger university, a stronger health system and a stronger community,” he continued.

PROGRAM SPOTLIGHT

Surgeon General Visit (cont.)

Research and education leaders from the IU Center for Global Health presented the concept of reciprocal innovation and gave examples of the ways that global health innovations are working to improve health in Indiana. [Kara Wools-Kaloustian, MD](#), director of research for the Center, explained that reciprocal innovation is an Indiana-based model built on the concept of reverse innovation from industry. She said the concept is based on the belief that “innovation should not be going in one direction or another, it should be a continuous team-based process.”

Wools-Kaloustian said that the concept was utilized in response to the HIV epidemic in Indiana when Adams was Indiana Health Commissioner. “You asked us to be able to treat patients in a small town in southern Indiana with no resources and we said, ‘We can do this, we’ve done this for a decade in Kenya,’” said Wools-Kaloustian, who also serves as the North American director of research for the IU-led [AMPATH Consortium](#). Adams said that Scott County, Indiana, is now a national example with one of the highest viral suppression rates in the country.

[Debra K. Litzelman, MA, MD, MACP](#), director of education for the Center, shared another example of using successful global health strategies in the [WeCare](#) program to reduced infant mortality rates in the 13 highest risk zip codes in central Indiana.

“We are taking the reciprocal innovation model of things we’ve learned in Kenya to our lowest-resource, highest-need areas in central Indiana. We have hired, deployed and trained community health workers, something we have been doing in Kenya for 30 years,” Litzelman continued. “We have mobilized the community health workers with laptops, iPhones and mobile offices and deployed them out and about in the community to deliver community-based interventions where they are needed most,” she said. Mobile health is another important component of the program.

Litzelman shared that in the first few years of the WeCare program that initial results are showing improvements in both social and mental health. Smoking and substance use are down and breastfeeding and safe sleep practices are increasing among families in the program. Infant mortality rates and low birthweight are both down in initial results. The IU Center for Global Health is working to solidify the reciprocal innovation concept, operationalize it and use it to solve other health problems in Indiana and in the United States.

Dr. Adams challenged those gathered to continue to focus on implementation science and equity. “How can we take best practices from a global perspective? The more that we can show that both experimenting in and investing in global health has an impact on health here in the United States and we are doing both, not either or, the better off we will be,” he said.



Dr. Adams, IU School of Medicine Dean Hess and students from the IU School of Medicine and IUPUI.

EDUCATION

School of Medicine

For more than three decades, Indiana University School of Medicine and Moi University School of Medicine in Kenya have partnered together to create expansive opportunities for global health education through [Academic Model Providing Access to Healthcare \(AMPATH\)](#).

Long-term and robust partnerships have also formed in El Salvador through the [ENLACE program](#) with alternative spring break programs, summer immersions and an elective, and in many other countries around the world to provide training opportunities for IU medical students and residents.

Kenya: Two-Month Medical Rotation - AMPATH

Twenty-four fourth-year medical students and 24 medical residents spent two months in Eldoret, Kenya, in partnership with AMPATH in AY 2018-19. An additional 13 residents and 23 students participated in AY 19-20, although some rotations were cut short due to COVID-19. Students live alongside Kenyan medical students working in wards (one month in general medicine, one month in reproductive health, pediatrics or surgery) and outpatient clinics, and participate in AMPATH-related and local activities, including the Tumaini Innovation Center for street-connected youth and the Rafiki Adolescent Center. Students attend lectures and discussions on ethical and global health issues facilitated by permanent IU School of Medicine faculty in Kenya.

US: Kenyan Student & Registrar Exchange

Since the inception of AMPATH, 360 Kenyan trainees from Moi University have rotated at AMPATH Consortium institutions. In the summer of 2019, four Kenyan medical students and two dental students completed rotations at IU during the six-week student exchange program.

In addition, three Kenyan registrars (residents) spent three months on rotations at IU in 2019 and one in early 2020. Thirty-seven registrars have rotated at North American AMPATH partners. Several IU faculty members collaborated with other AMPATH leaders to publish an [article](#) about the commitment to ethical and equitable rotations entitled, "Developing Ethical and Sustainable Global Health Educational Exchanges for Clinical Trainees: Implementation and Lessons Learned from the 30-Year Academic Model Providing Access to Healthcare (AMPATH) Partnership" published in the *Annals of Global Health*.



Kenyan medical students and registrars train at Indiana University's academic health centers.

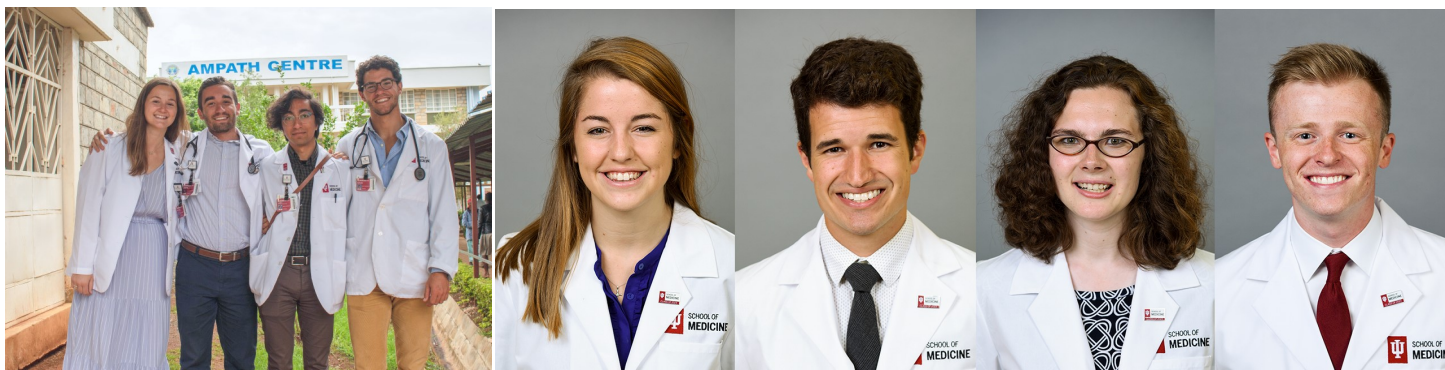
EDUCATION

School of Medicine

Kenya: Slemenda Scholars Program - AMPATH

In the summer of 2019, [four rising second-year medical students](#) traveled to Kenya as part of the [Slemenda Scholars](#) program. [Selected scholars for the summer of 2020](#) were unable to travel to Kenya and completed global health projects in the US, including the creation of a website for [disability resources](#) in Kenya.

The program was established in honor of Dr. Charlie Slemenda, an IU School of Medicine epidemiologist, who had a passion for global health. The program sends IU medical students to Eldoret to experience AMPATH by participating in rounds, collaborating on field projects and working alongside Moi University medical students.



Four Slemenda Scholars completed a rotation in Kenya in 2019. Selected 2020 students completed domestic global health projects.

Interdepartmental Global Health Residency Track

The IU Center for Global Health's [Interdisciplinary Global Health Residency Track](#) added [25 residents](#) in AY 18-19 and [19 new residents](#) in AY 19-20, including the first radiation oncology resident. The total number of participants in the track is 71 including residents specializing in family medicine, med-peds, surgery, pediatrics, OBGYN, internal medicine, emergency medicine, neurology, and physical medicine and rehabilitation. Residents meet with a global health mentor, prepare a scholarly project, attend quarterly half-day conferences, and complete an international or local-global experience. [Jenny Baenziger, MD](#), assistant director of education for the IU Center for Global Health, coordinates the

Global Health Residency Track. [Sixteen residents graduated](#) from the track in the spring of 2020 bringing the total number of residents who have completed the track since its inception to 78.



Global Health residents meet quarterly.

Additionally, assistant professor of pediatrics [Megan McHenry, MD](#), and colleagues from IU, University of Virginia and Mount Sinai had their paper "[Leveraging Economies of Scale via Collaborative Interdisciplinary Global Health Tracks \(CIGHTs\): Lessons from Three Programs](#)" published by Academic Medicine, the journal of the Association of American Medical Colleges.

EDUCATION

School of Medicine, continued

El Salvador: Alternative Spring Break - ENLACE

Every year during the IU School of Medicine's spring break week, a group of first-year medical students spend one week working on a global health infrastructure project in El Salvador with the [ENLACE Project](#). The ENLACE Alternative Spring Break (ASB) program seeks to heighten awareness of global public health issues, wrestle with the ethics of global volunteerism, hone a more complex understanding of global health infrastructure development and increase cultural humility, thereby encouraging a lifelong commitment to wide-ranging social advocacy and engagement.

During an amazing week in El Salvador in AY 18-19, nine medical students and one staff member got down and dirty constructing an addition to a rural health clinic. New friendships formed, with others on the trip and with El Salvadorans that students work and live with during the week. Participants come to know the world and themselves more deeply as they learn about El Salvador's rich culture and complex history. Due to COVID-19, the 2020 ASB trip did not take place and the 2021 trip was also cancelled.



The ENLACE programs provide opportunities for IU School of Medicine students to learn in El Salvador.

El Salvador: Summer Language & Cultural Immersion - ENLACE

Between Phase 1 Year 1 and Phase 1 Year 2, the ENLACE Summer Language & Cultural Immersion offers medical students an intensive month-long immersion experience in El Salvador. In 2019, three participants and one staff member discovered the past and present of El Salvador through an intensive 2-day orientation; participated in small-group classes focused on conversational Spanish; lived with host families; shadowed a variety of health care providers in public hospitals and community clinics; participated in home health visits with lay midwives; studied the health care delivery system in El Salvador; increased cultural humility; and analyzed their experience against the backdrop of the six core principles of ethics in global health volunteerism. The Summer Language & Cultural Immersion is offered in June. The 2021 Immersion Program is contingent on an available COVID-19 vaccine.

EDUCATION

School of Medicine, continued

ENLACE Global Health Elective—El Salvador (93ZH900)

The [ENLACE Global Health Elective--El Salvador \(93ZH900\)](#)

immerses Phase 3 medical students in a four-week international global health experience in a developing country. In AY 18-19, there were 15 medical students and two IU School of Medicine faculty who participated. Sixteen students participated in AY 19-20. Participants undergo an introduction to global health issues and policies; begin to think critically about ethics in global health volunteerism; examine global health challenges and compare and contrast the systematic, policy and experiential differences between health care in the US and El Salvador. Participants hone Spanish language skills in daily classes, work under the supervision of El Salvadoran health care providers and live with a host family. Clinical work occurs at community-based health care facilities, non-governmental public health organizations and health promoter organizations.



