

UCSF Center for Health Equity
in Surgery & Anesthesia

2022

Annual
REPORT



CONTACT US

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 www.globalsurgery.org

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About CHESA

Mission

To advance equity in surgery, anesthesia and perioperative care worldwide through ethical and innovative academic engagement.

Vision

To ensure the global capacity of surgery and anesthesia care to serve all people and communities everywhere to achieve their full potential. Grounded in social justice, we do this through equitable partnerships based on shared learning, innovation and knowledge creation and translation.

Guiding Principles

- Champion health equity for vulnerable populations
- Elevate interventions prioritized by local and international partners
- Harmonize approaches between local and international populations
- Prioritize implementation and impact evaluation

Why we Exist



Surgery and Anesthesia have been grossly overlooked in global health

Despite marked progress in many areas of global health over the last few decades, death and disability due to common conditions requiring surgery have grown in low- and middle-income countries (LMICS) even as the availability of safe, reliable surgical and anesthesia care has stagnated or declined.

Nine in ten people in LMICs can't access basic surgical care services¹

The result is alarmingly high fatality rates for easily treatable conditions like appendicitis, hernia, fractures, obstructed labour, congenital anomalies, breast and cervical cancer.

In the United States, black children are three times more likely to die during surgery²

Maternal mortality rates are also three times higher for black women than their white counterparts.³ Meanwhile rural populations have lower survival rates from cancers amenable to surgery.⁴

There is a 20-year mortality difference by zip code in the San Francisco Bay Area⁵

Shameful disparities in health outcomes like this correspond directly with a legacy of historical discriminatory social and economic policies, such as redlining.

CHESA is doing the work of training, connecting, and advocating to change these realities

At CHESA, we know filling the care gap will mean training a new generation of global and U.S. providers, but also building a network of advocates that can demand urgently needed long-term investments. This is why we work on three interconnected fronts: education, research, and advocacy.

¹ Global Surgery 2030: evidence and solutions for achieving health, welfare, and economic development, *The Lancet*, 2015. [Link to article.](#)

² Race, Postoperative Complications, and Death in Apparently Healthy Children, *Pediatrics*, 2020. [Link to study.](#)

³ Racial Disparities in Maternal and Infant Health: Current Status and Efforts to Address Them, *Kaiser Family Foundation*, 2022. [Link to study.](#)

⁴ Rural-urban survival disparities for patients with surgically treated lung cancer, *NCBI*, 2022. [Link to article.](#)

⁵ The Structural Violence Trap: Disparities in Homicide, Chronic Disease Death, and Social Factors Across San Francisco Neighborhoods. *Journal of the American College of Surgeons*. 2022. [Link to article.](#)

LETTER FROM THE DIRECTOR



2022 has been a year of continued growth for CHESA as reflected in the health equity-focused work led by our members and through our collaborations with groups internal and external to UCSF. As the year still posed significant challenges in managing the COVID pandemic response, the Center has been able to move major priorities forward. It is critical that academic medical centers like CHESA play a leadership role in tackling surgical and perioperative health disparities.

Our anesthesia and health equity group has continued their innovative work with USAID in providing technical support for pandemic response and maintaining the comprehensive [Open Critical Care](#) resource, while initiating landmark work through the [Open Oximetry project](#) to address disparities in pulse oximetry performance. In Uganda, CHESA worked especially closely with surgery and anesthesia leaders to continue to support workforce development, expansion, and policy. Meanwhile CHESA members have led significant scholarship to support advocacy in health equity, increasing the visibility of public health challenges and pioneering solutions in the surgery and perioperative space.

The [CHESA Perioperative Health Equity Fellowship](#), co-led by Drs. Lia Jacobson, Sri Padmanabhan, and Cathy Kilyewala, entered its second year and has expanded to over 20 fellows, most from low- and middle-income countries. The background and work of our fellows reflects the breadth of CHESA activities, ranging from curricular innovations and educational and training tools to address domestic health disparities and neglected surgical diseases internationally, to scholarly work in clinical research. The fellowship program underscores our commitment to nurturing and learning from emerging leaders in the surgery and perioperative space across geographies and contexts.

CHESA's leadership team includes a diverse group of colleagues across surgery and anesthesia in Uganda who have helped drive our priorities and activities and we are grateful for their efforts – Drs. Phyllis Kisa, Fred Bulamba, Tonny Stone, and Cornelius Sendagire. UCSF colleagues from over 10 surgical specialties, anesthesia and nursing have been actively involved in the Center's growth, including those who have stepped into key programmatic roles as Directors and Associate Directors for CHESA's core areas of education, research, and policy advocacy.

We have been fortunate to have Patti Orozco, CHESA Deputy Director, and Zayna Tommalieh, CHESA Program Coordinator, join us in April 2022. Patti has brought tremendous expertise in strategy, business development and program implementation given her track record of work in Sub-Saharan Africa. Zayna, a graduate of the UCSF IGHS Master's in Global Health Sciences program, has catalyzed the organization and expansion of the CHESA fellowship program. Fiffi Negussie, CHESA Program Manager, joined in December to oversee multiple CHESA programs including the Open Oximetry project, leveraging her global health, research and informatics experience in Namibia and Mozambique. We are very lucky to have them all as part of our core team!

CHESA members are motivated by the drive to address and reduce health disparities in our space – we feel an urgency to act and are uncomfortable with the status quo. Many of us are motivated by our clinical experiences delivering care to vulnerable populations and/or our work in public health, and our drive to be the best possible allies we can be in solidarity with vulnerable groups. We will need everyone's help to continue this work and push forward the health equity agenda in surgery and perioperative care.

It is a privilege and inspiration to be working with a broad, diverse and accomplished group. I hope you enjoy learning more about our shared work in this report as we look forward to growing CHESA with you.

