

2020 Annual Report





# Letter from the Director

Dear Colleagues,

2020 showed us just how vital a field global health remains, despite our huge geographic distances and what can sometimes seem like insurmountable differences. More work remains for the Institute for Global Health Sciences (IGHS) to do in coming years, but I am incredibly proud of the quick, strategic and meaningful responses that IGHS faculty and staff spearheaded as the pandemic hit. We responded with research and practical support, sharing what we learned along the way – earning substantial recognition from the Chancellor even at a place as flush with smart, capable, driven people as UCSF.

Even with all that underway, faculty and staff took immediate action to confront and address the legacies of racism that fester in our workplace and in our work as global health practitioners. We have begun a transparent and productive process to address that chronic problem.

Nor did we drop the ball on our essential efforts to reduce malaria, HIV and tuberculosis and to increase the share of babies born healthy and on time. We also began work to introduce global health topics into high school curricula to build a bigger workforce and a more informed global populace to face the health challenges of the future.

I want to thank you for your support during this very challenging year – it made everything you see below possible. Please do get in touch if you have feedback on the work we are doing.

Warmly,

Lefillueda

Jaime Sepulveda, MD, DSc, MPH Haile T. Debas Distinguished Professor

### COVID-19



IGHS leveraged its decades of experience addressing global health inequities to address COVID both globally and locally through our research, education and practical partnerships.

### Chancellor's Awards

George Rutherford, MD, and Jessica Celetano, MPH, received Chancellor's Awards for Public Service for their work assisting the San Francisco Department of Public Health (SFDPH) to investigate and trace COVID-19 infections. Karen White Horn, MBA, MPH, who also helped develop and manage the SFDPH partnership, received a Chancellor's Award for Exceptional University Management.

### WHO COVID case studies

The World Health Organization (WHO) Independent Panel for Pandemic Preparedness and Response released case studies evaluating key countries' responses to the COVID-19 pandemic. The panel invited case studies on national pandemic responses from a number of countries, to provide lessons that can be used to strengthen national and global responses for both this pandemic and the inevitable next one. Jaime Sepulveda, MD, DSc, MPH, executive director of IGHS, led the committees that wrote the U.S. and Mexico reports.

# Mexico's Response to COVID-19: A Case Study



### UCSF Pandemic Initiative for Equity and Action (UPIEA)

UPIEA was established in the early days of the pandemic to develop a virtual training program for case investigators and contact tracers, helping train more than 300 contact tracers and case investigators to mount San Francisco's successful contact tracing program. The group then leveraged its learning platform and methods to reach more groups who needed to stay abreast of COVID-19 science and epidemiology. Nationally, more than 10,000 contact tracers came through the program. A module to coach contact tracers in cultural humility - so they can better persuade people in minoritized groups who have been exposed to the virus to guarantine - earned funding from the Skoll Foundation. The Virtual Training Academy also coached more than 150 superintendents and principals on their options for mitigating contagion in schools. The project's technical support for the San Francisco Department of Public Health will continue through 2021; the VTA trainings will continue through 2023.

Other projects included:

- Research into the most common settings of COVID transmission in San Francisco
- Technical assistance for health jurisdiction tracking and tracing efforts



### COVID speaker series

As the hub of international expertise at UCSF, IGHS brought in a host of speakers to address the specific challenges our experts knew would arise as the global community worked to tackle the virus in marginalized communities and in low-resource areas and healthcare systems. The Institute hosted 18 talks, featuring speakers ranging from Carlos del Rio, MD, the foreign secretary for the National Academy of Medicine, to prominent Navajo doctor Adriann Begay, MD, and others with distinguished track records in this area, including: Peter Hotez, MD, PhD; Mary Pittman, DrPH; Kirsten Bibbins-Domingo, MD, MPH, MAS; Michael Busch, MD, PhD; Craig Cohen, MD, MPH; Alicia Fernandez, MD; Monica Gandhi, MD; Eric Goosby, MD; Desi Kotis, PharmD; Kim Rhoads, MD, MPH; Sriram Shamasunder, MD and Mary Wilson, MD.

### Access COVID

Early on, IGHS PhD students and a handful of MS alumni began tracking research on SARS-CoV-2 that would bear on global response to the pandemic. They then posted synopses and links to the key publications. A native Spanish speaker, Lucia Abascal, MD, MS '18, quickly realized that these synopses needed to appear in Spanish as well. A partnership with the Mexican University, UNAM, was

developed with funding from the Alianza UCMX program. The result is not just bilingual COVID briefs, but also a searchable archive of the research summaries.