Trainees work with a variety of local organizations.

Global Health Elective in Ghana (71ZH900)

The [Global Health Elective in Ghana \(71ZH900\)](#) is a four-week international health experience designed to immerse students in a developing country to gain a more direct understanding of the Ghanaian culture including language, public health issues and Ghanaian spiritual beliefs intersecting with health and illness. Students receive training by TMS Global (partnering institution) and Ghanaian professionals on language, culture and medical care as it relates to the patient-doctor relationship and medical decision-making. Students think critically about global health challenges and practices while developing basic Twi language skills and working side-by-side with host country health care providers located at the Ankaase Hospital in Ankaase, Ghana. Clinical work occurs at community, mission-based health care facilities and governmental based public health organizations. Two students completed the new elective in AY 19-20.

Domestic Local-Global Elective

The [Domestic Global Health Elective \(93YF730\)](#) is an opportunity to participate as an advocate in your community. This is a 4-week local experience in Indianapolis with focus on cultural competencies in a global health experience designed to immerse students in direct understanding of the barriers that foreign-born patients face in the local medical system as well as increase the medical knowledge related with travel and tropical medicine. During this course, students have the opportunity to work in clinics that serve multicultural populations, recent immigrants, refugees, as well as observe a travel medicine clinic. They also have the opportunity to participate in some of the local community organizations that have direct contact with the immigrant and refugee population. The community partner is IU School of Medicine Student Outreach Clinic.

Students also participate in health examinations with a federal designated Immigration Physician learning the requirements of a complete Immigration Health examination. The students will be required to complete the series of three modules on A Physician's Practical Guide to culturally-competent care, a free series of on-line modules endorsed by U.S. Department of Health and Human Services. Students spend two full days working with physicians in clinics that serve patients with different backgrounds (Africa, Asia, Latin America). Four medical students and four faculty members from family medicine and pediatrics participated in AY 18-19. Four students also participated in AY 19-20.

EDUCATION

School of Medicine, continued

Global Health Student Interest Group (SIG)

The [Global Health Student Interest Group](#) strives to create opportunities to inspire, encourage and educate medical students interested in global medical work. The group works on the belief that the more globally-minded students become, the better physicians they can be. While not everyone at IU School of Medicine will do future global health work, exploring it is beneficial for all students.

A majority of SIG programming is through speakers and talks on a wide range of topics. For example, [Megan McHenry, MD](#), shared unique challenges and benefits of global health research with practical points about how to get involved. An Exodus Refugee Immigration, Inc. representative shared about the composition of the refugee population in Indiana and specific considerations for medically caring for them. [Wayne Ellis, MD](#), shared inspiring stories of his time in Ethiopia and other countries, and described how he has developed his career to allow him to spend six months of the year abroad and six months in Indiana. Student speakers share about global health books they are reading. The group has also has joint talks with the Global Health Residency Track on the uniqueness and importance of AMPATH.



Dr. McHenry presents to the global health SIG from IU House in Kenya.

The SIG also tries to connect students with resources via a watch and read list shared every year as well as networking and mentoring. The group maintains a growing list of global health faculty from a variety of fields and backgrounds that are willing to be connected with students for mentoring.

7 Elements

[7 Elements](#) is a student organization that provides a hands-on learning experience for IU School of Medicine students. The organization's focus is on the seven "Elements of Human Securities": economic, food, health, environmental, personal, community and political. In December 2018, twelve School of Medicine students traveled to the Dominican Republic to participate in the service trip. In July 2019, ten students, one advisor and a student facilitator also travelled to Flint, Michigan. During each week-long trip, students worked with members of the local population to improve their status in relation to the aforementioned seven elements.

American Samoa: Lyndon B. Johnson Tropical Medical Center

Every year, [Jon Hathaway, MD, PhD, MS](#), associate professor of Clinical Obstetrics & Gynecology, invites medical students and residents to join him at the LBJ Tropical Medical Center for a week to provide gynecology surgical services to those in the local community who cannot afford to travel to Hawaii for medical care. Two residents joined Dr. Hathaway in Pago Pago in 2019.

EDUCATION

Global Health Scholars Day 2019

The first [Global Health Scholars Day](#) was held in May 2019 to showcase research from members of the IU community interested in global health. The event featured poster presentations and the opportunity for those interested in global health throughout the university to network and share information. The winning posters for 2019 were:

Jason Hoard, IU School of Medicine

"Bullous Impetigo in the Setting of Antibiotic Shortage in El Salvador: A Case Report"

Mentor: Ruben Hernandez, MD

Ryan Smith, IU School of Medicine

"Chamas for Change: A Community-Based Strategy for Pregnancy, Infancy, and Women Empowerment"

Mentor: Laura Ruhl, MD

Nora Gilliam, IUPUI undergraduate

"Distribution of ApoE polymorphisms in Ugandan children with severe malaria"

Mentor: Chandy John, MD



Dr. Debra Litzelman and winners from the 2019 Global Health Scholars Day poster contest.

Global Health Scholars Day 2020

In May 2020, [Global Health Scholars Day](#) was held virtually with dozens of faculty members, staff and trainees sharing research presentations via Zoom. A photo contest was also added to the event. The following presentations and posters were selected by a panel of judges:

Sean Buehler, BSPH, IU School of Medicine

"Starting at the Roots: Using Human-Centered Design to Develop a Sex and Pregnancy Education Curriculum for Adolescents in Kenya"



Winners of the 2020 Global Health Day poster presentation competition.

Corissa Dionisio, MD, IU School of Medicine

"Psychiatrists On the Front Lines of the U.S.-Mexico Border Immigration Crisis: Proving Forensic Evaluations and Establishing Asylum Clinics at Academic Institutions"

Allison Lyle, MD, MA, IU School of Medicine

"Delayed Diagnosis: Progressively Worsening Cough in a Healthy Adolescent"

Top photos selected by judges:

1st place: "Trek to Rainbow Mountain, Peru" --Karen Chahal, MD

2nd place: "Comuna 13" --Eric Raynal, MD

3rd place: "Progress" --Corissa Dionisio, MD

Honorable Mention: "The Future" --Anna Pendrey, MD

EDUCATION

School of Social Work

South Korea: Health and Behavioral Health in a Global Context: Interprofessional Collaborative Practice

Given the globalization of health care and the importance of interprofessional collaborative practices in health care, it is important for future health care professionals to expand their understanding and knowledge about health care programs beyond the U.S. In this course, students explore and experience health and behavioral health care programs and interprofessional collaborative practices in diverse settings in South Korea. In AY 18-19, three graduate students and nine undergraduate students experienced cultural enrichment through on-site course, agency visits, and interactions with Korean students.

Media School

Reporting HIV/AIDS in Africa

Professor James Kelly takes a dozen Media School students on an annual reporting trip as part of his class “Reporting HIV/AIDS in Africa.” The last trip in the summer of 2018 included month-long newspaper internships in [Uganda](#). Although a sabbatical spent in Eldoret and the COVID-19 pandemic have precluded travel since then, Dr. Kelly hopes the class will return to reporting about the AMPATH partnership in Eldoret, Kenya, in 2022.



Media School students traveled to Uganda to report on stories related to HIV/AIDS in 2018.

School of Optometry

Thailand: 20-year Relationship

Beginning in 1999, the [IU School of Optometry](#) partnered with Rhamkamhaeng University in Bangkok to establish an optometry program. At that time, optometry was not recognized as a profession in Thailand. IU faculty created a curriculum and faculty members travelled to Thailand to help teach. Two decades later, optometry is now recognized as a legal profession in Thailand and the standard curriculum is based on the original model. The school now has 13 full-time faculty members and the 2019 class included 64 students. The program has about 300 graduates and has inspired two additional optometry programs in the country.

EDUCATION

School of Dentistry

In December 2017, the IU School of Dentistry updated its mission statement to reflect its growing commitment to global initiatives and “to advance the oral and systemic health of the people of the State of Indiana and globally.” Through its [Global Service Learning](#) program, hundreds of dental students have participated in clinical work.

Global Service Learning Programs

Thirty-four dental students and two hygiene students traveled abroad during AY18-19 on International Service Learning programs. In addition, 25 students and two hygiene students participated in global experiences at Indian reservations in the U.S.

The IU School of Dentistry boasts “one of the most globally-engaged” programs in the country, and continues to find new areas to engage.

Dentistry Global Service Learning Program Participants AY 18-19:

Brazil—4

Ecuador—9

(+2 dental hygiene students and 2 pediatric residents)

Guatemala—8

Mexico—5

UK: Dentistry at Newcastle University—8

Dentistry Global Service Learning Program Participants AY 19-20:

Guatemala—7

The IU School of Dentistry also welcomes international students to Indianapolis. The school hosts two dental students each year from Moi University School of Dentistry in Eldoret, Kenya. Additionally, the UK: Dentistry at Newcastle University program allows students from both universities to visit one another to compare educational and treatment techniques. In a new program, IU School of Dentistry hosted 15 students from King Khalid University dental school in Saudi Arabia for five weeks during July/August 2019.



IU School of Dentistry students and faculty set up a dental clinic.

EDUCATION

School of Nursing

Strategic international partnerships with the [IU School of Nursing](#) continued to provide students and faculty opportunities to learn and contribute globally. The school has partnerships with Moi University in Kenya, John F. Kennedy Medical Center at the University of Liberia, Sun Yat Sen University in China and Kaohsiung Medical University and National Defense Medical College in Taiwan. Additionally, global–local opportunities exist for students.