Doruk Ozgediz, MD, MSc
Director of CHESA
Professor of Pediatric Surgery

CHESA'S BIG MOMENTS OF 2022

2022 

JAN



CHESA Fellow **Dr. Brand** awarded **GloCal Health Fellowship**

FEB



CHESA Fellow, **Dr. Philipo** and colleagues receive **THET Grant**



GSSA and CHESA host first **virtual symposium**, **Global Surgery: Lessons from Pediatric Surgery**

MAR



CUGH 2022 Surgery Satellite Session co-hosted by CHESA

APR

CHESA and UC partners receive **\$30K incubator award** as part of UC's Emerging Center for Perioperative and Surgical Health Equity

MAY

CHESA Announces **Seed Funding** for 2022: Perioperative Health Disparities in the Bay Area

First **CHESA Advisory Board Meeting** convened

JUN

CHESA Director **Dr. Ozgediz** Named **Chair of GICS** - Global Initiative for Children's Surgery



JUL

Dr. Adrian Gelb, CHESA Director, leads **Utstein II Surgical Metrics Meeting** with faculty from CHESA



2022-2023 CHESA Fellowship Cohort launched

CHESA receives grant from **Laura Case Trust** to scale up advanced trauma training in Uganda

AUG



Open Oximetry Project launches

SEPT

New Members announced on CHESA Leadership Committee

CHESA enters partnership with **Uganda Paediatric Surgical Foundation**



OCT

CHESA Associate Director **Dr. Lilaonitkul** appointed **Director** of the Anesthesia Simulation Center



CHESA Advisory Board Member, **Jane Fualal**, becomes first female president of COSECSA

NOV

THE LANCET

Dr. Lipnick represents CHESA on **Lancet Global Health Commission** on Medical Oxygen Security

DEC

CHESA and Dept. of Emergency Medicine partner to lead **WHO Collaborating Centre for Emergency, Critical and Operative Care**



CHESA Signs on to **WHO Charter on Health Worker Safety**

2023  06

2022 IN NUMBERS

22

CHESA Fellows added to the 2022 cohort

240

New CHESA members added in 2022

83

Health equity-focused publications authored by CHESA faculty, leadership, and Fellows in 2022

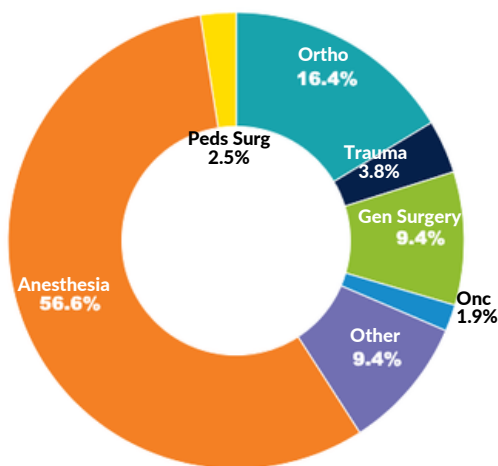
\$83,100

Total funding support provided for CHESA Fellows from LMICs in 2022

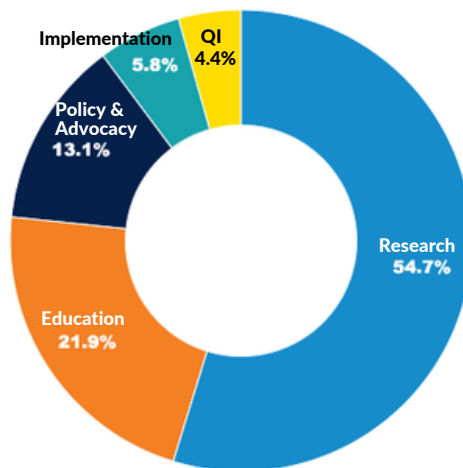
\$52,500

Total funding provided through CHESA Seed Grants to fund member research

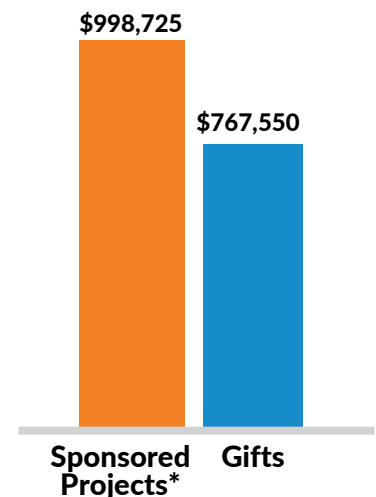
MEMBER PROJECTS BY SUBSPECIALTY



MEMBER PROJECTS BY TYPE



EXTERNAL FUNDING BY SOURCE



*Sponsored projects include research, education, and other projects led by CHESA faculty with direct support from CHESA staff

GROWING OUR PRESENCE

ON SOCIAL MEDIA

65,543

Unique impressions garnered on Twitter in 2022

296

New followers to @UCSF_CHESA in 2022

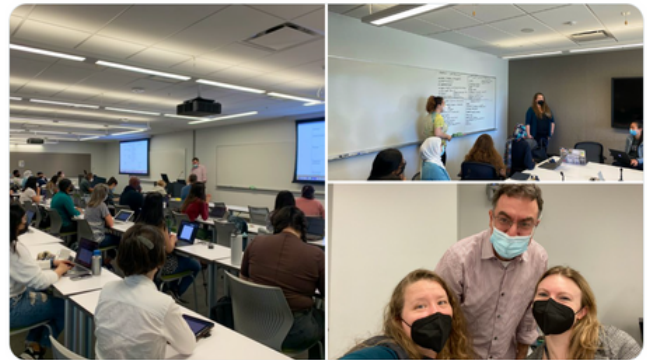
TOP TWEET OF 2022



Center for Health Equity in Surgery & Anesthesia
@UCSFCHESA

Loved participating, as always, for a lecture & seminar on global surgery/anesthesia/trauma/ortho for MS in #GlobalHealth students @IGHSatUCSF Health, the Environment & NCD course! (in-person this time! 🙌)

Such amazing engagement, passion, & enthusiasm. #TheFuturesBright 💡



ON THE GROUND: MEMBER PROJECTS IN 2022



FELLOW SPOTLIGHT



Dr. Godfrey Sama Philipo: Addressing Gaps in Surgical Oncology in Tanzania

Dr. Godfrey Sama Philipo was drawn to the CHESA fellowship because of his interest in global surgery research, a new field in Tanzania. The CHESA fellowship was an opportunity for mentorship from people with a variety of skills, interests, and specialties.

In the first year of his fellowship, Dr. Philipo has focused on lab-based skills training for Tanzanian surgical residents treating cancer patients to address the gap in trained surgical oncologists in Tanzania and improve patient outcomes.