# Pandemic Response Initiative (PRI)

COVID-19 is, unfortunately, becoming endemic. With a combination of sluggish vaccine deployment, evolving variants, and few effective therapeutics, it is likely that patients in low-resource settings will continue to need robust access to testing and treatments. PRI created a free evidence-based analytical tool. available online, that illustrates which groups should be prioritized when allocating scarce testing resources. Appropriate allocation will ensure that the tens of millions of dollars invested and the more than 100,000 antigen tests to be delivered in comina months have maximum impact.

PRI also hosted a <u>virtual roundtable</u> for global health experts to share their thinking on the best ways to ensure that lower- and middle-income countries (LMICs) can access treatments – particularly monoclonal antibodies – for COVID-19. They followed the discussion with a summary of the ideas shared, published in early 2021. They expect to follow with a policy paper proposing a framework for deploying therapeutics in LMICs.

### PRI also:

- Conducted scientific review of existing oral therapeutics that could be repurposed for COVID-19 treatment in LMICs;
- Piloted the tool to support diagnostics strategy through in-depth engagement with health policymakers in India, Rwanda, Zambia and Zimbabwe.

# Helping shape where we go from here

Eric Goosby and Mike Reid are co-chairing a PLOS Supplement, entitled, "How will COVID-19 transform global health post-pandemic?"

### Taking to the airwaves

Our faculty and students figured in three podcast episodes of Carry the One Radio, "Global Health in the Time of COVID."

P2–3 top: Chancellor's Award recipients George Rutherford, Jess Celantano and Karen White.

P2 bottom left: Covers for the WHO case studies on Mexico and the U.S. COVID-19 response.

# Faculty Affiliate Program

The IGHS Faculty Affiliate Program, which supports global health projects across all departments at UCSF debuted its Early Career Global Health to Dr. Schola Matovu, who aims to advance nursing and promote the health and well-being of older adults. particularly those with caregiving responsibilities. Her research, funded by NIMH and Fogarty International Center through the UC GloCal Health Fellowship, piloted an income-generating project to promote the health and economic empowerment of Ugandan grandmothers. Dr. Matovu recently accepted a tenure-track position at the University of Utah College of Nursing.



Dr. Schola Matovu



# **Global Surgery**

The Center for Health Equity in Surgery and Anesthesia, led by Doruk Ozgediz, MD, MSc, formed to address a massive unmet need in global health: 5 billion people lack access to safe and affordable surgical and anesthesia care around the world, and surgically treatable conditions represent one third of the global burden of disease. CHESA has since become part of IGHS.

CHESA's UCSF Health Equity Fellows Paul Park, MD, and Greg Klazura, MD, have worked with KidsOR and its international partners to help the nonprofit, clinics, and, potentially, international researchers track useful data on care provided in the operating rooms that KidsOR provides in areas of need. Drs. Park and Klazura have built Tableau dashboards to track patient demographics and outcomes in KidsOR operating rooms. The data collection aims to help direct equipment and training from KidsOR and support quality improvement efforts at the clinics. The data may also aid

further research into how to address unmet global surgical need.

Other achievements include:

- Dr. Mike Lipnick led a collaborative effort with Brigham and Women's Hospital and Partners in Health, with USAID funding, to provide oxygen-ecosystem technical assistance to help with global COVID response and to help overwhelmed clinics and hospitals quickly access the most up-to-date science on COVID treatment.
- Dr. Coleen Sabatini and collaborators from CORSU Rehabilitation Hospital and Makarere University won a Global Surgical Training Challenge Discovery Award from the Intuitive Foundation for their work to improve care for open fractures and osteomyelitis.

Shivani Subhedar, MS '19, working with anesthesia providers in Uganda to help provide high quality care in remote parts of the country. *Photo by Sala Lewis*.



### **HIV/AIDS**

The quality of care for people with HIV in Africa has remained a hurdle to achieving global health goals. Knowing that team-based care outperforms other forms of care, IGHS worked with more than 15 African nursing and medical schools in the AFREHealth network to develop a team-training practicum in HIV care. The Strengthening Inter-Professional Education for HIV (STRIPE) program was off and running at the beginning of 2020. Before the pandemic hit, the interprofessional HIV modules reached 5,000 learners in 125 different workshops. Participants showed a better understanding of HIV care and reported more confidence in administering it. But, in late March, all in-person learning came to an end. The team quickly rolled out virtual

interprofessional care modules for COVID-19, which have reached 1,300 learners; an abbreviated online version has amassed more than 2,000 views. STRIPE is building a learning management system to ensure that online learning can continue indefinitely.

