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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
The last year posed unprecedented challenges to health equity in the United States and internationally as two pandemics collided – the COVID-19 pandemic and structural racism. At the same time, the Center for Health Equity in Surgery and Anesthesia (CHESA) was born. The name was inspired by our members' recognition that we are working together to advance health equity independent of geography and in partnership with communities and leaders both in the Bay Area and internationally.

Despite the challenges of the last year, we have convened and created a community dedicated to health equity in surgery, anesthesia and perioperative care. We are fortunate to have great diversity and breadth in expertise around health equity at the University of California, San Francisco (UCSF) and among our global partners. CHESA members remain active in Bay Area communities and in over fifty countries; they lead collaborative local and global initiatives ranging from education and training in health equity and public health to support of clinical training initiatives and the advancement of scholarship, advocacy and policy.

Our shared vulnerability as global citizens has never been more apparent than now – rapidly evolving guidelines and restrictions due to COVID-19 have forced us to pivot to virtual learning and practice and have also shed light on the necessity to continue to prioritize the needs of our most vulnerable communities. CHESA members have partnered to mitigate the global COVID impact and have also led local initiatives to understand and address the multidimensional impact of social determinants of health on patients and communities we serve.
We have also engaged in challenging and ongoing conversations with each other and our partners about diversity, equity, inclusion, commitment to principles of “decolonizing global health” and tackling structural racism. Perhaps our most passionate group are students and trainees who have demanded action over words, and a clearer roadmap to equity and justice in the spaces where we work.

To advance this agenda, CHESA has awarded seven seed grants over the last year to early career faculty and their teams who work on advancing training and scholarship across multiple disciplines and across both domestic and international spaces. Our strengths are our multidisciplinary leadership and structure, and our emphasis on a continuum of implementation and impact between domestic and international communities – which we will highlight over the course of the next year in our new series of Grand Rounds and workshops. To further strengthen our efforts, we have partnered with seven other UC campuses to incubate a UC Center of Expertise in Perioperative and Surgical Health Equity.

This report outlines the breadth, depth, and diversity of work amongst our membership and their achievements. Over the coming year, we plan to expand our internal and external partnerships to impact health equity, amplify the work of allied groups that share our mission and vision and advocate for the roles of surgery, anesthesia and perioperative care in global health. We look forward to working with all of you to achieve our shared goals in the coming year.

Doruk Ozgediz, MD, MSc
Director, CHESA
Executive Committee

Doruk Ozgediz, MD, MSc is an Associate Professor of Surgery at UCSF, Director of the UCSF Center for Global Surgery and Health Equity (CHESA) and on the leadership team of the Institute for Global Health Sciences. He trained at UCSF before pursuing a pediatric surgery fellowship at the Hospital for Sick Children, University of Toronto. He also completed an MPH in Developing Countries at the London School of Hygiene and Tropical Medicine. Since 2003, Dr. Ozgediz has participated in multiple surgical collaborations in Uganda to strengthen their surgery and anesthesia care, mostly through support of capacity-building initiatives.

Michael Lipnick, MD is an anesthesiologist and intensivist at Zuckerberg San Francisco General Hospital (ZSFGH) and the Co-Director of CHESA. Dr. Lipnick's interests focus on critical care, perioperative care and medical education. He co-founded The Global Health Hub, OpenCriticalCare.org and Global Partners in Anesthesia and Surgery. He is currently the Director of Anesthesia and Surgery for the HEAL Global Health Fellowship, and the Director of the UCSF Institute of Global Health Sciences Faculty Program. Dr. Lipnick is an investigator in the UCSF Hypoxia Lab and has active research projects in pulse oximetry development for low-income countries and examining mechanisms of hypoxia tolerance, preconditioning and outcomes in critically-ill patients with ARDS.
**Marissa Boeck, MD, MPH** is an assistant professor in the Division of General Surgery and serves as an acute care surgeon at Parnassus and ZSFGH. She earned an MPH at Johns Hopkins Bloomberg School of Public Health and completed a fellowship at the Brigham and Women’s Center for Surgery and Public Health and at Northwestern University Feinberg School of Medicine's Center for Global Health. Her professional passions include global public health and trauma and surgical system strengthening in low-resource settings. She also champions diversity in the surgical workforce, and the power of social media in medicine.