Reflecting on the first year of his fellowship, Dr. Philipo noted that mentorship from UCSF faculty and other CHESA fellows has been the best part. Because global surgery and implementation science are not well-established in Tanzania, meeting experts, seeing what other people are working on, and collaborating with other fellows on projects has been valuable. As he enters the second year of his CHESA fellowship, the newly acquired skills and knowledge of his research area have allowed him to expand his goals for the future of surgical oncology and children's surgery in Tanzania.

**Mentorship
from UCSF
faculty and
other CHESA
fellows has
been the
best part.**

OUR TEAM

Executive Committee & Core Team



The CHESA Executive Committee held a team retreat in August 2022.

Doruk Ozgediz, MD, MSc*

Director, CHESA

Professor of Pediatric Surgery, UCSF

Michael Lipnick, MD*

Associate Director, CHESA

Associate Professor of Anesthesia and Perioperative Care, UCSF

David Bayne, MD, MPH

Director of Research, CHESA

Associate Director, CHESA

Assistant Professor of Urology, UCSF

Marissa Boeck, MD, MPH

Associate Director, CHESA

Assistant Professor of Acute Care Surgery, UCSF

Read full bios [on our website.](#)

Coleen Sabatini, MD, MPH

Associate Director, CHESA

Vice Chair for Health Equity and Academic Affairs, UCSF Department of Orthopaedic Surgery, Professor of Orthopaedic Surgery, UCSF

Patti Orozco, MPA*

Deputy Director, CHESA

Zayna Tommalieh, MS*

Program Coordinator, CHESA

Fiffi Negussie, MPH*

Program Manager, CHESA

Daniel Flores Martinez, MPA*

Communications Support, CHESA

Project Policy Analyst and Assistant to Coleen Sabatini

*Core Team Members

OUR TEAM

Leadership Committee

The CHESA Leadership Committee (LC) builds linkages between perioperative specialties and departments at UCSF, CHESA, and non-UCSF partners. The LC supports our programmatic growth and serves as champions and liaisons for CHESA.

ANESTHESIA

Fred Bulamba, MBChB, MMed

Leadership Committee, CHESA

Anesthesia Care Specialist and Chair of Department, Busitema University

Odi Ehie, MD

Leadership Committee, CHESA

Vice Chair of Diversity, Equity, and Inclusion, Department of Anesthesia, UCSF
Assistant Professor of Anesthesia and Perioperative Care, UCSF

Adrian Gelb, MD

Director of Advocacy and Policy, CHESA

Professor Emeritus of Anesthesia and Perioperative Care, UCSF

Erica Langnas, MD, MPH

Associate Director of Research, CHESA

Assistant Clinical Professor of Anesthesia and Perioperative Care, UCSF

Tyler Law, MD, MSc

Associate Director of Research, CHESA

Assistant Professor of Anesthesia and Perioperative Care, UCSF

Maytinee Lilaonitkul, MBBS, MRCP, FRCA

Associate Director of Education, CHESA

Assistant Clinical Professor of Anesthesia and Perioperative Care, UCSF

Michael Lipnick, MD

Associate Director, CHESA

Associate Professor of Anesthesia and Perioperative, UCSF

Cornelius Sendagire, MBChB, MMed

Leadership Committee, CHESA

Cardiac Anesthesiologist, Uganda Heart Institute
Lecturer, Makerere University

Tonny (Stone) Luggya, MBChB, MMEC

Leadership Committee, CHESA

Chair of Anesthesia and Emergency Medicine
Department, Makerere University

NURSING

Rebecca Silvers, DNP, APN, CPNP-AC, CCRN, RNFA

Director of Education, CHESA

Director, UCSF Center for Global Nursing
Pediatric Neurosurgery and Critical Care Nurse Practitioner, UCSF
Assistant Clinical Professor of Nursing, UCSF

OPHTHALMOLOGY

Sriranjani Padmanabhan, MD

Co-Director of the CHESA Fellowship

Assistant Professor of Ophthalmology, UCSF

OTOLARYNGOLOGY

Lia Jacobson, MD, MSGM

Co-Director of the CHESA Fellowship

Assistant Clinical Professor, Division of Pediatric Otolaryngology, UCSF

Josephine Czechowicz, MD

Leadership Committee, CHESA

Assistant Professor of Otolaryngology-Head and Neck Surgery, UCSF

OUR TEAM

Leadership Committee (cont.)

SURGERY

Marissa Boeck, MD, MPH

Associate Director, CHESA

Assistant Professor of Acute Care Surgery, UCSF

Anthony DiGiorgio, DO, MHA

Neurosurgery Lead, CHESA

Assistant Professor of Neurological Surgery,
UCSF

Amy Fiedler, MD, MS

Cardiac Surgery Lead, CHESA

Assistant Professor of Cardiac Surgery, UCSF

John Rose, MD, MPH

Associate Director of Advocacy and Policy, CHESA

Assistant Professor of Plastic and Reconstructive
Surgery, UCSF

Phyllis Kisa, MBChB, MMed

Leadership Committee, CHESA

Pediatric Surgeon, Pediatric Urologist, and
Lecturer, Makerere University

Cathy Kilyewala, MBChB, MMed

Co-Director of the CHESA Fellowship

Lecturer, Makerere University

Doruk Ozgediz, MD, MSc

Director, CHESA

Professor of Pediatric Surgery, UCSF

UROLOGY

David Bayne, MD, MPH

Director of Research, CHESA

Assistant Professor of Urology, UCSF

OBSTETRICS, GYNECOLOGY & REPRODUCTIVE SCIENCES

Felicia Lester, MD, MPH

Leadership Committee, CHESA

Associate Professor of Obstetrics and
Gynecology,

Martha Tesfalul, MD

Leadership Committee, CHESA

Assistant Professor of Maternal-Fetal
Medicine, UCSF

Stefanie Ueda, MD

Leadership Committee, CHESA

Associate Professor of Gynecologic
Oncology, UCSF

ORTHOPAEDIC SURGERY

Coleen Sabatini, MD, MPH

Associate Director, CHESA

Vice Chair for Health Equity and Academic
Affairs, UCSF Department of Orthopaedic
Surgery, Professor of Orthopaedic Surgery, UCSF

MEDICAL STUDENT LEAD

Omeed Mirafatab-Salo

Global Surgery Student Alliance Lead, CHESA

Medical Student, UCSF

Read full bios [on our website.](#)

OUR TEAM

Advisory Board

The CHESA Advisory Board plays an essential role in guiding CHESA's work, identifying opportunities, and assessing impact. We are grateful to be guided and inspired by the experience, influence, and thought leadership of this illustrious group.

