

GLOBAL HEALTHAT YALE SCHOOL OF MEDICINE
2023-24 EIGTHEENTH EDITION

Global Health At Yale School of Medicine

2023-24 Eighteenth Edition

Editors:

Nickia Corley Jaimee Smith-Solomon

Table of Contents

GETTING INVOLVED IN GLOBAL HEALTH AT YALE	1
N THE CLASSROOM: COURSES	2
TOPICS IN GLOBAL MEDICINE (MD220) GLOBAL MENTAL HEALTH PROGRAM GLOBAL HEALTH COURSES AT YALE	8
CERTIFICATE IN GLOBAL MEDICINE	11
AT THE UNIVERSITY: LECTURE SERIES AND CONFERENCES	13
LECTURE SERIES	
RESEARCH OPPORTUNITIES	15
FACULTY MENTORS AT YALE	15
FUNDING RESEARCH IN INTERNATIONAL SETTINGS	34
SHORT TERM OR SUMMER RESEARCH FUNDING	
	37
YEAR-LONG RESEARCH FUNDING	37 40
YEAR-LONG RESEARCH FUNDING CLINICAL ELECTIVE EXPERIENCES IN INTERNATIONAL SETTINGS	37 40 52
YEAR-LONG RESEARCH FUNDING CLINICAL ELECTIVE EXPERIENCES IN INTERNATIONAL SETTINGS CLINICAL ELECTIVE EXPERIENCES IN DOMESTIC SETTINGS	37 40 52 55
YEAR-LONG RESEARCH FUNDING	37 40 52 55 59 64 66
YEAR-LONG RESEARCH FUNDING	37 40 52 55 59 64 66 66
YEAR-LONG RESEARCH FUNDING	37 40 52 55 59 64 66 66 66

INTRODUCTION

Getting Involved in Global Health at Yale

We have created this guide to help you navigate global health opportunities at Yale School of Medicine and across the university.

A helpful place to start is the Office of Global Health Education (OGHE) and Visiting Student Programs. The office was established in 2006 to facilitate opportunities for medical students to experience medicine as it is practiced throughout the world and to enrich the learning environment at YSM by providing opportunities for students from international schools to come to Yale for clinical electives. Dr. Robert Rohrbaugh, Associate Dean of Global Health Education, was a Downs Fellow at YSM and has developed and administered both undergraduate and graduate medical education programs.

Students with questions about international opportunities are encouraged to reach out to the Office of Global Health Education and Visiting Student Programs at global.health@yale.edu, Nickia Corley at nickia.corley@yale.edu or Jaimee Smith-Solomon at jaimee.smith-solomon@yale.edu

We would like to thank the faculty and staff who have agreed to be included in and those who contributed to, this guide. If you find new organizations, classes, faculty, funding sources, clinical opportunities, etc. that you think should be included in the next edition, or if you find any errors, please send them to nickia.corley@yale.edu. Thank you!

September 2023

Bob, Jaimee, and Nickia

IN THE CLASSROOM: COURSES

Global Health Seminar (EPH 591 01) Fall 2023

The Global Health Seminar is a weekly course for students in the health professional schools to be exposed to key issues upon which they may base future research, service, and clinical pursuits in the field of global health. The course features faculty from across the health professional schools and other global health experts from around the world. Its collaborative nature provides a rich environment for interdisciplinary dialogue. The Global Health Seminar is a requirement for students in the Global Health Concentration at the Yale School of Public Health (YSPH) and for students in the Certificate in Global Medicine at the Yale School of Medicine (YSM). Students from YSPH must take the course in their first year. The objectives of the course are for students to:

- gain exposure to a variety of perspectives on current challenges in global health;
- engage in meaningful discussions with health professionals working in medicine, nursing, and public health including Yale faculty and outside experts; and
- cultivate relationships with Yale faculty, outside experts, and students resulting in potential research/fellowship opportunities.

Class Participation and Reading

Before each session, 1 - 2 readings and discussion questions will be posted. Students are required to study the readings and come prepared with reactions to the discussion questions. Students are encouraged to articulate other questions and ideas for class discussion. The success of each session is dependent upon active participation.

- Thursdays, 12:00 12:50
- 60 College Street, Winslow Auditorium

Faculty Director

Michael Skonieczny, Lecturer in Public Health; Deputy Director, Yale Institute for Global Health (michael.skonieczny@yale.edu)

Program Manager

Anjuli Bodyk, Assistant Director, Global Health Concentration at YSPH (anjuli.bodyk@yale.edu)

Fall 2023 Schedule

8/31 Global Health at Yale

Michael Skonieczny, Lecturer in Public Health; Deputy Director, Yale Institute for Global Health

9/7 Antimicrobial Resistance

Windy Tanner, Associate Research Scientist in Epidemiology (Microbial Diseases)

9/14 History, Justice, and Ethics in Global Public Health Laura Bothwell, Associate Research Scientist in Epidemiology (Microbial Diseases)

9/21 Building Equitable Partnerships in Global Health

- Tracy Rabin, Associate Professor of Medicine (General Medicine) and Clinical Professor of Nursing; Director, Office of Global Health: Co-Director, YIGH Global Health Ethics Program
- Kaveh Khoshnood, Associate Professor of Epidemiology (Microbial Diseases); Co-Director, YIGH Global Health Ethics Program

9/28 Building Public Trust in the Age of Misinformation

Aleksandra Kuzmanovic, Social Media Manager, Leadership Unit, Department of Communications (DCO), World Health Organization (WHO)

10/5 Health Systems Strengthening Post-War and Post-Ebola in Liberia Kristina Talbert-Slagle, Assistant Professor; Affiliated Faculty, Yale

Institute for Global Health; Associate Director of Faculty Mentorship and Academic Programs, Yale Institute for Global Health

10/12 Global Health in Practice: Investing Amidst Pandemics, Denial of Evidence, and Neo-Dependency

Olusoji Adeyi, President, Resilient Health Systems (via Zoom)

10/19 October Recess – No Class

10/26 Addressing Emerging Public Health Challenges in Cambodia

- Yem Sokunthea, Health Economist, National Institute of Public Health, Cambodia
- Chham Savina, Research Fellow, National Institute of Public Health, Cambodia
- Mao Sovathiro, Researcher, National Institute of Public Health, Cambodia

11/2 HIV-TB in sub-Sahara Africa

Luke Davis, Associate Professor, Epidemiology of Microbial Diseases; Pulmonary, Critical Care, & Sleep Medicine, Yale School of Medicine; Center for Methods in Implementation & Prevention Science; Yale School of Public Health

11/9 Innovation in Global Health: The Story of Khushi Baby Ruchit Nagar, CEO, Khushi Baby

11/16 Equitable Access to Vaccines

Anant Shah, New Products & Lifecycle Lead, COVID & Respiratory Combination Vaccines, Moderna

11/30 Mobile Technologies to Prevent Cardiovascular Disease and HIV/AIDS

Zhao Ni, Assistant Professor, Yale School of Nursing

12/7 Biological Embedding of Adversity

- Barbara "Suzi" Ruhl, Senior Research Scientist, Yale Child Study Center
- Kieran O'Donnell, Assistant Professor, Yale Child Study Center;
 Department of Obstetrics, Gynecology and Reproductive Sciences

Fall 2023 Schedule of "Topics" can change; however, the course dates will remain the same, please check the YSPH website for updated scheduled topics or contact the program manager.

https://publichealth.yale.edu/myysph/curriculum/mph/ghc/seminar/

Topics in Global Medicine (MD220)

Fall 2023

Location: HOPE 110 (and potentially Zoom)

Course Highlights:

- Practical approach to some of the most pressing issues in global health for health care professionals-in-training
- Student-led and student-driven course supported by faculty Course Director
- Emphasis on interprofessional, interactive, small group learning
- Learn from, and connect with, Yale global health faculty

Course Description

Topics in Global Medicine and Health is a student-led, case-based elective course for Yale health professionals-in-training that provides participants with a broad knowledge base in current globally important health issues. Each session focuses on a specific topic and aims to integrate the perspectives of public and population health with a practical, clinically oriented approach to the topic. Importantly, the course provides a forum for interactive discussions of health issues that pose unique challenges in resource-limited settings. The sessions are collaborative – a Yale faculty member with expertise in the topic is paired with one or two students and the team works together to present the topic. Faculty will be asked to provide reading resources relevant to their session in advance.

We encourage the presenters to avoid clinical language or, if necessary, to explain it well in Topics presentations given the broad array of student backgrounds and clinical experiences.

Objectives

Upon completion of this course, the student will be able to:

- Appreciate the spectrum of globally important health issues affecting persons and communities in resource-limited settings.
- 2. Identify the major principles and challenges of providing health care in resource-limited settings.
- Appreciate the importance of public health interventions in addressing global health issues.

Participation

Topics in Global Medicine and Health is designed for students in all of the health professions programs, specifically physician associate (PA), nursing (YSN), medicine (YSM), and epidemiology and public health (EPH). In addition, advanced trainees such as residents and fellows are encouraged to participate. The course is open to all members of the Yale community. Active participation in the course is expected, whether by way of presenting a topic in collaboration with the faculty member or actively participating in the small group discussions.

Student Presenters

Students will be asked to sign up online for a presentation slot prior to the course starting. Additional interested students will be able to sign up at the first session, pending availability.

Course Schedule

Day/Time: Tuesdays 6:30-8:00pm

Start/End Dates: September 12 through December 5, excluding November 21

Location: In person*: All sessions: HOPE110 – Hope Memorial Building, 315

Cedar St.

Zoom: Hybrid option will be provided for those that cannot attend in person *May change depending upon student feedback/preferences

Session Format

Each collaborative *Topics* session will have the following format:

6:30-7:00pm Presentation by students- introduction of themes, representative

case(s)

7:00-7:30pm Faculty lecture

7:30-8:00pm Questions & Answers

YSM Global Health Concentration Fulfillment

The course satisfies one of the course requirements for the YSM Global Health Concentration.

YSN Global Health Track Fulfillment

The course satisfies one of the two course requirements for the Global Health Track if the student attends at least 75% of the sessions and submits a 10-page scholarly paper exploring one of the issues discussed in class.

Attendance

We urge all course participants to attend the course as regularly as possible. Poor attendance reflects poorly on the course in the eyes of faculty speakers. Additionally, strong attendance will make the interactive aspect of the course highly rewarding. Those students taking the course for credit must achieve the attendance rate designated by their program. Attendance will be tracked using Canvas.

Course Leadership

The Course Director is **Dr. Fabian Laage Gaupp**, Assistant Professor in Vascular and Interventional Radiology at Yale School of Medicine.

Course Senior Faculty Advisor is **Dr. Jeremy Schwartz**, Associate Professor of Medicine (General Medicine) at Yale School of Medicine.

The Student Leadership team is selected annually from interested students in the represented programs.

Evaluation

- Details of participants, including school, level of training, and prior experience in global health are collected for evaluation purposes.
- Participants are asked to fill out a simple questionnaire at the end of the course to evaluate the topics, format, and overall effectiveness of the course.
- All evaluations will be done anonymously.

Course Schedule – To be announced Course schedule is subject to change

Global Mental Health Program

Offered by: Yale Department of Psychiatry

The Yale Global Mental Health Program consists of faculty mentorship, resident and medical student projects, the Global Mental Health Seminar Series.

The Global Mental Health Seminar is a monthly curriculum consisting of renown guest speakers, psychiatry faculty and staff presentations of their global mental health projects, resident and medical student presentations of on-going projects, and journal or multi-media presentations by residents with faculty discussion. The elective is conducted in an informal and social setting geared for trainees at all levels, providing program participants and the broader Yale community with opportunities to get to learn more about global mental health. The elective also allows colleagues with similar professional interests to learn about the variety of global mental health activities within the Department of Psychiatry and elsewhere. The elective promotes networking, idea sharing, and information about possible future projects. https://medicine.yale.edu/psychiatry/globalmentalhealth/calendar/

Goals of the Global Mental Health Program

- Global Mental Health Awareness To promote awareness of issues of global mental health and social disparities.
- <u>Practical Implementation in Clinical Settings</u> To develop practice tools to address these issues both at home and abroad.
- <u>Underserved Access to Care</u> To promote interest in working with underserved populations within and outside the United States that are in need of mental health services.
- <u>Cross Cultural Psychiatry in Practice</u> To expand the knowledge of crosscultural psychiatry and provide ways for residents to incorporate that knowledge into their clinical practice of psychiatry
- <u>Networking</u> To develop within and external to the department of psychiatry a network of individuals with common interests in global mental health from which collaborative ideas and projects can spring.

Objectives of the Global Mental Health Program

- Partner with current electives and clinical placements where the program goals can be met
- Develop new global health didactic and clinical electives
- Identify faculty with global mental health interests who could help mentor residents and fellows on clinical elective and scholarly projects
- Develop international sites for possible bidirectional exchanges of faculty, residents/fellows, and medical students

- Consult with clinical and didactic curriculum leaders to develop new opportunities to meet global mental health goals within the existing curriculum
- Provide guidance for residents/fellows interested in global mental health during training
- Identify and develop funding for international or GMH-related clinical electives and scholarly projects

Education Program Components

The Global Mental Health Program (GMHP) exists to supplement and support the existing didactic and clinical curriculum of the residency program. Residents/fellows interested in doing GMH related education can do so during elective times and during selective experiences. The Global Mental Health Elective experiences will be open to all residents/fellows in the program and to others in the medical school and university.

The major component of the Global Mental Health Program is the <u>Global Mental Health Seminar Series</u>. The seminar meets once per month and consists of multidisciplinary presentations on global mental health projects or issues, including journal club presentations by residents/fellows with faculty discussion and resident/fellow scholarly work. The elective is conducted in an informal setting geared for trainees at all levels, providing program participants opportunities to become familiar with colleagues with similar professional interests and to learn about the variety of global mental health activities within the department and elsewhere. It is designed to promote networking, idea sharing, and information about possible future projects.

For more information about the program, please contact program Director and Co-Directors, Drs. Iheanacho, Altalib, and Silva at the emails listed below, respectively.

theddeus.iheanacho@yale.edu hamada.hamid@yale.edu michelle.silva@yale.edu

Global Health Courses at Yale

Yale offers a range of global health courses for undergraduate, graduate, and professional students across campus. For more information, please see https://students.yale.edu/oci/search.jsp or https://medicine.yale.edu/md-program/special-program/global-health/global-health-electives/.

Current Global Health courses include offerings from the School of Public Health, School of Medicine, the Law School, School of Forestry and Environmental Science, Graduate School, and Yale College. Courses range in topics from Global Aspects of Food and Nutrition to Global HIV/AIDS: Challenges and Response, to Global Health Economics.

CERTIFICATE IN GLOBAL MEDICINE

The Certificate in Global Medicine is awarded upon graduation to students who demonstrate competence in Global Health and provides recognition that a student has completed required didactic coursework, scholarly work, international clinical experience, and language, culture, and leadership activities relevant to Global Health. This Certificate allows students to develop expertise and prepare students for leadership in Global Health by providing the knowledge, skills, and attitude essential for success in this field.

In addition to directly benefitting students at Yale, this program will establish the Yale School of Medicine as a model for excellence in global health education. Requirements for earning the certificate can be completed over four or five years, while maintaining flexibility in terms of both the timing and content of these opportunities.

It is expected that students pursuing the Certificate will engage with the community of practitioners and scholars working on Global Health at Yale and around the world. International field experience in Global Health is an integral part of the program.

How do I earn the Certificate?