**Coleen Sabatini, MD, MPH** is dedicated to caring for children with musculoskeletal problems both domestically and abroad, and believes that all children should have access to high quality, safe, and affordable orthopaedic care. She is a pediatric orthopaedic surgeon based at the University of California San Francisco (UCSF) Benioff Children’s Hospital Oakland (BCHO) in Oakland, California. She serves as the Vice Chair of Health Equity and Academic Affairs for the UCSF Department of Orthopaedic Surgery and co-Director of the UCSF Center for Health Equity in Surgery and Anesthesia. Her global surgery work is primarily based in Uganda, where she has been working since 2013 and is based on collaborative work to strengthen musculoskeletal care through education and research.
Lauren Wall, MPH joined the CHESA as a founding member of the leadership team in 2020. She has directed the technical and operational design, implementation and evaluation of global health programs spanning 16 countries with US government, private family foundation, multi-lateral and private sector funding. She holds an MPH in Maternal and Child Health from the University of North Carolina at Chapel Hill. Her previous research surrounds treatment seeking behavior for congenital birth defects in Brazil, Liberia, Nicaragua and Tanzania.

David Bayne, MD, MPH is an assistant professor of urology at UCSF and studies the clinical, social and behavioral factors that contribute to kidney stone formation and influence treatment outcomes. During medical school, Dr. Bayne worked in Haiti and completed his residency in urology at UCSF. He completed a Masters in Public Health at UC Berkeley to better understand the social factors associated with the surgical outcomes that he noted during his early clinical years in Haiti and San Francisco.
**Leadership Council**

**Aileen Chang, MD** is an assistant professor of Dermatology and the director of Global Health Dermatology at the University of California, San Francisco. She is also the director of the Dermatology Consult Service at ZSFGH and the co-director of the Social Determinants of Health Curriculum for the UCSF Department of Dermatology. Dr. Chang’s work is rooted in advancing health equity in dermatology. Her research interests are in the intersection of social determinants of health and dermatology, dermatologic care of persons experiencing homelessness, scabies and lice, management of chronic wounds/lymphedema in resource-limited settings and skin health in migrant populations.

**Anthony DiGiorgio, DO, MHA** is an assistant professor in the Department of Neurological Surgery at UCSF. He received his DO degree from Touro University of Osteopathic Medicine and completed his neurosurgery residency at Louisiana State University (LSU) Health Sciences Center. At UCSF, he completed a research fellowship in minimally invasive spine surgery and a clinical fellowship in neurotrauma and neurocritical care. His clinical interests include traumatic brain injury, spinal cord injury, and minimally invasive spine surgery. He later developed an interest in healthcare socioeconomics and policy, obtaining his master’s in Health Administration from LSU. He has served as a healthcare policy fellow in the US Senate, a delegate to the Council of State Neurosurgical Societies representing California and as a delegate to the California Medical Association representing San Francisco & Marin.
Sriranjani Padmanabhan, MD is an assistant professor of ophthalmology at the UCSF and the associate medical director for the ophthalmology service at ZSFGH and Trauma Center. Dr. Padmanabhan’s primary interests are in the clinical care of marginalized populations and the clinical and surgical teaching of ophthalmology trainees. Her scholarly endeavors lie at the intersection of health equity in ophthalmology and the improvement of eye care delivery in diverse and underserved populations, especially with respect to glaucoma and cataract surgery.

Odi Ehie, MD is a pediatric anesthesiologist whose interests include diversity, equity and inclusion, global health as well as education. A UCSF Teachers Scholar, Dr. Ehie started a diversity curriculum for the surgery and anesthesia residents, and has held a teaching position as a UCSF Bridges coach over the past four years for the School of Medicine. She is the co-lead of the CHESA Research Working Group, a member of the Society of Pediatric Anesthesia Women’s Empowerment and Leadership Initiative, and serves as: site co-director in Vietnam for the Health Volunteer Overseas/Society of Education in Anesthesia (SEA) Travel Fellowship; Designee Chair of the SEA Global Health Outreach Committee; a member of the SEA Diversity Task Force; a member on the ASA Committee for Professional Diversity; and as chair for the California Society of Anesthesiologists Committee of Justice, Equity, Diversity, and Inclusion. She was recently appointed vice-chair of diversity, equity, and inclusion for the Department of Anesthesia & Perioperative Care.
Josephine Czechowicz, MD is a pediatric otolaryngologist at UCSF Benioff Children’s Hospital and assistant professor of otolaryngology-head and neck surgery. Her global health work is focused on hearing outcomes, education and health equity. She has collaborated with partners in Peru, Tanzania, Zimbabwe, Chile, Equatorial Guinea, as well as locally in Oakland. She represents the UCSF Department of Otolaryngology for the CHESA, and is a faculty affiliate of the Institute for Global Health Sciences. She is the otolaryngology representative on the American Academy of Pediatrics Section on International Child Health. She is also a member of the International Global Otolaryngology-Head and Neck Surgery Initiative.