Board Chair Dr. Haile Debas helps shape CHESA's foundation, refine our collective vision, and ensure sustainability. Dr. Debas has been at the forefront of global surgery from its inception, leading multi-sectoral advocacy efforts to identify and confront the highest priority challenges facing surgery and perioperative care in low-income settings.



Haile Debas, MD
UC Chancellor Emeritus
Professor Emeritus of Surgery,
UCSF



Gareth Wood
Chairman and Founder, Kids OR



Peter Carroll, MD, MPH
Chair of the Urology
Department, UCSF



Jane Fualal, MBChB, MMed
President, College of Surgeons of
East, Central and Southern Africa



Carolina Haylock-Loor, MD
Director of Programs, World
Federation of Societies of
Anesthesiologists



Sara Anderson, MA
Executive Director, Bay Area Global
Health Alliance



Adil Haider, MD, MPH
Dean of the Medical College,
Aga Khan University-Pakistan



Edna Adan
Founder and President, Edna Adan
University & Hospital

Read full bios [on our website.](#)

HOW WE ADVANCED GLOBAL SURGERY IN 2022

Throughout 2022, our CHESA community worked across our **three focus areas** to surface challenges and solutions that impact health inequity in surgery and anesthesia locally and globally. Here's how:

Research

We supported dozens of research efforts across our global community spanning implementation, translational, and basic sciences.

Education

We doubled the size of the 2022 CHESA Fellowship cohort and supported fellows to sharpen their clinical, research, and advocacy skills to improve care for their communities.

Policy and Advocacy

We created new tools and supported our fellows, alumni, faculty, and broader membership in their efforts to advance racial and economic justice in perioperative care globally.

RESEARCH

In 2022, CHESA provided \$52,500 in funding to support four groundbreaking member research projects in the Bay Area.

Implementing Human-Centered, Trauma-Informed Perioperative Care at Zuckerberg San Francisco General

By Amanda Sammann, MD, MPH

Project Overview: This project aims to develop and implement a novel Trauma-Informed Care (TIC) training curriculum for providers of emergency surgical services at Zuckerberg San Francisco General Hospital. TIC is an approach to creating psychological safety for patients and more positive interactions with the care team through improved patient-physician partnership and trust.

Food Insecurity in Peripheral Arterial Disease Treatment & Health Outcomes: Towards Patient Concordant Solutions

By James Iannuzzi, MD, MPH

Project Overview: Living in a food desert has a dramatic impact on Peripheral arterial disease (PAD)-related health outcomes. This study will assess whether food insecurity is associated with increased risks among patients with PAD following a surgical intervention. It will also aim to better understand how patients view their food insecurity and identify possible interventions.

SPEAC: Sedation and Proficiency in English Association Cohort Study

By Thanh-Giang Vu, MD and Elizabeth Whitlock, MD, MS

Project Overview: In San Francisco, 42.6% of households speak a non-English language. Analgosedation is typically administered on the basis of clinical judgment for mechanically ventilated patients. This study assesses the association between primary language and sedation dose/depth for intubated medical and surgical ICU patients at UCSF Medical Center.

Understanding Anesthesia Graduates' Practice Environments and Reach to Underserved Communities

By Tyler Law, MD, MSc

Project Overview: It is unclear how many UCSF anesthesia graduates take jobs that include or prioritize service to underserved communities. This project aims to understand the extent to which anesthesia residency graduates include service of underserved communities in their post-graduation practice locations and identify the factors that affected their job decision.

RESEARCH



Making Pulse Oximeters More Accessible, Accurate, and Equitable

In 2022 CHESA, in partnership with the UCSF Hypoxia Lab and other collaborators, launched the Open Oximetry Project to improve access to accurate pulse oximeters globally. Market barriers like high costs, limited supply, as well as inadequate regulatory requirement make safe access difficult in LMICs.

Beyond market access problems, design challenges like the impacts of dark skin color, low perfusion, and severe anemia further impact safety and equity. The Open Oximetry Project aims to address all of these challenges.



Project participants left to right: Jana Fernandez, Deleree Schornack, Phil Bickler, Caroline Hughes, Mike Lipnick, Fiffi Negussie, Greg Leeb

Top Goals for the Open Oximetry Project:

- **Lab testing with human subjects** to determine which existing oximeters work and which don't and to develop new protocols that better validate device performance
- **Performance Data Dissemination** to help oximeter users discern which devices are safe
- **Real World Human Studies** to ascertain how and why some oximeters perform well in a lab setting but not for some patients in the clinical setting
- **Bring together a consortium of stakeholders** from diverse institutions, disciplines and settings to share ideas and data to help improve oximetry performance and equity








Open Oximetry Project Funders



RESEARCH

CHESA members produced field-leading research in 2022 that's advancing health equity in the Bay Area and worldwide. We highlight a sampling of them below. [View the full list here.](#)

TOP PUBLICATIONS ACROSS THE CHESA COMMUNITY IN 2022

| Title | Author(s) | Link |
|--|---|---|
| Pediatric surgery backlog at a Ugandan tertiary care facility: COVID-19 makes a chronic problem acutely worse, | Greg Klazura†, Phyllis Kisa*, Anne Wesonga, Mary Nabukenya‡, Nasser Kakembo‡, Stella Nimanya‡, Rovine Naluyimbazi, John Sekabira‡, Doruk Ozgediz*, Monica Langer |  |
| Impact of new dedicated pediatric operating rooms on surgical volume in Africa: Evidence from Nigeria | Ruth Laverde†, Olubumni Majekodunmi†, Paul Park*, Chisom R Udeigwe-Okeke, Ava Yap†, Greg Klazura†, Nancy Ukwu, Emma Bryce, Doruk Ozgediz*, Emmanuel A Ameh‡ |  |
| Publish or Perish but Pursue Decolonization: The Complexities of Global Surgery | Felix Oyania†, Tamara N Fitzgerald |  |
| Decolonizing the decolonization movement in global health: A perspective from global surgery | Emmanuel Bua† and Saad Liaqat Sahi† |  |
| The Structural Violence Trap: Disparities in Homicide, Chronic Disease Death, and Social Factors Across San Francisco Neighborhoods | Marissa A Boeck*, Waverly Wei, Anamaria J Robles, Adaobi I Nwabuo, Rebecca E Plevin, Catherine J Juillard, Kirsten Bibbins-Domingo, Alan Hubbard, Rochelle A Dicker |  |
| Epidemiology and treatment outcomes in pediatric patients with post-injection paralysis | Siyu Song, Moses Fisha Muhumuza, Norgrove Penny, and Coleen S. Sabatini* |  |
| Pulse Oximeter Performance, Racial Inequity, and the Work Ahead | Olubunmi Okunlola†, Michael Lipnick*, Paul Batchelder, Michael Bernstein, John Feiner, and Philip Bickler |  |