To earn the Certificate, students must **declare** their participation by completing the application located at the following link no later than **June 30**th **of their first year:** https://medicine.yale.edu/md-program/special-programs/global-health/certificate/.

Students must **complete** the following requirements, while maintaining a Global Health Portfolio (containing documentation of coursework and reflection papers of experiences) **to be turned in by February 1**st, **of the graduating year**.

REQUIREMENT 1: Global Health Coursework

Complete the following coursework requirements.

(<u>visit https://medicine.yale.edu/md-program/special-programs/global-health/certificate/ for details</u>)

- 1. Global Health Seminar (recommended, 1st year).
- 2. An elective course related to global health offered at Yale. Possible courses include Topics in Global Medicine and Health Elective, Global Mental Health Elective, U.S. Health Justice Course, Medical Anthropology, etc.
- 3. Medical Microbiology
- 4. Non-Communicable Diseases
- 5. Epidemiology and Public Health

REQUIREMENT 2: Scholarly Work

Conduct basic science or clinical research that focuses on an important topic in global health.

REQUIREMENT 3: International Clinical Experience

Participate in at least one international or domestic **clinical** experience during the 4th or 5th year. It is preferred that the elective be at one of the sites offered through the Office of Global Health Education (OGHE), however, OGHE will consider a non-affiliated site with prior approval.

REQUIREMENT 4: Language/Culture Appreciation

Demonstrate appreciation for the language/culture of a non-English-speaking population by completing **one** of the following:

- Conducting research or providing healthcare services in a language other than English.
- b. Appropriately utilizing a translator in healthcare interactions in an international setting as a part of your International Clinical Elective or Scholarly Work.
- c. If your international work involves an English-speaking population, reflect on your experience with the population's customs and culture.

REQUIREMENT 5: Global Health Leadership

Serve for 1 academic year as a leader in a global health organization, or global health activity, that directly addresses global health issues internationally or locally, for example, a Global Health Advocate for your class, helping to lead one of the global health electives, serving as a Global Health Student Coordinator for OGHE, etc.

REQUIREMENT 6: Connecting Your Global Health Experiences to New Haven

Students are asked to provide a five-page essay on how global health principles have been important in their work with patients in New Haven.

For more details on the requirements, please visit:

https://medicine.yale.edu/md-program/special-programs/global-health/certificate/ or contact a staff member in the Office of Global Health Education for questions.

AT THE UNIVERSITY: LECTURE SERIES AND CONFERENCES

There are many opportunities to hear talks on global health related issues, both on the medical campus and elsewhere at the University. Following are a few suggestions.

Lecture Series

"Yale AIDS Colloquium series (YACS)"

These seminars host a series of distinguished visitors to Yale that are conducting HIV/AIDS research in an international setting. Most discussions are followed by an informal, question-and-answer session with the audience, which ranges from faculty to undergraduate students interested in HIV/AIDS-related issues. For more information visit, http://cira.yale.edu/events.

The Bioethics Center

The Bioethics Center sponsors numerous events throughout the year that are related to local, national, and international bioethics topics. Dates may be subject to change. For up-to-date information, check the calendar at https://bioethics.yale.edu/. Contact bioethics@yale.edu if you would like to attend any of these events or for further information. To be added to their weekly listsery, please contact Lori Bruce, Associate Director, Interdisciplinary Bioethics Center, at lori.bruce@yale.edu

The Global Health Justice Partnership (GHJP)

The Global Health Justice Partnership (GHJP) is a program hosted jointly by Yale Law School (YLS) and Yale School of Public Health (YSPH) that tackles contemporary problems at the interface of global health, human rights, and social justice. The GHJP is pioneering an innovative, interdisciplinary field of scholarship, teaching, and practice, bringing together diverse thought leaders to collaborate on research, policy projects, and academic exchanges. GHJP also regularly organizes lectures, conferences, and other events on critical health justice topics. Visit https://law.yale.edu/ghjp for more information.

The History of Science and Medicine Colloquium

The Program sponsors a regular biweekly Colloquium during the fall and spring terms. Its aim is to enlarge the engagement of faculty and, especially, students with the diverse approaches and cutting-edge work of both junior and senior scholars from the United States and abroad in the history of science and medicine. All colloquia, workshops and lectures are scheduled for 3:45 PM as noted on their website. For further information and a schedule, visit https://hshm.yale.edu/events.

The Schell Center for International Human Rights at Yale Law School

The Orville H. Schell, Jr. Center for International Human Rights at Yale Law School coordinates a variety of human rights programs. The Center sponsors frequent panels, lectures, and conferences. Events can be viewed at https://law.yale.edu/schell/events or by signing up for their listserv by sending an email to schell.law@yale.edu.

The Whitney MacMillan Center for International and Area Studies

The Whitney and Betty MacMillan Center for International and Area Studies at Yale is the University's focal point for encouraging and coordinating teaching and research on international affairs, societies, and cultures around the world. The MacMillan Center sponsors numerous lectures, films, seminars, and conferences each week. The Events Calendar can be found on their website: https://macmillan.yale.edu/.

Yale Jackson School of Global Affairs

Yale Jackson School of Global Affairs is a principal driver of Yale's efforts to internationalize its teaching curriculum, to attract the most talented students and scholars to Yale from around the world, and to deepen the University's engagement abroad. Their mission is to institutionalize the teaching of global affairs throughout the University and to inspire and prepare Yale students for global citizenship and leadership. The calendar of events can be found on their website: https://jackson.yale.edu/.

Yale World Fellows Program

Each fall, Yale invites 16 early-to-mid-career emerging leaders from around the world to participate in intensive leadership training and networking program focused on global issues. The World Fellows serve as expert panelists on a broad range of topics of global importance. The Fellows are the featured speakers on a current-events discussion series. Experts discuss topics of vital global importance; students are welcome and encouraged to attend. For more information and detailed calendar of public events. please visit https://worldfellows.vale.edu/.

2023-2024 Conferences at Yale

Please refer to Yale University Bulletin to learn about ongoing conferences: https://calendar.yale.edu/cal/main/showEventList.rdo

Unite for Sight Annual Global Health & Innovation Conference held at Yale University Visit UFS's website for information on the 2024 conferences https://www.uniteforsight.org/

RESEARCH OPPORTUNITIES

Below we have listed some of the faculty and funding opportunities for student's doing research with a global health focus at Yale School of Medicine. You may also wish to visit the Yale Institute for Global Health (YIGH) for additional global health research opportunities and related activities.

Yale Institute for Global Health (YIGH), led by the schools of public health, medicine, and nursing, is a university-wide effort to address global health issues, and serves as the focal point for global health at Yale, bringing together expertise and knowledge from across campus with partners around the world. By actively collaborating across disciplines and seizing opportunities for innovation, YIGH aims to speed the translation of new scientific discoveries into better health for all.

Faculty Mentors at Yale

This list is not comprehensive but includes faculty who have mentored students in the past or who are interested in serving as mentors in the future. You should be able to contact them relatively easily; email is typically the best way to begin.

In addition, there is a group of designated Global Health Faculty Advisors across several of the departments who are an excellent resource for identifying possible faculty mentors within their departments. They are as follows:

Emergency Medicine – Dr. Hani Mowafi
Diagnostic Radiology – Dr. Mahan Mathur
Internal Medicine – Dr. Tracy Rabin
Neurology – Dr. Serena Spudich
Ob/Gyn – Dr. Lubna Pal
Pediatrics – TBD
Psychiatry – Dr. Theddeus Iheanacho
Surgery – Dr. Melanie Sion

Serap Aksoy, Ph.D.

Professor of EPH

Dr. Aksoy's interests are in the molecular basis of biological complexity that determines host-microbe interactions with the goal of interfering with the transmission of pathogens to humans. Her studies focus on tsetse flies, which are the vectors of the devastating parasites African trypanosomes. They investigate the molecular aspects of tsetse immunity during parasite transmission, with the eventual goal of manipulating these responses to block disease transmission. The laboratory also has field studies in Africa that aim to understand the dynamics of sleeping sickness transmission in Uganda.

Frederick L. Altice, MD, MA

Professor of Medicine, Section of Infectious Diseases, AIDS Program Director of Clinical and Community Research

Dr. Altice is involved in active research projects in several countries, including Malaysia, Ukraine, Indonesia, Russia, Peru, and the U.S. Dr. Altice is primarily interested in health outcomes and interventions associated with the prevention and treatment of infectious disease (e.g., HIV/AIDS, Hepatitis C, Tuberculosis) complications among drug users. His work involves clinical trials, prevention, health policy, epidemiology, and public health. He also has active research projects involving health care, community, and criminal justice settings. Clinical trials include behavioral interventions, the use of medication-assisted therapies (e.g., methadone. buprenorphine, naltrexone) and structural interventions. Individuals interested in summer projects should begin early by planning projects in the early to late fall and will require receipt of funding before the project can commence.

Linda D. Arnold, M.D.

Associate Professor of Pediatrics, Section of Emergency Medicine;

Dr. Arnold is the Yale Pediatric lead for Rwanda's Human Resources for Health: Capacity Building through Medical Education Program. As Chair of the American Academy of Pediatrics (AAP) Section on International Child Health, Dr. Arnold serves on the AAP Global Immunization Advocacy Project Advisory Committee and as a representative for the Survive and Thrive Global Development Alliance, a global initiative to improve maternal and child health in low resource settings. Dr. Arnold's research interests center on global child health; she is frequently invited to speak domestically and internationally about global child health priorities, effective bi-directional partnerships, and the importance of funding proven interventions like routine childhood immunizations and training of skilled birth attendants.

Alexia Belperron, PhD

Director of STEM Fellowships

Dr. Belperron l'esearch is focused on infections transmitted by ticks, in particular Lyme Disease, Babesia, and relapsing fever. I am interested in understanding the diseases caused by these infections, in particular those mediated by the immune system.

Richard Bucala, MD, Ph.D.

Professor of Internal Medicine, Pathology, and Epidemiology & Public Health Dr. Bucala's research is on the mechanisms by which host immunity converts from a protective response to one producing disease and tissue pathology, with active investigative programs in autoimmunity and infectious diseases, including malaria, tuberculosis, and leishmaniasis.

Michael Cappello, MD

Professor of Pediatrics, Microbial pathogenesis and Public Health;

Department Chair and Professor of Epidemiology

Dr. Cappello's research group conducts laboratory and field-based studies of parasitic diseases, including hookworm and malaria. Laboratory studies focus on parasite vaccine and drug development, while field-based studies in West Africa focus on epidemiology and molecular mechanisms of anthelminthic treatment failure. In addition, Dr. Cappello serves as co-Director of the Yale international Adoption clinic, where he provides medical evaluations of children adopted from abroad.

Lei Chen, MD, MHS

Associate Professor of Pediatrics (Emergency Medicine) and of Emergency Medicine

Dr. Chen's research focuses on health services as a means to improve the care of children in the acute care settings. He has focused on the application of new technologies to improve the care of pediatric patients to increase efficiency of medical care and improve delivery of quality health care in the developing world. He has devoted most of his time in Rwanda and China improving the infrastructure and training for clinical research and medical education.

Paul D Cleary, PhD

Anna M. R. Lauder Professor Emeritus of Public Health and Senior Research Scientist in Public Health (Health Policy)

Professor Cleary's research includes developing better methods for using patient reports about their care and health status to evaluate the quality of medical care and studying the relationships between clinician and organizational characteristics and the quality of medical care. His past research includes a study of how organizational characteristics affect the costs and quality of care for persons with AIDS, a national evaluation of a continuous quality improvement initiative in clinics providing care to HIV infected individuals, and a study of the long-term impact of patient-centered hospital care. He is Principal Investigator of one of the Consumer Assessment of Healthcare Providers and Systems (CAHPS) grants funded by the Agency for Healthcare Research and Quality to develop surveys for collecting information from consumers regarding their health care.

Cindy Crusto, PhD

Professor of Psychiatry; Associate Dean for Gender Equity; Deputy Chair for Diversity, Equity and Inclusion, Psychiatry

Dr. Crusto has extensive experience in the development, implementation, and evaluation of child and family prevention and intervention programs and initiatives. She has 20 years of experience providing training and technical assistance to staff of community-based organizations in program evaluation design and implementation. She has directed several statewide and community-based initiatives and programs focused in the areas of family violence, education, youth substance use/abuse, child protective services, early literacy, service system development, and host of other children's mental health related issues. Dr. Crusto's research interests are focused on understanding the impact of family violence exposure on young children's well-being and on identifying the factors that serve to place young children at risk and protect against negative developmental outcomes through basic and intervention research.

Leslie Curry, PhD, MPH, BA

Professor of Public Health (Health Policy) and Professor of Management

Dr. Curry's research focuses on organizational culture, leadership, management, and performance in health care systems in the US and internationally. She is an internationally recognized expert in the use of qualitative and mixed methods in public health and health services research. Dr. Curry has two decades of experience in health policy and program implementation and evaluation in collaboration with government agencies and policymakers with a primary objective of informing the development and scale up of innovative health programs and policy. She serves on a number of editorial boards including the Journal of Mixed Methods, is a fellow in the Gerontological Society of America, and a member of Academy Health. She is also an elected member of Academy Health Methods Council and served as a Board Member of the Mixed Methods International Research Association.

Luke Davis, MD

Associate Professor of Epidemiology (Microbial Diseases) and Associate Professor in Pulmonary

Dr. Davis's research is based in Uganda and uses translational methods to improve TB diagnosis and evaluation in high-burden, resource-constrained settings. Ongoing projects span two general areas: 1) discovery and validation of TB biomarkers using novel biotechnologies, and 2) translation of evidence-based TB diagnostic strategies into practice using implementation science through the Uganda TB Implementation Research Consortium (www.u-tirc.org). Training and capacity-building are an important aspect of my research activities, through the Fogarty Pulmonary Complications of AIDS Research-Training Program at Makerere University and Walimu (www.walimu.org), a non-profit that uses

implementation science to improve care of severe acute illness in Uganda and other low-income countries.

Jamie Childs, ScD

Senior Research Scientist, Microbial Diseases and Public Health

Childs' area of research includes the ecological dynamics of directly transmitted zoonotic viruses, including the hantaviruses, arenaviruses and rabies, and vector-borne bacteria, including rickettsia, bartonella and borrelia. His recent interests and research, conducted in collaboration with Dr. Albert Ko, focus on the ecoepidemiology of intra- and inter-specific transmission of leptospires in an urban slum setting in Salvador, Brazil.

Mayur Desai, PhD, MPH

Associate Professor of Epidemiology (Chronic Diseases)

Professor Desai's research interests focus on improving the quality and outcomes of medical care in complex and vulnerable populations, including persons with mental disorders, veterans, immigrants, and the elderly, and workforce issues in public health and medicine.

Esperanza Diaz, MD

Professor of Psychiatry; Medical Director Hispanic Clinic and Latino Behavioral Health System

Professor Diaz's research interests focus on Adherence to medication in persistent mental disorders. Mental Health Services for Latino Populations: exploring influences affecting access and retention. Exploring effective methods to teach cultural sensitivity. Application of the Cultural formulation interview for DSM 5 in clinical and educational settings. Influences of bias and prejudices on mental health care.