Paul Park is a fourth-year medical student at UCSF. He became interested in addressing health disparities as an undergraduate studying public health at UC Berkeley. His past experiences include working with the homeless population in the Bay Area, conducting a clean drinking water research project in Tanzania and partaking in clinical research in TB, HIV and malaria. He became interested in surgery after his third-year clerkship at ZSFGH and subsequently co-founded the Global Surgery Student Alliance (GSSA) chapter at UCSF as a way to incorporate his global health background into this new career interest. Since then, he has been working with the CHESA at UCSF on local and global surgery projects and took a research gap year to work with the non-profit organization, KidsOR, to help build data collection and research capacity at partner hospitals in low- and middle-income countries.
Felicia Lester, MD is a fellowship-trained specialist working with women in the medical and surgical treatment of gynecologic conditions including abnormal uterine bleeding, chronic pelvic pain, endometriosis, ovarian cysts, and endometrial polyps and fibroids. She also has expertise in contraception, the menopausal transition, abnormal pap smears management of pregnancy loss and office-based procedures. Her passion for global health and education and has led to her partnership with a university teaching hospital in Uganda where she provides support for Ugandan Ob/Gyns. She is also active in the Pre-term Birth Initiative in Uganda and Kenya, which focuses on reducing the mortality and morbidity associated with preterm birth through training, simulation, and quality improvement. Her research interests include global health education, quality improvement, post-partum contraception, holistic approaches to pelvic pain, and reducing maternal and neonatal mortality.

Martha Tesfalul, MD is a perinatologist working with individuals who are at-risk of pregnancy complications including hypertensive disorders, autoimmune conditions, and fetal anomalies. Her clinical interests are in diabetes, preeclampsia, preterm birth and sickle cell disease, and her endeavors center patient experience, health systems strengthening and health equity. Her work in global health has taken her to her family’s home country of Eritrea, as well as Botswana, South Sudan and Uganda. As a UCSF Maternal-Fetal Medicine fellow, she received the the Foundation for Society of Maternal-Fetal Medicine (SMFM) Queenan Global Health Fellowship to do work centered on the prevention of perinatal deaths in Eritrea. Now as a UCSF Assistant Professor, she looks forward to working with CHESA, SMFM and groups passionate about addressing pressing maternal and neonatal health issues across the globe.
Stefanie M Ueda, MD is an associate professor in the Department of Obstetrics, Gynecology, and Reproductive sciences within the UCSF School of Medicine. She specializes in gynecologic cancers, with a particular interest in ovarian cancer and robotic surgery. Her research has addressed conditions and treatments including low grade serous and clear cell ovarian cancer, uterine serous cancer, biologically targeted therapies and clinical treatment outcomes. She is part of an ongoing collaborative clinical education and surgical training program with Makerere University and Mulago Hospital in Kampala, Uganda that aims to improve the treatment and management of women gynecological malignancies by training a critical mass of specialists in Uganda.
HAILE DEBAS NAMED ADVISORY BOARD CHAIR

The CHESA Advisory Board will play a critical role guiding CHESA's work, identifying opportunities and assessing impact. Over the next year, CHESA will recruit advisory board members who share our mission and will use their expertise to be active leaders in their advisory roles. In his role as Board Chair, Dr. Debas will help recruit board members, shape CHESA's foundation, refine our collective vision, and ensure sustainability.

Haile T. Debas, MD is recognized internationally for his contributions to academic medicine and is widely consulted on issues associated with global health. At UCSF, he served as the founding executive director of Global Health Sciences (2003-2010), dean of the School of Medicine (1993-2003), vice chancellor for medical affairs for six years, and chancellor for one year. A gastrointestinal surgeon by training, Dr. Debas chaired the UCSF Department of Surgery (1987-2003),
and is the Maurice Galante Distinguished Professor of Surgery, Emeritus. He also was the founding director of the University of California Global Health Institute from 2009 to 2016. Dr. Debas has held leadership positions with numerous membership organizations and professional associations, including serving as president of the American Surgical Association and chair of the Council of Deans of the Association of American Medical Colleges (AAMC). He served for two terms as a member of the Committee on Science, Engineering and Public Policy of the National Academy of Sciences; served four years on the advisory committee to the Director of the National Institutes of Health; and was a member of the United Nations’ Commission on HIV/AIDS and Governance in Africa.