Key: * CHESA Leadership; † CHESA Fellow; ‡ CHESA Collaborator; ** CHESA Member

RESEARCH

PUBLICATIONS CONTINUED

| Title | Author(s) | Link |
|--|--|---|
| Validation of a Manual Negative Pressure Wound Therapy Device (PragmaVAC) for Acute and Chronic Wounds: A Prospective, Randomized, Controlled Trial | Mahmoud Hariri, Bakry Maaz, Measser Netfagi, Jude Alawa, Ahmad Sattouf, Hussam Alden Dubies, Jehad Alahmad, Muhammet Fuat Seyitisa, Amandine Godier-Furnemont†, Abedalkarem Ghali, Ahmad Ghandour, Zohair Abdullah, Munther Alsaleh, Ibrahim Almousa, Wael Habib, Hisham Alshaer |  |
| Implicit Racial Bias in Pediatric Orthopaedic Surgery | Ryan Guzek, Christine M Goodbody, Lori Jia, Coleen S Sabatini*, Wudbhav N Sankar, Brendan A Williams, Apurva S Shah |  |
| Building Critical Care Capacity in a Low-Income Country | Arthur Kwizera, Cornelius Sendagire*, Yewande Kamuntu, Meddy Rutayisire, Jane Nakibuuka, Patience A Muwanguzi, Anne Alenyo-Ngabirano, Henry Kyobe-Bosa, Charles Olaro |  |
| Social Determinants of Kidney Stone Disease: The Impact of Race, Income and Access on Urolithiasis Treatment and Outcomes | Kymora B Scotland, Manuel Armas-Phan, Georgina Dominique, David Bayne* |  |
| COVID-19, Racial Injustice, and Medical Student Engagement With Global Health: A Single-Institution Survey | Phoebe Miller, Ruth Laverde*, Avery Thompson, Paul Park*, Doruk Ozgediz*, Marissa Boeck* |  |
| A Journey Undertaken by Families to Access General Surgical Care for their Children at Muhimbili National Hospital, Tanzania | Godfrey Sama Philipo†, Zaitun Bokhary, Neema Lala Bayyo, Soham Bandyopadhyay |  |
| Inspirational Leaders in Surgery: Dr. Haile Debas | Doruk Ozgediz* |  |

Key: * CHESA Leadership; † CHESA Fellow; ‡ CHESA Collaborator; ** CHESA Member

FELLOW SPOTLIGHT



Dr. Ava Yap: How the CHESA Fellowship Opened New Avenues of Learning

Dr. Ava Yap joined the CHESA fellowship because she wanted to dedicate time to health equity during her UCSF surgical residency. She had previously worked on international health projects and wanted to expand her knowledge and competencies within the domestic healthcare system. In the first year of her fellowship, Dr. Yap focused on three areas: 1) Pediatric surgical capacity building in Uganda; 2) Pediatric surgical outcomes in the United States and how they tie into social determinants of health and vulnerable neighborhoods; and 3) Developing quality improvement programs for using reusable equipment in operating room.

For Dr. Yap, building personal relationships and working on projects that matter to both UCSF and CHESA have been the best parts of her fellowship experience. Being part of the CHESA community has been empowering for Dr. Yap. In an often-siloed field, being a part of this community opens doors for collaboration.

The CHESA fellowship solidified Dr. Yap's plan to pursue pediatric surgery. It also broadened her perspectives. "It's been an eye-opening experience and a grounding experience for me to know that there are many other avenues where I could pursue [global health]," she reflected.

It's been an eye-opening experience...to know that there are many other avenues where I could pursue [global health].

EDUCATION

THE CHESA FELLOWSHIP

The CHESA Fellowship is a one year training pathway designed for health professionals who are committed to developing a career focused on advancing health equity in perioperative care. In 2022, CHESA deepened its investment in the CHESA Fellowship as our flagship training program, doubling our cohort size and expanding mentorship and peer learning opportunities.

The program is a non-ACGME fellowship pathway intended to accommodate the learning objectives of fellows from diverse backgrounds and areas of expertise, while fostering collaboration for advancing health equity. Each fellow is provided mentorship and project support for their research, education, advocacy and policy projects focused on addressing health disparities in the Bay Area or globally.



From left to right: Dr. Nasser Kakembo (co-founder of the Uganda Paediatric Surgical Foundation, a CHESA partner), CHESA Fellow Dr. Ava Yap, and Dr. Peter Kayima (CHESA collaborator).

EDUCATION

MEET THE 2022-23 CHESA FELLOWS

We welcomed a diverse group of 22 CHESA Fellows, more than doubling the cohort size compared to the previous year.



Emmanuel Bua, MBChB
HEAL Fellow (2021-23)



Felix Oyania, MBChB, MMed
Surgery Fellow (2021-23)



Saad Sahi, MD
HEAL Fellow (2020-23)



Ava Yap, MD, MHS
Surgery Fellow (2021-23)



Mignote Yilma, MD
Surgery Fellow (2021-23)



Godfrey Sama, MD, MPH
Surgery Fellow (2021-23)



Temesgen K. Ayichew, MD
Surgery Fellow (2022-23)



Richard Gamubaka, MBChB
Surgery Fellow (2022-23)



Cecilia Protas, MD, MMed
Surgery Fellow (2022-23)



Mary Fakunle, MD
Surgery Fellow (2022-23)



Alliance Niyukuri, MD
Surgery Fellow (2022-23)



Bolusefe Olatunji-Banire, MD
Surgery Fellow (2022-23)

EDUCATION

MEET THE 2022-23 CHESA FELLOWS (cont)



Caroline Stephens, MD, MPH
Surgery Fellow (2022-23)