Check out an <u>article</u> about the program's Ugandan partners in a local newspaper.

Even as many of its faculty and staff were called home due to the pandemic, the Global Strategic Information (GSI) research group continued its work to contain HIV. GSI received new CDC grants to provide epidemiology surveillance supporting Kenyan HIV control efforts and to guide enhanced surveillance and continuous quality

improvement work in Namibia. GSI is also working on continuous quality improvement with individual South African HIV care facilities that receive support from the U.S. PEPFAR program. The group continues to conduct HIV surveillance in Uganda, Malawi, Kenya, Namibia, Burundi, Thailand, Cambodia and Vietnam and to support data collection and analysis in Tanzania, Angola, Cote d'Ivoire and the Caribbean region.

Two women participate in a training to learn how to conduct epidemiology surveillance in Uganda. *Photo by Sala Lewis*.



### **Malaria**

A toolkit was finalized in 2020 for 2021 launch that comprises eight tools to help ministries of health and NGOs address malaria through surveillance and response; vector control; drugs and diagnostics; program management; and advocacy, financing and sustainability. Parts of the toolkit have already been used successfully. For instance, a guide to targeted surveillance and response in high-risk populations identified specific risk factors, including nighttime agricultural work, contributing to ongoing transmission in two pilot malaria elimination districts in Madagascar. A second tool, to gauge readiness for malaria elimination, identified weaknesses in capacity and supply chains among community

health workers. These issues are now targeted in the country's plans and formed the basis of a Global Fund grant proposal.

Other accomplishments by the Malaria Elimination Initiative (MEI):

- Ultra-sensitive RDT (brand name Alere) gained WHO pre-qualification, with supporting evidence from a seminal article by MEI's Michelle Hsiang et al published in *The* Lancet.
- MEI has launched two new research projects in Southeast Asia to evaluate new surveillance, vector control and drug-based strategies for malaria elimination.

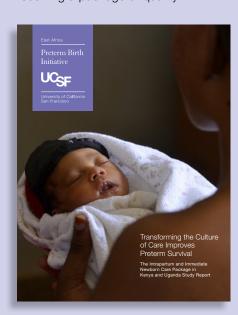
Thai district-level domestic resource contributions to malaria response doubled from 2017 to 2020 after MEI worked with the Thai Ministry of Health to train more than 600 people on budgeting and advocacy.

In Aceh province, Indonesia, healthcare workers and a microscopist travel to a remote village to test for malaria. *Photo by Paul Joseph Brown.* 



## **Maternal and Newborn Child Health**

The East Africa Preterm Birth Initiative published major results from its research in Kenya and Uganda using accessible best practices to try to reduce preterm births and improve outcomes for babies born preterm. Preterm babies born in hospitals receiving a package of quality



improvement strategies aimed at care during the intrapartum period had a 34% greater chance of surviving to 28 days compared to preterm babies born in hospitals that did not receive the intervention package. The program led to reductions in mortality among all babies born in intervention hospitals. The study results were published in *The Lancet Global Health* in August followed by a virtual webinar featuring Dilys Walker, MD; Phelgona Otieno, MBChB, MPH; Peter Waiswa, MBChB, MPH, PhD; Nana Twum-Danso, MD, MPH, FACPM; and Jeffrey Smith, MD.

Dr. Patience Afulani has researched factors that influence the poor care that women receive during pregnancy and childbirth. She has adapted a person-centered maternity care scale that was developed and validated

for care in low-resource countries to reflect the needs and prenatal care experiences of people of color in the United States. Measuring and improving pregnancy-related healthcare experiences of African American women may contribute to reducing disparities in birth outcomes.

Top: A patient undergoes an ultrasound at UCSF Benioff Children's Hospital Oakland. *Photo by Steve Babuljak*.

Left: Cover of the East Africa PTBi report "Transforming the Culture of Care Improves Preterm Survival: The Intrapartum and Immediate Newborn Care Package in Kenya and Uganda Study Report."



### **Tuberculosis**

Former UN Special Envoy on Tuberculosis Eric Goosby, MD, continued to work - virtually - with the ministries of health of Equatorial Guinea (September), South Africa (October) and others on how to eliminate tuberculosis. Goosby and Michael Reid, MD, published an editorial follow-on to their work on the Lancet Commission on Tuberculosis, estimating the cost of unaddressed TB cases during the pandemic. They also noted the possibility of using the rapid development of COVID-19 testing infrastructures to boost TB testing.