Dr. Debas is a member of the National Academy of Medicine and a fellow of the American Academy of Arts and Sciences. He currently serves as chair pro-tem of the Board of Trustees of the Aga Khan University and previously served on the Board of Regents of the Uniformed Services University of the Health Sciences. He was instrumental in the creation of the Consortium of Universities for Global Health, where he served as founding chair of the Board of Directors (2009-2012). Dr. Debas was a lead editor of the Essential Surgery volume of Disease Control Priorities, Third Edition (DCP3), published by the World Bank in 2015.

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. His work has led to enduring and significant advances in the field, and we are grateful to be guided and inspired by his experience, influence and thought leadership. -Dr. Doruk Ozgediz
Providing Critical Care Technical Assistance for COVID-19

In May 2020, UCSF received an award from the United States Agency for International Development (USAID) to provide global technical assistance for COVID-19 critical care. This work was led by Dr. Michael Lipnick in collaboration with Dr. Adrian Gelb. The resources developed by Dr. Lipnick's team have been accessed by users in over 181 countries. Learn more and where access these tools below.

OpenCriticalCare.org contains a resource library and links to different learning resources including respiratory care protocols and order set templates. The site aims to help healthcare workers in resource-variable settings find open-access, high-quality critical care learning tools to prepare themselves and their facilities to care for COVID critical care patients quickly.

COVID Guidelines Dashboard summarizes the latest guidelines updates from multiple leading authorities and institutions to help users see where there is consensus and where there is not.

COVID Protocols v2.0 contains COVID-19 clinical practice guidelines and adaptations relevant to all practice settings on a searchable, mobile-optimized, web-based platform. Developed by UCSF, Brigham & Women's Hospital, and Partners In Health.
IMPROVING ACCESS TO NEWBORN HEARING SCREENING AND OTOLOGIC CARE

With support from the NIH-Fogarty International Research Institute, Dr. Josephine Czechowicz collaborates with the pediatric otolaryngology and audiology team at Hospital San Bartolome in Lima, Peru to optimize access to screening, improve the follow up for infants diagnosed with hearing loss and to better characterize the preventable causes of congenital hearing loss in Peru.

Collaborators: Dr. Josephine Czechowicz, Dr. Sara Antayhua, Lic. Susy Mamani, and Allison Rollins.

Dr. Lia Jacobson has an ongoing collaboration with the ENT Resident Program at Bugando Medical Center in Mwanza, Tanzania, which is rolling out an early hearing detection and intervention program.

Collaborators: Dr. Lia Jacobson, MD; Dr. Gustave Buname, MD; Dr. Christopher Waterworth, Au.D.

PROVIDING INCREASED ACCESS TO SURGICAL EDUCATION AND TRAINING

Dr. Lia Jacobson also works with the Children's Surgical Centre of Cambodia, where she participates in on-the-ground ENT surgical training and project development with local otolaryngologists, trainees and nursing staff in Phnom Pehn. Along with her CHESA colleagues at UCSF, including Dr. Josephine Czechowicz, she is in the process of developing a global surgery fellowship and faculty/trainee rotations to provide ongoing support and educational partnership opportunities for global surgical equity trainees based in the US and internationally.
In response to the COVID-19 pandemic, several new open access and online training modules in otolaryngology-head and neck surgery have been developed in 2020, expanding available training resources and collaborative learning opportunities for surgeon learners across the globe. Dr. Jacobson has helped develop a pediatric ENT symposium series in partnership with international collaborators and the nonprofit organizations Mending Kids and Global ENT Outreach, to host an online lecture series attended by over 100 health care professionals from 30+ countries globally. She is also collaborating with partners at Bugando Medical Centre in Tanzania to develop a training module on pediatric head and neck disorders for the COSECSA Pediatric Surgery Fellowship web-based learning platform.

Dr. David Bayne, Dr. Chris Prashad and Dr. Adrian Fernandez started a training collaboration between UCSF and Georgetown Public Hospital in Georgetown, Guyana to teach point of care ultrasound to residents and medical students. This will allow for the diagnosis of hydronephrosis and urinary retention in urology clinics that do not have bladder scanners or readily available ultrasound diagnostics. The goal is to foster a longitudinal, international collaboration between the academic medical centers to promote education, training and research in urological care.
INTERNATIONAL COLLABORATION IN UROLOGY

Dr. Adrian Fernandez was selected to present at this year's American Urological Association national conference on the topic of international collaborations between urology departments in the United States and academic research centers in low- and middle- income countries.