Treasure Ibingira, MD
Surgery Fellow (2022-23)



Violet Kemunto Otoki, MD
Surgery Fellow (2022-2023)



Amandine Godier-Furnemont, MD, PhD
Surgery Fellow (2022-23)



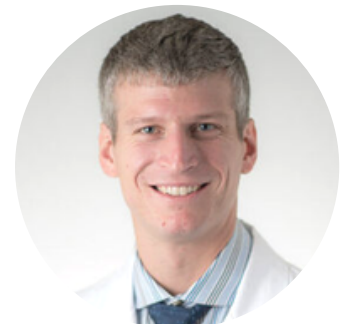
Hannah Decker, MD
Surgery Fellow (2022-23)



Martha M. Namugga, MD
Surgery Fellow (2022-23)



Samuel Negash, MD
Surgery Fellow (2022-23)



Nathan Brand, MD, MSc
Surgery Fellow (2021-23)



Greg Leeb, MBBS, FANZCA
Anesthesia Fellow (2022-23)



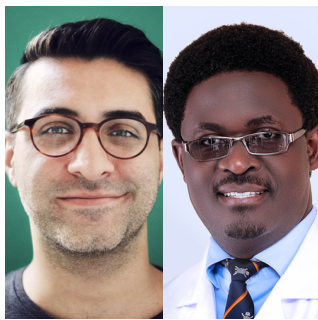
Anne Mbiya, MMed
Anesthesia Fellow (2022-23)

[Read Fellows' full bios on our website.](#)

EDUCATION

CHESA FELLOW HAPPENINGS FROM 2022

CHESA Fellows were busy in 2022 in all areas of CHESA's work. Here we share highlights of what our Fellows achieved:



Drs. Saad Sahi and Emmanuel Bua publish paper: **Decolonizing the decolonization movement in global health: A perspective from global surgery**



Dr. Godfrey Sama Philipo and colleagues **receive THET grant** for nurse leadership training.

CHESA Fellows held **11 Journal Club and Work in Progress Meetings** in 2022, to discuss latest research and improve their own research skills



Dr. Nathan Brand awarded **GloCal Fellowship** and worked with mentor Dr. Akoko and UCSF colleagues to start a **laparoscopic simulation lab** in Tanzania.

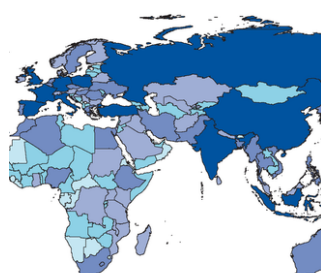


Dr. Ava Yap continues **research collaboration with KidsOR** to assess cost-effectiveness of Kids OR supported facilities in Nigeria.



Dr. Ernest Barthélemy, gives talk, **"Practicing Neurosurgery While Black"** on relationship between market failures and racism in healthcare.

CHESA Fellows participate in seminar with Dr. Cameron Gaskill: **"Primer on Global Surgical Oncology"**.



Drs. Treasure Ibingira, Martha Namugga, and Caroline Stephens partner on **trauma capacity scale-up project in Uganda** supported by Laura Case Trust.



EDUCATION

OTHER EDUCATIONAL HIGHLIGHTS FROM 2022

Health Equity Curriculum Enters Second Year



CHESA launched the Health Equity Curriculum for Anesthesia and Surgery trainees in 2021 as a first step toward addressing a major gap in health equity education for surgery and anesthesia residents: a focus on disparities.

The purpose of the curriculum is to provide an introduction to the history of systemic discrimination and bias present in perioperative care and outline approaches and practices that clinicians can use to identify and mitigate it.

[Access the full Health Equity Curriculum here](#)

Open Critical Care Resource Hub Expands Global Reach

With support from USAID and the Sustaining Technical and Analytical Resources project, CHESA faculty continue to lead USAID education projects to expand reliable, high-quality, and open-access critical care learning tools for medical educators and learners from resource-variable settings.

In 2022, hundreds of thousands of users from more than 200 countries visited our education platforms [OpenCriticalCare.org](#) and [OxygenCalculator.org](#). OpenCriticalCare.org includes curated and original content for training at various levels and multiple healthcare cadres, and are suited for independent learning and integration into institutional training programs and curricula. The team continues to release enhanced versions of its oxygen calculator.



EDUCATION

OTHER EDUCATIONAL HIGHLIGHTS FROM 2022

Top Talks Hosted by CHESA on Critical Health Equity Topics

Click any of the links below to access the full recording



[Practicing Neurosurgery While Black](#), by CHESA fellow alumnus Dr. Ernest Barthélemy, Chief of Neurosurgery, SUNY Downstate



[Global Pediatric Surgery Challenges and Opportunities: Evidence and Progress in Nigeria](#), by Dr. Justina O. Seyi-Olajide, Consultant Pediatric Surgeon at Lagos University Teaching Hospital, Nigeria



[Anesthesia Visiting Professor Lecture: Research with Refugees](#), by Dr. Gunisha Kaur, Medical Director of the Weill Cornell Center for Human Rights



[Global surgery and Universal Health Coverage: Minding the Surgical Gaps in Africa](#), by Professor Emmanuel Ameh, Chief of Pediatric Surgery, Abuja National Referral Hospital, Nigeria

HYPOXIA LAB

[Multi-stakeholder Forum to Advance Pulse Oximetry, Safety, and Equity](#), co-hosted by UCSF Hypoxia Lab and CHESA



[UC Departments of Surgery Health Equity Grand Rounds](#), co-hosted by CHESA



[Anesthesia and IGHS Global Health Grand Rounds](#) moderated by CHESA faculty Drs. Mike Lipnick, Odi Ehie and Tyler Law, with presentations by: Dr. Maytinee Liaonitkul, Assistant Clinical Professor of Anesthesia, UCSF; Dr. Fred Bulamba, Chair of Department, Busitema University, Uganda; Dr. Cornelius Sendagire, Uganda Heart Institute, Association of Anesthesiologists of Uganda; Dr. Mary Nabukenya, Mulago National Referral Hospital; and Dr. Tonny Stone Luggya, Chair of Department of Anesthesia, Mulago Hospital, Makerere University

FELLOW SPOTLIGHT



Dr. Emmanuel Bua: Mentorship and Partnership as a CHESA Fellow

Dr. Emmanuel Bua found the CHESA fellowship at a time when he was seeking mentorship and direction in his surgical career. He saw a leadership deficit in Uganda. In his first year of the fellowship, his project focused on education and mentorship. Dr. Bua partnered with HEAL fellow Dr. Saad Sahi to build a training center and residency program at Mbale Regional Referral Hospital in eastern Uganda. He also mentored residents and started a journal club.