Top: Dr. Eric Goosby speaking at the Union World Conference on Lung Health, Barcelona, Spain. *Photo by Steve Forrest/The Union.* 

Right: A doctor in Haiti holds a chest x-ray up to the light. *Photo by Sheila Menezes.* 





### **Education**

### Master's Program

- Graduated 34 students in July with an <u>online commencement</u> ceremony;
- Awarded the 2020 John L. Ziegler Outstanding Capstone Award to two students: Sigal Maya and Guntas Padda:
- Welcomed 32 new students, the 13<sup>th</sup> cohort, in September.

### PhD Program

The PhD Program has 10 current students and received a record number of applicants for the 2021 cohort.

# Teaching global health in high school

IGHS's education program developed a virtual teacher training course to empower teachers to instruct high schoolers on the very infectious disease issues that were forcing them to learn online. Nine Bay Area teachers participated in the Global Health Curriculum Bootcamp, which will result in hundreds of students benefiting from this curriculum.

### Global REACH

With a generous donation, IGHS launched the Global Research, Education, Action and Communities for Health pathway, called Global REACH, to help students from all backgrounds pursue careers in global health beginning in high school. The pathway

begins in UCSF's own community in the San Francisco Bay Area, with a summer internship. The pathway continues with undergraduate, graduate and professional education across the University of California, and extends to post-doctoral and early career research at the UCs and around the world. IGHS will be adding a program to support the career growth of women and under-represented minority early career investigators with mentorship, funding and professional development.

Above: As part of his capstone research in Tanzania, Rohan Luhar, MS '19, studied a clinical systems approach to implementing the country's national cancer treatment guidelines. *Photo by Sala Lewis*.



# **Diversity, Equity and Inclusion**

IGHS's <u>Diversity</u>, Equity and <u>Inclusion</u> Committee was formed in 2019 to ensure equitable staffing and an inclusive workplace and research culture. The work of the committee intensified in 2020 in a number of ways. For example, members formed a <u>book club</u> to learn more about the history and continued relevance of racism in the United States and around the world.

### DEI committee members

### Lucia Abascal

PhD student; UCSF Pandemic Initiative for Equity and Action

### Hana Azman

Global Strategic Information; UCSF Pandemic Initiative for Equity and Action

### **Ingrid Chen**

Global Health Group

### Sun Yu Cotter

University of California Global Health Institute

### Madhavi Dandu

Education

### Heidi Frank

Finance and Research Services

### Anika Kalra

'20 MS alumna; UCSF Pandemic Initiative for Equity and Action

### Usma Kahn

Executive Director's Office

### Eliza Love

Global Health Group

### **Michel Reid**

Global Health Delivery and Diplomacy; UCSF Pandemic Initiative for Equity and Action

### **Cameron Scott**

Communications

### **Kerstin Svendsen**

Communications

### **Kelly Taylor**

Global Strategic Information; UCSF Pandemic Initiative for Equity and Action

### **Katy Vosburg**

Global Health Group

IGHS also hired consultant Briana Evans, MA, to lead an internal assessment of the climate and policies at the Institute. Evans conducted a survey, which she followed with listening sessions for a range of affinity groups. Her findings will form the basis of an action plan for leadership.



Top: Sun Yu Cotter and Usma Kahn, DEI Committee co-Chairs

Above: Briana Evans

# Leadership

### IGHS Faculty Leadership

### Kimberly Baltzell, RN, PhD, MS

Director of Partnerships

### Alden Blair, MSc, PhD

Associate Director, Master of Science Program

### Ben Chaffee, DDS, PhD, MPH

Associate Professor, School of Dentistry

### Jennifer Cocohoba, PharmD

Professor, School of Pharmacy

### Craig Cohen, MD, MPH

Co-Director, UC Global Health Institute

### Madhavi Dandu, MD, MPH

Director, Master of Science Program

### Haile T. Debas, MD

Founding Executive Director, Global Health Sciences; Former UCSF Chancellor

### Elizabeth Fair, PhD, MPH

Director, PhD Program

### Richard Feachem, KBE, DSc(Med), PhD

Director, Global Health Group

### Eric Goosby, MD

Director, Global Health Delivery and Diplomacy

### Roly Gosling, MD, PhD, MS

Director, Malaria Elimination Initiative, Global Health Group

### Dean T. Jamison, PhD

Professor Emeritus

### James G. Kahn, MD, MPH

Director, Global Health Economics Consortium

### Michael Lipnick, MD

Chair, IGHS Faculty Affiliate Program

### Jonna Mazet, DVM, PhD

Executive Director, OneHealth Institute, UC Davis (on sabbatical)