PEdiatric surgery

KidsOR - CHESA SURGICAL DATA PLATFORM

KidsOR is a global health charity based in Scotland that provides surgeons and their teams with the infrastructure needed to provide high-quality, safe surgical services for children in LMICs. The research team at KidsOR is a global, multi-center research partnership committed to locally driven and evidence-based collaboration. Through a consensus based iterative process with local champions the team has developed interactive and accessible data dashboards, providing a platform for partners to engage in their data to advance care locally. The research team is also working on a COVID impact report, a pediatric surgery waitlist manuscript and a pediatric surgery mortality risk calculator for low resource settings. The approach demonstrates collaboration between non-governmental organizations and academic partners to advance equity-driven data-based solutions in global surgery.

Contributors: Dr. Doruk Ozgediz, Dr. Greg Klazura, Paul Park
The Institute for Global Orthopaedics and Traumatology (IGOT) at UCSF is an academic initiative committed to building capacity in musculoskeletal care through global partnerships. IGOT strives to provide orthopaedic surgeons from low- and middle-income countries (LMICs) with the training and educational resources needed to save limbs and lives through the Surgical Management and Reconstructive Training (SMART) course. This course teaches basic principles of open fracture management and soft-tissue coverage techniques within resource-limited settings. A typical course instructs 50-150 surgeons from diverse countries, with faculty from leading North American, as well as local academic institutions.

IGOT offers bi-monthly webinars comprising of interactive case discussions and Q&A engagement with audiences of 250 attendees, representing over 45 countries. These webinars are led by an expert panel of North American and international orthopaedic surgeon-leaders experienced in different orthopaedic techniques and sub-specialties, while being supplemented by surgical approach videos and didactic lectures available on IGOT's online learning portal.

Contributors: Dr. Colleen Sabatini, Dr. Sanjeev Sabharwal, Dr. David Shearer, Dr. Saam Morshed, Dr. Theodore Miclau, Dr. Richard Coughlin and Madeline MacKechnie
MITIGATING THE IMPACT OF COVID-19 ON THE DELIVERY OF GLOBAL CHILDREN’S SURGICAL CARE


The study aimed to understand the challenges facing children's surgical care providers globally and realistic interventions to mitigate the catastrophic impact of COVID-19 on children’s surgery and was performed through the Global Initiative for Children's Surgery.

Reported Challenges

- Delayed access to care for children
- Fear among the public and patients
- Unavailability of appropriate personal protective equipment (PPE)
- Diversion of resources toward COVID-19 care; and interruption in student and trainee hands-on education

Recommendations

- Human resource and funding support to minimize backlog
- Setting up international, multi-center studies for systematic data collection specifically for children
- Providing online educational opportunities for trainees and students in the form of large and small group discussions
- Developing best practice guidelines
- Most importantly, adapting solutions to local needs

Conclusion Identification of key challenges and interventions to mitigate the impact of the COVID-19 pandemic on global children’s surgery via an objective, targeted needs assessment serves as an essential first step. Key interventions in these areas are underway.
AWARDS RECEIVED

Congratulations to the CHESA community members for the honors, appointments, and recognition they received in 2020-2021.

APPOINTED VICE CHAIR OF HEALTH EQUITY AND ACADEMIC AFFAIRS
UCSF Department of Orthopaedic Surgery
Dr. Coleen Sabatini

LONG TERM MENTORSHIP AWARD
UCSF School of Medicine
Dr. Michael Lipnick

RESIDENT HUMANITARIAN SERVICE AWARD
American Society of Anesthesiologists
Dr. Samuel Percy

DEAN’S PRIZE AWARD
UCSF School of Medicine
Brittany Robinson

OUTSTANDING CAPSTONE
UCSF Institute for Global Health Sciences
Chelsie Anderson, MS

BEST TRAUMA PAPER AWARD
Pediatric Orthopaedic Society of North America
Dr. Coleen Sabatini

2021 FOUNDER’S MEDALIST
Vanderbuilt University School of Nursing
Dr. Rebecca Silvers

APPOINTED VICE CHAIR FOR DIVERSITY, EQUITY AND INCLUSION
UCSF Department of Anesthesia and Perioperative Care
Dr. Odi Ehie

APPOINTED PRESIDENT
World Federation of Societies of Anaesthesiologists
Dr. Adrian Gelb

GLOBAL SURGICAL TRAINING CHALLENGE
Grant sponsored by the Intuitive Foundation
Dr. Coleen Sabatini (co-lead)
Dr. Moses Muhumuza Fisha (co-lead)