Now in year two, Dr. Bua is researching the barriers to surgical care. He is also working on setting up a student surgical club to introduce students to global surgery and organize camps for skills transfer. In his second year, he has also appreciated the opportunity to connect and collaborate with fellows from other countries.

Reflecting on lessons learned, Dr. Bua shared, “My life is changing. I’m looking beyond disease. Previously, my focus was just disease and how to treat and how to operate. Now, every time I treat a patient, I look beyond their disease and look at their social life and how they came to fall sick, and what can be done at the higher level.”

Now, every time I treat a patient, I look beyond their disease and look at their social life...

ADVOCACY

EXPANDING THE CONVERSATION ON HEALTH EQUITY

CHESA deployed its collective expertise and resources to champion major projects in 2022 that have opened new conversations on health equity in our field. These projects further other areas of our work, but are also powerful tools of advocacy.

Anesthesia Informed Consent Videos

With the support of a SURF grant, Drs. Laura Lang and Michael Lipnick designed a series of animated videos for patients requiring anesthesia care at ZSFG. The series empowers patients, including those with variable English language proficiency, to make more informed, deliberate care decisions. The videos were launched in 2019 with [Spanish and Cantonese translations](#) released in 2022. Other hospitals have reached out to use and adapt the videos for their patient populations.



CHESA Coordinates 4th Disease Control Priorities (DCP4) Meetings

CHESA with Gingko Bioworks helped co-organize and co-host DCP4 Meetings in September 2022 to promote the inclusion of global surgery and perioperative issues in setting global disease control policy. Over 25 colleagues joined in-person and virtually, including visiting members of the DCP4 leadership.

DCP4 | Disease Control Priorities

economic evaluation for health

ADVOCACY

HOW OUR MEMBERS SHOWED UP AS ADVOCATES IN 2022

CHESA community members were also actively advocating in 2022 through their own projects and leadership. Here we highlight some of the ways that our team and members made contributions to health equity in our field over the last year.



CHESA Board Chair **Dr. Haile Debas** was profiled as an Inspirational Leader in Surgery in the *World Journal of Surgery* by CHESA Director, Dr. Doruk Ozgediz.



CHESA signs on to **WHO Charter on Health Worker Safety** calling on governments to make sizable investments in workplace safety.

CHESA Board member Jane Fualal is elected the first female President of The College of Surgeons of East, Central and Southern Africa (COSECSA).



CHESA Director Dr. Doruk Ozgediz is named President of the Global Initiative for Children's Surgery (GICS).



THE LANCET

CHESA Associate Director Dr. Michael Lipnick serves on the Lancet Global Health Commission on Medical Oxygen Security.



CHESA coordinates the **4th Disease Control Priorities (DCP4) Meetings** to promote the use of economic evaluation in setting disease control policy.

CHESA hosts **Multi-Stakeholder Forum to Advance Pulse Oximetry, Safety, and Equity**, sharing insights with 130 registrants.



CHESA co-hosts **CUGH 2022 Surgery Satellite Session** on Role of Surgical, Obstetric, Trauma, and Anesthesia (SOTA) Care in Global Health



AWARDS, HONORS, AND APPOINTMENTS IN 2022

Congratulations to the CHESA community members for the honors, appointments, and recognitions they received in 2022.

**APPOINTED DIRECTOR OF THE UCSF
ANESTHESIA SIMULATION CENTER**

UCSF Department of Anesthesia

Dr. Maytinee Lilaonitkul

**APPOINTED DIRECTOR OF UCSF CENTER FOR
GLOBAL NURSING**

UCSF Center for Global Nursing

Dr. Rebecca Silvers

NAMED CHIEF OF NEUROSURGERY

State University of New York (SUNY) Downstate

Dr. Ernest Barthelemy

**AWARDED OWEN WANGENSTEEN
RESEARCH AWARD**

The American College of Surgeons

Dr. Ruth Laverde

**ORGANIZED AND CONTRIBUTED TO THE AAS –
COSECSA RESEARCH COURSE**

*The College of Surgeons of East, Central and Southern
Africa (COSECSA) Conference*

Dr. Godfrey Sama

QUALIFIED AS PEDIATRIC SURGEONS

COSECSA

Drs. Felix Oyania and Rovine Naluyimbazi

**PASSED THE COSECSA FELLOWSHIP EXAMS
FOR UROLOGY**

COSECSA

Dr. Martha Namugga

NAMED BEST UROLOGY TRAINEE

COSECSA

Dr. Martha Namugga

**NAMED PATIENT AND RESEARCH
OUTCOMES COORDINATOR**

COSECSA

Dr. Godfrey Sama

**PRESENTED ON CONJOINT TWIN
SEPARATION EXPERIENCE IN UGANDA**

World Association of Pediatric Surgeons

Dr. Phyllis Kisa

**HELPED HOST TANZANIA'S FIRST
NATIONWIDE COLORECTAL CANCER
CONFERENCE**

Sponsored by the International Cancer Institute

Dr. Nathan Brand with Dr. Larry Akoko

GAVE KEYNOTE ADDRESS

GSSA Bootcamp

Dr. Emmanuel Bua

In Memoriam

WE REMEMBER THREE HEALTH EQUITY CHAMPIONS



Dr. Martin Situma

Dr. Martin Situma dedicated his life to serving Ugandan children and families, training new surgeons, and bringing hope to low-resource areas. He was an exceptional surgeon, teacher, and leader who saved or altered tens of thousands of children's lives. Martin collaborated with many non-profit organizations, universities, and professional associations throughout his career. To learn more about Dr. Situma's work and legacy, you can read the [tribute from PAPSA](#) or view the [moving memorial service](#) held in his honor.



Dr. Paul Farmer

Dr. Paul Farmer was a giant in global health who dedicated his life to serving, empowering, and learning from vulnerable populations around the world. He strongly believed in access to universal health coverage and saw essential surgical care as a basic human right. Dr. Farmer catalyzed the founding of the Harvard Program for Global Surgery and Social Change, the UCSF HEAL Program, and many others. His work in advancing the global surgery movement has had a profound impact on CHESA's approach to its global surgery work.



