## UNIVERSITY of WASHINGTON



# DEPARTMENT OF GLOBAL HEALTH ANNUAL REPORT 2019



Transforming health for a better world.

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## A MESSAGE FROM THE CHAIR



We are proud to share the University of Washington Department of Global Health 2019 Annual Report, which highlights the powerful global impact of our work over the past year. In this report, you will see how the UW Department of Global Health, in collaboration with our partners around the globe, is transforming lives and improving health. This report highlights innovative discoveries in science, efforts to improve global health systems and practices, and examples of how we are preparing the next generation of global health leaders through our world-class learning programs. We hope this report will showcase some of our successes and open doors for future collaborations to ensure that the Department of Global Health continues to serve communities equitably and creatively here in Seattle and around the world in 2020 and beyond.

Judith n. Wasserheit

## OUR CENTERS, PROGRAMS AND INITIATIVES (O

The Department of Global Health (DGH) includes CPIs working with partners to improve health in more than 140 countries. Through research, capacity development and education and training, DGH is making pivotal contributions to urgent health priorities, including the top 10 threats to global health in 2019 as defined by the World Health Organization (WHO).

## WHO: TEN THREATS TO GLOBAL HEALTH IN 2019





# **OUR FACULTY AND STAFF**

349



72 Faculty appointments that are primary or joint in DGH

Faculty who have primary appointments with other UW departments or have primary employment at affiliated institutions worldwide.

**Emeritus faculty** 

## **HIGHLY INTERDISCIPLINARY FROM**

41 UW departments

**STAFF** 

221

USA-based



UW Schools and colleges

190 +

Partners across Seattle and the world

> 222 Internationally based

> > \*Includes staff working with DGH through other organizations, temporary, short-term, and stipend.

## I-TECH

**International Training & Education Center for Health** 



KRTC Kenya Research & Training Center 4 10

**MetaCenter for Pandemic Preparedness and Global Health Security** 

3 4 9 6

PERLA Program in Education and Research in Latin America

24

#### SCOPE

**Strengthening Care Opportunities through** Partnership in Ethiopia

4 10

**START CENTER** Strategic Analysis, Research, and Training 4 8 10

**UW Global Mental Health Program** 

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# **OUR GLOBAL REACH**





## **RESEARCH AND CAPACITY DEVELOPMENT HIGHLI**

Our research and capacity development efforts focus on developing, testing and delivering evidence-based interventions that result in improved health, at scale, among people and communities most vulnerable to health problems. This includes those most at risk for adverse health outcomes—children, adolescents, women, and people in low- and middle-income settings around the world, including in Seattle and across Washington State. These highlights from 2019 offer a glimpse of our achievements that are harnessing expertise and innovation across the entire university—and across the globe—to improve health and reduce health disparities.

## CLIMATE AND HEALTH

Our climate is changing - how will we adapt? DGH's flagship environmental change program, the Center for Health and the Global Environment (CHanGE), facilitates interdisciplinary collaborations across UW's schools and colleges to promote systems-based approaches to support communities to prepare for, cope with, and adapt to a changing climate.

#### LANCET COUNTDOWN /

The Lancet Countdown is a global, annual update on a suite of indicators related to climate change and health. The global report is published every year in the *Lancet* in advance of the Conference of Parties (COP), the annual United Nations policymaker gathering focused on climate change and emissions reduction. Each year the release of the global report is accompanied by the publication of several national briefs focused on countries of particular importance to global climate policy, including the US. The national briefs provide additional insight into the global indicators in a given country and bring additional data and perspective to bear on regionally significant trends. The global report and, increasingly, the national briefs, are highly visible and highly cited, and the Countdown has become an authoritative account on climate and health. CHanGE faculty Jeremy Hess and Kris Ebi are both authors on the global report and Jeremy Hess is the senior author on the US national brief. Both reports were released in November 2019.

## **GHTS 2019**

Every child born today will be affected by **climate change.** How we respond will determine the world we live in tomorrow and will shape the health of children across the globe, at every stage of their lives.





Governments need to do more. Only 28 countries made the link between health and climate change at the UN General Assembly in 2018.



Record-breaking numbers of people are facing extreme heat.

220 million additional vulnerable people were exposed to heatwaves in 2018, 11 million more than the previous 2015 record.



### ZOONOTIC DISEASE RISK MAPPING FOR WASHINGTON STATE /

As new and emerging diseases continue to threaten human health, the role of animal to human transmission (zoonotic transmission) of pathogens is increasingly recognized. CHanGE faculty members Cory Morin, Peter Rabinowitz, and Nick Ogden were funded by the UW EarthLab to map the climate suitability for four zoonotic diseases in Washington state. The diseases are West Nile virus, Valley Fever, Hanta virus, and Leptospirosis. The investigators are using existing case data and historical climate data to determine the climate condition that support each disease and will then use these relationships to create an empirical model to identify other areas in the state where conditions may be suitable for the pathogen but it has not been observed. The goal is to create maps that will aid the Washington Department of Health in monitoring and preparing for potential outbreaks. The team also includes investigators from the Washington Department of Health.

#### CLIMATE AND HEALTH ADAPTATION IN THE PACIFIC /

CHanGE continues to expand its work in the Pacific region, including with several small island developing states and countries in Southeast Asia. Chris Boyer, a former UW global health MPH student and current UW PhD student, and CHanGE faculty Kris Ebi lead the work, which is supported by the World Health Organization's Western Pacific Regional Office (WPRO). CHanGE worked together with four small island developing states – Kiribati, the Solomon Islands, Tuvalu, and Vanuatu – to submit proposals to the Least Developed Country Fund to conduct four-year climate change health adaptation projects. In addition, CHanGE is starting to develop training materials on climate change and health for health professionals in Kiribati and Tuvalu. CHanGE is also working to support multiple countries to develop proposals for the Green Climate Fund to support additional climate and health work.



Participants in a 2019 NIH research symposium in Nairobi celebrated the power of global health partnerships in Kenya.

## CELEBRATING THE POWER OF GLOBAL HEALTH PARTNERSHIPS IN KENYA

More than 30 years ago, University of Washington and Kenyan researchers first began partnering to strengthen global health research and action in Kenya. Since then, collaborations have blossomed, mutually strengthening both UW researchers and their Kenyan counterparts and resulting in long-term health impacts in Kenya and beyond. "The partnership has developed high-level research capacity, created a critical mass of mentors and inculcated a culture of scientific inquiry in the Kenya health system," said Peter Cherutich, Director of Preventive and Promotive Health, Kenya Ministry of Health, and UW Global Health alumni. In 2019, highlights included:

In partnership with UW, University of Nairobi has been awarded a \$3.2 million grant to strengthen high-impact research in Kenya to improve treatment and prevention of HIV, led by Drs. Ruth Nduati and Dalton Wamalwa.