UCSF BAUM FAMILY SIMULATION FACULTY SCHOLARSHIPS
Baum Family Presidential Chair for Experiential Learning
Dr. David Bayne
Dr. Maytinee Lilaonitkul

EARLY CAREER AWARD FOR STUDIES ON ANORECTAL MALFORMATIONS IN UGANDA
Thrasher Foundation and GloCal Fellowship
Dr. Felix Oyania
Residency Health Equity Curriculum

Health care disparities are pervasive in all aspects of medicine, disproportionately and unfairly increasing morbidity and mortality. Providers must understand disparities and health equity to advocate for and deliver equitable care. To address this need, UCSF CHESA members developed and delivered the Health Equity Curriculum for surgery and anesthesia residents. The comprehensive curriculum is currently being digitized for easy adoption by other departments and universities and includes:

- A year-long longitudinal course for anesthesia and general surgery residents during dedicated learning time
- Four lecture topics and three complementary small group discussions
- Two panels to connect students with community engagement and faculty projects
- Health Equity Journal Club
- Pre-test/Post-test survey
- Facilitator Guides

Contributors: Drs. Beti Asnake, Andre Campbell, Brianna Carreno, Rebecca Chen, Caitlin Collins, Odi Ehie, Michael Lipnick, Sara Mohamedaly, Bunmi Okunlola, Janette Tang, Elliot Wollner, Mignote Yilma.

Many (residents) shared that they... would like to see continued efforts like this in the future.

- DR. BETI ASNAKE
CHESA, in collaboration with other UCs and global partners have been presented an incubator award for a Perioperative and Surgical Health Equity Center of Expertise (COE). The UC Global Health Institute (UCGHI) incubator awards are designed to support multi-campus and multidisciplinary teams undertaking transformative solutions to global health challenges. Surgical conditions account for 30% of the global burden of disease, but surgical and anesthesia care remain an under-supported element in the achievement of Universal Health Coverage. If funded beyond incubation, the COE will unite UC campuses, international universities, and non-governmental organization partners to address the need for equity-based perioperative care.

The consortium would be one of the first of its kind, building on the existing partnership between CHESA and 7 other UC campuses and their respective international and local partners. CHESA Director Dr. Doruk Ozgediz envisions that a UC-wide COE will “harness the breadth, depth, and diversity of engagement in work that advances health equity in surgery and perioperative care across the UC system.”

The COE will leverage the UC system and its global partner network to facilitate multi-directional exchange; train leading researchers and change agents and engage in research and partnerships that center community and patient perspectives.

Dr. Ozgediz believes the COE will “allow the many existing partnerships and initiatives to amplify their impact, share lessons learned, and expand work.” This multi-directional exchange across academic centers, disciplines, and community agents will benefit students, trainees, and faculty at all partner sites. Theresa L. Chin, Assistant Professor of Surgery at University of California, Irvine says, “the Center of Expertise will be a central
point for students, trainees, faculty and partners to allow for collaboration on projects, sharing of resources and expansion of ideas. It will allow students and trainees to identify cross-campus faculty mentors that have similar interests." The driving force behind the creation of the COE is to improve health equity in both domestic and global contexts. The COE will approach health inequities as constructs that lack geographical borders and will engage both local and international stakeholders in community engagement.

Dr. Chin says, "Global surgery is more than doing surgery in another country", and while the initial focus may be on the operative aspect, global surgery encompasses the health care systems in the US and abroad, health policy, cultural barriers, injury and disease prevention, and long-term outcomes of surgical disease. "By increasing capacity and developing system-related changes we can have a greater impact on the public health pyramid."
For 2020-21, CHESA provided $100,000 of funding to support members’ projects and ideas.

**UROLOGY**

Dr. David Bayne  
Dr. Adrian Fernandez  
Dr. Christopher Prasadh  
Training and implementation of handheld ultrasound technology at Georgetown Public Hospital Corporation: a low-cost intervention to improve diagnostic evaluation in a resource-limited urology clinic

**TRAUMA**

Dr. Marissa Boeck  
Dr. Larry Akoko (MUHAS)  
EX-LAP: EXploring LAParotomy outcomes for surgical quality improvement at a tertiary care facility in Tanzania

**OPHTHALMOLOGY**

Dr. Sriranjani Padmanabhan  
Evaluating the efficacy, patient satisfaction, and cost effectiveness of a new dropless postoperative regimen after cataract surgery in a vulnerable, county-hospital population

**SURGERY**

Dr. Nichole Starr  
Dr. David Rabinowitz  
Implementation of UV-C Cabinet for N95 and surgical mask decontamination and reuse: Protecting vulnerable surgical & anesthesia healthcare providers in LMICs