### Ali Mirzazadeh, MD, PhD, MPH

Associate Director, PhD Program

### Doruk Ozgediz, MD, MSc,

Director, Center for Health Equity in Surgery and Anesthesia

### Michael Reid, MD

Chief Medical Officer, UCSF Pandemic Initiative for Equity and Action

### George Rutherford, MD

Director, Global Strategic Information

### Judy Sakanari, PhD

Adjunct Professor, School of Pharmacy

### Jaime Sepulveda, MD, DSc, MPH

Executive Director, Institute for Global Health Sciences; Haile T. Debas Distinguished Professor

### Paul Volberding, MD

Director, Global Health Research Director, AIDS Research Institute

### Dilys Walker, MD

Director, Maternal, Newborn and Child Health Research Cooperative

### IGHS Administration

### Jeremy Alberga, MA

Chief Operating Officer, Global Health Group

### Kemi Amin, MBA

Director, Communications

### Inez Bailey, MS

Director, Education Strategy and Operations

### Colin Boyle, MBA, MPP

Deputy Director, Institute for Global Health Sciences

### Jess Celentano, MS

Deputy Director, Global Health Delivery and Diplomacy; Chief Operations Officer, UCSF Pandemic Initiative for Equity and Action

### Sun Yu Cotter, MPH

Deputy Director, UC Global Health Institute

### Jane Drake, MPH

Director, Global Operations

### Heidi Frank, MPH, MBA

Director, Grants Management

### **Lissette Irizarry**

Senior Executive Assistant to the Director

### Usma Khan, MS

Director, Staffing and Strategic Operations

### Georgina Lopez

Director, Finance and Administration

### **Hannah Park**

Deputy Director, Maternal, Newborn and Child Health Research Cooperative

### Karen White Horn, MPH, MBA

Chief Technical Officer, UCSF Pandemic Initiative for Equity and Action

### Ellyn Woo

Director, Finance Management

### Kelly Young, MA

Deputy Director, Global Strategic Information

### UCSF Leadership Council for Global Health

### Harvey V. Fineberg

Leadership Council Co-Chair President, Gordon & Betty Moore Foundation

### William J. Rutter

Leadership Council Co-Chair Chairman and Chief Executive Officer, Synergenics, LLC

### Haile T. Debas

Founding Executive Director, Global Health Sciences; Former UCSF Chancellor; Director Emeritus, UC Global Health Institute

### Sandra R. Hernández

President and Chief Executive Officer, California HealthCare Foundation

### Jeffrey (Jeff) Hessekiel

Executive Vice President and General Counsel, Exelixis, Inc.