With mentorship from KRTC faculty, more than 40 U.S. UW students and postdoctoral students have lived in Kenya and worked in Kenya for an extended period of time, often for several years, and at least 63 advanced degrees (masters and PhD degrees) have been awarded to Kenyan collaborating scientists.

#### HEALTH CO-BENEFITS OF CLIMATE CHANGE MITIGATION /

Climate change mitigation often has substantial short term impact on health through multiple pathways, including reduced air pollution from elimination of fossil fuels, reduced intake of cholesterol and carcinogens from food, and reduced obesity and diabetes prevalence from increased active transport. These benefits can be modeled, but approaches vary widely and this wide variation limits aggregation of results and policy development. With funding from the Wellcome Trust, CHanGE convened the world's experts on health co-benefits of climate change mitigation to review approaches and develop guidance for modeling studies. This guidance will be published in 2020.



Glacier Peak High School students present their global health projects at their annual science symposium.

## GLOBAL HEALTH IN HIGH SCHOOLS

Every year, DGH partners with teachers at high schools in the Greater Seattle area to offer a course Introduction to Global Health: Disparities, Determinants, Policies, and Outcomes. In 2019, the course was taught at Redmond, Tesla, Glacier Peak, Eagle Harbor, and Pope John Paul II High Schools. Students earn five UW credits while learning about the burden and distribution of disease and mortality, the determinants of global health disparities, the making of global health policies, and the outcomes of global health interventions. Students in Tami Caraballo's Global Health course at Glacier Peak High School reflected: "I thought that global health was a purely medical based subject. I quickly learned that global health is much more than medicine, it is a concept that includes politics, anthropology, economics, ethics and many other contributing factors. The most impactful realization I had was that while medicine and surgery are sometimes the most effective treatment, it is important to look at what the root of the cause is." Another student shared, "My biggest "wow" moment was realizing that there are so many different ways to indirectly attack diseases like HIV without ever attacking the disease itself. Things like good food, water, education, sanitation, and equality all contribute just as much to someone's health." DGH's UW in the High School program is led by Todd Faubion.

## GLOBAL MENTAL HEALTH

Our Global Mental Health program aims to reduce the burden of mental disorders in low resource settings globally. In conjunction with local and global partners, our projects develop, test, and build capacities to deliver sustainable models for mental health interventions.

## WORKING WITH HEALTH WORKERS TO OPTIMIZE MENTAL HEALTH TREATMENT IN MOZAMBIQUE /

The Systems Analysis and Improvement Approach for mental health (SAIA-MH) borrows elements from industrial engineering. The approach charts the steps involved in the mental health care cascade, identifies how patients and the health system are affected by them, and then works with health workers to address problems. The approach was applied in a project with HAI support in Sofala, Mozambique, where only 62% of mental health patients ever returned for a scheduled follow-up visit after being diagnosed, only 9% of patients were adherent to medication, and only 3% of patients showed improvements in function. Following three months of SAIA-MH implementation, 85% of patients were returning for a follow-up visit, 16% of patients were adherent to medication, and 11% showed improved function.



SAIA-MH training and a health professional learning to understand their mental health care cascade.



Both pets and people receive care at One Health Clinic. Photo by Gemina Garland-Lewis

# SUPPORTING HOMELESS YOUTH AND THEIR PETS

The state's two largest public universities have teamed up to improve the health of young adults experiencing homelessness – and their pets. UW and Washington State University are working with New Horizons Ministries and Neighborcare Health to provide health care and veterinary care to this vulnerable population. Many people experiencing homelessness have pets, but the animals can be a barrier to health care. Owners may not want to leave their dogs or cats while visiting a clinic. Enter the new One Health Clinic, which welcomes two- and fourlegged creatures at the same time. "Our joint human health/veterinary care model allows us to treat humans and their pets as a unit, since there are so many overlapping health issues," said Peter Rabinowitz, director of UW's Center for One Health Research and a professor of environmental & occupational health sciences, family medicine and global health. The project grew out of a pilot grant from the UW's Population Health Initiative.

## SCALING-UP DELIVERY OF PSYCHOLOGICAL INTERVENTIONS: EQUIP NAIROBI

**NAIROBI** / Around the world, people living with some of the most common mental health problems, such as depression, anxiety, traumatic stress and harmful substance use, do not have access to quality treatment and support services. Women, men, and children living in low- and middle-income countries and settings of humanitarian crises are typically at greater risk of these common mental health problems but have the least access to care. To address this, the World Health Organization has launched a unique initiative -EQUIP: Ensuring Quality in Psychological Support - to develop and disseminate resources for scaling-up quality delivery of psychological interventions. In this WHO-funded project, led by Pamela Collins, UW is piloting EQUIP and the project has completed adaptation and pilot training of community health volunteers and psychologists on Trauma-Focused Cognitive Behavioral Therapy in Nairobi. The volunteers are now equipped to deliver therapy to children and adolescents affected by trauma. The project leverages UW's collaborations with University of Nairobi, citiesRISE—our implementing partner-and Nairobi County. Through this project, UW is part of a WHO seven-country consortium. Our work in Nairobi brings the capacity that the BASIC project (see p. 17) has developed in Western Kenya to Nairobi.





EQUIP: Ensuring Quality in Psychological Support is developing and disseminating resources for scaling-up quality delivery of psychological interventions in Kenya.



A peer support workshop on HIV-related stigma among African American women living with HIV.

#### UNDERSTANDING STIGMA IN THE GLOBAL CONTEXT /

Health-related stigma is a complex phenomenon, acting across multiple levels (e.g., interpersonal, community) to dramatically reduce help-seeking and worsen health outcomes among people with stigmatizing conditions. Though existing stigma-reduction interventions have demonstrated modest effectiveness, their full reach and impact have been limited as they generally focus on one component or level of stigmatization. Multi-level stigma reduction interventions are necessary to address the full scope of healthrelated stigma. In a study led by Deepa Rao, researchers conducted the first systematic review of original research from high- and low/middle-income countries on multi-level stigma-reduction interventions. The study found that while there has been progress in the evaluation of multi-level stigma interventions, the approach needs to be expanded. The study highlighted several opportunities for new program development.