Leadership in Healthcare Delivery and Policy

This undergraduate nursing class uses an unfolding case study focused on the complex care of a Burmese male. The students complete the questions on the unfolding case study and come to class prepared to engage in the debriefing. This is a collaborative effort with Franciscan Health educators, clinical nurse specialists, a case manager, charge nurses, a Burmese nurse and a Burmese physician. Guest speakers from Exodus Refugee Immigration, Inc. speak to the students; clarify the difference between a refugee and an immigrant; and outline the process of requesting refugee status in the U.S. and the governmental supports provided during the transition following resettlement. Content includes information about where they have come from - including camp life. The intent is to raise student awareness of the situation from which the refugees flee, the life in the camp, and the behaviors, values and healthcare practices of the Burmese Chin culture. Eighty undergraduates participate per semester during their senior year.

Managing Health and Illness Across Care Environments

Students study a focused clinical area of concern for nursing; explore the ways in which culture, health disparity, transitions between care environments and health policy impact care for an aggregate population of specialty. Immersed in a care environment, students gain relevant clinical knowledge as well as understanding of the aggregate health concerns. Students have opportunities for various clinical and service learning experiences. One such example is through the inter-professional Student Outreach Clinic. Students gain exposure with patients from diverse racial, ethnic, social, economic, and refugee or immigrant status. Eighty undergraduate students participate per semester during their senior year.

Spain, Contemporary Global Health Issues

This program provides an opportunity for 10 undergraduate nursing students to learn about a healthcare system and nursing education and practice at the University of Navarra in Pamplona, Spain. The program's mission is to increase nursing students' awareness of healthcare in another country in order to widen their global perspective of how nursing and healthcare is organized in another culture. The program mission is met through mini-lectures, group discussions, conversations with faculty and students from the University of Navarra and other participating institutions, and tours of private and public healthcare facilities in Navarra. The program includes cultural excursions to introduce important aspects of the Spanish way of life.

Study Abroad Sun Yat Sen University School of Nursing

This [program](#) hosts undergraduate students from Sun Yat Sen University School of Nursing and enhances academic, social and cultural experiential learning at the School of Nursing's Indianapolis and Bloomington campuses. Four students visited in January 2019.



The nursing students from Sun Yat Sen attended an Indiana Fever game and met Tamika Catchings.

EDUCATION

Timmy Global Health

[Timmy Global Health](#) is a global organization, headquartered in Indianapolis, that sends medical teams internationally to support their partner organizations. A key part of their work is empowering students, who also have the opportunity to serve internationally. To achieve this, Timmy Global Health sponsors chapters on college campuses around the United States. IU was the original chapter and has grown to be the organization's largest. In addition to serving locally, students are able to travel with medical teams to Guatemala. Forty-five students and 14 medical professionals participated in Timmy brigades in AY 18-19.



The Bloomington Timmy Global Health chapter was the organization's first.

Kelley School of Business

Business of Medicine: Singapore and Malaysia

[The Indianapolis Kelley School of Business Physician MBA](#) program offers a [Global Healthcare Experience](#) course which provides physician MBA students the opportunity to explore health care systems in a variety of international locations. Twenty-seven students, four faculty members, three staff members, three alumni and 11 guests traveled to [Singapore and Malaysia](#) in the spring of 2019. Through immersive experiences, each trip includes examinations of various health care settings and the cultural and political context in which care is provided in each country.



Physicians in the MBA program traveled to Singapore and Malaysia in 2019.

EDUCATION

Hutton Honors

Ghana: Hutton Honors Culture and Health

The theme of the [Hutton Honors](#) Africa Study Abroad Travel program to Ghana in 2019 was the interconnectedness between culture and health. The 20 participating students were provided with the opportunity to observe how Ghanaian culture influences the way and manner in which they accessed various health types (traditional and modern/Western) and their perceptions of outcomes emanating from the various health types. Students visited Shrine centers and clinics where they learned about spiritual healing; herbal clinics and centers where they learned about plant use in healthcare delivery; Dagara Center where the participants learned about physical health and its attainment via aerobics, drumming and music; and Western-based government hospitals.

Students had the opportunity to observe and learn about Ghana's health delivery systems including the practitioners' professional practices, the various types of professionals who work in these areas, and the challenges they face based on the unique cultures of the patients and those of the practitioners. To learn about Ghanaians' financial health, the students visited Kejetia Market in Kumasi where they observed the market women who trade in and run the market, and interacted with them about how their commercial activities impacted their financial and overall health.

School of Liberal Arts

Japan: Health Care Professions

Undergraduate students who are preparing for careers in health care experience life and a health care system in another country with the [School of Liberal Arts](#) study abroad program in Japan. In the summer of 2019, six undergraduates participated in the program. While in Japan, students visited several places in Yokohama, Tokyo, Kyoto and Hiroshima, including the Yokohama Rosai Nursing School and Yokohama Rosai Hospital, a private midwife clinic, and the Biomedical Science Center at Waseda University.

While in Kyoto, students met with a Zen Buddhist priest who lectured on Zen meditation and its effects on the brain and health. The Hiroshima portion of the program included a visit to the Hiroshima Peace Memorial Museum and Hiroshima Peace Memorial Park, where students listened to a testimonial of an atomic bomb survivor and poems written by children affected by the bombing. Students also visited Hiroshima Radiation Effect Foundation and Itsukushima Shrine in Miyajima.

The students thoroughly enjoyed Japan and gained a great deal of knowledge about Japanese health care and Japanese culture in general. The program was led by [Keiko Kuriyama, PhD, MA](#), associate clinical professor and director of the Japanese studies program in the World Languages and Cultures Department, and [Mary Beth Riner, PhD, RN, CNE, FAAN](#), professor in the School of Nursing.



Students also got to experience some of the sites in Japan including the Itsukushima Shrine.

EDUCATION

Richard M. Fairbanks School of Public Health

The [Richard M. Fairbanks School of Public Health](#) offers a variety of programs for students to experience public health around the world.

DrPH Health Policy and Management

The Fairbanks School of Public Health's offers a doctoral degree in [Global Health Leadership](#). The program, aimed at professionals with a variety of health care backgrounds, is designed to develop leaders to combat global health issues. The three-year, cohort-based distance program is designed for diverse professionals working full-time in field-based settings around the world. Classes are delivered in real-time via internet video. Scholars meet face-to-face for a few days three times per year in years one and two of the program. Most in-person sessions take place in Indianapolis, Indiana; on occasion, the program meets elsewhere in the U.S. or around the world. Scholars complete dissertations or field-based, culminating projects in year three. Eleven students matriculated in the first cohort in Fall 2018 and an additional xx students began the program in Fall 2019.

Master of Science in Global Health and Sustainable Development

The [MS in Global Health and Sustainable Development](#) program is designed for early to mid-careerists who would like a broad, contemporary foundation of knowledge, skills and abilities in global health. Graduates apply their expertise in varied roles that contribute to meeting global health goals that aim to improve health and well-being for people everywhere. Graduates may find positions in a wide variety of organizations including local, state and national agencies, nonprofit organizations, foundations, academic institutions, for-profit companies, contract research organizations, NGOs and IGOs, and others. They may serve as analysts, program coordinators, managers, technical specialists, program officers and other roles. The first cohort of students matriculated in Fall 2020.

Morocco: Public Health Internship

A Master's of Public Health student works for six weeks at Hassan 1st University in Settat, Morocco, to help teach public health courses for graduate public health and nursing students, and work on maternal and child health research projects with PhD students in public health. One student developed curriculum and provided lectures for MPH courses, designed the qualitative research portion of two PhD research projects—one focused on HIV prevention and one focused on social determinants of female reproductive health—and provided help with public health accreditation process.



Students from IUPUI work with students from Hassan 1st University in Morocco.

In addition to the internship, [Jack Turman, PhD](#), professor in the school's Department of Social and Behavioral Sciences teaches a global health class with students from IUPUI and Hassan 1st students to address public health issues in Morocco. The class, Community Capacity Building in a Global Health Context, teaches global health through the lens of community development and is taught synchronously for the two groups of students. The class works with the students in Morocco to develop community health strategic plans addressing five key Moroccan public health issues.

EDUCATION

Richard M. Fairbanks School of Public Health (cont.)

London and Sweden: Health Systems Around the World

With the School's [Health Systems Around the World](#) programs in London and Sweden, students compare and contrast health care systems. At each site, students visit health care facilities and meet health professionals. Twenty-eight students travelled to London and 13 students to Sweden in AY 18-19. COVID-19 forced the cancellation of the trips in AY 19-20 including new planned opportunities in China, Colombia and Switzerland.



Students from the Fairbanks School of Public Health learned about health care systems around the world.

Accreditation from the Agency for Public Health Education Accreditation (APHEA)

In early 2020, the IU Richard M. Fairbanks School of Public Health reached a global milestone becoming the first U.S. school of public health to [receive full accreditation](#) from the Agency for Public Health Education Accreditation (APHEA). The accreditation process was led by Associate Dean for Education [Carole Kacius, PhD](#), and Associate Dean for Global Health [Sue Babich, DrPH, MS](#). The Fairbanks School of Public Health fulfilled a curriculum validation and performed a self-evaluation before participating in a site visit. All seven criteria were met, including 38 sub-criteria.

“APHEA accreditation is a significant step in elevating the level of global opportunities we offer our students, staff and faculty,” said [Paul Halverson, DrPH, FACHE](#), founding dean and professor at the Fairbanks School of Public Health.

The review committee noted the school's commitment to community practice and stakeholder engagement. It recognized the school's key role in developing the overall global agenda of the university through global activity, collaboration and networking.

School of Public Health-Bloomington

Faculty and Research Collaboration with Australian National University (ANU)

IU President Michael McRobbie led a university-wide delegation to [ANU](#) in November 2018 which followed a visit to the IU School of Public Health-Bloomington by Dr. Archie Clements, the former head of the ANU Research School of Population Health. The two schools then created a collaborative agenda including a proposed joint population health symposium, co-supervision of graduate students, sharing of online materials, and bringing classes together virtually. Several joint research projects were proposed, including topics such as tropical diseases, morbidity and parasitic worms in South America; mortality related to tobacco use; epidemiological spatial analysis and disease mapping; and HIV and sexually-transmitted diseases and infections in the Asia Pacific region.

EDUCATION

School of Public Health-Bloomington (cont.)

Global Environmental Health Issues in Ecuador

[Rodrigo X. Armijos, MD](#), leads [this study trip to Quito, Ecuador](#) to provide IU students the opportunity to learn about the negative health impact of environmental exposures on underserved communities of a middle-income country and to understand the complexity of the environmental problem-human interaction by observing real life situations in international settings.