**SURGERY**

Dr. Tasce Bongiovanni  
Dr. Woon Cho Kim  
Delivery of Surgical Care to Vulnerable Populations During the COVID-19 Pandemic

**ANESTHESIA**

Dr. Odi Ehie  
Implementation of a diversity, equity, and inclusion curriculum for residents in a perioperative setting

**ENT**

Dr. Lia Jacobson  
Training modules to improve safe ear surgery and audiology services in Tanzania
The COVID-19 pandemic has had a devastating impact on the nation's healthcare system, requiring abrupt changes in priorities and services. The extent of the surgical burden during these unprecedented times is currently unknown. Access to medical care, including essential surgical services, is a growing problem, particularly in low socioeconomic status communities. Zuckerberg San Francisco General Hospital (ZSFG), the county and safety-net hospital of San Francisco that cares for a large proportion of the city's minority, uninsured, and Medi-Cal or Medicare patients, canceled all non-emergent scheduled surgeries between March and May of 2020, as a direct response to the State of California's shelter-in-place mandates and national guidelines by the American College of Surgeons. Even after its partial resumption of services, ZSFG perioperative and clinic services resumed at a reduced capacity, which continues to affect access to care in the patient population we serve. We hypothesize that the recent restrictions on non-emergent surgical services disproportionately impact vulnerable populations in San Francisco.

SUMMARY
The COVID-19 pandemic has had a devastating impact on the nation's healthcare system, requiring abrupt changes in priorities and services. The extent of the surgical burden during these unprecedented times is currently unknown. Access to medical care, including essential surgical services, is a growing problem, particularly in low socioeconomic status communities. Zuckerberg San Francisco General Hospital (ZSFG), the county and safety-net hospital of San Francisco that cares for a large proportion of the city's minority, uninsured, and Medi-Cal or Medicare patients, canceled all non-emergent scheduled surgeries between March and May of 2020, as a direct response to the State of California's shelter-in-place mandates and national guidelines by the American College of Surgeons. Even after its partial resumption of services, ZSFG perioperative and clinic services resumed at a reduced capacity, which continues to affect access to care in the patient population we serve. We hypothesize that the recent restrictions on non-emergent surgical services disproportionately impact vulnerable populations in San Francisco.

PROPOSAL
- Characterize the trends of non-emergent conditions that require surgery at ZSFG during and after the shelter-in-place period, compared pre-COVID-19
- Qualify various SDOH of those who unable to receive scheduled surgeries at ZSFG
- Estimate the clinical consequences of delayed or canceled non-emergent surgeries

The results of this study will help the surgical department at ZSFG better understand the current demands, capacity, and barriers of scheduled surgical services in this new climate.
IMPLEMENTATION OF UV-C CABINET FOR N95 AND SURGICAL MASK DECONTAMINATION AND REUSE: PROTECTING VULNERABLE SURGICAL & ANESTHESIA HEALTHCARE PROVIDERS IN LMICS

David Robinowitz, MD, MHS, MS; Nichole Starr, MD, MPH

SUMMARY

In the COVID-19 pandemic, the proper personal protective equipment (PPE) is critical; Anesthesia, surgical, and emergency care providers, who perform or are exposed to aerosol-generating procedures like intubation, airway surgery, or laparoscopy are at high risk of exposure as they try to maintain access to essential healthcare services. In low-resource environments, both the healthcare workforce and PPE are already critically limited, further exacerbating the need for rapid implementation of ways to preserve PPE supply and keep healthcare workers safe.

The CDC has highlighted ultraviolet germicidal irradiation as a promising decontamination method and possible mitigation of the PPE shortages during the COVID-19 pandemic. A UV-C Cabinet that can decontaminate 5,000 N95 masks/day was designed and validated by our consortium; construction of these UV-C Cabinets has begun in 11 LMICs as part of a collaboration with N95Decon, the OSA Foundation, and Lifebox Foundation. However, additional support is needed to expand the program footprint and study potential use for surgical masks, develop and share implementation guidance, provide a communication platform for global partners to engage in this method, and study the impact of this method on PPE supply to inform future work.

"A UV-C Cabinet that can decontaminate 5,000 N95 masks/day was designed and validated by our consortium; construction of these UV-C Cabinets has begun in 11 LMICs as part of a collaboration with N95Decon, the OSA Foundation, and Lifebox Foundation."