Another study, conducted by Christopher Kemp and Deepa Rao, focused on HIV stigma and African-American women, who, despite representing only 13% of the total female population, account for 61% of new HIV diagnoses among women in the United States. The study assessed the relationship between HIV stigma and viral load among a sample of African-American women receiving treatment for HIV, and explored social support and depressive symptoms as mediators. Viral load is a key indicator of treatment success, HIV-related health, and the risk of progression to AIDS. The study concluded that ongoing experiences of HIV stigmatization may contribute to increased viral load among African-American women in primary HIV care. Interventions should aim to alleviate the consequences of stigma experienced by patients and prevent future stigmatization.

## IMPROVING MENTAL HEALTHCARE FOR HIV+ INDIVIDUALS IN MOZAMBIQUE /

The Common Elements Treatment Approach (CETA), is based on evidence-based treatments for depression, anxiety, substance use, trauma and stress related disorders. The CETA model was developed specifically for low and middle-income settings that rely on non-mental health providers working within sustained supervisory systems. This project, led by Brad Wagenaar in partnership with Health Alliance International, I-TECH, and the Mozambican Ministry of Health, implemented CETA for HIV+ individuals in Mozambique. Over 250 newly-magnosed HIV+ individuals were screened, and 148 (59%) tested positive for clinically significant mental health symptoms at HIV diagnosis and were enrolled in CETA. Mental health symptoms of patients enrolled in CETA decreased 56% after 4 CETA sessions and 90% after 6 sessions; suicidal ideation decreased from 15% at intake to 0% after 4 sessions. One-month retention among CETA participants was 67%, compared to the combined one-month retention rate of 60% for all HIV+ patients (those offered CETA and those not offered CETA combined). Three-month retention among CETA patients was 80%, compared to 64% among all HIV+ patients. Compared to all HIV+ patients, those patients enrolled in CETA had 7% higher one-month retention in HIV care (67% vs. 60%) and 16% higher three-month HIV retention (80% vs. 64%). CETA is a promising approach to reduce symptoms of common mental illness among HIV+ patients and improve HIV care cascade outcomes in areas with high HIV prevalence. The next steps are scaling-up the CETA model to other provinces in Mozambique.



CETA training in Beira.



CETA dissemination meeting presenting results of projects to Ministry and local partners.



## WORLD'S MOST INFLUENTIAL, WIDELY PUBLISHED RESEARCHERS

In 2019, UW DGH faculty members published a total of over 780 articles in internationally acclaimed journals such as *The Lancet, Nature, New England Journal of Medicine*, and *Science*. Many critical policy, program and funding decisions are based on the work emanating from these top scientific journals. Two DGH faculty members were also recognized as among the most Highly Cited Researchers of 2019 for producing multiple highly cited papers that rank in the top 1% by citations for field and year.

#### GLOBAL AND LOCAL PARENTING PROJECT /

The goal of the Public Health Parenting Project (PHPP) is to extend knowledge on child and adolescent brain development and parenting skills within communities that, due to language barriers and low resources, have limited access to evidence-based parenting interventions. UW implemented a project that is part of the PHPP. The project, led by Ann Vander Stoep, worked with parents from two communities. PHPP workshops were offered in Amharic language to parents of Seattle Public School students at the Ethiopian Community in Seattle (ECS) Center in Rainier Valley, and in Chitumbuka to parents of Ekwaliweni Primary students in N. Malawi. In both settings the UW team trained local leaders to implement the workshops. Three UW Community-Oriented Public Health Practice MPH students focused their Capstone projects on PHPP, including evaluating community engagement, evaluating uptake of positive parenting skills, and creating a training toolkit.

#### TASK-SHARING MENTAL HEALTH CARE IN LOW-RESOURCE SETTINGS /

The Building and Sustaining Interventions for Children (BASIC) study led by Shannon Dorsey aims to provide knowledge about how implementation of task-shifted mental health care can be supported in government systems that already serve children and adolescents in Kenya. The study involves 40 schools and 40 communities surrounding the schools, with enrollment consisting of 120 teachers, 120 Community Health Volunteers, site leaders, and 1,280 youth. In the study, lay counselors are being trained and supervised by local trainers who are experienced in delivering the intervention and skilled in the Train-the-Trainer model. Researchers then conduct in-depth interviews with the initial implementing sites' counselors and leaders. The findings will then be used to inform delivery of implementation coaching (facilitation) for subsequent sites.

## STIs/HIV/AIDS

DGH's work on infectious diseases, including STIs, HIV, and AIDS, includes laboratory-based sciences that are developing vaccines and therapies, and conducting clinical trials, along with prevention education, and health systems strengthening.

## STUDY REVEALS DEPO-PROVERA HORMONE SHOT DOES NOT RAISE HIV RISK - ECHO TRIAL /



Jared Baeten at IAS 2019. Photo by Liz Highleyman.

For decades, many African women in need of birth control
they could use in secret have relied on intramuscular hormone
injections that prevent pregnancy for three months. But in recent
years, studies suggested that women using injectables were more
likely to get infected with H.I.V. In 2019, a major new study found
that women who did were not at a much greater risk than they
were from other contraceptive methods, including a hormone
implant or a copper intrauterine device. The ECHO study (Evidence
for Contraceptive Options and HIV Outcomes), which involved more
than 7,800 women in four African countries (South Africa, Kenya,
Zambia and eSwatini—the former Swaziland) was published in The
Lancet. The study compared infection rates among thousands of
women who each had to consistently use one of three modern
birth control methods for 18 months. Jared Baeten was one of two

#### SEEKING BETTER WAYS TO KNOW THE HIV EPIDEMIC /

HIV/AIDS is a leading cause of disease burden in sub-Saharan Africa. Existing evidence has demonstrated that there is substantial local variation in the prevalence of HIV; however, subnational variation has not been investigated at a high spatial resolution across the continent. A study, which included Laura Dwyer-Lindgren, Christopher Murray and Simon Hay, explored within-country variation at a 5 × 5-km resolution in sub-Saharan Africa by estimating the prevalence of HIV among adults (aged 15–49 years) and the corresponding number of people living with HIV from 2000 to 2017. The analysis revealed substantial withincountry variation in the prevalence of HIV throughout sub-Saharan Africa and local differences in both the direction and rate of change in HIV prevalence between 2000 and 2017, highlighting the degree to which important local differences are masked when examining trends at the country level. These fine-scale estimates of HIV prevalence across space and time provide an important tool for precisely targeting the interventions that are necessary to bringing HIV infections under control in sub-Saharan Africa.