Environmental Health Research and Interventions in India

Dr. Khalid Khan leads [this experience](#) which provides students with exposure to important environmental health challenges that developing countries are encountering in today's world and presents successful mitigation strategies implemented in different parts of the world. Students gain field experience by observing and analyzing various environmental health projects that are being implemented in a developing country. The international field experience allows students to develop a deeper understanding of the global health challenges both in the fields of infectious and non-infectious diseases and health outcomes in context of a developing country.

Public Health and Healthcare Delivery Systems in Iceland

This [one-week intensive tour](#) led by [Priscilla Barnes, PhD, MPH](#), for undergraduate and graduate students is set in Reykjavik, Iceland. The program mission is for public health students to gain experience in the Icelandic public health sector. The study tour provides an introduction to the public health successes and challenges currently faced by people residing in Reykjavik, as well as existing government, international and community-led initiatives tasked with meeting these challenges. This is a unique opportunity for SPH-B students to hear from leading health professionals, policy-makers and community health workers, and to discuss approaches to health issues with these individuals.



School of Public Health students studying in Iceland.

La Vie Intime des Femmes (The Intimate Life of Women): Stories of Sex, Love, Reproduction, and Resilience

This program examines historical and contemporary issues related to [women's sexuality and relationships](#), use of contraceptives, birthing and postpartum care. Students are immersed in the culture and locations that contextualize the lives of the historical French women students will read about. [Debby Herbenick, PhD, MPH](#), leads this trip.

Asia Health Promotion

During this [study tour in Thailand](#) students visit the Health Foundation, Ministry of Public Health, Action on Smoking and Health Foundation, Chulalongkorn University, Bumrungrad Hospital, Nopparat Rajathanee Hospital and others. There are discussion session with students from Chulalongkorn University and each individual student conducts a presentation on a topic related to health issues, public health, health care systems in the U.S. and other topics.

International Internships and Study Abroad

[International internships](#) in community public health, environmental health and community development are available to students in Botswana, Ecuador, South Africa and the Dominican Republic. The school also sponsors semester-long programs in Australia, London and Copenhagen. In 2018-2019, seventeen percent of graduating students participated in an international experience.

CARE & ADVOCACY PROGRAMS

AMPATH Kenya

The [Academic Model Providing Access to Healthcare \(AMPATH\)](#) is an alliance of [Moi University](#), [Moi Teaching and Referral Hospital \(MTRH\)](#), and the AMPATH Consortium of North American universities led by Indiana University. Officially established in 2001, AMPATH began as a partnership between medical schools at Indiana University and Moi University in 1990.

AMPATH Kenya is developing an integrated health system in the public sector across all levels of the health system using a community-based, population health approach. The system, inclusive of both primary and specialty care services, is designed to host and nurture training and research activities. Specialty care services, centered on the campus of MTRH in Eldoret, consist of emerging Centers of Excellence in cardiopulmonary diseases, adolescent health, diabetes, mental health, and oncology.

AMPATH serves a population of more than 8 million people in western Kenya in partnership with Kenya's Ministry of Health (MoH). This AMPATH-MoH system aims to deliver a package of primary care services inclusive of HIV/AIDS care and control, maternal-child services, and essential/basic prevention services and medical care for burdensome health problems.

Additionally, AMPATH is developing a replicable model of universal health coverage by (1) building a health care system in western Kenya that delivers quality health services effectively and efficiently; (2) developing community-based and group-based mechanisms of wealth creation; and, (3) collaborating with Kenya's National Hospital Insurance Fund (NHIF) to ensure that that health care delivery system is financially accessible to all people.

Faculty across Indiana University and IU School of Medicine support the partnership. Virtually all of the major IU School of Medicine departments and many sub-specialty divisions have joined the effort including medicine, pediatrics, ob/gyn, surgery, GI, radiology, pathology, oncology and palliative care. IU's schools of dentistry, public health, law, nursing and others also contribute to the Kenya partnership.

The Indiana University Center for Global Health (IUCGH) coordinates the North American involvement in AMPATH by twelve academic health centers throughout North American. IUCGH holds institutional relationships with Moi University and MTRH, and facilitates the presence of full-time, year-round IU faculty in Eldoret, Kenya.

In March 2020, most of IU's faculty, residents and students were recalled to the United States as a result of the coronavirus pandemic, but the strength of the partnership allowed essential collaboration via digital platforms to continue.



Members of AMPATH income-generating groups receive hand hygiene kits to allow them to meet COVID-19 protocols.

CARE & ADVOCACY PROGRAMS

Global Oncology

Indiana University plays a lead role in the advancement of global oncology in Kenya and beyond. With generous sponsor support, faculty members throughout IU School of Medicine work with international colleagues to advance cancer research, screening and care.

Screening and treatment programs for breast and cervical cancer occur throughout AMPATH's service area in western Kenya. The AMPATH Breast and Cervical Cancer Control Program (ABCCCP), supported by Eli Lilly and Company Foundation, set a goal of screening 100,000 women in five years and reached the goal in under four years. Other screening programs for lung cancer and multiple myeloma continue to expand.

A new pediatric hematology-oncology fellowship at Moi University and efforts to improve general knowledge about pediatric cancers throughout the country will help young patients with Burkitt lymphoma, leukemia and other childhood cancers receive timely and accurate diagnosis and treatment. This fellowship joins existing fellowships in medical oncology and gynecologic oncology as well as clinical officer and nursing programs. The hematology program also provides screening and treatment for patients with sickle cell and hemophilia.

A clinically-based program in supportive oncology trains physicians, clinical officers, nurses and other healthcare workers to provide palliative care.

IU also trains and consults in pathology and assisted in the establishment of a telepathology service. Thirteen other telemedicine sites in 11 counties with video and audio capability supported by Pfizer are used for weekly multidisciplinary tumor boards with plans for upcoming cancer trainings as well.

Global Health Communications Center

The Global Health Communications Center (GHCC), located within the [IUPUI School of Liberal Arts](#), engaged in several projects designed to improve the delivery of health care in a variety of settings around the world including Geneva, Switzerland; Kigali, Rwanda; Delhi, India; Panama City, Panama; Bentonville, Arkansas; Bogota, Columbia; and Moscow, Russia. The center partners with World Health Organization (WHO), ministries of health and other NGOs in a collaborative effort to facilitate better health. [John Parrish-Sprowl, PhD](#), leads the center.

The GHCC's Communication for Whole Health approach has had impact in multiple countries across several issues including mental health and psychosocial support, malaria, avian flu and vaccination.

The GHCC is helping to lead the way to a complexity-based approach to health through the communication for whole health perspective by participating in projects that have both improved and saved lives in multiple countries.



Dr. John Parrish-Sprowl (left) and Dr. Susan Parrish-Sprowl (right) lead the Global Health Communications Center.

CARE & ADVOCACY PROGRAMS

WeCare Indiana

[Debra Litzelman, MD, MACP](#), is the principal investigator for the [WeCare](#) program, funded by IU Health, Indiana Clinical and Translational Sciences Institute (CTSI), and Indiana State Department of Health, that trains community health workers in techniques to guide and support mothers, fathers and caregivers toward behavior changes that decrease risk factors for infant mortality. These changes include reducing smoking, improving mental health, skipping fewer meals and reducing substance abuse. The program is modeled on the community health worker model often used in Kenya. The Central Indiana regional infant mortality rate decreased from 7.0 in 2018 to 6.4 in 2019.

Fifteen percent of mothers in WeCare were self-reporting concerns about or use of illicit drugs which presented an opportunity to expand the use of community health workers in a new way. This extension, called [Care Plus](#) is now supporting women with substance use disorder and new mothers with babies suffering from neonatal abstinence syndrome (NAS) due to drug use during pregnancy. The [program](#) at IU Health Methodist Hospital is one of 16 pilot projects selected to receive nearly \$1 million during the first phase of Indiana University's "Responding to the Addictions Crisis" Grand Challenges initiative. The Richard M. Fairbanks Foundation provided an additional grant of more than \$840,000 to focus on mother-baby dyads who have experienced NAS.

COVID-19 restrictions altered the way Community Health Workers and Addiction Recovery Coaches interacted with clients, but they continued to deliver services through phone calls, texting, messaging and safe drop-offs of necessities.

I-CARE Botswana

In Botswana, the [International Counseling, Advocacy, Research and Education \(I-CARE\)](#) project partners with the Institute for Development Management (IDM) to provide consultation on curriculum development and training programs for AIDS counselors. In addition, I-CARE partners with IDM on research studies that focus on the widespread effects of having HIV/AIDS. AIDS counselors are provided training, business programs take place and public health individuals are trained and active in Botswana.



Dr. Rex Stockton (center) and his colleagues in Botswana.

IU Medical Response Team

In response to the COVID-19 pandemic, IU President Michael McRobbie sought the leadership and expertise of faculty members from IU School of Medicine to create a [Medical Response Team](#) to lead symptomatic testing, mitigation testing and contact tracing for all of IU's campuses.

Drs. [Cole Beeler](#), [Aaron Carroll](#) and [Adrian Gardner](#) form the team that has advised McRobbie and other university leaders throughout the pandemic. Gardner relied on years of experience in global health to establish an effective and efficient contact tracing system to meet the challenge of reaching all members of the IU community who test positive and their close contacts. IU hired a cadre of contact tracers to serve each campus, created labs to handle mitigation testing internally and relied on a collaboration with IU Health to test symptomatic individuals. The university also created a [COVID-19 dashboard](#) to update the university community on the current status of COVID-19 testing throughout the university.

CARE & ADVOCACY PROGRAMS

Pediatric Cancer Asia

The Asian Resilience Enhancement for Adolescents and Young Adults (AYA) with Cancer (AREA-CA) Cooperative Group currently has teams working in Taiwan, China, Japan, and Korea to spread the Resilience in Illness Model (RIM). RIM is designed to increase understanding of how positive health protective factors (i.e., social integration, family environment, courageous coping and derived meaning) may influence resilience outcomes in AYA. This project involves pre- and postdoctoral students and IU School of Nursing alums. Four papers related to the initiative were presented at the Sigma Theta Tau International 45th Biennial Convention in 2019. The China team has collected data on 128 patients. The Korea team has collected data on 155 patients and the Taiwan team continues to collect data and work with students.