DR. NICHOLE STARR
Trainees of all levels are an essential part of the CHESA community. CHESA faculty mentor trainees ranging from undergraduates to clinical fellows in multiple disciplines and from institutions across the globe.
**GSSA @ UCSF**

**Mission**

To connect UCSF medical students to global surgery opportunities, foster a robust global surgery community spanning all levels of training and work towards sustainable, equitable and accessible surgical, obstetric and anesthetic care worldwide.

**From Our Chapter Leader**

Global Surgery Student Alliance (GSSA), a national student-run global surgery working group for the U.S., affiliated with InciSioN (the International Student Surgical Network), was started at UCSF in 2019. Thanks to the mentorship of faculty, residents and staff at the Center for Global Surgery and Health Equity, we have been able to increase awareness about global surgery issues among the medical students here at UCSF. We take great pride in our mission and believe that students--the future generation of global surgery leaders--can contribute greatly to this field. Through the Global Surgery and Health Equity elective, we have invited physician leaders from both high-income countries and low- and middle-income countries to speak about their work to students. We plan to host events focused on the ethics of global health and surgery. With this, we hope to encourage dialogue about advocacy and equity in international partnerships.

- Eric Kim MS4

"Many students endorse difficulties identifying mentors and available projects. Even those that find opportunities often describe significant activation energy needed to send many cold-emails before getting their foot in the door."

- Outreach Chair

Omid Boozarpour
GSSA A C T I V I T I E S

GSSA GLOBAL SURGERY ELECTIVE

For the second year, GSSA curated and presented UCSF's Global Surgery and Health Equity Spring Elective for medical students. The elective serves as an introduction to global health, global surgery at UCSF and to global partners. This year the elective explored the theme of global surgery as a public health intervention and health equity in perioperative care locally and globally.

"My favorite session this year was learning about Dr. Rebecca Plevin’s work in trauma surgery and the Wrap Around Project. As the field of global health shifts to a lens of health equity and moves away from the notion that global health is always practiced elsewhere, it was a great opportunity to hear about the work being done in San Francisco to address surgical inequity."

GSSA 2021-2022

GSSA at UCSF-CHESA collaboration wants to support students who are already interested in global surgery and inspire new students to consider global surgery.

- Database of current projects open to student involvement
- Faculty Meet and Greet
- Symposium for faculty and student presentations
- Workshops for trainees at different stages of their global health career

Join the GSSA listserv! Email Feyisayo.Ojute@ucsf.edu
The CHESA Fellowship is an opportunity for individuals who have completed, or are currently enrolled in, a health professional training program and are committed to developing a career focused on advancing health equity in perioperative care.

This fellowship program is a non-ACGME fellowship pathway and has been designed with multiple tracks that are 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 with mentorship and project support for their research, education, advocacy and policy projects focused on health equity in the Bay Area or globally.

2021-2022 CHESA FELLOWS

- **Ernest Barthelemy**, ZSFG neurotrauma fellow
- **Nathan Brand**, UCSF surgery resident
- **Emmanuel Bua**, UCSF HEAL surgery fellow
- **Kent Garber**, ZSFG trauma fellow
- **Greg Klazura**, Fulbright Fogarty fellow and UIC global pediatric surgery fellow
- **Erica Langnas**, UCSF anesthesia global health equity fellow
- **Ruth Laverde**, UCSF medical student
- **Rachel Montoya**, Brown University MD/MPA candidate
- **Caroline Melhado**, UCSF surgery resident
- **Felix Oyania**, Mbarara University Western Uganda pediatric surgery fellow and Glo Cal fellow
- **Saad Sahi**, UCSF HEAL surgery fellow
- **Constance Shreckengost Harre**, Emory University general surgery resident and Fulbright Fogarty global health research fellow
- **Ava Yap**, UCSF surgery resident
- **Mignote Yilma**, UCSF Surgery Resident
CHESA has secured seed funding from the UCSF Department of Surgery and Department of Anesthesia and Perioperative Care. Current funding comes from UCSF perioperative care departments, grants, and donor contributions.

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 https://globalsurgery.org/donations/.

CHESA strives to provide financial support to fellows from low- and middle-income countries.

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

Flexible funding allows CHESA to support international partners in managing COVID-19 surges, natural disasters, and other emergencies.
UCSF Member Departments

Anesthesia and Perioperative Care
Emergency Medicine
Epidemiology & Biostatistics
Institute for Global Health Sciences
Neurological Surgery
Nursing
Obstetrics, Gynecology and the Reproductive Sciences
Oncology
Ophthalmology
Orthopedic Surgery
Otolaryngology
Pediatrics
Surgery
Urology

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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.
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