Prevalence of HIV in adults aged 15-49 in 2017.



# STRATEGIC ANALYSIS, RESEARCH & TRAINING (START) CENTER

The START Center is a research consulting group whose team includes 9 UW faculty who are leaders in global and domestic public health research and 17 graduate research assistants in addition to leveraging a network of 4,700 faculty experts across the UW. START provides high-quality research and analytic support to public health organizations seeking to have an impact globally, while providing structured mentorship and training to UW graduate research assistants. In 2019, START completed 16 projects partnering with Boston Scientific, Global to Local, Children's HeartLink, and 13 teams across the Bill and Melinda Gates Foundation. Since its founding in 2011, START has completed 150 projects, trained 70 students, and engaged 35 faculty from across UW.



Nigel Garrett, Centre for the AIDS Programme of Research in South Africa (CAPRISA), and Paul Drain, ICRC, UW, are interviewed at CROI 2019.

STUDY SHOWS POINT-OF-CARE VIRAL LOAD TESTING IMPROVES TREATMENT OUTCOMES AMONG PEOPLE LIVING WITH HIV /

Globally, less than half of all people living with HIV (PLHIV) have achieved viral suppression. Delays with laboratory testing in resource-limited settings continue to present challenges for monitoring treatment with antiretroviral therapy (ART). Paul Drain led a recent study that found that point-of-care (POC) testing and same day counseling by nurses significantly improved suppression of the virus, retention in care, and referral into community-based care. POC testing allows important test results to be received by both the patient and clinician in a timely manner. Set in South Africa, the study randomized patients into receiving either standard laboratory HIV viral load testing or POC viral load testing. Among 390 patients enrolled (195 per arm), 90% of POC tested and 76% of laboratory tested patients were retained and achieved viral suppression after 12 months, a statistically significant 13.9% increase. The results suggest a promising future for POC HIV viral load testing to simplify health care and improve outcomes for PLHIV receiving ART. Increasing access to POC HIV viral load testing could be a major step towards achieving UNAIDS's 90-90-90 targets by 2020, especially in resource-limited areas such as South Africa.

## INDEX TESTING TO IDENTIFY AND SUPPORT THOSE MOST AT RISK OF ACQUIRING HIV /



I-TECH's programs in Botswana, Mozambique, Namibia, and Zimbabwe are on the forefront of index testing, a key strategy to identify and support those most at risk of acquiring HIV. Index testing, including partner notification services (PNS), is a key strategy to identify and support those most at risk of acquiring HIV: sexual contacts, needle-sharing partners, and biological children of newly diagnosed HIV-positive individuals. The International Training and Education Center for Health (I-TECH) has been on the forefront of index testing activities and support services in Botswana, Namibia, Ukraine, Zimbabwe, and Mozambique. Services include elicitation of sexual contacts and biological children, counseling on risk reduction and disclosure to sexual contacts, passive and active notification by health care workers, HIV testing and counseling, distribution of condoms, and linkage to pre-exposure prophylaxis (PrEP) and/or HIV treatment.

#### DREAMS /



Through an I-TECH project, mentors help adolescent girls and young women build strong social networks and empower them to make healthy and positive decisions. In 2017, I-TECH began the DREAMS program in the Khomas and Zambezi regions, Namibia. DREAMS is a President's Emergency Plan for AIDS Relief (PEPFAR) program that stands for Determined, Resilient, Empowered, AIDS-free, Mentored, and Safe that aims to reduce HIV infections among adolescent girls and young women (AGYW) through a core package of evidence-based interventions across health, education, and social sectors. At a safe space such as a school or community center, participants meet with a mentor trained to deliver a curriculum focused on the prevention of HIV and gender-based violence (GBV). Mentors help AGYW build strong social networks and empower them to make healthy and positive decisions. AGYW can also access on-site services like HIV testing, family planning, PrEP, counseling, and screening for GBV to protect against HIV infection. I-TECH has supported over 150 safe spaces since its launch and enrolled over 20,000 AGYW in the program, and from early 2018 through May 2019, more than 2,290 adolescent girls and young women have been started on PrEP across the two DREAMS regions.

## I-TECH RENEWED AWARDS TOTALING \$24 MILLION HELP BRING ZIMBABWE TOWARD HIV EPIDEMIC CONTROL /

Two programs at I-TECH are working in concert with local partners to help make HIV Epidemic Control a reality in Zimbabwe. I-TECH has worked in Zimbabwe since 2003, and since then, work in the country has expanded to two awards totaling more than \$24 million—one of which focuses on HIV testing, care, and treatment and the other on voluntary medical male circumcision (VMMC) for HIV prevention.
Both projects are funded by the U.S. Centers for Disease Control and Prevention, through the President's Emergency Plan for AIDS Relief (PEPFAR), and operate through consortia comprising I-TECH and local partners.

For more HIV/STI/AIDS programs/projects, also see the Global Mental Health, Implementation Science and Maternal, Newborn and Child Health sections.

## HEALTH SYSTEMS STRENGTHENING

With partner organizations around the world, Health Alliance International and the International Training & Education Center for Health are two major efforts responding to emerging global health needs through capacity development, training, electronic medical record implementation, and more.

## EVIDENCE-TO-ACTION: IMPROVING MATERNAL, NEWBORN, AND CHILD HEALTH OUTCOMES IN MOZAMBIQUE /

Health Alliance International is collaborating with the Doris Duke Charitable Foundation's African Health Initiative and the Mozambican Ministry of Health to improve maternal, newborn and child health service delivery and outcomes in Central Mozambique. The Integrated District Evidence to Action (IDEA) project develops and systematizes data-driven decision-making skills and public health research expertise at the provincial, district, and facility levels. In 2019, the IDEA project was operational at 150+ health facilities serving ~2.9 million Mozambicans, leading to increases in antenatal care use, institutional births, and outpatient visits.

#### DIGITAL INITIATIVES GROUP /

In winter 2019, I-TECH launched a new unit: the Digital Initiatives Group at I-TECH (DIGI). The DIGI team builds upon 15 years of experience at I-TECH designing, developing, implementing, and evaluating health information systems around the world. The group — co-led by Nancy Puttkammer and Jan Flowers — provides services to help programs scope and build technical solutions to manage program or clinical data. DIGI leverages diverse resources from departments across the university. By promoting open-source "global goods" that are supported by implementer communities, DIGI helps partners such as Ministries of Health to be able to own and continue to develop long-term digital solutions.