Robert Dubrow, MD, PhD

Professor of Epidemiology (Chronic Diseases)

Dr. Dubrow has been involved in cancer research for most of his career, first in cancer biology and then, for the major portion of his career, in cancer epidemiology, which has included the following work: 1) studies aimed at the identification of fecal and serum markers for the early detection of colorectal cancer and/or for the identification of persons at high risk for colorectal cancer; 2) case-control studies of cancers of the stomach, esophagus, breast, endometrium, and larynx, as well as malignant melanoma, childhood osteosarcoma, and childhood rhabdomyosarcoma; 3) a study of the effects of race and social factors on the stage at diagnosis of breast, prostate, colorectal, and endometrial cancers; 4) time trend and age-period-cohort analyses of malignant melanoma and colorectal cancer; and more recently, 5) HIV-related malignancies; and 6) descriptive and

analytic epidemiology and patterns of care and outcomes for glioma. Since 2009, the latter two areas have been the main focus of his research.

Dana Dunne, MD, MHS

Associate Professor of Medicine (Infectious Diseases)

Dr Dunne research interest are in the area of STDs. She has several projects on going including investigation the interaction between bacterial vaginosis and bacterial STD acquisition, the role of enhanced syphilis screening in the HIV clinic.

Menachem Elimelech, Ph.D.

Roberto Goizueta Professor of Chemical & Environmental Engineering

Dr. Elimelech's research interests include environmental applications and implications of nanomaterials, membrane separations for desalination and water quality control, engineered osmosis for sustainable production of water and power, and water and sanitation in developing countries.

Rafael Perez-Escamilla, Ph.D.

Professor of Epidemiology; Director, Office of Public Health Practice

Dr. Perez-Escamilla's global public health nutrition research program seeks to understand how best to: a) promote breastfeeding and other infant feeding practices; b) measure household food insecurity; c) mitigate the negative impact of household food insecurity on maternal-child physical and mental health outcomes; d) mitigate the negative impact of maternal HIV on child growth and development; e) design community nutrition education programs. His domestic health disparities research program focuses on design and evaluation of health disparities research program focuses on design and evaluation of community health worker models seeking to improve behavioral (nutrition, physical activity, self-glucose monitoring, medication adherence) mental health (stress reduction) and metabolic outcomes among Latinos with type 2 diabetes.

Durland Fish, PhD

Professor of Epidemiology (Microbial Diseases) and of Forestry and Environmental Studies

Dr. Fish is also the Director of the Yale Institute of Biospheric Studies Center for EcoEpidemiology. His research focus is on epidemiology and prevention of vector-borne disease.

Erol Fikrig, MD, BA

Waldemar Von Zedtwitz Professor of Medicine (Infectious Diseases) and Professor of Epidemiology (Microbial Diseases) and of Microbial Pathogenesis Dr. Fikrig laboratory investigates vector-borne diseases, including illnesses transmitted by ticks and mosquitoes. Studies are directed toward understanding

Lyme disease, human granulocytic ehrlichiosis, flaviviruses and malaria. Efforts on Lyme disease include exploring immunity to Borrelia burgdorferi, and the immunobiology of Lyme arthritis. We are investigating the molecular strategies that Anaplasma phagocytophilum uses to survive in polymorphonuclear leukocytes or ticks. Finally, we are also developing molecular approaches to prevent ticks or mosquitoes from feeding on a mammalian host, thereby interfering with pathogen transmission.

Brian Forsyth, MBChB, FRCP(C)

Professor of Pediatrics and Associate Professor of Child Study Center Dr. Brian Forsyth is Deputy Director for International Research for Yale's Center for Interdisciplinary Research on AIDS (CIRA). His primary research interests lie in the areas of prevention of mother to child HIV transmission, the psychological effects of parental HIV on children and issues relating to child development. His research is conducted internationally, primarily in South Africa.

Gerald Friedland, MD

Professor Emeritus of Medicine and EPH

Dr. Friedland's research interests have focused on HIV disease in underserved populations in the United States, and most recently South Africa. These include the transmission of HIV among HIV seropositives, natural history and clinical manifestations of HIV infection, clinical trials of new antiretroviral and opportunistic infection therapies and adherence to these therapies. Dr. Friedland's recent work has included study of multi and extensively drug resistant tuberculosis in Tugela Ferry, KZN, and South Africa.

Alison Galvani, PhD

Professor of Epidemiology (Microbial Diseases) and of Ecology and Evolutionary Biology

Professor Galvani's research focuses on integrating epidemiology and the evolutionary ecology or economics in order to generate predictions that could not be made by these disciplines alone. This interdisciplinary approach has widespread potential for answering evolutionary questions, explaining empirical observations, and informing public health policy. Professor Galvani has applied this approach to the study of HIV, influenza, TB, and HPV, among other diseases.

Joel Gelernter, MD

Foundation Professor of Psychiatry, Professor of Genetics and Neurobiology; Director, Division of Human Genetics

Dr. Gelernter's research focuses on the study of genetics of substance dependence, as well as a range of behavioral phenotypes, panic and other anxiety disorders, schizophrenia, and affective disorders. In addition to neuroimaging measures, Dr. Gelernter's lab also examines genetic polymorphisms, both on a

molecular level, and from the perspective of population genetics. He has current projects in Thailand and is developing others elsewhere in Asia.

Matthew Goldenberg, M.D., M.Sc.

Associate Professor of Psychiatry

Matthew Goldenberg, M.D., M.Sc., is a psychiatrist who has been on the faculty at Yale and the staff of Yale-New Haven Hospital since 2013. He serves as an attending psychiatrist in the YNHH emergency department's Crisis Intervention Unit. He is active in medical student education at Yale, serving as a member of the steering committee for the integrated Primary Care and Psychiatry Clerkship and a regular lecturer, seminar leader and tutor to medical and physician associate students. Dr. Goldenberg's professional interests include medical student and resident education, emergency psychiatry, physician political behavior/advocacy, health promotion, as well as international and refugee mental health. He received a certificate in Global Mental Health from the Harvard Program in Refugee Trauma in 2009. He is a member of the American Psychiatric Association and the Association of Directors of Medical Student Education in Psychiatry (ADMSEP).

Nicola Hawley, PhD

Assistant Professor of Epidemiology (Chronic Diseases)

Dr. Hawley's research focuses broadly on: (1) understanding how maternal and child health are impacted by rising levels of obesity and diabetes in developing countries, (2) determining how the delivery of healthcare impacts the identification and treatment of these diseases during the perinatal period, and (3) developing interventions focused on pregnancy and early infancy to prevent the intergenerational transmission of chronic disease. She has ongoing projects and collaborations in American Samoa, Samoa, South Africa, and the US.

Robert Heimer, Ph.D., MSc

Professor of EPH, Associate Professor of Pharmacology

Currently, Dr. Heimer's major research efforts include both field-based prevention work and laboratory investigations of disease transmission risks. The field-based work concentrates on the scientific evaluation of prevention programs serving drug users. These include syringe exchange, hepatitis vaccination, and overdose prevention. The laboratory work concentrates on the virological assessment of the risk of syringe sharing and other drug injection behaviors that may transmit HIV-1 and Hepatitis C virus.

Debbie Humphries, Ph.D., MPH

Clinical Instructor, School of Public Health

Dr. Humphries is a lecturer in the Global Health division at Yale School of Public Health and has mentored Yale students in international research in years past.

Theddeus Iheanacho, MBBS

Associate Professor of Psychiatry

Dr. Iheanacho's research is focused both locally and globally on modalities for increasing access to evidence-based interventions for underserved and vulnerable populations with mental and substance use disorders. He has long standing collaborations in Nigeria where his work most recently on The HAPPINESS Project in Owerri has been centered around Integrating mental health in primary care in Imo State, Nigeria.

Karen Jubanyik, MD

Assistant Professor of Emergency Medicine Director, Emergency Medicine Clerkship

Dr. Jubanyik is the Director of the required two-week Emergency Medicine Clerkship, as well as the four-week Emergency Medicine Subintership offered to 4th/5th year students. She serves on the Yale-New Haven Hospital Bio-ethics Committee; she is the National Chair of the Society for Academic Emergency Medicine's Palliative Care Interest Group. Integrating Palliative Care and End-of-Life Care teaching to residents and medical students on all clerkships, including Emergency Medicine, has been a recent priority for Dr. Jubanyik. She is a core faculty member in the Professional Responsibility course taught to first-year students and will continue to teach second-year student workshops devoted to recognizing and treating victims of Intimate Partner Violence and Sexual Assault. She also organizes and teaches the Emergency Medicine component of the Integrative Clinical Medicine course taught to graduating medical students.

Trace Kershaw, Ph.D.

Associate Professor of EPH

Professor Kershaw's research is in the area of HIV/STD prevention and reproductive and maternal-child health epidemiology. Currently he is involved in several research projects assessing the influence of behavioral interventions aimed to reduce the occurrence of HIV/STD and negative perinatal and postnatal outcomes for young woman in the United States and abroad.

Kaveh Khoshnood, Ph.D., MPH

Associate Professor EPH

Dr. Khoshnood is trained as an infectious disease epidemiologist, and his research interests include the epidemiology, prevention and control of HIV/AIDS and tuberculosis among drug users, prisoners, and other at-risk populations in United States and in resource-poor countries; examination of the links between violent conflict and health and the ethical dilemmas in research involving vulnerable populations. Dr. Khoshnood conducts research and mentors researchers from China and the Middle East and teaches courses on HIV/AIDS, global health, research methods and ethics.

Albert Ko, MD

Professor of Epidemiology and Medicine; Department Chair

His research focuses on the health problems which have emerged as a consequence of rapid urbanization and social inequity. Dr. Ko coordinates an NIH-supported research and training program on urban slum health in Brazil, where his group is conducting long-term prospective studies on urban health problems which include dengue, meningitis, and respiratory infections, as well as non-communicable diseases such as hypertension and violence. His work is particularly interested in understanding the natural history of leptospirosis, which is as a model for an infectious disease which has emerged in slum settlements due to the interaction of climate, urban ecology, and social marginalization. His research combines field epidemiology and translational research approaches to identify prevention and control strategies which can be implemented in slum communities. Furthermore, Dr. Ko is the Principal Investigator at Yale for the Fogarty Global Health Equity Scholars Program which provides research training opportunities for US and LMIC post and pre-doctoral fellows at collaborating international sites.

Harlan Krumholz, MD

Harold H. Hines Jr. Professor of Medicine

Dr. Krumholz is the director of the Robert Wood Johnson clinical Scholars Program and the director of the Yale-New Haven Hospital Center for Outcomes Research and Evaluation. His research focuses on determining optimal clinical strategies and identifying opportunities for improvement in the care of patients with or at risk for cardiovascular disease.

James Leckman, MD

Neison Harris Professor in the Child Study Center;

Professor of, Psychology and Pediatrics

Dr. Leckman's primary research interests are in the evaluation and treatment of Tourette's Syndrome and early onset obsessive-compulsive disorder. He has also done work in numerous other areas of child and adolescent psychiatry as the current Director of Research for The Child Study Center.

Bernardo Lombo, MD

Assistant Professor of Clinical Medicine

A member of the Yale Cardiovascular Global Health Initiative, which has developed clinical collaborations and research projects in Colombia, Rwanda, Argentina, Russia, Indonesia, and the Dominican Republic. His work also focuses on the use of portable echocardiography technology, transcatheter aortic valve replacement (TAVR), metabolic syndrome, hypertension, and the development of

online platforms that provide free access to educational materials for the medical community.

Cynthia McNamara, MD

Assistant Professor of Clinical Medicine

Dr. McNamara is primarily involved in medical education of students and trainees at the CT VA. She is actively involved with reciprocal education programs with local health promotors and medical personnel in low resource countries, and the education of patients and their families.

Robert L. McNamara, MD, MHS

Professor of Medicine (Cardiovascular)

Dr. McNamara's research centers on improving quality of care through teaching and outcomes assessment, at Yale and internationally. He and his colleagues founded the nonprofit, International Team of Educators Advancing Cardiovascular Health (ITEACH). They have projects in Colombia, Russia, Dominican Republic, Argentina, and Indonesia. Areas of interest are broad within the cardiovascular spectrum, including point of care ultrasound, hypertension, cardiac surgery, rheumatic heart disease, and Chagas Disease.

Hani Mowafi, MD, MPH

Associate Professor of Emergency Medicine;

Section Chief of Global Health and International Emergency Medicine.

Dr. Mowafi's areas of interest include provision of health services in humanitarian emergencies, the burden of injuries in low- and middle-income countries, and the characterization of global emergency care. He has participated in and led programs in thirteen countries primarily in the Middle East and Africa and has partnered with NGOs, UN agencies and universities on programs and academic research.

Linda Niccolai, Ph.D.

Associate Professor of Epidemiology; Director, HPV-IMPACT Project

Her main area of interest is in behavioral aspects of HIV/STI prevention. Specifically, she is interested in studying both individual-and partnership-level determinants of sexual risk behaviors, and population-based patterns of transmission dynamics. Her research includes a focus on the underserved populations of adolescents and women and includes both domestic and international sites. Currently, Professor Niccolai is involved in three main areas of research: the behavioral and molecular epidemiology of repeat Chlamydia infections among young women; HIV transmission dynamics among injection drug users and commercial sex workers in Russia; and working with the Connecticut Emerging infections program to monitor impact of the human papillomavirus vaccine.

Diane McMahon-Pratt, Ph.D.

Professor of EPH

Professor McMahon-Pratt's laboratory is interested in understanding the immune effector mechanisms in the mammalian host that are involved in the control of infection and/or pathogenesis of leishmaniasis, with the aim to developing a vaccine. Currently, Professor McMahon-Pratt is director of an NIH-sponsored International Collaborating Infectious Disease Research Center Program and Fogarty Training Programs with Centro Internacional de Entrenamiento e Investigaciones Medicas in Colombia.

Sukanya Narasimhan, PhD

Associate Professor of Infectious Disease

Dr. Narasimhan research focuses on arthropod vector-host-pathogen interactions and arthropod vector gut microflora and host skin microflora in the context of pathogen transmission. In collaboration with Dr. Fikrig, Dr. Narasimhan studies the molecular biology of tick-pathogen interactions that facilitate pathogen colonization of the tick and ultimately pathogen transmission to the vertebrate host. In collaboration with Dr. Peter Krause at the School of Public Health, she is expanding her research to gain molecular insights into the impact of climate change on tick-*Borrelia* interactions and infection rates in endemic areas.

Elijah Paintsil, MBChB, MD

Professor of Pediatrics & Pharmacology

Research Interest: HIV; translational research: cellular pharmacology of HIV-RT Inhibitors in relation to clinical toxicities; fitness and evolution of HIV drug resistant mutants; molecular epidemiology and dynamics of HIV/HCV transmission. Clinical Interest: Pediatric infectious diseases; pediatric HIV/AIDS with special interest in management of multi-drug resistant HIV infection; prevention of mother to child transmission of HIV and monitoring of antiretroviral therapy in a resource limited setting.

David Paltiel, Ph.D.

Professor of Public Health (Health Policy) and of Management

Dr. Paltiel works in the field of operations research and disease simulation modeling. He conducts cost-effectiveness analyses on a variety of medical technologies and public health activities. His current research focuses on model-based evaluation of HIV/AIDS testing, prevention, treatment, and care in vulnerable and underserved populations in the United States and abroad.

Catherine Panter-Brick, D.Phil

Professor of Anthropology, Health and Global Affairs

Catherine Panter-Brick is a medical anthropologist whose global health research addresses issues of poverty, disease, malnutrition, armed conflict, and social marginalization. She has directed large interdisciplinary projects in Afghanistan, Ethiopia, the Gambia, Nepal, Niger, Pakistan, Saudi Arabia, Tanzania, and the United Kingdom. Her focus on youth in global adversity has included research with street children, refugees, famine-stricken households, and war-affected communities in areas of conflict and humanitarian emergencies. At Yale, she leads a global mental health initiative to develop interdisciplinary research, training, program evaluation and advocacy through international partnerships.