Youth Enrichment Through Sport

With a grant from the Sport Diplomacy program in the Bureau of Education and Cultural Affairs, [Sarah Young, PhD](#), and [Bill Ramos, PhD](#), from the Indiana University School of Public Health-Bloomington, are expanding their successful [Youth Enrichment through Sport program](#) to four countries in Africa. Using sports to bring youth into the program, Young and Ramos focus on teaching at-risk youth and those with physical disabilities between the ages of 14 and 23 about critical public health issues facing their communities. Over the course of the three-year grant, 17 adult leaders and youth from each of the four exchange programs will come to the U.S. for educational sessions about the importance of following a healthy lifestyle, youth development leadership, and sport and aquatic instruction. In turn, 16 U.S. youth and program instructors will travel to each African country to learn about cultural differences, enhance the mutual understanding of using sport to create healthy lifestyles, and develop leadership through the Sport Education model.

Facial Plastics: Cleft lip, Palate and Facial Reconstruction

[Taha Z. Shipchandler, MD, FACS](#), associate professor of Otolaryngology-Head & Neck Surgery, co-leads a team of five surgeons, residents, fellows, nurses and anesthesiologists on an annual surgical trip with Johns Hopkins School of Medicine to correct problems of the face, cleft lip and palate in Managua and Ingenio San Antonio, Nicaragua.

Wheel Chair Life Skills Program

The team at Crann Centre Ltd, in Cork, Ireland, and faculty in the IU School of Medicine Department of Pediatrics have been engaged in a bidirectional, beneficial partnership since 2016 and share a commitment to caring for persons with complex disabilities from a clinical, research and community perspective. [Joseph O'Neil, MD](#), medical director of the Riley Spina Bifida program, and [Mary Ciccarelli, MD](#), director of the Center for Youth and Adults with Conditions, are working with the team of the Crann Centre who provide community service to persons with spina bifida and other neurophysical disabilities and their families. One of the collaboration's signature programs is Turas Saol ("Life Trip" in Gaelic)– Wheel Chair Life Skills Program. This is one of the very few sites around the world working on enhancing wheelchair skills especially for children. The collaboration includes faculty in the IUPUI School of Health and Human Sciences as well as the Riley Rehab Department and Child Life Zone. They also receive valuable mentorship from the wheelchair team at Dalhousie University in Nova Scotia.

CARE & ADVOCACY PROGRAMS

Helping Babies Breathe

[Helping Babies Breathe \(HBB\)](#) celebrated its tenth anniversary in 2020. The initiative teaches healthcare workers the initial steps of resuscitation to save babies who struggle to breathe at birth. HBB is part of [Helping Babies Survive](#), an initiative of the American Academy of Pediatrics developed in collaboration with the World Health Organization.

[Sherri Bucher, PhD](#), associate research professor of pediatrics at IU School of Medicine, is an international mentor for Helping Babies Survive, as well as the country mentor for Kenya. More than 850,000 health workers have been trained with these lifesaving skills in more than 150 countries. Bucher and the Helping Babies Breathe team have made ambitious goals for the future, including supporting the United Nation's Sustainable Development Goal to reduce the global rate of newborn mortality to 12 deaths per 1,000 by 2030. According to the World Health Organization, the global rate of newborn mortality was 29 deaths per 1,000 in 2017.



Dr. Sherri Bucher trains others on Helping Babies Breathe.

Teledermatology

Doctors trained in dermatology are extremely rare in East Africa and patients often have to travel long distances at great expense to be seen. [Toby Maurer, MD](#), professor of clinical dermatology at IU School of Medicine, worked with colleagues in Kenya and Uganda to establish a teledermatology system to allow for the remote diagnosis of dermatologic conditions. Supported by the Department of Dermatology at IU School of Medicine and IU Health, clinicians at remote clinics utilize an iPad to photograph patients with skin issues which are then reviewed by the local dermatologist at a central location. The system allows for the diagnosis, triage, screening and linkage to care. Maurer estimates that 65 percent of patients can be treated without having to make a long journey to see a specialist in East Africa.

After seeing the benefits of the program in a resource-limited country, a similar system is in the implementation process in Indianapolis at Methodist Hospital. The innovation can eliminate the need for travel, reduce wait time and minimize no-shows. Maurer estimates that she has personally done more than 80,000 consults using the teledermatology system.

Walther Center in Global Palliative Care and Supportive Oncology

[The Walther Center in Global Palliative Care & Supportive Oncology](#) is based at Indiana University School of Medicine and IU Simon Comprehensive Cancer Center from which its international reach extends.

The aim of the Walther Center's work is to advance global palliative care and supportive oncology through policy, research, education and practice for the relief of pain and suffering worldwide.

[James Cleary, MBBS](#), leads the Center and is the Walther Senior Chair in Supportive Oncology. The Walther Center's work engages a three-pronged approach to accomplish these aims: developing critical guidance documents and essential resources; implementing policy change through training programs; collaborating in research efforts across and with international institutions, regional organizations, and at individual country levels.

CARE & ADVOCACY PROGRAMS

Noncommunicable Diseases in Nigeria

[Ukamaka M. Oruche, PhD, RN, PMHCNS-BC FAAN](#) works with Providence Care Community Health Initiative, a non-governmental organization committed to provide access to care in Nigeria. Patients receive screening tests, diagnoses, treatment and management of non-communicable diseases including hypertension and diabetes. Services are provided through annual medical missions and regular follow-up clinic. This effort involves a multidisciplinary team of volunteer nurses, doctors, physical therapy, and students.

American University of Beirut

Dr. [Zeina Nabhan](#), associate clinical professor in the division of endocrinology and the assistant dean for [Graduate Medical Education](#), and Dr. [Riad Lutfi](#), associate clinical professor in the division of [Pediatric Critical Care Medicine](#), lead an [emerging partnership with the American University](#) of Beirut, Lebanon. This partnership builds off of the long-standing relationship that Dr. [Mark Turrentine](#), chief of the Pediatric Cardiovascular Surgery and Cardiopulmonary Transplantation Division, and his team have developed while leading humanitarian missions to repair pediatric congenital heart disease defects in children around the world. A multidisciplinary team, including pediatric surgeons, intensive care specialists, cardiologists and nurses, are required for these surgeries to be successful.



International Elective to China

Dr. [Deb Hamby](#), assistant clinical professor in the division of [Developmental-Behavioral Pediatrics](#) and the director of the International Adoption Clinic at Riley Hospital for Children, is passionate about the care of children living with disabilities. She has led pediatric residents on an [international elective to China](#) to work in orphanages, where many of the children live with disabilities. In addition to their time at the orphanages, residents were invited to participate in capacity building activities with health providers in China to enhance the care of children with developmental disabilities.

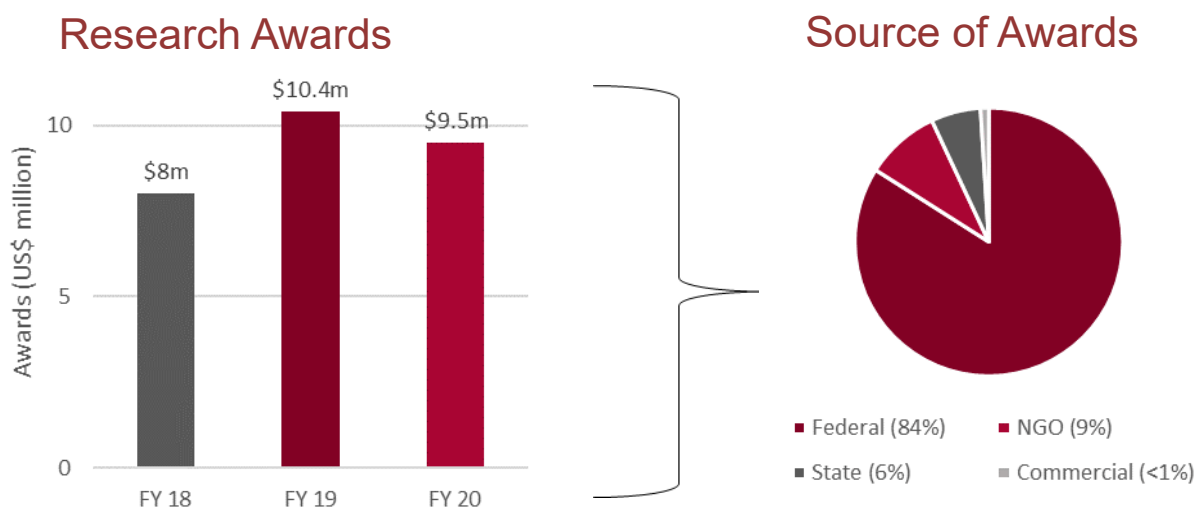


RESEARCH

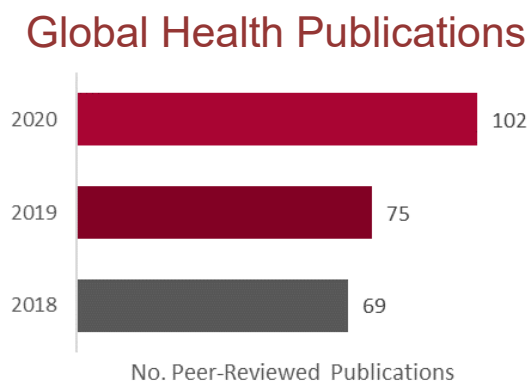
IU Center for Global Health

[The IU Center for Global Health \(IUCGH\) Research Program](#) provides a university-wide platform for global health research at Indiana University. The Center's research program supports more than **50 affiliated researchers** who are committed to eliminating health disparities and improving the health of people in resource-limited settings in Indiana and around the world. IUCGH provides a hub of program services to help IU's multidisciplinary research teams develop enduring partnerships with researchers in low- and middle-income countries and enables researchers to conduct high-impact research to solve the world's most complex and persistent health challenges.

In fiscal years (FY) 19 and 20, IU investigators received nearly **\$20 million in extramural awards** for global health research projects, with **84 percent of award dollars coming from the US National Institutes of Health**. Major sponsors included the National Institute for Allergy and Infectious Diseases, National Cancer Institute, National Institute of Child Health and Human Development, National Institute of Neurological Disorders and Stroke, Fogarty International Center, US Department of Defense and the Doris Duke Charitable Foundation.