#### RESPONSE & RECOVERY IN THE WAKE OF CYCLONE IDAI /

In March 2019, Cyclone Idai hit Central Mozambique, causing intense infrastructural damage, including 94 provincial health units, and leading to spikes in water- and vector-borne disease. Health Alliance International engaged its decades-long relationship with Mozambique's Ministry of Health to provide immediate support and raise resources directed at long-term health system recovery. Recovery activities included import and distribution of priority medical supplies, equipment, and medicines; rehabilitation of three damaged health facilities; support for health system engagement in cholera and vaccination rapid-response campaigns; and regional epidemiologic capacity building and preparation for future weather and disease events.





A new study found that interactive, mobile technology safely improves male circumcision care quality at lower cost than standard post-operative visits.

#### TEXTING TO REDUCE PROVIDER WORKLOADS /

Interactive, mobile technology safely improves male circumcision care quality at lower cost than standard post-operative visits. Voluntary medical male circumcision (MC) safely reduces the risk of female-to-male HIV transmission by up to 60%. Few men have any post-operative MC complication. However, current practice in Zimbabwe and throughout most of sub-Saharan Africa requires MC patients to return for multiple, in-person post-operative visits. With low complication rates, and severe healthcare worker shortages, these required visits are a burden for providers and patients threatening achievement of critical HIV prevention targets. A two-way texting model studied by UW researchers in Zimbabwe, led by Caryl Feldacker, offers a new way to address this barrier by reducing provider workload while also safeguarding patient safety. The method was found to dramatically reduced in-person visits by 85%, and showed that texting also reduced follow-up costs by about one-third while improving the quality of care.

#### PILOT-TO-NATIONAL HEALTH SERVICE SCALE-UP IN TIMOR-LESTE /

In 2013, Health Alliance International and Catalpa International designed and launched the first ever mobile health (mHealth) program in Timor-Leste. The Liga Inan program supports Ministry of Health efforts to improve maternal and newborn home care and care-seeking practices by connecting mothers to health information and care providers using their mobile phones. In 2019, the Liga Inan program achieved nationwide scale-up through the National Health Service, substantially increasing the number of women who seek skilled care in a health facility before, during, and after childbirth.

## IMPLEMENTATION SCIENCE

DGH's Implementation Science (IS) program seeks to get 'what works' to the people who need it, with greater speed, fidelity, efficiency, quality, and relevant coverage. A leader in implementation science, our IS program involves a growing array of research and educational activities that span across the Department.

## NEW UW CENTER TO IMPROVE THE FIGHT AGAINST CANCER /

Even successful methods for diagnosing, treating and caring for people who are suffering from cancer are not enough without effective, practical tools and guidance for putting those methods into practice.

To bridge this gap between cancer interventions and their implementation within communities across the country, the National Institutes of Health's National Cancer Institute is funding the creation of six implementation science centers focused on cancer control. The creation of these centers are part of NIH's Cancer Moonshot initiative to make more therapies available and improve prevention and detection. One of the six centers will be at the UW based in the Department of Health Services, part of the School of Public Health, led by Bryan Weiner, who also leads the DGH Implementation Science program.

#### OPTIMIZING AND SCALING PREP DELIVERY /

PrEP is an essential component of HIV prevention strategies.
Several International Clinical Research Center (ICRC)
implementation science projects are looking at ways to optimize
and scale PrEP delivery. The Partners Scale-Up Study, led by
Jared Baeten and Kenneth Mugwanya, is working with the Kenyan
government to scale PrEP delivery to serodiscordant couples
nationally. The project is working in over 30 clinics in western,
central and coastal Kenya, with over 5,000 people starting PrEP
since the beginning of the project. In Uganda, the Partners PrEP
Program is working to integrate PREP delivery at public health
clinics in Kampala. Additionally, several smaller projects are
working to optimize efficiencies for PrEP delivery, including
through the use of HIV self-tests, one-stop delivery, and pharmacy-based delivery.



he annual Fundamentals of Implementation Science in Global Health summer course included 90 students from 22 countries.

## REACHING OUT TO STUDENTS AROUND THE WORLD ABOUT IMPLEMENTATION SCIENCE

Implementation science works to address bottlenecks in getting proven health interventions implemented at scale in clinical and community settings. This approach focuses on onthe-ground personnel, making it particularly relevant to global health, a field that relies on the sustainability of health interventions in challenging environments. In 2019, DGH's Implementation Science program launched a new undergraduate course in implementation science – the first of its kind worldwide. In addition, DGH is offering opportunities for students around the world to learn about implementation science through its intensive summer course in The Fundamentals of Implementation Science in Global Health every summer – in 2019 90 students from 22 countries traveled to Seattle for the one-week course. eDGH's online course, Fundamentals of Implementation Science, also taught more than 652 students in 21 countries via a three-month online course. You can learn more about UW's implementation science education, training, and research activities at the UW Implementation Science Resource Hub www.impsciuw.org.

## PANDEMIC PREPAREDNESS AND GLOBAL HEALTH SECURITY

The UW MetaCenter for Pandemic Preparedness and Global Health Security aims to save lives by limiting the extent of infectious disease epidemics. We are fostering an interdisciplinary and integrated systems approach spearheaded by top scientists and practitioners that focuses on improving readiness before epidemics hit.

## MAPPING THE EPIDEMIC POTENTIAL OF DENGUE

IN PERU /

In Peru, outbreaks of dengue fever and the Zika virus have plagued the country in recent years, and UW experts say weather events induced by El Niño are making the problem worse. To show exactly how changing weather patterns are leading to new vulnerabilities, the UW MetaCenter leveraged expertise at the UW and the Universidad Peruano Cayetano Heredia in Lima, with support from a UW Population Health Initiative Pilot Research grant. The interdisciplinary team mapped the epidemic potential of dengue and other viruses transmitted by the Aedes aegypti mosquito down to the district level, while considering climate change, health care capacity and infrastructure. The project team is now testing whether the tool improves Peru's ability to respond to dengue outbreak threats by helping focus and prioritize resources in the areas with greatest vulnerability. Future projects will focus on vaccine and diagnostics development.

#### DENGUE RISK MAPPING IN PERU /

CHanGE faculty members Cory Morin and Peter Rabinowitz, and David Pigott, health metrics sciences, were funded by the UW Population Health Initiative to create a tool to map risk of dengue infection at the district level in Peru. The tool includes multiple levels of data input including climate, population, and access to health care facilities, among others. For the climate input, Dr. Morin used a model to calculate the probability of a mosquito surviving the incubation period based on district temperature. Values for each district were calculated for several different scenarios; summer and winter, El Nino and non El Nino years, and a couple of simple climate change conditions. In 2019, the UW MetaCenter received new funding from the U.S. CDC to lead an ambitious project in Kenya to map vulnerability to Rift Valley fever and other pathogens.