Sunil Parikh, MD, MPH

Assistant Professor of Epidemiology (Microbial Diseases) and of Medicine (Infectious Diseases)

Professor Parikh's research interests focus on translational studies of malaria in sub-Saharan Africa. Dr. Parikh focuses upon several aspects of malaria: early host immune responses to infection, human genetics, and treatment. Current projects include: (1) understanding host factors affecting response to artemisinin-based antimalarial therapies using a combination of individual and population-based pharmacologic approaches to inform treatment guidelines; 2) characterizing the impact of host genetic and transcriptional variability in early immune responses to malaria; and 3) understanding the impact of the HIV epidemic on the treatment of malaria in co-endemic regions. Dr. Parikh has ongoing projects in several African countries, including Uganda, Burkina Faso, and Nigeria.

Linda Honan, PhD, MSN, RN

Professor of Nursing

A scholar and clinical educator dedicated to understanding and developing effective and innovative techniques for clinical education, Professor Honan has been recognized for her creativity and the development of novel and effective teaching strategies for adult learners with numerous awards. Her research reveals that diagnostic observations can be significantly improved by training in the visual examination of works of art, that the narratives of student experiences can give insight into the process of learning nursing, and aural training with music improves auscultative abilities.

Virginia Pitzer, ScD

Associate Professor of Epidemiology (Microbial Diseases)

Professor Pitzer uses mathematical models for the transmission dynamics of infectious diseases to understand patterns in the distribution of cases over time and space, and to predict the potential impact of interventions such as vaccination. By integrating epidemiological data analysis with concepts from disease ecology,

she studies how characteristics of host-pathogen interactions affect the population-level spread of disease. Current projects include understanding the dynamics of rotavirus and the potential impact of vaccination in developing countries; evaluating strategies for controlling typhoid fever in endemic countries; and understanding how climatic factors influence the seasonality and spatiotemporal spread of RSV.

Tracy Rabin, MD, MS

Associate Professor of Medicine (General Medicine); Director, Office of Global Health (Department of Internal Medicine)

Dr. Rabin is an Internist and Pediatrician. She attends and teaches on the medical wards at the St. Raphael's Campus (SRC) of Yale-New Haven Hospital; directs care and precepts residents in the SRC Adult Primary Care Diabetes Clinic; codirects the YPC Community Engagement Curriculum; directs the YPC Home Visit Elective; and co-directs the Makerere University-Yale University (MUYU) medical education capacity building collaboration which is based at the Makerere University College of Health Sciences/Mulago National Referral & Teaching Hospital in Kampala, Uganda. Her areas of academic interest include global health education and clinical ethics, outpatient diabetes management, and health care transitions.

Asghar Rastegar, MD

Emeritus Professor of Medicine

Dr. Rastegar is a clinical nephrologist with strong interest in intensive care nephrology including disorders of acid base and electrolytes. His academic interest revolves around education and training of young physicians both in the US and abroad. In his role as the founding Director of the Office of Global Health and co-director of Yale-Stanford J&J Global Health Scholar Program, he has focused on the development of bilateral relationship with institutions in resource poor regions with the goal of improving human capacity in the health care sector.

Robert Rohrbaugh, MD

Professor of Psychiatry; Associate Dean for Global Health Education, Deputy Dean for Professionalism and Leadership,

Dr. Rohrbaugh is the Associate Dean of Global Health Education. He has developed clinical programs and educational programs at the interface of geropsychiatry and medicine. His research has been focused on evaluating the effect these interventions have had on patient care and on trainee education and skill development. Dr. Rohrbaugh has also been interested in teaching beginning clinicians to identify data in a patient's narrative and to develop a bio-psycho-social formulation. Several publications and one book describe both teaching methods and methods to evaluate the effectiveness of these interventions.

Robert Rosenheck, MD

Professor of Psychiatry and of Public Health (Health Policy)

Dr. Rosenbeck is the Director of the Division of Mental Health Services and Outcomes Research in the Department of Psychiatry. His research interests include Homelessness; Post Traumatic Stress Disorder; Cost-Effectiveness Analysis. He is an internationally known mental health service researcher who is leader in cost-effectiveness studies of behavioral health interventions and in monitoring quality of care and other aspects of the performance of large health care system.

Patricia Ryan-Krause, MS, MSN, APRN

Associate Professor Emeritus of Nursing, Pediatric Nurse Practitioner Specialty and served as the Interim Director of Center for International Nursing Scholarship and Education. Her scholarly and clinical interests include early childhood development, learning issues and capacity- building in low resource global settings. She has many years of experience in Central America working with health, mental health, and developmental issues in urban and rural settings.

Richard Schottenfeld, MD

Professor of Psychiatry

Dr. Schottenfeld's research is aimed at improving the accessibility, availability, and effectiveness of treatments for substance use disorders in the U.S. and internationally, through clinical trials and clinical epidemiologic studies. The general themes of his research and approaches utilized are evident in the major, interrelated programs of research that he has developed aimed at: 1. improving the efficacy of pharmacological and behavioral treatments for opioid (heroin, morphine, or prescription opioids) or stimulant (cocaine or amphetamine-type stimulants) use disorders, including studies of opioid agonist maintenance treatment with methadone or buprenorphine and adjunctive behavioral or pharmacological treatments for specific patient sub-populations (e.g. those with co-occurring stimulant dependence or chronic pain), 2. improving the accessibility and effectiveness of opioid dependence treatment by integrating it in office-based and primary care settings, and 3. evaluating and disseminating evidence-based drug abuse treatment and promoting drug abuse clinical research in international settings, including in Malaysia, China, and Russia.

Jeremy Schwartz, MD

Associate Professor of Medicine (General Medicine) and Epidemiology; Firm Chief, Yale Primary Care Residency Program.

Dr. Schwartz is board-certified in both Internal Medicine and Pediatrics. He places an emphasis on patient quality and safety and the patient experience and engages in research in those realms. Globally, his focus centers around non-communicable diseases (NCDs). He is an active member of the global NCD advocacy movement.

He serves on the Advisory Council of the Young Professionals Chronic Disease Network and is a member of the East African NCD Alliance post-2015 Implementation Initiative. His research focuses on health system strengthening related to NCDs. He is the US-based co-Director of the Uganda Initiative for the Integrated Management of Non-Communicable Diseases (UINCD). He is also the Director of Chronic Disease Integration and Delivery Science at the Yale Equity Research and Innovation Center (ERIC). Within ERIC, he is Medical Director of the Eastern Caribbean Health Outcomes Research Network (ECHORN). Dr. Schwartz has been directing "Topics in Global Medicine" (formerly the Tropical Medicine Course) since 2010. This interdisciplinary elective course for health professions students at Yale presents a wide range of globally relevant health issues in an interactive format.

Sheela Shenoi, MD, MPH

Assistant Professor of Medicine in the AIDS Program of the Section of Infectious Diseases. Assistant Director, Office of Global Health in Internal Medicine Dr. Shenoi's clinical research is on HIV/AIDS and tuberculosis with a focus on resource-limited settings. She has worked in South Africa to study the epidemiology of drug resistant tuberculosis and tuberculosis infection control strategies. She currently develops and implements community-based projects that emphasize the integration of HIV and tuberculosis services to improve prevention, care, and treatment for patients with HIV/AIDS and tuberculosis. Dr. Shenoi serves as a member of Yale's Global Health Program committee of the Department of Medicine.

James Shepherd, MD, PhD

Associate Professor of Medicine (Infectious Diseases)

HIV and TB infection in Africa and India. Through clinical, epidemiological and, most recently, health care delivery studies, Dr. Shepherd's interests have focused on providing high quality treatment services for HIV, TB, or both to people in countries with weak healthcare infrastructure. In the past he has worked in Nigeria, Botswana and India and currently collaborates with the Yale program in Kwazulu-Natal South Africa.

Melanie Sion, MD

Assistant Professor Surgery

Section of General Surgery, Trauma, and Surgical Critical Care

Dr. Sion is a Trauma surgeon with academic interest in surgical care and the development of surgical systems in low-income countries. She has worked both locally and globally to promote surgical education and training primarily with and for other surgeons and surgical trainees in sub-Saharan African countries. Dr. Sion has a long-standing collaboration with the department of surgery at Kamuzu

Central Hospital in Lilongwe, Malawi and is expanding her work to include Makerere University in Kampala, Uganda academic year 2020-21.

Andre N. Sofair, MD, MPH

Associate Professor of Medicine (General Medicine) and of Epidemiology (Microbial Diseases)

Dr. Sofair's research interests lie primarily in the area of emerging infectious diseases. He has worked to develop surveillance systems for the detection of emerging pathogens, developed hospital and practice—based cohorts to define infectious disease burden and epidemiology, and performed a number of validation studies to limit biases in estimation of incidence rates. His current work focuses largely on the epidemiology of chronic liver disease with an emphasis on liver disease due to hepatitis C infection.

Serena Spudich, MD, MA

Professor of Neurology

Division Chief, Neurological Infections & Global Neurology

Dr. Spudich is trained in both Internal Medicine and Neurology, as well as fellowship training in Neuro-infectious Disease, Neuro- AIDS, and clinical research methods. Her primary research concentration is the pathogenesis of HIV infection in the nervous system, focusing particularly on establishment of inflammation, injury, and a potential CNS 'reservoir' for HIV. These studies have involved intensive and coordinated multidisciplinary studies of difficult to access and identify subjects, for example systemic HIV controllers, patients with CNS 'escape,' and individuals with acute and early infection in San Francisco, USA and Bangkok, Thailand.

Marietta Vázquez, MD

Associate Professor of Pediatrics, Infectious Diseases

Director of Pediatric Global Health Track

Dr Vázquez is an infectious diseases specialist who conducts clinical epidemiology research. Her primary research interests include evaluating the effectiveness of pediatric vaccines--varicella vaccine, Rotavirus vaccines, Lyme vaccine, Pneumococcal conjugate vaccine, and Influenza vaccine, among others. Dr Vazquez's studies focus on the assessment of the effectiveness of vaccines. She has established the Pediatric Yale-Hospital Infantil Robert Reid Cabral (HIRRC) collaboration. This new initiative is a multifaceted collaborative program between Yale Pediatrics and the only public children's hospital in Santo Domingo-- HIRRC. The collaborative program encompasses research projects

(funded in part by the Centers of Disease Control Foundation), a bidirectional resident exchange program, and faculty exchange. Dr Vázquez also serves as codirector of the Yale Pediatric Global Health track.

John Harley Warner, Ph.D.

Avalon Professor and Chair, History of Medicine, Professor of History

Dr. Warner's research interests include the cultural and social history of medicine in 19th and 20th century America, comparative history, (particularly British, French, and North American medicine), and medical cultures since the late 18th century.

Daniel Weinberger, PhD

Assistant Professor of Epidemiology (Microbial Diseases)

Dr. Weinberger's research is at the intersection of microbiology and epidemiology. Much of his work focuses on the pneumococcus, a major bacterial pathogen that causes a large burden of disease worldwide, particularly among young children and the elderly. Major research questions are related to bacterial evolution and strain dominance, bacterial-viral co-infections, and seasonal determinants of bacterial disease incidence. He also does work focused on improving the interpretation of disease surveillance data and understanding geographic variations in vaccine impact. These projects have direct relevance for interpreting post-vaccination disease data and for understanding the potential impacts of bacterial evolution on long-term vaccine effectiveness.

Jeffrey Wickersham, PhD

Assistant Professor of Medicine (AIDS)

Dr. Wickersham's research is focused on the development and evaluation of biomedical and behavioral interventions to address HIV prevention and substance abuse treatment among sex workers. His work targets both cisgender female and transgender women in the sex work industry in Southeast Asia. Broadly, his work seeks to understand the effect of gender differences in substance use etiology, drug and sex risk taking behavior, and to develop interventions sensitive to gender-specific needs to improve HIV and substance dependence outcomes.

Julie Womack, CNM, APRN, PhD

Associate Professor of Nursing

Dr. Womack's research interests include HIV/AIDS in an aging population with a particular interest in HIV-infected women. Her current focus is fragility fractures and falls in an aging population. She has also explored metabolic complications in HIV infected women who use hormonal contraception.

Barry J. Wu, MD, FACP

Clinical Professor of Medicine at Yale University School of Medicine and

Dr. Wu is responsible for teaching residents, medical students, physician assistants and caring for the uninsured and under insured in New Haven. He has participated on medical mission trips to the Dominican Republic, Ecuador and Panama and taught at the International Medical Conference for medical

missionaries in Thailand. He has been on the board of the Yale China Association since 2007 and has been involved in developing a model of undergraduate and graduate medical education in China.

In addition to those faculty listed here, the Directory of Faculty Research Interests – maintained by the Office of Student Research is a great resource to identify potential faculty mentors and thesis advisors. It is available on-line at, https://medicine.yale.edu/dfri/ or by contacting osr.med@yale.edu.

FUNDING RESEARCH IN INTERNATIONAL SETTINGS

Short Term or Summer Research Funding

The Office of Student Research

The Office of Student Research funds medical student research in low and middle -income countries. A full time Yale faculty advisor is required. Students are strongly encouraged to also apply to the Downs Fellowship Program which has an earlier submission date. If students are not awarded the Downs Fellowship but apply for funding to the Office of Student Research, the application should address and correct recognized limitations in the protocol submitted for the Downs Fellowship.

For more information, visit the OSR's website: https://medicine.yale.edu/md-program/research/

The Arons-Millard Student Research Fund for Surgery

The Arons-Millard Student Research Fund for Surgery was established by M. Felix Freshwater, M.D.'72 in 2007 in order to promote the development of future academic surgeons. Dr. Freshwater established this fund in honor of his first and final surgical teachers: Marvin S. Arons, M.D., D.M.D. (B.S. Yale 1952) Clinical Professor of Surgery, Emeritus, Yale and D. Ralph Millard Jr., M.D. (B.S. Yale 1941) Light-Millard Professor of Surgery, Emeritus at the University of Miami.

This research fund is administered by the Office of Student Research, and students may pursue projects abroad within the surgical disciplines. Such research projects must fall within the following areas:

- 1. Clinical research with the surgical disciplines
- 2. Projects related to the History of Surgery
- 3. Projects on surgical ethics
- Projects on evidence-based care
- 5. Projects on surgical economics

Research projects meeting these criteria can be conducted in domestic or international settings.

Downs Fellowship Program

The Downs Fellowship Program utilizes an endowment from Dr. Wilbur Downs and his family to provide opportunities for students from the Schools of Epidemiology and Public Health, Medicine, Physician Associate, and Nursing to complete research projects in the developing world. The Downs Fellowship Committee is comprised of members from the four health professions schools, meets monthly to review issues of interest and serves as the committee to review applications and award fellowship applications.

Dr. Leonard Munstermann chairs the Downs Fellowship Committee. Students interested in the Down's Fellowship can e-mail him at Leonard.Munstermann@yale.edu, or Anjuli.Bodyk@yale.edu, Program Administrator.