IU investigators published **246 publications related to global health** in peer-reviewed journals from January 2018 to December 2020 including in major journals such as *New England Journal of Medicine*, *The Lancet*, *The Lancet Global Health*, *Pediatrics*, and *AIDS*, among others. This research has helped to shape international policy and programs in HIV/AIDS, malaria, oncology, and population health, with important impacts on securing the health of people in Indiana and around the world.



RESEARCH

IU Center for Global Health (cont.)

In September 2019, [Kara Wools-Kaloustian, MD, MS](#), was named director of research for the IUCGH and co-director of research of the AMPATH Research Network. Dr. Wools-Kaloustian was part of the first residency class at IU School of Medicine to complete rotations at Moi University and Moi Teaching and Referral Hospital in Kenya in 1991 and the first fellow to conduct research as part of the partnership in 1992. She has served in various leadership roles at IU, including most recently the Chief of the Infectious Diseases Division at IU School of Medicine. In addition, she is the co-principal investigator for the East Africa International Epidemiologic Databases to Evaluate AIDS (EA-IeDEA) consortium, one of seven regional data centers funded by the NIH to merge, share, and analyze global HIV/AIDS data.

As this program grows, IUCGH continues to strengthen its research infrastructure and resources to support a growing portfolio of global health research and build IU's reputation as one of the top universities in the country for global health research.

Regenstrief Institute and Fairbanks School of Public Health

Researchers from Regenstrief Institute and the Fairbanks School of Public Health are building and expanding global relationships and [collaborations in Ethiopia](#) in the fields of public health and health informatics.

In 2019, [Brian Dixon, PhD, MPA](#), director of public health informatics at the Regenstrief Institute and IU Richard M. Fairbanks School of Public Health at IUPUI, met with leaders of the Africa Centres for Disease Control and Prevention (CDC) about building informatics capacity across the continent.

Funding was announced for a U.S. Agency for International Development (USAID) Digital Health Activity in Ethiopia, in which Regenstrief will play a significant role.

Dixon and Regenstrief Global Health Informatics Associate Director Theresa Cullen, M.D., M.S., met with leaders of the University of Gondar in Ethiopia to discuss a partnership.



Dr. Brian Dixon meets with a representative of the University of Gondar in Ethiopia.

Some of the objectives of the University of Gondar health informatics collaboration include shared research projects, mentoring and advising PhD students, enhancing exchange programs for teaching and research, and exchanging information related to instruction and training in public health informatics.

RESEARCH

Global Health Research Speaker Series

The IU Center for Global Health's research program has continued to sponsor a monthly Global Health Research and Bioethics Speaker Series. The speaker series occurs monthly on the second Tuesday of the month. Due to restrictions related to COVID-19, the series has been delivered via Zoom since April 2020. Recordings of all previous sessions are available on the [IU Center for Global Health website](#).

Date	Speaker	Topic/Link
7/10/2018	Jane von Gaudecker	Epilepsy Care in Kenya
8/21/2018	Rachel Vreeman	AMPATH at AIDS 2018
9/11/2018	John Humphrey	Measuring Prevention of Mother-to-Child Transmission of HIV Outcomes in Kenya
10/9/2018	Teshome Alemneh	Institutional Capacity Development and Problem-solving through Higher Education Collaboration
11/13/2018	Laura Ruhl	Achieving Universal Health Coverage in Kenya
2/12/2019	Una Osili	The Long Term Impacts of Civil War
3/12/2019	Darron Brown	Cofactors of Oncogenic HPV Detection and Persistence in Kenyan Women and Cervical Cancer Prevention in Kenya
4/9/2019	Terry Vik	Pediatric Oncology in Kenya: A Decade of Lessons Learned
5/14/2019	Caitlin Bernard	Global Reproductive Health Issues: Care & Research in Kenya
6/11/2019	Aaron Ermel	Understanding the Epidemiology of HPV in Women in Western Kenya and How Biobanking May Further This Endeavor
8/13/2019	Gerardo Maupome	How we share health behaviors and social norms when health resources aren't abundant
9/10/2019	James Cleary	Measuring Improvements in Global Palliative Care
10/8/2019	Kara Wools-Kaloustian	The East African International Epidemiology Databases to Evaluate AIDS (EA-IeDEA) – Who are we and what do we do?
11/12/2019	Suzanne Goodrich	Substance Use and Mental Health Assessments in East Africa
12/10/2019	Sophie Lelièvre	Primary Prevention Research for Breast Cancer on a Global Scale
2/11/2020	Jimmy Carlucci	Baby I want you Back... Improving Retention in HIV Early Infant Diagnosis Services in Resource-Limited Settings
2/20/2020	Mabel Nangami	Disruptive Public Health Strategies for Transformative Change in Kenya's Health Outcomes
4/14/2020	Rishika O'Brien and Deb Litzelman	A Fair Share of Global Health: Reciprocal Innovation in Action
6/9/2020	Marya Lieberman	Got Fakes? Paper Analytical Devices for Finding Falsified Medicines

RESEARCH

Indiana CTSI Global Health Program

Since 2016, the IU Center for Global Health, with support from the [Indiana Clinical and Translational Sciences Institute \(CTSI\)](#), has awarded 24 grants totaling \$470,000 to encourage global health research among CTSI institutions. These awards support pilot work by investigators from four Indiana CTSI institutions, including IU Bloomington, IUPUI, Purdue and Notre Dame. Awardees are engaging in pilot research that will strengthen and build research collaborations in half a dozen countries around the world. In the 2019-2020 round of funding, the Indiana CTSI Global Health Grants Program focused on Reciprocal Innovation (RI). RI is the bi-directional and iterative exchange of a technology, methodology, or process between at least two countries, one lower or middle-income country and one high-income country, to address a common health challenge and provide mutual benefit to both sides. Lessons learned are continually shared throughout the process to suit the needs and infrastructure of each country.



Mothers participate in a community-based peer-support and health education group called a Chamas in Kenya.

2019-20 CTI Global Health Pilot Grant Awardees

Protocol Title	Recipient	Institution	Award
Chamas for Change: Adapting a community-based peer-support and health education model for pregnant and parenting adolescents in Kenya	Laura Ruhl	Indiana University	\$50,000
Bionomic Characterization of Malaria Vectors in the Highlands of Kenya—Identification of Gaps in Protection and Drivers of Transmission in Association with Current Intervention Methodologies	Neil Lobo	Notre Dame	\$20,000
Satiety response through delayed gastric emptying as related to dietary differences in the US and Kenya	Bruce Hamaker	Purdue University	\$20,000
Molecular Epidemiology of Malaria in Bangladesh: An In-Depth Study Based on RDT's from the National Malaria Elimination Program	Cristian Koepfli	Notre Dame	\$20,000
Reciprocal innovation to reduce infant mortality and improve access to non-pharmacological care for opioid-exposed newborns	Sherri Bucher, Jacqueline Linnes	Indiana University Purdue University	\$50,000

RESEARCH

Indiana CTSI Global Health Program (cont.)

The 2019 Indiana CTSI [Global Health Stakeholders Meeting](#) took place in Indianapolis, Indiana. Approximately 42 program stakeholders participated, including attendees from Indiana CTSI member institutions, community partners, state and local government and the NIH. This planning meeting served to review the challenges, priorities, and opportunities identified from the environmental scan with the goal of developing a prioritized agenda for the Indiana CTSI's Reciprocal Innovation grant programs.

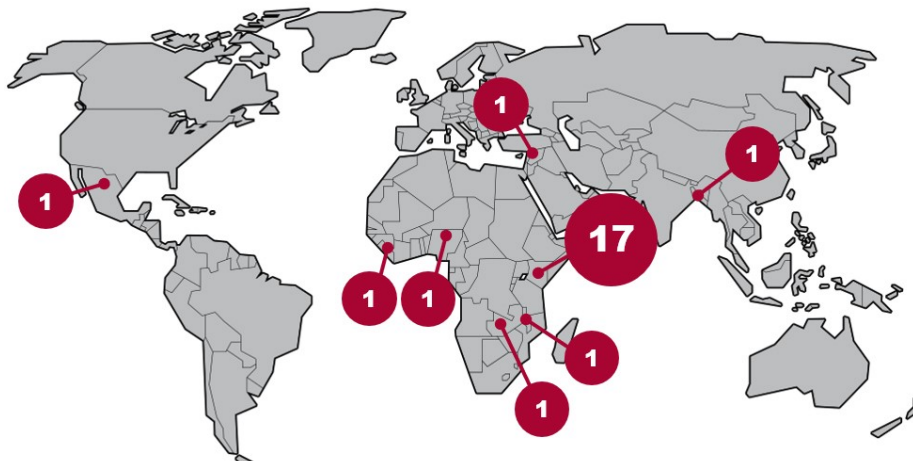
The meeting provided attendees with an overview and background of reciprocal innovation and highlighted case studies of successful reciprocal innovation projects. Findings from the environmental scan were used to educate attendees on the key challenges reciprocal innovation would be most useful in addressing, prioritized innovations and outlined perceived barriers. The scan served as a roadmap and resource to assist meeting attendees in prioritizing health challenges and identifying potential areas of reciprocal innovation.

To prepare for the 2020-2021 round of funding, the Indiana CTSI Global Health team hosted a virtual East African Reciprocal Innovation Stakeholders Meeting on Thursday, December 3. This meeting brought together health leaders from Indiana CTSI institutions and partners across East Africa to address current and emerging health challenges in Kenya.

Meeting objectives included:

- Learning about the concept of reciprocal innovation
- Identifying key priority areas for the next round of grant funding
- Providing networking opportunity for international and local partners

A Global Health Reciprocal Innovation Online Repository to host informational materials including information about previous and active CTSI-supported projects is under construction. A manuscript led by Dr. Debra Litzelman (IUCGH) and Dr. Tommy Sors (Purdue University) describing the conceptualization and implementation of a reciprocal innovation grants program is also under development.