Harriet Nambooze

We are in gratitude to Harriet Nambooze and her work with UCSF and the Makerere College of Health Sciences as Surgical Skills Lab Coordinator from 2012-2022. She was committed to the organization of the skills lab that helped build the capacity of many students and post graduates. She also managed the pediatric surgery database in its early years. She was a major part of the UCSF GPAS family and worked closely with all the scholars over the years.

FELLOW SPOTLIGHT



Dr. Felix Oyania: Connecting to a family of mentors and fellow learners

When Dr. Felix Oyania started his surgical residency in Uganda back in 2015, he quickly noticed one thing: no one had time to talk to him. Working in a severely underserved area in Southeastern Uganda, he understood why, but that often left him to learn on his own. It wasn't until Dr. Oyania got to work with CHESA Director, Dr. Doruk Ozgediz, during one of his teaching exchange visits to the area that a door to professional mentorship was opened. Through his mentorship, Dr. Ozgediz inspired Dr. Oyania to specialize in pediatric surgery and eventually to join the CHESA fellowship.

As a fellow, Dr. Oyania was paired with a local mentor, the late Dr. Martin Situma, from whom he has had the privilege of learning over the last few years. He also has pursued research on improving pediatric surgical treatment for children in Uganda, with a focus on pediatric colorectal surgery, anorectal malformations, and Hirschsprung's disease. In addition, the CHESA fellowship opened opportunities for Dr. Oyania to exchange learnings with fellows across the world.

When asked why he chose pediatric surgery, Dr. Oyania shares a shocking statistic: There are only eight pediatric surgeons serving the 20 million children of Uganda – a ratio of 1 to 2.5 million (compared with 1 to 500,000 in the U.S.). Prior to his death in December 2022, Dr. Situma was the only pediatric surgeon in the Southeastern region. Since the loss of Dr. Situma, Dr. Oyania has shouldered a triple-burden of grieving, filling the enormous care and training gaps, and continuing his own learning. But he knows he won't bear that burden alone: "The fellowship has connected me to a family of people walking the same pathway."

There are only eight pediatric surgeons serving the 20 million children of Uganda - a ratio of one to 2.5 million.

COMMUNITY

SHOWING UP FOR EACH OTHER IN 2022

As COVID restrictions eased, CHESA members have enjoyed the opportunity to gather, whether for collaborative projects and presentations, or to catch up and decompress after a long day. Here are some highlights from the year.



CHESA leadership members Michael Lipnick, Tyler Law, and Sri Padmanabhan



CHESA Director Doruk Ozgediz with CHESA fellow Felix Oyania and colleagues Charles Odongo and Chispus Bingana



CHESA fellows Ava Yap and Treasure Ibingira



CHESA Executive Committee members during their team retreat: Michael Lipnick , Patti Orozco, Marissa Boeck, Doruk Ozgediz, David Bayne and Coleen Sabatini



Chair of the UCSF Surgery department Julie Ann Sosa with guest lecturer and CHESA collaborator Professor Emmanuel Ameh and CHESA Director Doruk Ozgediz

COMMUNITY

SHOWING UP FOR EACH OTHER IN 2022 (cont.)



CHESA core team with fellows Amandine Godier-Furnemont and Felix Oyania and colleagues outside of Dr. Martin Situma's Pediatric Surgical Unit in Mbarara Regional Referral Hospital



Left to right: Doruk Ozgediz, Maytinee Lilaonitkul, Michael Gropper, Tyler Law, Michael Lipnick, Gunisha Kaur, Jenny Guan and Suzanne Barakat



CHESA collaborator Monica Kabagambe with Program Coordinator Zayna Tommalieh and Deputy Director Patti Orozco



Former CHESA fellow Ruth Laverde with CHESA Associate Director Marissa Boeck and current fellows Violet Otoki and Ava Yap at the 2022 American College of Surgeons Clinical Congress



CHESA hosted a Fellows and Affiliates end-of-year party at Underdog Tres.

Photos courtesy of Caroline Stephens, Ava Yap, Doruk Ozgediz, Michael Lipnick and Zayna Tommalieh

SUPPORT CHESA

Donations are critical to funding CHESA's mission by providing administration, operational support and support for the development of CHESA programs.

Making a gift to CHESA is easy and tax-deductible. You can give online; by mail, phone, or wire transfer.



Learn more at globalsurgery.org/donations or scan the QR code

NURTURING THE NEXT GENERATION OF LEADERS

CHESA supports dynamic local champions and global surgery and anesthesia leaders from low- and middle-income countries.

PIONEERING DISRUPTIVE RESEARCH

CHESA engages in capacity strengthening and research activities to advance perioperative health equity. Learn more at globalsurgery.org/our-work/.

DEPLOYING RESPONSIVE SURGE SUPPORT

Flexible funding allows CHESA to support international partners in managing health crises, natural disasters, and other emergencies.

UCSF Member Departments

Anesthesia and Perioperative Care
Emergency Medicine
Epidemiology and Biostatistics
Institute for Global Health
Sciences
Neurological Surgery
Nursing
Obstetrics and Gynecology
Oncology
Ophthalmology
Orthopaedic Surgery
Otolaryngology
Pediatrics
Surgery
Urology

External Partners and Collaborators

Association of
Anesthesiologists of Uganda
Busitema University
Global ENT initiative
Global Initiative for
Children's Surgery
Global OHNS
Global Surgery Student
Alliance
HEAL Initiative
Institute for Global
Orthopaedics and
Traumatology
Kids OR
Lifebox
UCSF Health and Human
Rights Initiative
UCSF Hypoxia Lab
World Federation of Societies
of Anesthesiologists

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CHESA Faculty Projects have been funded by multiple departments at UCSF and external funding agencies and foundations. We are grateful to all supporters including those listed below and those who wish to remain anonymous.



USAID
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HELLMAN FOUNDATION



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CHESA Funders

CHESA has been funded by multiple departments at UCSF as well as external funding agencies and foundations. We are grateful to all of our supporters, including those listed below and those who wish to remain anonymous.



HELLMAN FOUNDATION





UCSF Center for Health Equity
in Surgery & Anesthesia

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