Downs Fellowship

Listed below are the Downs Fellowship recipients for the past three years. https://ysph.yale.edu/admissions-financial-aid/applied-practice-and-research/downs-fellowship/

2022 Downs Funding Recipients

- Catherine Chantre, Graduate School of Arts and Science
- Ife Desamours Adeveri, Graduate School of Arts and Science
- Mukund Desibhatla, School of Public Health
- Divya Gumudavelly, School of Public Health
- Anne Havlik, School of Public Health
- Ariell Hazi, School of Public Health
- Angi He, School of Public Health
- David Oliveros Gomez, School of Public Health
- Paul Serrato. School of Medicine
- Elizabeth Zhang, School of Medicine

2021 Downs Funding Recipients

- Phoebe Chen, School of Medicine
- · Brian Fleischer, School of Medicine
- Erika-Ann Kim, School of Public Health
- Sarah Michels, School of Public Health
- Risika Mohanty, School of Public Health
- Mary Tate, Graduate School of Arts and Science
- Joseph Williams, School of Public Health

2020 Downs Funding Recipients

- Katherine Daiy, Graduate School of Arts and Science
- Sarah Lapidus, Graduate School of Arts and Science
- Emma Jean Mew, Graduate School of Arts and Science
- Bohao Wu, Graduate School of Arts and Science
- Ann Johnson, School of Medicine
- Muzzammil Muhammad, School of Medicine
- Dao Ho, School of Medicine
- Robert Johnston, School of Medicine
- Matthew Benczkowski, School of Public Health
- Morgan Buchanan, School of Public Health
- Jad Elharake, School of Public Health)
- Brandi Moore, School of Public Health

Year-Long Research Funding

Global Health Equity Scholars Program

The Global Health Equity Scholars (GHES) program offers a unique international experience for postdoctoral fellows, and advanced PhD and professional school students. It provides one-year research training fellowship opportunities in global health at top-ranked, NIH-funded centers abroad.

The GHES program is one of five supported by the Global Health Program for Fellows and Scholars funded by the **Fogarty International Center** at NIH https://www.fic.nih.gov/Programs/Pages/scholars-fellows-global-health.aspx. This program brings together a consortium that includes the University of California, Berkeley, Florida International University, Stanford University, and Yale University.

This program supports a one-year mentored research fellowship for trainees to study slum-related health topics/challenges. Fellows will spend eight to ten months in low-resource settings at one of the 20 program project sites. The research topics can range from infectious diseases to non-communicable chronicle diseases, environmental health, mental health, urban planning, engineering, education, and others.

This fellowship is designed for citizens or permanent residents of the U.S. Low-and middle-income country scholars who work at a pre-approved fellowship international site are also eligible. For more information on eligibility, specific aspects of the fellowship award, and an application, please visit https://medicine.yale.edu/yigh/ghes/.

Recipients:

- Amanda Liberman (Kazakhstan 2022-23)
- Tyler Shelby (Kampala, Uganda 2021-22)
- Kenneth Gunasekera (Durban, South Africa 2019-20)
- Megan Grammatico (Tugela Ferry, South Africa 2019-20)
- James Porterfield (Durban, South Africa 2018-2019; 2019-20)
- Adeolu Aromolaran (Oswaldo Cruz Foundation, Brazil 2016-17)
- Samantha Kaplan (Cape Town, South Africa 2015-16)
- Duncan Reid (Durban and Tugela Ferry, South Africa 2014-15)
- Sheela Shenoi (Tugela Ferry, South Africa 2008)

Fulbright Fellowship

This fellowship supports one year research programs, whether as part of formal degree programs or individual research, in over 140 host countries. For further information about the Fulbright at Yale, see:

https://funding.yale.edu/fellowships/fulbright-us-student-grants National deadline, Tuesday, October 10, 2023, 5 pm EST.

American Heart Association Predoctoral Fellowship

To enhance the integrated research and clinical training of promising students who are matriculated in pre-doctoral or clinical health professional degree training programs and who intend careers as scientists, physician-scientists or other clinician-scientists, or related careers aimed at improving global cardiovascular, cerebrovascular and brain health.

Application deadline: Please contact OSR for deadline.

https://professional.heart.org/en/research-programs/aha-funding-opportunities/predoctoral-fellowship

YCCI Multidisciplinary Pre-doctoral Training Program

The Multidisciplinary Pre-Doctoral Training Program in Translational Research aims to identify and support a representative and diverse group of outstanding trainees who specifically want to pursue careers in clinical and translational research; to train them in the use of state-of-the-art research tools; to enhance their abilities to work collaboratively in complex multidisciplinary research teams; to provide outstanding mentoring (including concordant mentoring) by experienced and diverse faculty that support the trainee's long-term professional development. Pre-doctoral students from the Schools of Medicine, Nursing, Public Health, Engineering and Applied Science, or other appropriate departments in the graduate school in training across the full span of clinical and translational research focused on human health are encouraged to apply. Please visit their website at https://medicine.yale.edu/ycci/education/predoc/.

Please notify OSR osr.med@yale.edu of your intent to apply.

NIH Medical Research Scholars Program

The Medical Research Scholars Program is a yearlong research immersion program for future clinician-scientists that advances health by inspiring careers in biomedical research. By engaging students in basic, clinical, or translational research investigations, offering a curriculum rich in didactics and professional development, and featuring a robust mentorship and advising program, MRSP prepares its Scholars to become tomorrow's leaders in medicine and biomedical research.

Application is available online at http://www.cc.nih.gov/training/mrsp/index.html

Application Deadlines: As noted on the NIH website.

NIH-National Institute of Diabetes and Digestive and Kidney (NIDDK) Diseases Medical Student Research Training Program

The Medical Student Research Training (MSRT) program provides mentored support for medical students interested in taking a year off from their medical school studies to work in an academic research lab. This support is via a supplement to a training grant (T32) in the appropriate area of research. A list of currently funded T32 program locations with the Principal Investigator contact information is available. Providing the opportunity for students to interrupt their medical school studies for up to 12 months to pursue a research project should help them solidify their decisions to pursue a research career, focus their research interests, and provide a background for future training and career development programs once they have completed their medical training.

Please review the NIH guidelines and instructions for this fellowship opportunity at https://www.niddk.nih.gov/research-funding.

Please visit the Office of Student Research website for other available opportunities: https://medicine.yale.edu/md-program/research/one-year-fellowships/

CLINICAL ELECTIVE EXPERIENCES IN INTERNATIONAL SETTINGS

Clinical electives allow students who have completed their core clerkships to have a clinical experience in another health care system. The following clinical electives are available:

Argentina

Not Available AY 23-24 Sanatorio Allende Cordoba

Yale Mentor - Robert Rohrbaugh and Rosana Gonzalez-Colaso

Requirements: Language Assessment passed at intermediate or higher.

Duration: 4 weeks

Yale medical students will participate in rounds with the medical team, attend outpatient clinics, as well as round on the in-patient service units. In addition, there may be opportunities to observe and compare clinical activities at other community based public hospitals.

Students are required to speak Spanish on at least a high intermediate level in order to maximize their experience in Cordoba. Clinical rotations are currently available in Nephrology, Cardiology and Ob-Gyn.

Participants:

- Siobhan Case (2014)
- Matthew Marr (2014)
- Susan Maya (2014)
- Flavia DeSouza (2015)
- Taber Lightbourne (2017)
- Daniel Zheng (2017)

- Katherine Chuang (2018)
- Melody Hu (2018)
- Jennifer Hanberg (2020)
- Kristina Klara (2020)
- Tess O'Meara (2020)
- Caitlin Parmer-Chow (2020)

Chile

Pontifica Universidad Católica de Chile (PUC)

Santiago, Chile

Yale Mentor – Dr. George Lister

Requirements: Language Assessment passed at intermediate or higher.

Duration: 4 weeks

PUC, a private not-for-profit university in Santiago, Chile, includes health professional schools in the fields of medicine, nursing, and dentistry. The medical school, which is viewed as the top school in the country, has established

relationships with other institutions in South America as well as worldwide, and is currently part of an international seven school educational consortium directed by the ECFMG. The medical school has a seven-year curriculum whereby students enter after high school and receive elements of undergraduate education combined with a foundation in biomedical science. The medical students have a gradually increasing clinical experience and the final two years are referred to as internship and resemble the clinical rotations during the latter years at Yale School of Medicine. Yale students will work in teams that include interns (6th and 7th year students) from PUC as attending physicians, in a manner similar to that in the US. Many of the senior leaders in the school received some of their medical education outside of Chile, collaborate with colleagues in the US, are quite attuned to the educational curriculum for students in the US, and have fostered relationships with other institutions.

At PUC, there would be an opportunity to participate in a health care system that is organized in a manner that is different from the US and to experience **family-based primary care** for large populations of patients, with resources very much focused on the education of students. Students must speak Spanish on at least an **intermediate-advanced level**. Language assessment required.

Participants:

- Jacob Siegel (2016)
- Alexander Domingo (2017)
- Kayleigh Herrick-Reynolds (2017)
- Talia Robledo-Gil (2017)
- James Smithy (2017)

- Aimee Alphonso (2018)
- Adam Brownstein (2018)
- Julia Raney (2018)
- Sophia Shimer (2019)
- Nisha Dalvie (2020)
- August Oddleifson (2022)

Colombia

Fundación Santa Fe de Bogotá Bogotá, Colombia

Yale Mentor - Dr. Bernardo Lombo

Requirements: Language Assessment passed at high intermediate or higher.

Duration: 4 weeks

The Fundación Santa Fe de Bogotá (FSFB), founded by two Yale Medical School alumni, was established as a clinical elective program in 2012. Students rotate at FSFB's main hospital. FSFB demonstrates an impressive commitment to patient centered care and patient safety. In addition to learning about the specialty they choose for their clinical elective, students will have the opportunity to meet leaders at the hospital to learn how they ensure their clinical programs demonstrate the values of patient centered care and patient safety.

Clinical Responsibilities:

FSFB is a teaching hospital and students will be expected to participate as any other medical student rotating on the wards there. It is required that students have a high intermediate to advanced level of fluency in Spanish, as rounds and daily activities will be conducted in Spanish. Clinical rotations at FSFB are 4 weeks long.

Participants:

- Tsion Aberra (2017)
- Sophie Chung (2018)
- Kelsey Loeliger (2019)
- Monica Ferrer Socorro (2020)
- Nicolas Munoz (2020)
- Madison Sharp (2020)

- Patricia Valda Toro (2020)
- Samer Hassan (2022)
- Michael Flores (2023)
- Katherine Hill (2023)
- May Shum (2023)

Dominican Republic

Pre-Clinical and Clinical Instituto Tecnológico de Santo Domingo (INTEC) Santo Domingo, Dominican Republic Yale Mentor – Dr. France Galerneau

Requirements: Language Assessment passed at intermediate or higher (for 4-week Clinical Elective Only); Beginner Spanish encouraged for pre-clinical, but not required.

Duration: 4 weeks for Clinical; 1 week over spring break for Pre-Clinical

In 2013, a pre-clinical site was established in the Dominican Republic at the Instituto Tecnologico de Santo Domingo "Intec." The objective of this week long elective is to teach students about the delivery of health care in an international setting and the impact of social determinants of health in the Caribbean. Emphasis is given to the challenges and opportunities for providing care in a resource limited country and the major communicable and non-communicable diseases in the Dominican Republic.

A key component is the educational exchange with Intec students and faculty. Yale medical students are paired with Intec 4^{th} year medical students and a Yale faculty member. Patient based teaching is provided at public and private hospitals in the morning; afternoons are spent in clinic providing free care to local uninsured workers. Additional education is provided via faculty didactics and Yale-Intec student presentations.

Student Participants (practice-based learning trip):

- Ignacio Cerdena (2016)
- Sascha Murillo (2016)
- Thais Faggion Vinholo (2016)
- Louise Lu (2016)
- Anusha Singh (2016)
- Keval Desai (2016)
- Sonia Taneja (2016)
- Emily Vancor (2016)
- Rachel Esparza (2016)
- Paul Abraham (2017)
- Emmanuella Asabor (2017)
- Monica Ferrer Socorro (2017)
- Christopher Han (2017)
- Ryan Handoko (2017)
- Briana Olamiju (2017)
- Kishan Patel (2017)
- Anuoluwapo Sopeyin (2017)

- Aishwarya Vijay (2017)
- Linda Li (2018)
- Tyler Shelby (2018)
- Linette Bosques (2018)
- Paul Bourdillon (2018)
- Seong Im Hong (2018)
- Sangwon Yun (2018)
- Priya Bisarya (2019)
- Kenneth Gunasekera (2019)
- Salah Elkattaway (2019)
- Kayla Isaacs (2019)
- Alanna Kaplan (2019)
- Alaa Mohamedali (2019)
- Olamide Olawoyin (2019)
- Christopher Radcliff (2019)

Yale Faculty Participants:

- Dr. Lisa Walke (2013 2019)
- Dr. Daniel Federman (2013)
- Dr. Cynthia McNamara (2013)
- Dr. France Galerneau (2013 2019)
- Dr. Anna Sfakianaki (2015, 2016)
- Dr. Cynthia Gneco-Wilamo (2015 2017)
- Dr. Ali Suliman (2016)
- Dr. Lourdes Aviles Rios (2016)
- Dr. Yulanka Castro-Dominguez (2018, 2019)
- Dr. Nadia Ameen (2018)
- Dr. Jaideep Talwalkar (2019)

Brown Faculty Participants:

Dr. Julio Defillo (2013, 2014, 2015)

Students are able to do a four-week **clinical** rotation in either Internal Medicine, Surgery, Psychiatry, Ob Gyn, or Pediatrics.

- Ken Hui (2015) IMed
- Amanda Lu (2018) Peds EM

Ghana

University of Ghana School of Medicine and Dentistry (UGSMD)

Accra, Ghana

Yale Mentor – Dr. Elijah Paintsil

Requirements: YSM Ultrasound elective (recommended)

Duration: 4-6 weeks

Established in 1962, UGSMD, was the first medical school in Ghana. The Ministry of Health, in 1998, initiated the establishment of a School of Allied Health Sciences to train graduate allied health Professionals. Programs for this school include physiotherapy, medical laboratory science and radiography. The Academic Board and the University Council approved this proposal in 1999. In the year 2001, this School came into being. An earlier Diploma in Medical Laboratory Technology also sponsored by the Ministry of Health in 1994 was phased out, with the birth of the School of Allied Health Sciences. The idea of creating a College of Medicine was mooted in 1994. Planning for the College took five (5) years. In 1997, the Academic Board of the University endorsed proposals from the UGMS to bring together Medical School, the School of Public Health, Noguchi Memorial Institute for Medical Research, the School of Allied Health Services, and a School of Nursing as a College of Medical Sciences. On December 11, 1999, the University Council gave assent to the establishment of the College but changed the name to COLLEGE OF HEALTH SCIENCES. The partnership between UGSMD and Yale School of Medicine began in 2015.

Students wishing to do an elective in Ghana have the option to do a 4- or 6-week rotation in one of the following areas: Internal Medicine, Pediatrics, Ob/Gyn, Surgery and Anesthesia, or Ophthalmology.

- Jennie Choe (2018)
- Elizabeth Ludwig (2018)
- Lucy Zhang (2018)
- Paul Bourdillon (2019)
- Bertie Geng (2019)
- Lovemore Kuzomunhu (2019)
- Alison Lee (2019)
- Taylor Ottesen (2019)
- Cassie Pan (2019)
- Sara Tannenbaum (2019)
- Yapei (Rosie) Zhang (2019)

- Maryam Ige (2020)
- Katherine Cooke (2022)
- Olamide Olawoyin (2022)
- Cosmas Sibindi (2022)
- Benjamin Steren (2022)
- Amy Thomas (2022)
- Annika Belzer (2023)
- Muzzammil Muhammad (2023)
- Amar Sheth (2023)

Greece

The Athens Vision Eye Institute Athens, Greece Yale Mentor – Dr. Ninani Kombo

Requirements: YSM 4-week Ophthalmology Elective

Duration: 4 weeks

The Athens Vision Eye Institute is an urban ophthalmology practice in Athens, Greece offering cost effective eye care in private and public settings. There are opportunities to work with the refugee community in Athens through the Medecins du Monde (Doctors of the World)

Students will shadow a variety of subspecialties including Cornea & Refractive, Glaucoma, Retina, Oculoplastics. Students will have opportunities to practice slit lamp skills during the clinical examination.