## AWARDS

In 2019, several UW Global Health faculty and staff were honored for their outstanding work in the field of global health.



Professor BEN ANDERSON

won the Washington Global Health Alliance (WGHA) Pioneers Award for Impact.



Affiliate Assistant Professor MICHELE ANDRASIK won the UW 2019 Martin Luther King Jr. Community Service award.



I-TECH Contracts and Operations Manager **MAYA BEAL** received the Bob Roseth Outstanding Staff Award from the UW Professional Staff Organization.



Professor **PAMELA COLLINS** received the 2019 Jeanne Spurlock, M. Minority Fellowship



Adjunct Associate Professor **TRACY HARACHI** received the UW 2019 Martin Luther King Jr. Community Volunteer

Recognition award.



Professor **KING HOLMES** received the Consortium

Achievement Award.

of Universities for Global Health (CUGH) 2019 Distinguished Leadership award.



## Professor Emeritus JAMES P. LOGERFO SR.,

received the UW Award of Excellence – Distinguished Retiree Excellence in Community Service Award.



Global WACh and SCOPE Managing Director **KATE PFIZENMAIER** won the 2019 Outstanding

Staff Award from the UW Department of Global Health.



Assistant Professor JILLIAN PINTYE won the WGHA Pioneers Rising Leader Award.



(L-R) Susan Graham, Carey Farquhar, Judy Wasserheit, Jared Baeten, Judd Walson

## DGH WELCOMES NEW LEADERSHIP

On Aug. 1, 2019, DGH welcomed Susan Graham as the new Associate Chair of Academic Programs and Judd Walson as the Department's new Vice Chair. They replaced Jared Baeten and Carey Farquhar, who are taking new Vice Dean roles in the UW School of Public Health Dean's office.

## SPOTLIGHT: MATERNAL, CHILD, AND NEWBORN HEALTH

Advancing the health and well-being of women, adolescents, and children is emphasized in all the work we do - from scientific discoveries, to cultivating leaders, to bridging disciplines. Our research approach focuses on critical windows—during birth and infancy, during the transition from childhood to adolescence, and from adolescence into adulthood—where healthcare interventions can have long-term benefits across the lifecycle.



### Increasing Survival and Improving Growth from Childhood Infections

The Global Center for Integrated Health of Women, Adolescents, and Children (Global WACh) completed several studies in 2019 that sought to understand interactions between diarrhea, growth, and mortality and is leading large multi-site trials to understand impact of antibiotics on mortality and morbidity. The team provided seminal reviews to help the field understand key issues and implications and collaborates with stakeholders in-country, at WHO, and the Gates Foundation.

## Preventing HIV Infection in Young Women by Implementing PrEP in Maternal Child Health and Family Planning Clinics

Global WACh, International Clinical Research Center (ICRC), Kenyatta National Hospital, and the Kenya Ministry of Health led the first implementation of PrEP in maternal and child health and family planning clinics in Africa. The work conducted in 2017 from the team informed WHO guidelines regarding PrEP in pregnancy. The UW team, including Jillian Pintye, is co-leading a multinational group to advance PrEP in Pregnancy.





#### Saliva testing to expedite diagnosis of HIV in infants

Gaps persist in HIV testing for children who were not tested in prevention of mother-to-child HIV transmission programs. Oral mucosal transudate (OMT) rapid HIV tests have been shown to be highly sensitive in adults, but their performance has not been established in children. A Global WACh study in Kenya and Zimbabwe, including Irene Njuguna and Anjuli Wagner, found that OMTs are valid in this age range. The data are now being used by WHO to guide recommendations for use of saliva HIV testing in children.

#### mHealth Tools to Improve Women, Adolescents, and Children Health

A Global WACh study including Keshet Ronan and Brandon Guthrie found that two-way SMS results in improved breastfeeding, increased uptake of contraception and high rates of client satisfaction. To date, the UW team has conducted 10 studies involving mHealth/eHealth interventions to improve maternal, adolescent and child outcomes. The researchers used SMS and WhatsApp platforms to support women in pregnancy and postpartum, to engage male partners, to provide PrEP and ART adherence counseling, to help women recognize neonatal danger signs and growth failure and address maternal depression, and to facilitate group discussions among youth living with HIV. The studies included Praekeldt, a global social media leader to convene stakeholders to advance social media platforms to improve public health.



## THE GLOBAL CENTER FOR INTEGRATED HEALTH OF WOMEN, ADOLESCENTS, AND CHILDREN (GLOBAL WACh) TEAM



Global WACh is a Center in the UW Department of Global Health that focuses on scientific discoveries, cultivating leaders, and bridging disciplines to advance the tightly connected health and well-being of women, adolescents, and children. The Global WACh team includes 44 staff in Seattle and 252 staff outside the U.S. and is led by Grace John-Stewart, Director and Judd Walson, Co-Director. Faculty and key research areas include: Alison Drake, Co-Director of Family Planning Decision Support Research; Brandon Guthrie, Director of Leadership Development; Sylvia LaCourse, Jennifer Slyker, Anjuli Wagner, Co-Directors of HIV Through the Lifecycle Research; and Patricia Pavlinac, Judd Walson, Co-Directors of Gut Health and Child Survival Research, along with Donna Denno, Associate Director; Jennifer Unger, Associate Director; and Kate Pfizenmaier, Managing Director.

#### Air Pollution May Worsen Brain Function in HIV-Infected Children

The combination of air pollution and HIV infection may have a greater detrimental impact on the cognitive abilities of school-aged children than exposure to either factor alone, according to an NIEHS-funded study led by Sarah Benki-Nugent. The findings also revealed an alarmingly high prevalence of air pollution exposure, regardless of HIV status, in children living in urban settings in Sub-Saharan Africa.





#### **New HIV Prevention Choice for Women**

In an open-label study of women in southern and eastern Africa, a vaginal ring that is inserted once a month and slowly releases an antiviral drug was estimated to reduce the risk of HIV by 39%, according to statistical modeling. In addition, the study, led by Jared Baeten, found that participants appeared to use the ring more in the open-label study than in a previous clinical trial.