Locations of Indiana CTSI Global Health Program pilot grants

RESEARCH

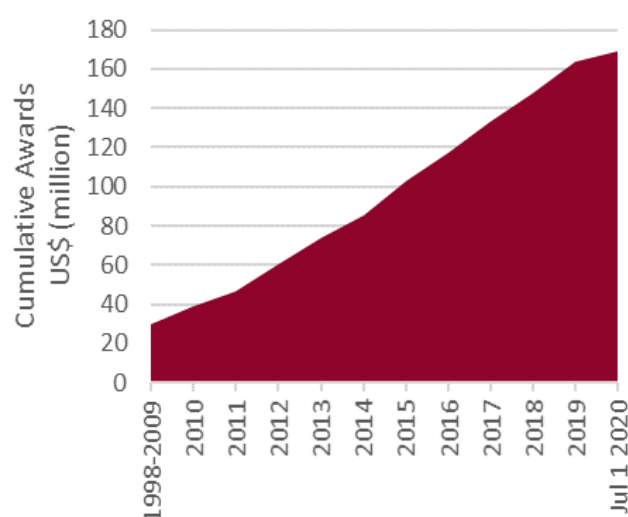
AMPATH Research Network

The [AMPATH Research Network](#) co-led by Dr. Winstone Nyandiko from the Moi University School of Medicine and Dr. Kara Wools-Kaloustian at the IU Center for Global Health, seeks to support a vibrant, world-class, Kenyan-led **community of researchers across 20 institutions in East Africa, Europe, and North America**. Guided by the principle of leading with care, AMPATH-affiliated investigators work in partnership to develop local Kenyan research talent and to identify, develop, and disseminate relevant and timely information to improve the health of underserved populations in Kenya and around the world. To support this work, the AMPATH Research Network has developed a robust infrastructure for research including a system of peer research development groups to assist in mentoring new investigators and developing new research proposals, an ISO-accredited laboratory, an Institutional Review Board (IRB), a research and sponsored projects office, Moi University Clinical Research Centre, and cores in biostatistics, data management, informatics and bioethics.



Dr. Winstone Nyandiko and Dr. Kara Wools-Kaloustian, co-directors of research at AMPATH Research Network.

Research Awards, 1998-2020



Since 1998, AMPATH-affiliated investigators have been awarded **\$169 million for research and training activities** from sponsors including the National Institutes of Health (NIH), Centers for Disease Control and Prevention, the Bill and Melinda Gates Foundation, USAID and others. This includes more than \$22 million in new awards during the reporting period of July 1, 2018 to June 30, 2020, with the vast majority of this funding coming from the NIH. A total of **855 articles have been published** by AMPATH-affiliated investigators in the areas of HIV, tuberculosis, malaria, maternal and child health, oncology, hypertension, diabetes, mental health, and bioethics, among others, including 245 that were published during the reporting period. The AMPATH Research Program Office releases semi-annual reports on current research activities, including information about the more than **more than 50 ongoing research studies**, that are publicly available on its [website](#).

In September 2019, the AMPATH Research Network convened for two-day [strategic planning meeting](#) in Eldoret, Kenya with more than 40 key research program leaders and stakeholders tasked with reviewing and evaluating the program's strategic priorities and developing a new strategic plan for 2020-2023. The following strategic priorities were defined:

RESEARCH

AMPATH Research Network (cont.)

1. Strengthen development of a well-resourced and sustainable infrastructure for research that enables the efficient conduct of high-quality research;
2. Increase the number of successful independent investigators working in collaborative, interdisciplinary research teams by increasing access to high-quality training and mentorship;
3. Enhance supportive, research-intensive cultures within the schools and departments of all AMPATH institutions and partners;
4. Accelerate growth in relevant, high-yield research initiatives that will improve policy and strengthen the health systems and communities we serve including biomedical innovations, health economics, health equity, population health, informatics, and implementation science research; and
5. Incorporate research into ongoing efforts to expand AMPATH innovations to additional underserved populations outside Kenya.



Participants in the 2019 AMPATH Research Network strategic planning meeting in Eldoret, Kenya.

Highlights of IU Research in the AMPATH Partnership

Diagnosing Neurodevelopmental Delays in Infants Exposed to HIV (K23)

In 2018, [Megan McHenry, MD](#), received [K23 research award](#) from [National Institutes of Health \(NIH\)](#) to significantly expand her [pediatric neurodevelopmental research](#) in Kenya. The aim of the research is to identify appropriate brain development screening instruments for use in HIV-exposed Kenyan children. The next step is to pilot an integrated screening program within the existing Kenyan care system. Children born to HIV-infected mothers are more likely to have neurodevelopmental delays than HIV-unexposed children. In sub-Saharan Africa more than one million children are born to mothers with HIV annually, but early identification and referral to intervention are not routinely provided.

East African Biobank

The IU Center for Global Health supports the development of biobanking capacity in East Africa. With ongoing funding from Indiana Physician Scientists Initiative (PSI) supported by the Lilly Endowment, Inc., the Center has worked with partners in the AMPATH Reference Laboratory in Eldoret, Kenya, to establish a new dedicated biobanking facility in the Chandaria Cancer and Chronic Disease Center. The East African Biobank will serve as the central storage center for over 70,000 samples from more than 22 active research studies. The facility provides capacity for sub-80 degree storage along with ISO accredited lab processing and testing of samples banked as part of a research protocol.

RESEARCH

AMPATH Research Network (cont.)

HPV and Cervical Cancer in Kenyan Women with HIV/AIDS (U54)

Within East Africa, cervical cancer remains one of the most common malignancies in women. Women living with HIV have a greater incidence and persistence of human papilloma virus (HPV) infections, cervical cancer and precancerous cervical lesions. In contrast to other HIV-associated cancers, the incidence of cervical cancer has not declined in the era of antiretroviral therapy.

[Pat Loehrer, MD](#), is the principal investigator of a U54 grant from US National Cancer Institute to better explain the natural history of HPV infection and cervical cancer in HIV-infected women and to identify potentially modifiable (and non-modifiable) factors that are associated with progression of the most high-risk HPV infections to clinical disease, including cervical cancer.

Worldwide, it is estimated that over 500,000 cases of cervical cancer are diagnosed yearly, with 85 percent of these in low and middle-income countries. In Africa, approximately 80,000 women are diagnosed with cervical cancer and 60,000 die from the disease annually, making it the leading cause of cancer death among women. Sub-Saharan Africa also contains 70 percent of the world's diagnosed cases of HIV, with Kenya as one of Africa's epicenters. Recent studies show that HIV is clearly a contributing factor for cervical cancer development.

The "perfect storm" of these two families of viruses only begins to explain why both incidence and mortality of cervical cancer in sub-Saharan Africa are three-fold that of the United States. Other co-morbidity factors, such as sexually transmitted infections (STIs), environmental issues, anti-retroviral and other therapies, and their relation to HPV infections and cervical cancer need further study to make a major impact.

A mentoring program was also established to foster development of new cancer researchers in Kenya. The expected outcome is the establishment of a dedicated core of cancer-focused Kenyan investigators who embody a culture of translational and collaborative research.

IeDEA Consortium

For more than a decade, IU has led the [East Africa International Epidemiology Database to Evaluate AIDS \(EA-IeDEA\)](#) consortium – one of seven regional data centers funded by the National Institutes of Health to provide a rich resource for globally diverse HIV/AIDS data. IeDEA currently receives funding from eight NIH institutes and one Center.

East Africa IeDEA is led by Kara Wools-Kaloustian, MD, IU School of Medicine, in partnership with [Constantin Yiannoutsos, PhD](#), Richard M. Fairbanks School of Public Health, and houses expertise in merging, sharing, and analyzing routine data collected within HIV care and treatment programs, as well as proficiency in the design, conduct and analysis of implementation research. The East Africa Consortium includes partners from ten active HIV-treatment programs in Kenya, Tanzania, and Uganda and six universities in the United States (IU, Brown, Columbia, Mt. Sinai, University of California Riverside and University of California San Francisco).

Members of the IeDEA team also led the development of a COVID-19 standard operating procedures for the conduct of research in East Africa and was made widely available for adaptation by other projects particularly those in the AMPATH Research Network. [Suzanne Goodrich, MD](#), assistant professor at IU School of Medicine, led a project implemented under EA-IeDEA to assess the impact of COVID-19 using several prospective cohorts by telephone survey. The survey was adapted and adopted by investigators for three studies in East Africa as well as by IUCGH's Director of Education, Dr. Debra Litzelman, in her WeCare Indiana project.

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Fulbright Scholars

Several IU faculty members were named [Fulbright Scholars](#) and embarked on projects related to global health:

In 2018, [James Kelly, PhD](#), director of journalism for the IU Media School, was a Fulbright Scholar at Moi University in Eldoret where he did research on job motivation and satisfaction among healthcare workers working for AMPATH. He



Dr. Terry Vik improves pediatric cancer care in Kenya.

also taught a photojournalism course at the university and conducted workshops for photojournalists in Nairobi. Dr. Kelly plans to publish a book related to his experience.

[Kyle Carpenter, MD](#), a general surgery resident at IU School of Medicine, traveled to Kenya to assist in the study of burn injuries and their care. This work included the creation of a burn registry, the assessment of current capacity for burn care, and the comparison of its current provision of care to standards for essential burn care delivery established under the World Health Organization.

[Terry Vik, MD](#), began training the first class of pediatric hematology-oncology fellows at Moi University School of Medicine and Moi Teaching and Referral Hospital (MTRH), while also conducting research to demonstrate the lack of diagnosis of childhood cancers during his Fulbright year. Dr. Vik, IU School of Medicine, also developed additional training resources and worked to improve the general [medical knowledge of childhood cancer](#) in communities across western Kenya before having to return to Indiana due to COVID-19.

Additionally, [Carmen Luca Sugawara, Ph.D.](#), associate professor in the IUPUI School of Social Work commenced a Fulbright year in Croatia in September 2019. Her research examined how higher education community-engaged programs contribute to building local capacity for community development in post-communist countries. She also worked with a local university to teach and develop social work curricula.

IU President's International Research Awards

President McRobbie awarded [President's International Research Awards](#) each spring through 2019. The university-wide awards offered up to \$50,000 to projects aimed at making a difference around the world and at home.