Participants:

Louisa Lu (2020)

Jamaica

University of the West Indies (UWI)
University Hospital
Kingston, Jamaica
Yale Faculty Mentor – Dr. Elijah Paintsil
Duration: 4 weeks

Our site in Jamaica is for Yale medical students who are interested in global health from a surgical perspective. Students will participate in surgical rounds at the University Hospital in Kingston. Paired with UWI students, Yale students will have the opportunity to work with Dr. Hilary Brown. Dr. Brown, a native of Jamaica, completed her surgical residency and later, fellowship at Yale.

Student will be housed in student housing on the Mona campus of UWI in Kingston.

- Kaysia Ludford (2014)
- Chung-Sang Tse (2015)
- Gerneiva Parkinson (2017)
- Sifon Ndon (2019)

India

L.V. Prasad Eye Institute

Hyderabad, India

Yale Faculty Mentor – Dr. Ninani Kombo

Requirements: YSM 4-week Ophthalmology Elective

Duration: 6 weeks

Established in 1987, L V Prasad Eye Institute (LVPEI) is a comprehensive eye health facility and a World Health Organization Collaborating Centre for Prevention of Blindness.

The initial vision of the Founder, Dr Gullapalli Nageswara Rao, a renowned academic ophthalmologist, was limited to establishing a centre in Hyderabad focusing on patient care, education, research, and later rehabilitation. But as LVPEI started delving deeper into the field of eye care, the scope and reach of its activities broadened. The LVPEI Pyramid of Eye Health and its ten functional arms - patient care, education and research, vision rehabilitation, eye banking, rural and community eye care, innovation and product development, advocacy, and capacity building - evolved over the years. LVPEI has served over 34.14 million people, with more than 50 percent of services provided free of cost regardless of complexity, reached nearly twelve thousand villages, trained more than twenty thousand eye care professionals, and published over 4000 papers. It is one of the biggest corneal transplantation centers in the world.

The LVPEI's mission is to be a center of excellence in eye care services, basic and clinical research on eye diseases and vision-threatening conditions, training, product development, and rehabilitation for those with an incurable visual disability, with a focus on extending equitable and efficient eye care to underserved populations in the developing world.

The Institute is managed by two not-for-profit entities - Hyderabad Eye Institute (HEI) and Hyderabad Eye Research Foundation (HERF).

Students will shadow a variety of subspecialties including Cornea, Glaucoma, Retina, Oculoplastics & Pediatric ophthalmology. Students can practice slit lamp skills during the clinical examination. They may also shadow in the OR and observe surgery. Students will also have the opportunity to travel to outreach programs and satellite locations.

People's Republic of China

Xiangya Hospital System Changsha, Hunan Province Yale Mentor - Dr. Robert Rohrbaugh

Duration: 4 weeks

The Yale-China Association founded the Xiang-Ya (Hunan-Yale) Hospital and medical school over 100 years ago. Xiangya School of Medicine is a highly regarded, central government funded medical school. Facilitated by the Yale China Association health committee staff, we are able to develop elective rotations in many disciplines at Xiangya. This has been a truly bilateral exchange with Xiangya students, residents, and faculty spending time on the Yale campus.

Changsha is a medium sized Chinese city of about 7 to 8 million people. About 1-2 million of these individuals have come to Changsha from the countryside to seek work. Students will be able to gain first-hand experience regarding the difficulties of providing health care for this population and experience some of the environmental challenges of rapid industrialization.

Selection will in part depend on finding a mentor who will be able to work with the student in that department. Traditional Chinese Medicine is a well-regarded independent department at the medical school and students may be interested in spending some time with these physicians.

Medical students in China tend to be in more of an observer role rather than being actively engaged in caring for patients. Thus, Yale students going to Xiangya should be prepared to round with the care team but not to have weight-bearing clinical responsibilities.

Knowledge of Mandarin would be useful in gaining a fuller understanding of the system of care but is not a requirement for the rotation. Xiangya will assign a medical student to assist non-Mandarin speakers.

Participants from Yale:

- Daniel Barron (2016)
- Connie Cheng (2016)
- Raj Chovatiya (2016)
- Adesuwa Ighodaro (2016)
- Nicole Jawitz (2016)
- Oliver Jawitz (2016)
- David Zhu (2016)
- Elizbeth (Chen) Kurtz (2017)
- Edward Herman (2017)
- Lucy Liu (2017)

- Wendy Xiao (2017)
- Goran Micevic (2018)
- Allen Shih (2018)
- Alex Sun (2018)
- Siyu Xiao (2018)
- Genevieve Yang (2018)
- Ke Zhang (2019)
- Constance Zou (2019)
- Charlie Zhao (2020)

Participants to Yale:

- Ji Li (2012)
- Chengyuan Song (2012)
- Yuan Liu (2012)
- Weiqing Wang (2012)
- Shiyu Chen (2013)
- Zijin Zhao (2013)
- Fei Shao (2013)
- Luo Zhou (2013)
- Feng Lin (2014)
- Yinzong Xiao (2014)

- Yuxi Tan (2015)
- Shixuan Liu (2015)
- Jingling Duan (2016)
- Xiaoke Lin (2016)
- Li Huang (2017)
- Xu Wang (2017)
- Zhi-Jain He (2018)
- Rouyu Ma (2019)
- Lu Xu (2019)

South Africa

Tugela Ferry Church of Scotland Hospital (CoSH) KwaZulu Natal

Yale Mentor - Dr. Sheela Shenoi

Requirements: YSM Ultrasound elective (recommended)

Duration: 6 weeks

The Church of Scotland hospital was originally founded by missionaries at the turn of the century from Scotland. The name "Church of Scotland Hospital" (affectionately known at "CoSH") is historic, and only maintained to honour the Scotlish missionaries who started the hospital in the early 1930s. In 1974 the KwaZulu government was formed. They have since taken over all the mission hospitals and changed them into government hospitals. The hospital is the health center of a district called Msinga, which seems to have its own climate and vegetation different from the surrounding affluent farmlands and forestry areas. Msinga is a little pocket of old and traditional Africa where Zulu people live, some holding to a traditional lifestyle which has not changed for 100s of years.

Although TB is the leading cause of death among HIV-infected patients in South Africa, care of the two diseases has been separate, leading to fragmented patient care and suboptimal patient outcomes. Dr. Gerald Friedland has worked on projects integrating care for HIV and TB and this is the focus of collaborative operational research projects in KwaZulu Natal. In addition, the discovery of XDR TB has been a focus of a more recent investigation. The surrounding area is hilly, mountainous, and very rural with one tarred road, dirt roads and paths, and humble family compounds. The site affords a genuine rural African medical experience.

While students will have protective gear to wear during clinical experiences at Tugela Ferry, students must consider that XDR TB is a potentially fatal disease. In particular, any student who may be immune compromised should not consider this site for a clinical rotation.

The clinical experience will be largely in an outpatient clinic and will be supervised by Dr. Anthony Moll, Senior Medical Officer. Opportunities to work with home care workers providing DOT may also be available. Students have the ability to complete clinical electives outside of internal medicine at CoSH.

Participants:

- Tiffany Yuh (2015)
- Ruth Wang'ondu (2015)
- Dame Idossa (2015)
- Akash Gupta (2015)
- Harry Chang (2015)
- Luis Rubio (2016)

- Joel Winer (2016)
- Samantha Kaplan (2016)
- Ravi Gupta (2017)
- Belinda Nhundu (2019)
- Christina Lin (2020)

Thailand

Mettapracharak (Wat Rai Khing) Hospital Yale Mentor - Dr. Ninani Kombo

Requirements: YSM Ophthalmology 4-week elective

Duration: 6 weeks

Mettapracharak (Wat Rai Khing) Hospital is located in Nakornprathom province, adjacent to Bangkok, and approximately 40 minutes' drive west of the city center. This province is well known for a number of historic sites, including Wat Rai Khing temple. Mettapracharak hospital is administratively part of the Department of Medical Services at the Ministry of Public Health.

The ophthalmology elective is offered to one or two Yale students at any given time, for a minimum of 6 weeks during which they would be paired with an ophthalmology resident from Mettapracharak hospital. The students will observe and participate in the care of the patients to the extent of their abilities, participating in rounds and other clinical activities including observation in the operating rooms. They will have the opportunity to develop hand-on surgical skills in the well-equipped microsurgery training center. They will also accompany the frequent outreach mission throughout Thailand when they occur during the rotation. Transportation on these missions will be provided by the hospital. Participating students are required to have completed the YSM Ophthalmology 4 weeks elective prior to the elective in Thailand.

- Haben Kefella (2014)
- Wei Gui (2014)
- Bethlehem Mekonnen (2015)
- Peter Zhao (2015)
- Jessica Chen (2017)

- Jenny Dohlman (2017)
- Wendy Li (2017)
- Nathan Pirakitkulr (2017)
- Angela Gauthier (2018)
 - Anand Gopal (2018)

Uganda

Mulago Hospital Makerere University

Yale Mentor - Dr. Tracy Rabin

Requirements: YSM Ultrasound elective (recommended)

Duration: 6 weeks

An affiliation between Yale and Makerere University in Kampala, Uganda, was initially established to place Yale attendings and residents at Mulago Hospital throughout the year, funded through the Yale Stanford/Johnson & Johnson Scholars in International Health Program. Later the program expanded to include YSM medical students as a bilateral exchange program with Ugandan students also spending time on the Yale campus.

Students, who are funded through travel awards from the Office of Global Health Education, will observe on several inpatient clinical services at the hospital. Situated in a low-resourced setting, Mulago hospital has limited access to routine tests and procedures that Yale trainees may be accustomed to and will learn that Ugandan physicians utilize history and physical exam skills to establish diagnoses and follow patient progress. Physical exam rounds by expert clinicians will help Yale students hone their own physical exam skills. Medical students who do a clinical elective at Mulago will learn about the effects of the HIV epidemic on the Ugandan population. Many of the patients hospitalized at Mulago Hospital will have quite advanced presentation of illness and so students should prepare themselves for the experience that a significant number of patients admitted to the hospital may die in the hospital.

Language, history, and cultural experiences will be provided through faculty lectures and interactions with the students. Students frequently utilize weekends to travel to other parts of the country.

Participants from Yale:

- Aniruddh Patel (2014)
- Oluwarotimi Okunade (2014)
- Benjamin Margolis (2014)
- Gladys Rodriguez (2014)
- Charisse Mandimika (2014)
- Thomas Gilliland (2015)
- Sarah Jin (2015)
- Rabeea Khan (2015)
- Duncan Reid (2016)
- Minhee Sung (2016)
- Kathleen Yan (2016)

- Bianca Yuh (2016)
- Carla Lopez (2017)
- Azim Munivar (2017)
- Ava Yap (2017)
- Hadley Bloomhardt (2018)
- Ryan Handoko (2020)
- Wyatt Hong (2020)
- Seewan Kim (2020)
- Joseph Lim (2020)
- Kelsey Rankin (2023)

Participants to Yale:

George Ssenyange (2016)

Moureen Amuge (2016)

- Margaret Kyamulabi (2017)
- Sarah Kimuda (2017)
- Leonard Rotich (2017)
- Cosmas Karamuzi (2017)
- Andrew Semulimi (2018)
- Abraham Mukalazi (2018)

- Mariam Babita (2018)
- Ronah Namuwonge (2018)
- Julius Nuwagaba (2019)
- Mary Lilian Nabwire (2019)
- Moses Omongin (2019)
- Josephine Ndawula (2019)

Other International Clinical Opportunities

Zambia

Mwandi Hospital

Surgery

Requirements: Student must have completed both surgical and medicine clerkships and express a strong interest in international health.

Yale Mentor - Dr. Michael O'Brien

Dr. Michael O'Brien, Department of Surgery, makes an annual two-week trip to the village of Mwandi, on the Zambezi River in southwest Zambia, volunteering in the local Mwandi Hospital, a 50-bed rural facility. Dr. O'Brien takes one 4th/5th year medical student with him to assist in general surgical and medicine responsibilities.

Mwandi is midway between Livingstone and Sesheke, in the southwest corner of Zambia. The medical experience would primarily be surgical, but students would be caring for patients with infectious and medical diseases as well.

For more information, contact <u>Michael.Obrien@yale.edu</u>. Please note that this is not an elective funded by OGHE.

Participants:

Heather McGee (2007)
Jonathan Lu (2008)
Jill Rubenstein (2009)
Matthew Hornick (2010)
Kiavash Nikkhuo (2011)
Adam Sang (2012)
Oluwarotimi Okunade (2013)
Paul Bagi (2014)
Lise Tchouta (2015)
Joshua Rosen (2016)
Valerie Luks (2017)
Anusha Singh (2018)

CLINICAL ELECTIVE EXPERIENCES IN DOMESTIC SETTINGS

Arizona

Chinle Comprehensive Health Care Facility Chinle, AZ Yale Mentor – Dr. Tracy Rabin

Duration: 4 weeks

The Chinle Comprehensive Health Care Facility (CCHCF) is based in Chinle. Arizona (Northeast Arizona near Canyon De Chelly National Monument). The CCHCF is a 60-bed hospital which serves as the health care hub for the region. The medical staff includes Family Physicians, Internists, Pediatricians, General Surgeons, OB/GYN's, Anesthesiologists, and a Psychiatrist. Health care services are provided to approximately 37,000 active users. Strong Navajo cultural traditions exist within the community, offering an opportunity to learn the Navajo language, or to learn about traditional Navaio medicine.

This Advanced Primary Care Elective is supervised by Elizabeth (Quinn) Ziatyk MD, and colleagues provides an opportunity to work with Navajo on the reservation in a rural setting. Students appreciate working with traditional native American healers in a remote, beautiful landscape, addressing health needs created by poverty and injustice. Clinical rotations at CCHCF are 4 weeks long.

California

San Francisco Free Clinic (SFFC) San Francisco, California Yale Mentor – Dr. Peter Ellis

Duration: 4 weeks (priority is given to students requesting to do their Primary Care Clerkship at this site) Elective placement requests should contact John.Genest@yale.edu .

SFFC, was founded in 1993 by two family physicians. Recognizing that in a city of great medical resources, many people still went without care due to lack of insurance, the founders opened the free clinic to care specifically for this population. Drs. Richard and Tricia Gibbs closed their successful private practice and moved all their equipment into a modest townhouse in the Richmond District of San Francisco. Their next step was to seek support from the medical community. The response was overwhelming. Hundreds of physicians and several hospitals and other medical facilities offered to provide their services free of charge to clinic patients.

This Advanced Primary Care Elective is offered to senior students, who are expected to assume full responsibility for their patients, under the supervision of expert Attending's. Typically, students will perform a history and physical exam, formulate a complete assessment, and present the case to the Attending. After discussing the case, the student will perform the wrap-up, e.g., answer questions, agree on a management plan, follow-up, diagnostic tests, and medications. Students will find this an excellent opportunity to refresh and hone clinical ambulatory skills before Internship. Clinical rotations at SFFC are 4 weeks long.