### **Wendy Holcombe**

Radio Producer and Philanthropist, City Visions at KALW

### Nasi Jazayeri

Chief Technology and Product Officer, Salesforce.org

### Sanford R. (Sandy) Robertson

Founder, Francisco Partners

### Jaime Sepulveda

Executive Director, Institute for Global Health Sciences

### Ariel D. Stern

Associate Professor of Business Administration, Harvard Business School

### Michael (Mickey) Urdea

Managing Partner, Halteres Associates

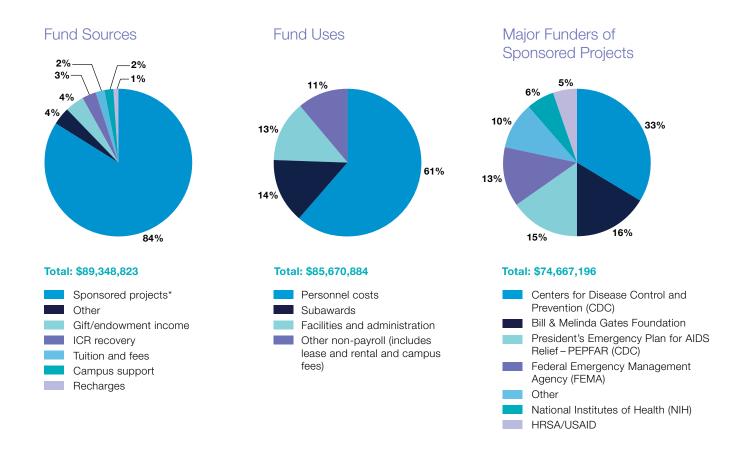
### **Phyllis Whiteley**

Partner, Mohr Davidow Ventures; Co-founder & Chief Executive Officer of Didimi

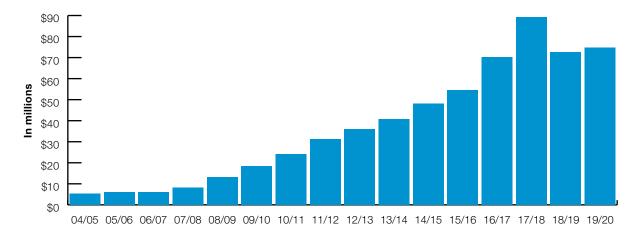
### Diede van Lamoen

Founder and Chief Executive Officer, Commure

# Financials



### Sponsored Projects Expenditures



<sup>\*</sup>Totals include the AIDS Research Institute (ARI), except for sponsored projects. Management of ARI sponsored projects transferred to the School of Medicine Department of Medicine effective January 1, 2021.

Data on this page reflects in-year project expenditures, July 1, 2019–June 30, 2020.

### Donors

We are grateful to the individuals, families and organizations that provided generous support to help us advance IGHS and AIDS Research Institute programs and research in 2020.

### Individuals and Families

### Over \$100,000

Mark Lampert & Susan Byrd Martin Romo & Leesa Romo

### \$10,000-\$99,999

Miles Adcox Nasi Jazayeri

Carl Kawaja & Gwendolyn Holcombe

### \$1,000-\$9,999

Anonymous Carole Baltzell Margaret Blair John Cochran Leon Drozd James Ely Leah Flanigan Jeremy Geller Manola Greene Ed P. Jensen Richard Judy Karen Smith-McCune & Joseph McCune

Sally Rankin Ellen Schell Jeffrey Sturchio Phyllis Whiteley

Mary Wilson & Harvey Fineberg John Ziegler & Rue Ziegler

### \$100-\$999

Anonymous Susan Andrus William Atkins Sam Austin Colin Boyle\* Elizabeth Butrick\* Margaret Byrnes Shih-Huai Cheng Kari Connolly Marita Daly Linda Della

Holly Eger Susan Elliott Judith Hanks Evan Kavanagh Mark Leggett Robert Mansfield\* Michiko Masters Lisa McCracken Bruce Mcintyre Zina Mirsky Ali Mirzazadeh\* Lillian Murray Soodabeh Navadeh

William Nisbet Carol Olsen Su-Moon Paik Hannah Park\* Sophie Pritchard Jaime Sepulveda\* James Shiovitz Susanne Tilney **Brady Thomas** 

Amy Rankin-Williams

Gina Wu

Anonymous

Ivan Uranga

### \$1-\$99

Jennifer Bandow Christine Coke Howard Gordon Daria King Jayne Lewis-Kulzer James McManus Lucille McManus Susan Neidlinger Marc Penso Kenneth Stelling Pierre Theodore Jonathan Tuerk Kimberly Walsh David Winckoski

### Corporations and Foundations

American Academy of Pediatrics American Endowment Foundation Anjani Thakur MD, Inc

Anonymous

California Foundation for Molecular Biology

California Health Care Foundation

Capital Group Companies Charitable

Foundation

Chevron USA, Inc.

Glaser Progress Foundation

Gordon and Betty Moore Foundation

Greater Cincinnati Foundation

Horace W. Goldsmith Foundation

Kalmanovitz Charitable Foundation

Marin Community Foundation

Qure LLC

Salesforce.com, Inc.

Salesforce.org

San Francisco Foundation

Sumitomo Chemical Comapny, Ltd.

The Joseph & Vera Long Foundation

We Are One World Foundation

Wyss Medical Foundation

<sup>\*</sup>IGHS faculty and staff Listings are for the 2020 calendar year.



**Editor** Kemi Ami

**Senior Writer**Cameron Scott

Graphic Designer

**Front cover:** Kimberly Baltzell, RN, PhD, MS, director of partnerships at IGHS, works with nursing students from City College of San Francisco to provide four days of COVID-19 testing in Bolinas, California. *Photo by Barbara Ries*.

**Inside cover:** Jaime Sepulveda at Mission Hall. *Photo by Elisabeth Fall.* 

**Above:** As part of her capstone work about female sex workers' perceptions around risky behavior and HIV transmission, Nardos Darkera, MS '19 (in yellow), attends a team meeting at the clinic in Uganda where her mentor, Dr. Rachel King (left), conducts research. Photo by Sala Lewis

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