#### **Staying on PrEP**

In a study led by Connie Celum of open-label Truvada as daily pre-exposure prophylaxis (PrEP) to prevent HIV among 427 young African women and adolescent girls, 95% initiated the HIV prevention strategy, and most used PrEP for the first three months. However, PrEP use fell among participants in this critical population during a year of follow-up clinic visits, although HIV incidence at 12 months was low. The preliminary results suggest that tailored, evidence-based adherence support strategies may be needed to durably engage young African women in consistent PrEP use.





#### Medicine Safety in Treating Malaria in Pregnant Women

In 2017, the UW Global Medicines Program published one of the world's largest studies on the safety of medicines to treat malaria in pregnant women. The work was presented to WHO to help inform the updating of global malaria treatment guidelines.

## **GLOBAL HEALTH EDUCATION PROGRAM**

## OUR STUDENTS – BY THE NUMBERS

# 68

#### **DEGREES AWARDED 2018-19**

- > Master of Public Health 58
- PhD Global Health Metrics and Implementation Science – 5
- > PhD Pathobiology 5

#### MINORS & CERTIFICATES AWARDED 2018-19

- > Undergraduate Global Health Minors 54
- > Graduate Certificates 20
- > School of Medicine Global Health Pathway 28

## STUDENTS - AUTUMN 2019 INCOMING CLASS

- Master of Public Health 45 (22% of 207 applicants admitted)
- PhD Global Health Metrics and Implementation Science
  - 13 (12% of 110 applicants admitted)
- PhD Pathobiology 7 (8% of 87 applicants admitted)

## TOTAL ENROLLED STUDENTS AUTUMN 2019

- > **114** Master of Public Health
- > 56 PhD in Global Health Metrics and Implementation Science
- > 33 PhD Pathobiology
- > 130 School of Medicine Global Health Pathway
- > 17 Graduate Certificates
- > 83 Undergraduate Global Health Minor
- > **1804** students took global health courses
- > 20,000+ students enrolled in E-learning courses

## **GLOBAL HEALTH EDUCATION PROGRAM**

## AUTUMN 2019 INCOMING CLASS





international students

The main regions of origin for international students (autumn 2019 incoming class, 19 students) are:

- > 16% Asia Afghanistan, China, Indonesia
- > 68% Africa Malawi, Nigeria, Rwanda, Sudan, Tunisia, Uganda, Kenya, Mozambique
- > 11% Latin America Columbia, Peru
- > 5% North America Canada

## 2019 OUTSTANDING STUDENTS IN GLOBAL HEALTH

Preventing mother-to-child HIV transmission, conducting novel research on West Nile Virus, and developing better approaches to mental health are just some of the ways that UW global health students are already making positive health impacts locally, nationally and globally. Each year, the Department of Global Health recognizes graduating Master's, PhD and medical student scholars who are exemplary students and engaged leaders in global health:



**DAVID FRANTZ** is pursuing a Global Health Minor as an undergraduate student at UW, while supporting research at PATH analyzing market structures to understand accessibility of medical oxygen in low and middle-income countries.



**COURTNEY JACKSON** received the 2019 Husky 100 award, the university's top award for students displaying exemplary work in their respective fields. As an MPH student, Jackson focused her work on issues at the intersection of homelessness, substance use, and criminal justice..



**CHRISTOPHER KEMP** received the SPH Gilbert S. Omenn Award for Academic Excellence Doctoral Award. Kemp's award recognizes his work in implementation science in the mental health and HIV-prevention fields, with a focus on the United States and South Africa, where he was a Peace Corps volunteer.



**FRITZ SIEGERT** won the Global Health Outstanding Medical Student Achievement Award and the 2019 US Public Health Service Award, which recognizes medical students who are public health champions advancing the U.S. Public Health Service mission to "protect, promote, and advance the health and safety of our Nation."



**KATHRYN MCGUCKIN WUERTZ** received the SPH Outstanding PhD Student Award. Kathryn graduated from the Pathobiology program, and was supported by a fellowship from the U.S. Army Medical Service Corps and gained a unique perspective on global health while deployed in Afghanistan.



**RABI YUNUSA** received the SPH Outstanding Master's Student Award. Her thesis work focused on the barriers that prevent women from getting proper service in regard to mother-to-child HIV transmission in Nigeria.



## 2019 GLOBAL HEALTHIES AWARDEES

DGH's event of the year for students, faculty, and staff is *The Global Healthies: Opportunities Fair and Poster Competition.* The annual event brings together DGH staff, faculty, and students to network and explore ways to work together through global health research/fieldwork opportunities. The event also includes a poster competition showcasing the work of our Department of Global Health students. In 2019, more than 200 people participated in the event. Awardees of the student poster competition were:

Jiho Kim, Pathobiology PhD, **Discovery and Development Award**, for high impact research across the spectrum from laboratory bench to bedside, to community and national-level programs.

Roshan Khatri, MPH Student, **Education and Training Award**, for research that demonstrates developing capacities to improve global health at the individual, community, organizational, community, or population-levels.

Adrien Allorant, PhD Health Metrics, **Implementation and Application Award**, for research that demonstrates approaches to increase the speed, efficiency, and impact of interventions and/or programs as they are put into practice or taken to scale.

Danae Black, PhD Epidemiology (Global WACh affiliate), **Public Health Service and Direct Care Award**, for research that assesses of existing individual clinical services or population level prevention services and/or development strategies to improve these services.

Seth Kramer, MPH Student, **Oscar Gish Social Justice and Health Equity Award**, for research that challenges inequality and improves health and justice for all.

## INTERNATIONAL EDUCATION AND TRAINING

DGH global health students have numerous opportunities for study abroad and exchange programs. These include annual DGH Fellowships that provide financial assistance to graduate students, professional students, and medical residents at UW to help support fieldwork experience in global health. In 2019, more than \$150,000 was awarded to 36 students from varied disciplines across the University, including global health, nursing, epidemiology, medicine, public health, psychiatry, and pharmacy, who traveled to 18 countries. In addition, the DGH coordinates more than 10 international training programs, including the Afya Bora Consortium Fellowship in Global Health Leadership, East African Diploma Course in Tropical Medicine, Fogarty Northern Pacific Global Health Fellows program, International AIDS Research and Training Program (IARTP), KUSKAYA Fellowship in Peru, PHERT - Partnership for Health Research Training in Kenya, and Treatment Research & Expert Education (TREE). Students who received fellowships in 2019 include:

#### Neil Sircar, Fogarty Northern Pacific Global Health Fellows program

Neil Sircar, J.D., LL.M, a human rights lawyer, recently concluded a Fellowship with the NIH through the Fogarty Northern Pacific Global Health Fellows program at the UW where he was the principal investigator on a study for assessing the implementation of human rights-based approaches to HIV testing in Kenya with the non-governmental organization Kenya Legal and Ethical Issues Network. His research focus is developing the legal dimensions to global health and human rights-based approaches to health.