Connecticut

HAVEN Free Clinic New Haven, CT Yale Mentor – Dr. Angela Kang Duration: 2 to 4 weeks longitudinal

In the spring of 2004, a group of Yale health profession students assembled under the shared desire to focus their enthusiasm on serving the New Haven community while utilizing their health care skills and knowledge. The resolution of that initial assembly was to evaluate the need in New Haven for a student-run free clinic. The HAVEN Free Clinic opened its doors in, 2005, with generous support from the Yale health professional schools.

This Advanced Primary Care Elective at the student-run free clinic serves predominantly Hispanic, adult uninsured persons. This is an opportunity for students to gain clinical experience and help serve an underserved population in an urban medical site where students will also help teach and supervise students earlier in their training. This longitudinal elective allows students to choose 8 or 16 Saturdays to work during the academic year, flexibly scheduled with oversight by the student leadership at HAVEN. Clinical rotations at HAVEN are 2 to 4 weeks longitudinal.

Tennessee

Grundy County, Tennessee Family Medicine Yale Mentor – Dr. Tracy Rabin Duration: 4-6 weeks

Grundy County, Tennessee is the location of our newest global health site. With a population of just under 14,000, it is the home of a vast recreational wilderness known as the South Cumberland State Park. Most of Grundy County is atop the Cumberland Plateau, averaging a height of around 1,800 feet above sea level. It is also the poorest county in the state, with the median household income at about

\$25,000, nearly half of what the median household income is for the state of Tennessee.

For students interested in learning more about rural health in the United States, this rotation will provide students with exposure to family medicine by working with the Mountain Medical Clinic, Sewanee Pediatric & Adolescent Medicine practice, and the Monteagle Internal Medicine clinic. Clinical rotations in Grundy County are 6 weeks long.

FUNDING CLINICAL ELECTIVES IN INTERNATIONAL SETTINGS

Yale Alumni Endowments

Several endowments and gifts from generous alumni provide funding for medical students to complete clinical experiences in international settings. Each of these endowments have been developed to support travel and living expenses for a highly motivated medical student who wishes to do a rotation in an underdeveloped country or a country where there is a pressing health-care need. For more information, contact the Office of Global Health Education

These travel awards and recent recipients are:

Eric P. Kindwall, '60 International Clinical Rotation Fund

This fund supports travel and incidental expenses for an international clinical rotation for a highly motivated medical student who wishes to do their rotation in a developing country but lacks the means for such.

- Siyu Xiao, China (2018)
- o Angela Gauthier, Thailand (2018)
- Anand Gopal, Thailand (2018)
- Marquita (Kilgore) Nolan, Tennessee (2018)
- Belinda Nhundu, South Africa (2019)
- Anuoluwapo Sopeyin, Nigeria (2020)
- August Oddleifson, Chile (2022)
- Michael Flores, Colombia (2023)

Daniel B. Stryer, MD Class of 1990 International Clinical Rotation Fund

This fund is intended to support the travel and living expenses for an international clinical rotation of a highly motivated medical student who wishes to do their rotation in an underdeveloped country or a country where there is a pressing health-care concern but lacks the means for such an experience.

- Frances Grace Javier, Argentina (2018)
- Aimee Alphonso, Chile (2018)
- o Adam Brownstein, Chile (2018)
- Goran Micevic, China (2018)
- Allen Shih, China (2018)
- Sophie Chung, Colombia (2018)
- Jennie Choe, Ghana (2018)
- Hadley Bloomhardt, Uganda (2018)
- Ke Zhang, China (2019)
- o Alison Lee, Ghana (2019)
- Rosie (Yapei) Zhang, Ghana (2019)

- Derek Ou, Chinle, AZ (2019)
- o Sacha Murillo, Chinle, AZ (2019)
- Melissa Thomas, Chinle, AZ (2019)
- o Caitlin Parmer-Chow, Argentina (2020)
- o Ryan Handoko, Uganda (2020)
- Seewan Kim, Uganda (2020)
- Louisa Lu, Greece (2020)
- o Charlie Zhao, China (2020)
- o Olamide Olawoyin, Ghana (2022)
- Kelsey Rankin, Uganda (2023)

Susan Wolf, MD and William Green, MD Fund for International Clinical Rotations

This fund is intended to support the travel, living and preparatory expenses (e.g. immunizations, evacuation insurance, etc.) for an international health-related experience of a highly motivated medical student(s) or MD/PhD student(s) who lacks the means for such an experience. It is to support an international clinical opportunity that exposes students to under-served populations.

- Mehida Alexandre, Argentina (2018)
- Amanda Lu, Dominican Republic (2018)
- Paul Bourdillon, Ghana (2019)
- Nicolas Munoz, Colombia (2020)
- Joseph Lim, Uganda (2020)
- Benjamin Steren, Ghana (2022)
- Muzzammil Muhammad, Ghana (2023)

Mitchell Edson MD, Fund for International Clinical Rotations

This fund is intended to support the travel, living and preparatory expenses (e.g. immunizations, evacuation insurance, etc.) for an international health-related experience of a highly motivated medical student(s) or MD/PhD student(s). It is to support an international clinical opportunity that exposes students to underserved populations.

- Melody Hu, Argentina (2018)
- Alex Sun, China (2018)
- Lucy Zhang, Ghana (2018)
- o Constance Zou, China (2019)
- o Lovemore Kuzomunhu, Ghana (2019)
- Kristina Klara, Argentina (2020)
- Cosmas Sibindi, Ghana (2022)
- Annika Belzer, Ghana (2023)

- Maria Turner, MD & Raymond W. Turner, MD 1958 International
 Fellowship. This fellowship will cover the costs incurred for travel,
 expenses, immunizations, for a medical student seeking an international
 experience, with a preference for clinical experiences.
 - Genevieve Yang, China (2018)
 - o Sara Tannenbaum, Ghana (2019)
 - Sifon Ndon, Jamaica (2019)
 - Christina Lin, South Africa (2020)
 - Samer Hassan, Colombia (2022)
 - Mayfong Shum, Colombia (2023)
- Howard A. Minners, M.D. 1957 International Fellowship

The Minners fellowship will fund the travel and living expenses for an international health-related experience for a student, resident, or faculty member.

- Yulanka Castro-Dominguez, Fac.to Dominican Republic (2018)
- Nadia Ameen, Fac. to Dominican Republic (2018)
- Bertie Geng, Ghana (2019)
- Tess O'Meara, Argentina (2020)
- o Amar Sheth, Ghana (2023)
- The Major José Jamil Miranda Memorial Fund for Clinical Rotations

This fund is to assist Yale School of Medicine students who are pursuing a short-term clinical, public health, or research experience, by enabling the exploration of an area of medicine or public health in a unique and under-served setting. While an international experience is preferred and encouraged, the location may also be domestic.

- Katherine Chuang, Argentina (2018)
- Julia Ranev. Chile (2018)
- Elizabeth Ludwig, Ghana (2018)
- Sophia Shimer, Chile (2019)
- o Cassie Pan, Ghana (2019)
- o Goldie Stand-Over-Bull, Chinle, AZ (2019)
- Amitte Rosenfeld, Chinle, AZ (2019)
- o Madison Sharp, Colombia (2020)
- o Patricia Valda Toro, Colombia (2020)
- Elizabeth Fairless, Chinle, AZ (2020)
- o Emily Gao, Chinle, AZ (2020)
- o Bertie Geng, Chinle, AZ (2020)
- o Amy Thomas, Ghana (2022)
- Tanvee Varma, Chinle, AZ (2023)
- Kelsey Rankin, Grundy County, TN (2023)
- Yale-INTEC Practice Based Learning Elective, 6 pre-clinical students the Dominican Republic (2018, 2019)

Schwartz Fellowship

This fellowship is to support the travel, housing, medications and immunizations, evacuation insurance, visa, and HIV Prophylaxis expenses for an international clinical rotation of a highly motivated medical student.

- Taylor Ottesen, Ghana (2019)
- o Charlie Zhao, China (2020)
- Katherine Cooke, Ghana (2022)
- Katherine Hill, Colombia (2023)

Norman Herzig Fellowship

Since its inception, in 1995 this fellowship provides funds to permit Yale medical students to enjoy clinical experiences in developing countries.

Maryam Ige, Ghana (2020)
 Amar Sheth, Ghana (2023)

OPPORTUNITIES IN THE "FIFTH YEAR" FOR GLOBAL HEALTH

Many YSM students elect to take a "fifth year," typically after clerkship year of the curriculum. During the "fifth year" students' complete clinical electives, research, or service work domestically and abroad, and/or enroll in alternative degree programs (e.g., MPH, MBA, etc). The fifth year is often funded in full through various fellowships available to Yale students. If you are interested, the Office of Student Research will work with you to decide which opportunities and funding source is best for you. Many students take this year to participate in global health related work; some additional and Yale-specific opportunities are listed on the following pages.

USING GLOBAL HEALTH PRINCIPLES IN NEW HAVEN

We strongly believe that we should utilize the principles of global health to help people here in New Haven face health disparities.

For other listings, please visit the YaleConnect Portal https://yaleconnect.yale.edu/home_login

Opportunities for Service

The contacts for the groups listed below change annually and some information may not have been available at the time of printing.

Please visit https://medicine.yale.edu/education/msc/student_groups/ or https://yaleconnect.yale.edu/club_signup for current contact information.

1. Addiction Medicine Collaborative

The mission of Addiction Medicine Collaborative (AMC) is to collaboratively promote and enhance professional and public education concerning substance use, to promote and foster the interests of medical students, health professionals and advocates for substance use assistance and recovery and to promote scholarly inquiry concerning substance use disorders as they impact health care professionals and the public whom we serve.

2. American Medical Student Association

The American Medical Student Association is an advocacy organization for the interests and beliefs of the medical students of the United States, including advocating improved global health in any way possible. Locally at Yale, AMSA runs a student blog that engages students to write about issues in global health and health policy. Additionally, AMSA has a program that pairs health professional students at Yale with visiting medical students on rotations from other countries to help these students make connections here at Yale and help our own students develop connections in international medicine.

3. <u>CARE: Community Alliance for Research and Engagement/</u> <u>Neighborhood Health Project</u>

CARE's research tackles chronic disease by focusing on social, environmental, and behavioral risk factors. CARE conducts longitudinal intervention studies in New Haven neighborhoods and schools, including cohort studies and randomized trials that are designed to measure, better understand, and help reverse these trends. CARE seeks projects that aim to improve health and relate in some way to major risks for chronic disease by impacting access to healthy foods and healthy eating and increasing physical activity. For more information visit http://care.yale.edu/

4. Columbus House

The Columbus House is a shelter serving hungry and homeless individuals in the New Haven community. Every Tuesday and Thursday evening, Yale medical, PA, and nursing students assist a local physician's associate in providing medical treatment, consultation, and screenings to the shelter's residents. Visit: http://www.columbushouse.org/get-involved/volunteer/

5. China Health Network

The Yale China Health Network coordinates regular trips to NYC Chinatown to conduct health screenings. If you are interested in Hepatitis B screening in Chinatown, you can volunteer at Charles B. Wang Community Health Center http://www.cbwchc.org/index.asp

6. The Global Health Interest Group

The Global Health Interest Group is for students interested in global health issues, doing clinical electives abroad, collaborating with international students and faculty, and conducting global health research. Please contact the Student Global Health Coordinators, Chidumebi.Alim@yale.edu or Amanda.Liberman@yale.edu for more information. To be added to the listsery, please visit http://mailman.yale.edu/mailman/listinfo/globalhealth.

7. HAVEN Free Clinic

The HAVEN Free Clinic is organized by students from Yale School of Nursing. Yale School of Medicine, Yale School of Public Health, and Yale Physician Associate Program. The clinic is dedicated to serving as a sustainable free clinic that provides uninsured adults in New Haven neighborhood with primary care. wellness education, and assistance in securing health care. HAVEN further aims to educate Yale health professional students about primary care and the value of working in health care teams; to allow students to gain experience in community health; and to expose students to the challenges of managing patient care with limited resources. Our model is unique in its inclusion of students across the disciplines of medicine, nursing, physician's associates, and public health. Teams of senior and junior students see patients with guidance from faculty preceptors. Currently, we see an average of 20 patients per week. HAVEN operates Saturdays from 9am-12pm out of the Yale Physicians Building. https://www.havenfreeclinic.com/ for more information hfcrecruitment@gmail.com.

8. HealthCORE

HealthCORE is an organization of Yale School of Public Health that seeks to work both domestically and internationally to promote the health of underserved communities. An annual international trip to Latin America for spring break is planned and organized through the year to provide public health education and other services. We also provide various opportunities to work in promoting health and well-being within New Haven. Contact: yalehealthcore@gmail.com or https://healthcoreyale.wordpress.com/

9. Health Justice Practicum

The Global Health Justice Partnership (GHJP), an initiative of the Yale Law School and Yale School of Public Health, was established in 2012 to promote interdisciplinary, innovative, and effective responses to key problems in health justice. It is a transformative collaboration integrating different fields in order to make critical policy interventions, develop new kinds of cross-cutting research, and provide educational opportunities straddling a variety of academic

disciplines. Leveraging Yale's institutional assets, the GHJP trains students to undertake collaborative, real-world research and advocacy to promote health justice in the U.S. and globally. It also organizes conferences and events; builds partnerships with local NGOs and social movements in New Haven, the U.S. and around the world to move research and critical analyses into action; and nurtures a truly interdisciplinary brain trust dedicated to effecting social change. The cornerstone of GHJP is a practicum/clinic course fusing didactic and experiential learning on critical topics at the intersection of public health, rights, and justice in the twenty-first century. For more information, visit https://law.yale.edu/studying-law-yale/clinical-and-experiential-learning/our-clinics/global-health-and-justice-practicum

10. Integrated Refugee and Immigration Services (IRIS)

The mission of IRIS is to help refugees and other displaced people establish new lives, regain hope, and contribute to the vitality of Connecticut's communities. A refugee is someone who has left his or her country of origin because of a well-founded fear of persecution for reasons of race, religion, nationality, membership in a particular social group, or political opinion. IRIS resettles approximately 200 refugees each year. Currently, over half of IRIS's refugee clients come from Iraq. Others come from Afghanistan, Congo, Cuba, Ethiopia, Iran, Somalia, Sudan, and other countries. IRIS services include provision of material needs (housing, furniture, food, clothing, and medicine), intensive case management, daily English class for adults with on-site childcare, educational programs for school-aged youth, assistance accessing medical care, legal services, and employment services. The IRIS Health and Wellness Program provides new refugee arrivals with the tools they need to achieve improved health and wellness in their new home: quick access to quality health services; access to culturally competent and linguistically appropriate services; knowledge about preventive medicine, wellness topics, and management of chronic conditions; and an improved health care system that better supports their transition to becoming Connecticut's newest residents. It takes time for refugees to adjust to a new culture and learn about U.S. institutions, and to learn English. IRIS helps them in their initial adjustment period and helps them achieve self-sufficiency. The contributions that volunteers, donors, and other community supporters provide are essential for IRIS to achieve its mission. For more information about refugees, IRIS, and getting involved, visit www.irisct.org Contact: Laurel McCormack, Volunteer & Acculturations Programs Coordinator at volunteer@irisct.org.

11. Mobile Migrant Farm-Workers Health Clinic

This clinic is maintained primarily by students attending the University of Connecticut, School of Medicine, and secondarily by students at Yale. The clinic travels to farms in Windsor, Middletown, Enfield, and Suffield and elsewhere to provide healthcare to migrant workers. It was established in 1998 and runs from mid-June to October. Contact Information: Hartford County Medical Association: 1-800-541-5083.