In 2018, the following global health project received the award:

- [Khalid Khan](#): *School-Based Intervention Using Participatory Approach and Microbiological Risk Characterization on Safe Water and Personal Hygiene for Children in Low-Income Communities in Urban New Delhi*

Among the 2019 recipients were:

- [Rodrigo Armijos](#) and [Margaret Weigel](#): *Epidemiologic study of the impact of prenatal cutaneous leishmaniasis infection on maternal-perinatal immune response, nutrition and birth outcomes in a highly endemic area of Tabasco State, Mexico*
- [Esperanza Angeles Martinez Mier, DDS PhD, MSD](#): *Urinary fluoride in pregnant women living in Mexico City -- a global perspective on the risks of prenatal fluoride exposure*
- [Carmen Luca Sugawara, Ph.D.](#): *Higher education and community engaged programs: a strategy to strengthen local capacity development in post-communist countries*

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Global Network for Women's and Children's Health Research

In 2018, the Eunice Kennedy Shriver National Institute of Child Health and Human Development renewed its support for the [Global Network for Women's and Children's Health Research](#) for another five years.

The partnership is dedicated to improving maternal and child health outcomes and building health research capacity in low- and middle-income countries by testing cost-effective, sustainable interventions that provide guidance for the practice of evidence-based medicine.

IU's involvement in the Global Network began with [Edward A. Liechty, MD](#), professor of pediatrics at IU School of Medicine, and Fabian Esamai, professor of child health and principal of the College of Health Sciences, Moi University, Eldoret, Kenya, in 2008. This cooperative multicenter network formed to conduct clinical research in low-resource countries with the aim of improving health and well-being of mothers and children.

Since its inception, IU's partnership with Moi has established an efficient, productive research site in sub-Saharan Africa. The site consists of 16 clusters located in rural western Kenya. It has contributed approximately 33,000 subjects to the Maternal Neonatal Health Registry database (MNH Registry) – the third most of the seven Global Network sites. The partnership has successfully participated in one completed study and is currently participating in two ongoing Global Network studies.

Neolnnovate Collaborative Consortium

[Sherri Bucher, PhD](#), is the primary investigator for the Neolnnovate Collaborative Consortium, a multi-disciplinary international coalition of faculty, students and post-graduate trainees. The digital health and biomedical device solutions developed within the consortium equip health care workers around the world with the education, training, and tools they need to deliver [evidence-based interventions](#). Lead partners are IU School of Medicine and Alupe University College at Moi University. Other core institutional partners include: Moi Teaching and Referral Hospital (Kenya), IUPUI, Purdue University and University of Notre Dame.



The NeoWarm medical device aids newborns.

Media School

Faculty members in the IU Media School conduct research related to health communication. [Esi Thompson, PhD](#), is an assistant professor and teaches public relations courses. Her research focuses on health risk/crisis communication, development communication and strategic communication. She has studied how communication surrounding the Ebola outbreak was undertaken and received by the affected communities and how this could inform public communication/policy around infectious disease outbreaks in developing contexts.

[Paul Wright, PhD](#), has research and teaching interests centered on media psychology, health communication, and audience analysis. His published articles span the fields of communication, psychology, and health and include research and data from Korea, England and Germany.

RESEARCH

LASER PULSE

[LASER PULSE](#) is the Long-term Assistance and Services for Research (LASER) Partners for University-Led Solutions Engine (PULSE). Its mission is to support the discovery and uptake of university-sourced, evidence-based solutions to development challenges through a [network](#) of almost 2,000 researchers and practitioners and the issuance of awards for applied development research. This is a five-year, \$70 million cooperative agreement with USAID led by Purdue University with partners at the University of Notre Dame, Makerere University, Catholic Relief Services and Indiana University. In cooperation with the Office for International Development, the IU Center for Global Health plays a key role in the consortium's global research translation and communications objectives.

In 2019, LASER PULSE held two Research for Development Conferences in Kampala, Uganda, and Bogota, Colombia, toward issuing Requests for Applications toward critical development issues. Awards totaling \$1.16 million have been issued for Kenya, Tanzania, and Uganda research translation projects in food security, water security and basic education. Awards for projects in Colombia and Vietnam are expected to be issued in coming months. Through the Office of International Development, IU is providing expertise toward the development of a Request for Applications for Ethiopia on youth engagement and measurement of resilience, expected to be issued in late 2020.



Conference participants discuss global issues.

Two LASER PULSE projects have concluded including the South Sudan Impact Evaluation on Psychosocial Support (PI at IU-Bloomington School of Education), as well as the Kenya Tusome Evaluation on Early-Grade Reading. Indiana University participates in existing projects on Northern Iraq Cultural Restoration (Co-PIs at IU-Bloomington Anthropology & Office of International Development), in addition to Applied Nutrition Research in Laos (Co-PI at Office of International Development). Through the Center for Global Health, Indiana University continues to provide support in research translation capacity strengthening. IU has developed 13 training resources to support the LASER PULSE Network and LASER PULSE project awardees. Available [resources](#) include support templates on implementing research translation projects, developing communications strategies and developing briefing documents. Available [online trainings](#) include topics on community engagement, research translation and using accessible language. Resources are available to LASER PULSE Network members and open for public access with a [StemEdHub log-in](#).



Participants in the 2019 Research for Development Conference in Kampala, Uganda.

RESEARCH

Northern/Pacific Global Health Research Training Consortium

Indiana University's membership in the [Northern/Pacific Global Health \(NPGH\)](#) Research Training Consortium provides opportunities for IU doctoral and post-doctoral trainees in a variety of health professions to engage in research at international partners sites throughout the world and also involves IU faculty to provide research mentorship to trainees throughout the consortium.

The Global Health Fellowship Program is a 12-month clinical research training sponsored by the National Institutes of Health's [Fogarty International Center \(FIC\)](#) in partnership with several NIH Institutes and Offices. Fellows represent academic institutions from the US as well as partners in low and middle-income countries. The 2019-20 cohort included two IU doctoral students.

Indiana University School of Dentistry third-year student [Ashley Karczewski](#) studied periodontal disease in adolescents living with HIV at the University of Nairobi in Kenya. Medical student [Grant Callen](#) studied barriers to care among adolescents living with HIV at Moi Teaching and Referral Hospital in Kenya.

Dr. Kara Wools-Kaloustian and Dr. Chandy John are [mentoring trainees](#) from the University of Washington in the 2020-21 cohort of Fogarty Fellows as they conduct research on malaria and HIV. Although the coronavirus pandemic has upset the planned travel and in-person collaboration, the research fellowships continues.



Students Grant Callen and Ashley Karczewski toured the National Institutes of Health during Fogarty Fellows training.

Ryan White Center for Pediatric Infectious Diseases & Global Health

The vision of the [Ryan White Center for Pediatric Infectious Diseases and Global Health](#) is “Fewer infections, healthier children...globally” and its mission is to improve the health of children in Indiana and worldwide through infectious disease clinical care, research and training.

Seventeen faculty members; more than 30 undergraduate, medical and graduate students in the U.S., Uganda and Kenya; six pediatric infectious disease fellows and six post-doctoral fellows contribute to the work of the center.

Led by [Chandy John, MD, MS](#), Ryan White Professor of Pediatrics, a group of research investigators are helping to solve infectious disease problems [created by malaria and HIV](#), which are among the greatest causes of death and long-term disability in children worldwide, and the COVID-19 pandemic. Children in Indiana require protection from malaria when they travel to countries with malaria and are still at risk for HIV infection, particularly in the perinatal/neonatal period and in adolescence. Partner research sites are in Uganda with Makerere University and in Kenya with the Kenya Medical Research Institute and Maseno University.

[Andrea Conroy, PhD](#), assistant professor of pediatrics, leads the IU Global Health Uganda CHILD laboratory in Kampala, Uganda, where she oversees the Uganda portion of Dr. John's and the Ryan White Center for Pediatric Infectious Disease and Global Health's research program and [other life-saving initiatives](#).

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Scheel Lab

[Molly Duman Scheel](#), PhD, professor of medical and molecular genetics at Indiana University School of Medicine-South Bend, works with colleagues on a variety of strategies to [mitigate the impact of mosquito-borne illnesses](#) such as Zika and dengue fever.

The Scheel Lab received two grants from the Department of Defense (DOD) to develop environmentally safe larvicides as well as traps designed to be attractive environments for mosquitoes to lay their eggs. They are also designing mosquito-specific pesticides that can be delivered as attractive toxic sugar baits, a new paradigm for mosquito control that exploits the sugar feeding behavior of female and male mosquitoes that are lured to feed on a sugar source containing an insecticide. These studies involve partnerships with researchers at the University of the West Indies at St. Augustine, Trinidad and Tobago, as well as the Armed Forces Research Institute of Medical Sciences in Thailand. The DOD is interested in protecting military personnel and their families from mosquito-borne illnesses when deployed.



Dr. Olive Akunga, a registrar (Kenyan equivalent of a resident) at Moi University School of Medicine, and Dr. Caitrin Kelly, IU's medicine team leader, pause outside Moi Teaching and Referral Hospital in Eldoret, Kenya. Dr. Akunga was in Indiana in March of 2020 when the pandemic forced her to cut her rotation short and return to Kenya. Similarly, Dr. Kelly left Kenya in early 2020, but was able to return and resume her team leader role in October.

LEADERSHIP

CENTER LEADERSHIP

Director

Adrian Gardner, MD, MPH

Robert Einterz, MD (retired January 2020)

Director of Education

Debra Litzelman, MA, MD, MACP

Director of Research

Kara Wools-Kaloustian, MD, MPH

Suzanne Babich, DrPH, MS

Carrie Docherty, PhD, ATC, FNATA

Ambassador Lee Feinstein, MA, JD

Larry Goldblatt, DDS, MSD

Hilary Khan

Edward Liechty, MD

Michael McGuire, PhD

Robin Newhouse, PhD, RN, NEA-BC, FAAN

William Plater, PhD, MA

Fran Quigley, JD

Anantha Shekhar, MD, PhD

We invite submissions of additional care, training or research programs at Indiana University that advance the Center's global health mission. Please send information for inclusion on the Center's [website](#) and future activity reports to [Debbie Ungar](#), communications manager.



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INDIANA UNIVERSITY
CENTER FOR GLOBAL HEALTH