#### Abdala Mohamed and Hannah Bosire, Clinical Education Partnership Initiative (CEPI)

Through the Clinical Education Partnership Initiative (CEPI), a month-long program designed for medical residents to gain experience abroad, two University of Nairobi medical students, Abdala Mohamed and Hannah Bosire, spent a month training at UW Medicine hospitals in Seattle, working alongside clinicians and attending physicians under the School of Medicine Internal Medicine Residency Program.

#### Marie-Claire Gwayi-Chore, Global Opportunities (GO) Health Fellowship

Marie-Claire Gwayi-Chore is an Implementation Science (IS) Research Assistant for the DeWorm3 Project. In the summer of 2019, Claire was awarded the GO Fellowship and traveled to Comé, Benin to conduct a qualitative study aimed at defining the challenges and successes of conducting IS research in a global health context and defining the IS research priorities as driven by Beninese public health stakeholders. She held interviews with the site IS research team as well as key partners within the local and national Ministry of Health and Government of Benin.



In 2019, thirty-six students from varied disciplines across UW, including global health, nursing, epidemiology, medicine, public health, psychiatry, and pharmacy, traveled to 18 countries through DGH fieldwork fellowships.



eDGH's Senior Instructional Designers, Leslie Wall (second from left) and Elizabeth Scott (right), at the South Africa graduation ceremony for the online course, Conducting Research Responsibility in Global Health.

## THE GLOBAL HEALTH E-LEARNING PROGRAM

The Global Health E-Learning Program (eDGH) has been offering high quality online courses to a worldwide audience of health care workers, supported by local volunteer site groups. The courses, which include videos, readings, and engaging learning activities for students, reached more than 19,000 participants in 2019, who enrolled in six courses across 80 countries with an overall pass rate of 84%.

The course offerings also expanded this year, with the pilot of two new courses: Global Health Project Management, taught by Ann Downer, Alison Shumays, Ivonne Butler, and Harnik Gulati, and Conducting Research Responsibly in Global Health, taught by Carey Farquar and Alison Drake.

Each course was piloted with 1,200 participants, but demand was even greater--each received more than three times as many applications as could be accepted. Student response to the courses has been tremendous, with course evaluations showing 98% rating the course "good" or "very good" for Project Management and 97% for Conducting Research Responsibly.

One volunteer site coordinator, who organizes local groups for participating in the courses commented, "Participating in the eDGH courses is often what our Kenyan colleagues appreciate the most about working with UW. The level of enthusiasm and gratitude our study staff have for the eDGH courses is unanimous and resounding."

A graduate student who enrolled in an adapted version of the Project Management course commented, "This has been the BEST course I have taken at UW to date." Another said, "No other class in all of my years in school (this is my second Masters degree) has ever been so applicable and beneficial to my professional growth or career endeavors."

New courses are in the works: a new 10-week online course, Monitoring and Evaluation in Global Health, will be piloted in Summer 2020. A hybrid course in Policy and Advocacy in Global Health, taught by Jeff Lane, is also planned for 2020, as is an online version of Global Mental Health, taught by Deepa Rao.

# **ALUMNI SPOTLIGHT**

# **1368**

### EMPLOYERS INCLUDE: WHO, UNAIDS,

CDC, Bill and Melinda Gates Foundation, PATH, Partners in Health, national ministries of health, local organizations worldwide

## ALUMNI PROFILES



## **MINA HALPERN (MPH 2006)**

Mina Halpern serves as the executive director of Clínica de Familia La Romana in La Romana, a medium-sized city in the eastern Dominican Republic. Clínica de Familia La Romana provides care to underserved populations, offering HIV care and treatment, STI diagnosis and treatment, and primary care. The clinic has blossomed into a wide-ranging organization featuring two health centers and 125 staff members and has become a nationally recognized model for comprehensive HIV and STI care. Since 2018, four UW medical students have participated in month-long global health rotations at the clinic.



## **BIRAJ KARMACHARYA (MPH 2017)**

Biraj Karmacharya, UW DGH and Epidemiology (PhD 2015), is head of community programs at a university hospital in the eastern town of Dhulikhel, Nepal. Understanding that health issues often took second place to financial concerns in the community, Dr. Karmacharya tried microfinancing as a way to grant women financial independence and the opportunity for regular health checks and education. This approach has drawn hundreds of women into a life-changing sexual and reproductive healthcare system, and several UW students have participated in programs associated with the programs.



## **ETENI LONGONDO (MPH 2005)**

Eteni Longondo (MPH, 2005) has been appointed head of the Ministry of Public Health in the Democratic Republic of Congo (DRC). After studying medicine at the University of Kinshasa in his native DRC, Longondo received a Master of Public Health from the University of Washington. In addition to his work with the Ministry of Public Health, Longondo's experience includes working as a doctor for Congo's national soccer team, serving as a general practitioner in Switzerland, and work with World Vision and United States Agency for International Development (USAID).

# **OUR FINANCES**

#### DEPARTMENT REVENUE BY FUND SOURCE



**3%** State**2%** Research Cost Recovery

## CORE REVENUE BY FUND SOURCE



## CORE EXPENDITURE BY TYPE



Core revenue and expenditures are the funding sources and costs associated with running the Department, including academic programs and excluding grant and contract-related work and the work of our Centers, Programs, and Initiatives.

## UNIVERSITY OF WASHINGTON



Reuters 2019





U.S. News and World Report 2019



## DEPARTMENT OF GLOBAL HEALTH





## DEPARTMENT OF GLOBAL HEALTH

A Department within the School of Public Health and School of Medicine

## LEADERSHIP

Judith Wasserheit, MD, MPH, William H. Foege Endowed Chair

Judd Walson, MD, MPH, Vice Chair

Susan Graham, MD, MPH, PhD, Associate Chair of Academic Programs

King Holmes, MD, PhD, Director of Research and Faculty Development

Dana Panteleeff, MBA, Director of Finance and Administration

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Cover photography: Genes of an inactivated virus being extracted for molecular testing. Photo credit: James Gathany (top left); Working on Systems analysis and improvement approach to optimize task-shifted mental health diagnosis and treatment cascades (SAIA-MH) in Munhava health center, Mozambique. Photo credit: Brad Wagenaar (top right); UW Global Health graduates, 2019. Photo credit: Marcus Donner (bottom).