12. The Whitney and Betty MacMillan Center for International and Area Studies The Whitney and Betty MacMillan Center for International and Area Studies at Yale is the University's principal center for teaching and research on

international affairs, societies, and cultures around the world. It provides eight undergraduate majors, including six focused on world regions: African, East Asian, Latin American, Middle East, Russian and East European Studies, and South Asian Studies. Two others are focused globally, one on International Studies and the other on Ethnicity, Race, and Migration. At the graduate level, the MacMillan Center provides four master's degree programs. Three are regionally focused on African, East Asian, and European and Russian Studies. and one is globally focused on International Relations. Open to all graduate and professional students at Yale, the MacMillan Center sponsors seven graduate certificates of concentration. The Councils on African, European, Latin American, and Iberian, and Middle East Studies provide four regionally focused certificates. The International Affairs Council provides three: Global Health, International Development Studies, and International Security Studies. Language training is an integral component of each of the degree and certificate programs. The MacMillan Center provides opportunities for scholarly research and intellectual innovation; encourages faculty and student interchange; brings international education and training to teaching professionals, the media, businesses, and the community at large; sponsors more than 700 lectures, conferences, workshops, and other activities each year; and produces a range of academic publications. https://macmillan.yale.edu/

13. Unite for Sight

Unite For Sight's Global Impact Corps (http://www.uniteforsight.org/volunteerabroad) is an immersive global health experience for students and for professionals. All volunteers participating in Unite for Sight's international programs are Global Impact Fellows. Global Impact Fellows support and learn from the partner clinics' talented medical professionals who are social entrepreneurs addressing complex global health issues. Through hands-on, structured training, Global Impact Fellows gain a comprehensive understanding about best practices in global health and social entrepreneurship. Global Impact Fellows gain skills and are nurtured to become new leaders in global health, and they receive a Certificate in Global Health & Program Delivery. Global Impact Fellows participate daily with local doctors to eliminate patient barriers to care and to facilitate comprehensive year-round eye care for patients living in extreme poverty. They assist with patient education, visual acuity screening, patient intake, distributing the glasses and medication prescribed by the local eye doctors, and other important support tasks. They also have the opportunity to observe the surgeries provided by the local doctors. Additionally, Global Impact Fellows may participate in the Global Impact Lab, an optional program for those interested in pursuing global health research. For example, current Global Impact Fellows are pursuing research studies about medication management, the use of visual resources for patient education, traditional medicine practices, and patient barriers to care. International volunteering takes place in India, Ghana, and Honduras. http://www.uniteforsight.org/volunteer-abroad

14. Wednesday Evening Clinic Interpreters

The Wednesday Evening Clinic is the longest running student-run clinic at Yale, currently run out of the Primary Care Center on Howard Avenue. The clinic is in need of talented Spanish speakers to serve as interpreters for its Spanish

speaking patients. The time commitment is just a few Wednesdays a semester and you can make a big difference in the lives of patients. For more information visit: https://medicine.yale.edu/education/curriculum/advancedtraining/clinicalelectives/wec/

15. YING (The Yale International Nursing Group)

YING (The Yale International Nursing Group) is a forum where all Yale nursing students interested in international health can join in discussions related to the role of nursing in global healthcare and work with like-minded students to explore opportunities to practice nursing internationally while at YSN and beyond. YING members are dedicated to the integration of global health into the YSN curriculum, organizing events related to nursing and global health, accessing international opportunities through Yale University as a whole, and forming of a community of YSN students, faculty, and alumni participating in global work. This group meets about once every month for general discussion and project organization, committees meet as needed to plan activities and a subset of students also meets once monthly for article http://nursing.yale.edu/students/studentiournal discussions. Visit: life/student-groups

Language Opportunities

Spanish for Health Care Professionals

Spanish for Health Care Professionals is a hybrid course offered in the Fall by the Yale Center for Language Study. This hybrid course will meet two times a week: one time in a traditional classroom on campus (face-to-face) and another time online. The course fee is \$150 (includes non-refundable registration fee of \$75) for students enrolled in a participating Yale Department or Program. The course fee for students not enrolled at Yale is \$200, payable to the Yale University prior the start of the first class. Required Placement Test: You will be given a brief placement test meant to gauge your current abilities and to assist us in placing you in an appropriate course. The placement test, including a video clip and a brief digital recording component, will ideally take no longer than 20 minutes of your time.

If you have any questions, please visit: https://cls.yale.edu/programs/language-special-purposes/spanish-course-offerings-lsp or https://cls.yale.edu.

Medical Mandarin for Health Care Professionals

Yale Center for Language Studies and Medical Mandarin Interest Group have come together to host a non-credit, elective course designed to help health care professionals gain a working knowledge of Mandarin to facilitate their daily interactions with Chinese-speaking patients and medical personnel. The course focuses on the integration of authentic resources to develop all four language areas for meaningful communication: speaking, listening, reading, and writing. Emphasis will be placed on oral communication with patients and colleagues through simulated communicative activities. Instructions of reading and writing skills will focus on recognition of common medical character combinations for specialized vocabulary and reading and writing standard patient notes. The students will also learn about the medical system in China, the culture of physician-patient interactions and medical practice, and the role of traditional Chinese medicine. All students must have basic proficiency in Mandarin Chinese.

Contact the Medical Mandarin Interest Group for updates on this offering. https://yaleconnect.yale.edu/home_login

Medical French: Conversation and Culture

An advanced language course emphasizing verbal communication and culture. Designed to foster the acquisition of the linguistic and cultural skills required to evolve within a Francophone medical environment. Discussions, in-class activities, and group projects in simulated professional situations. Topics such as the hospital, family physicians and nurse practitioners, medicine in Francophone Africa, humanitarian NGOs are explored through a medical textbook, articles, video clips, radio shows, films, documentaries, and excerpts from essays and literary

texts. Conducted in French. Please contact: Leo Tertrain <u>leo.tertrain@yale.edu</u> https://french.yale.edu/undergraduate/fall-2023-courses

Medical Spanish Abroad

Many students also choose to go abroad to study at language institutes. For suggestions on programs that other Yale students have participated in, visit: https://studyabroad.yale.edu/ for listings of language study options.

Yale Language Center / Directed Independent Language Study

This program is designed to give students the opportunity to study languages that are not currently offered through traditional classroom instruction at Yale. More information can be accessed on their website at https://cls.yale.edu/our-programs.

Foreign Language Tutoring

The CLS offers foreign language tutoring for Yale students. Any Yale student--whether undergraduate, graduate, or professional--can attend free weekly Chinese, French and Spanish tutoring drop-in sessions. For more information visit: https://cls.yale.edu/programs/foreign-language-tutoring.

Student Organizations

Possible Health

Possible Health is a 501(c) (3) nonprofit organization working to improve the health of poor communities in Nepal through the provision of medical and public health services. For more information contact: answers@nyayahealth.org or https://possiblehealth.org/

Cents of Relief

Cents of Relief, a 501(c) (3) nonprofit organization, endeavors to allow vulnerable populations, particularly women in prostitution and their children, access to healthcare and prevention from human trafficking. Their projects are dedicated towards providing educational opportunities, improving healthcare, and stopping human trafficking in hopes of permitting these individuals to enjoy the basic necessities of life. For more information visit their website at http://www.centsofrelief.org.

Physicians for Human Rights (PHR)

The goal of PHR's Student Program is to advance health professional students' understanding and lifelong investment in health and human rights activism, and to cultivate their unique contributions as advocates promoting health and human rights locally, nationally, and globally. More information can be found on their website at https://phr.org/

Universities Allied for Essential Medicines (UAEM)

UAEM's mission is to unite students, faculty, researchers, and university administrators in an effort to broaden access to essential medicines for those most in need. Their efforts include university patent licensing reform, public campaigns, policy advocacy, and bringing interested parties together for conferences and other events. Yale's UAEM chapter warmly invites participation students from absolutely any field, particularly those with an interest in treatment, research, policy, or public advocacy in the in the interest of the poor and underserved. UAEM is a small organization, which means that every single member has the opportunity to make significant contributions to the efforts of the UAEM and to help influence the activities and overall direction of the organization. Visit their website at: www.UAEM.org www.UAEM.org contact: yaleuaemchapter@gmail.com or visit their Facebook page: https://www.facebook.com/YaleUAEM/info

The American Medical Student Association (AMSA)

AMSA is the oldest and largest association of medical students in the United States and works on a number of socially conscious campaigns. For more information about the organization, see their website at www.amsa.org, or to find out about what Yale AMSA is doing, contact The Office of Student Affairs.

Listservs

In addition to those below, please refer to the "Lecture Series" section, as many of those institutions have parallel listservs.

AMSA Listservs

AMSA runs a large number of listservs focusing on many different facets of medicine. Among these is global health, and several other related listservs. To sign up, go to https://www.amsa.org/listservs/

For other listings, please visit the YaleConnect Portal https://yaleconnect.yale.edu/home_login or the Medical Student Council website: http://medicine.yale.edu/education/msc/student_groups/.

PREPARATION FOR GLOBAL HEALTH EXPERIENCES

Before leaving on your trip abroad, you should visit the Yale and the World website which provides excellent resources to help you plan your trip. The website address for travelers is: https://world-toolkit.yale.edu/.

Before leaving on your trip abroad, you should:

1. Check your passport and get a visa.

Passport basics

- It can take several months to get a passport; apply now if you don't have one
- Your passport should be valid for at least 6 months after you return from travel

Passport Security

In some countries you must carry your passport at all times

- Take your passport if you are taking a short trip from your base city In many countries, hotels are required to photocopy or hold guests' passports overnight. It's common, but find out in advance if this is true for your destination
- Report a lost or stolen passport immediately to your nearest embassy

Determine if you'll need a visa

Try CIBT (https://cibtvisas.com/?login=40634) Yale's preferred vendor for visas), the U.S. State Department (https://travel.state.gov/content/travel/en/passports.html), or your home country's embassy Then ask these questions:

- What type of visa do I need (tourist, student)?
- How long will it take for my visa to arrive?
- Will I need a transit visa (for a layover or travel through another country on the way to my destination)?

International students and visas

Non-U.S. citizens returning to the U.S. after travel can run into complications, so begin the visa process early

- Meet with an advisor in <u>OISS</u> with questions about the visa process
- Schedule a travel consultation 6-8 weeks before you depart with Travel Health Services for Students
 - (https://yalehealth.yale.edu/more/travel-health-services-students) at Yale Health Student Health Services, 203-432-8148 or 203-432-0312 or your personal physician. The Clinic provides pre-travel care including consultation, education, vaccination, travel medications, and, if necessary, referrals.
- Understand any changes in your health insurance coverage while you are abroad.

- Do you have coverage for routine care?
- Are there higher copayments?
- Is there prescription coverage?
- Are there excluded activities or geographic areas?
- Obtain additional coverage if needed.
- Check to make sure you can bring your medication abroad. If you can, pack enough medication to last for your entire stay. Not all medications are available in every country.
- Familiarize yourself with political, health, crime, and other safety-related conditions prevailing in any country and specific locations within country that you will be visiting. In addition to International SOS Global Travel Assistance (https://cgc.yale.edu/erm/ISOS) and the L.S. State Department, https://travel.state.gov/content/travel/en/passports.html other resources include:
 - Study Abroad Safety Handbook produced by the Center for Global Education
 - Resources and advice on cultures
 - Association for Safe International Road Travel (Contact the Office of Risk Management if you wish to obtain a country specific road travel report)
- 6. **Attend program pre-departure orientation**. REQUIRED for participation.
- Be familiar with the University's policies and procedures regarding conduct and travel. And COVID-19 Travel Policy https://covid19.yale.edu/travel-policy
- 8. Register Your Travel (https://world-toolkit.yale.edu/)
- Provide emergency contact information to and leave a copy of your passport/visa, with the Office of Global Health Education.
- 10. Leave a copy of your itinerary with your family.
- 11. Print out your Yale ISOS ID card with information on what to do in an emergency, (https://ogc.yale.edu/sites/default/files/isos_yale_card_120420_18.pdf). Keep your ISOS ID card in your wallet or passport in the event of an emergency. Fill in your specific contact information on the bottom of the card.
- Understand what to do in an emergency (https://world-toolkit.yale.edu/travel/what-do-emergency).
- 13. Carry a cell phone that you know will work at your destination(s) or at least a pre-paid phone card.
- 14. Familiarize yourself with Yale's International Toolkit (http://world-toolkit.yale.edu/).

Upon Arrival in your Host Country, you should:

- 1. Attend orientation upon arrival in country.
- 2. Register with the local U.S. Embassy or consular service.
- 3. Contact OGHE with your local cell # and address.
- 4. Stay in regular contact with advisor, sponsoring department, colleagues, and family and friends.

INTERNATIONAL MEDICAL STUDENTS

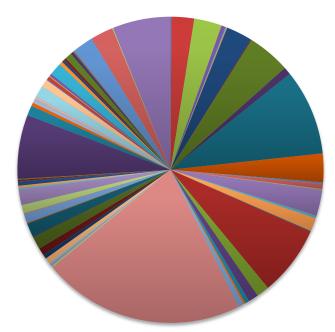
Visiting Student Elective Program Overview

The Office of Global Health Education supports a very active Visiting Student Elective Program (VSEP) for students from other countries and other schools to come to Yale for clinical electives. The program currently receives applications from approximately 600 applicants for over 1,000 elective requests and accepts about 100 international students into the elective program each year.

Students from over 50 foreign countries have participated in the VSEP in the last 15 years. US citizens attending an international school are not eligible for the VSEP.

Opportunities exist for Yale students to help welcome and mentor international medical students. Please contact the Office of Global Health Education if you are interested. Students from the following countries have participated in the VSEP:

2008 - 2022



- Antigua 0%
- Austria 0%
- Brazil 3%
- Chile 1%
- Cyprus 0%
- Dominican Republic 3%
- France 0%
- Greece 1%
- Iceland 1%
- Iran 0%
- Israel 0%
- Japan 0%
- Lebanon 1%
- Lenamon 17
- Mexico 2%
- Nigeria 0%
- Pakistan 7%
- Poland 0%
- Romania 0%
- Slovenia 0%
- South Africa 0%
- Switzerland 0%
- Thailand 0%
- Turkey 2%
- UK 6%

- Argentina 2%
- Barbados 0%
- Cameroon 0%
- China 9%
- Czech 1%
- Ecuador 0%
- Germany 7%
- Honduras 0%
- India 21%
- Iraq 0%
- Italy 1%
- Jordan 1%
- ______
- Lithuania 0%
- Netherlands 0%
- Norway 0%
- Peru 1%
- Portugal 0%
- Saudi Arabia 1%
- Spain 0%
- South Korea 1%
- Syria 0%
- Trinidad 0%
- Uganda 2%

- Australia 3%
- Bahraini 0%
- Canada 5%
- Colombia 3% Denmark 0%
- Egypt 1%
- Ghana 1%
- Hungary 0%
- Indonesia 0%
- Ireland 1%
- Jamaica 1%
- Kuwait 0%
- Malaysia 1%
- New Zealand 0%
- Oman 0%
- Phillipines 0%
- Puerto Rico 0%
- Singapore 1%
- Sri Lanka 0%
- Sweden 0%
- Taiwan 1%
- Tunisia 0%
- LIENA 00/
- UEM 0%

Cover photo:

Korle Bu Hospital Entrance; Annika Belzer, Accra, Ghana 2023

Yale School of Medicine Office of Global Health Education and Visiting Student Programs Harkness Hall, 210 367 Cedar Street New Haven, CT 06510



Scan the QR code to visit our website.



Scan the QR code to join our Global Health Interest Group listserv to receive information on upcoming opportunities.