

ICAP Next Generation Program 2024



ICAP's Next Generation Program is a multidisciplinary training initiative that provides students with internship and fellowship opportunities focusing on global public health.

Through the Next Generation Program, students engage in the design, implementation, and evaluation of ICAP supported programs while working side-by-side with global health experts. Students will learn about health care delivery systems in low-resource settings while working on discrete programmatic projects with ICAP team members. The Next Generation interns spend two to six months engaged in the design, implementation and/or evaluation of ICAP-supported programs in Africa, Asia, Central/South America, and New York under the mentorship of ICAP NY and/or country staff.

This opportunity is open to students enrolled in one of the following schools at the Columbia University Irving Medical Center Campus:

- The Mailman School of Public Health
- The College of Physicians and Surgeons
- The College of Dental Medicine
- The School of Nursing

Application Components

- 1) Complete application form ([Please see this link to the application form.](#))
- 2) Current resume (no more than two pages)
- 3) Statement of interest addressing a few key questions:
 - a. Why are you interested in global public health?
 - b. What are your goals for this internship experience?
 - c. What are your career goals?
 - d. What skills and experiences will you bring to ICAP?
- 4) One letter of recommendation

All application components should be submitted via the Qualtrics application in the link above. Letters of recommendation can be sent separately and directly from the recommender to icap-nextgen@cumc.columbia.edu or uploaded through Qualtrics. Applicants are responsible for confirming receipt of all materials.

All application components are due by Friday, February 23, 2024, by 11:59 PM.

You can find more information about the Next Generation Internship Program by visiting ICAP website at: <https://icap.columbia.edu/student-resources-archive/internships/>. If you have any questions, please contact icap-nextgen@cumc.columbia.edu or ICAP's Training and Education Program Coordinator, Krystina Jeron, at kj2601@cumc.columbia.edu.



Project Offerings

International

The projects below allow for international travel to ICAP Country Offices and/or ICAP supported sites. ICAP follows all travel guidelines issued by Columbia University. If travel restrictions are implemented by the University, these projects may be made remote.

- Population-based HIV Impact Assessment (PHIA) Survey Data Management and Analysis (**Cameroon, Cote d'Ivoire, Democratic Republic of the Congo**)
- Quality Improvement and Capacity Building in HIV Programming in **Lesotho**
- Biobehavioral Survey of Key Populations at Risk of HIV in **Malawi**
- Community Advisory Board for Biobehavioral Survey of Key Populations in **Malawi**
- Program Evaluation for PrEP Implementation, Viral Load Testing for Pregnant and Breastfeeding Women, and TB Screening in **Mozambique**
- Assessing and Designing Health Facilities to Improve Service Provision and Withstand Extreme Weather Events in **Mozambique**
- Bio-behavioral Survey of Key Populations in **Zambia**

Remote

The projects below are remote. Students will be expected to engage with the projects virtually.

- Dynamics of Contraception in Eswatini with Adolescent Girls and Young Women
- PHARM4PREP
- Diabetes Evaluation in TB patients in Eswatini for improving TB/HIV Care and Treatment (DETECT)
- Promoting HIV Testing and Linkage to Care in Cross-Border Migrants in Lesotho (LeMist)

International Practicum Opportunity: Population-based HIV Impact Assessment (PHIA)
Survey Data Management and Analysis *Multiple Locations*



Mentors: Melissa Metz, Data Management and Informatics Lead, In-Country PHIA Lead

Internship Focus HIV, Surveys, Data Management, Data Analysis, Capacity Building

Duration 3 to 6 months June to August or December

Location: Cameroon, Cote d'Ivoire, or Democratic Republic of the Congo

Preferred Skills

- French language experience for Cote d'Ivoire and Democratic Republic of the Congo

Project Description

The Population-based HIV Impact Assessment (PHIA) Project consists of cross-sectional, HIV-focused household surveys to assess the current status and effectiveness of national programs in reaching HIV epidemic control. Each survey offers participants household-based HIV counseling and testing with immediate return of HIV test results, with subsequent return of additional HIV related test results. The surveys also ask questions about access to preventive care and treatment services for adolescents and adults (15+). Survey results released to date measured national and regional progress toward UNAIDS' 95-95-95 targets and guide HIV policy and funding priorities as countries strive for epidemic control. More information on PHIA can be found at <https://phia.icap.columbia.edu>.

Intern Activities

The internship will focus on supporting the PHIA project's data management team in capacity building, return of results, data cleaning, investigation of new technologies, documentation, and analysis of data collected through the surveys under the mentorship of the Data Management and Informatics Lead and the Strategic Information Director. Potential analytical methods will vary.

- Run and improve reports for return of participant lab results, assist with dataset cleaning and management
- Conduct basic data analyses, summarize data in written format for reporting
- Support report generation for CDC and other partners as needed
- Assist with prompt review of all data queries and resolution
- Other duties as assigned by mentor or project team

International Practicum Opportunity: Quality Improvement and Capacity Building in HIV Programming in Lesotho



Mentors: Gillian Dougherty, Deputy Director Human Resources for Health Unit, Lerato Hlehlisi, Quality Improvement Advisor

Internship Focus HIV, TB, Maternal Child Health, Quality Improvement

Duration 3 months: June to August

Location: Maseru, Lesotho

Project Description

The LePHIA 2020 survey demonstrated that Lesotho has achieved the UNAIDS 90-90-90 goals with 90% of people living with HIV (PLHIV) knowing their status; 97% of those who know their status on treatment; and 92% of those on treatment virally suppressed. Furthermore, according to the UNAIDS Spectrum estimates, Lesotho has reached epidemic control – the point at which new HIV infections fall below the number of deaths among persons with HIV. While this remarkable achievement is a clear demonstration of high-quality program implementation, work remains to protect, transition, and sustain these gains to further realize the UNAIDS 95-95-95 and 10-10-10 targets. The Center for Disease Control of Lesotho requested that ICAP provide strategic leadership in collaboration with the Ministry of Health (MoH) to transition and sustain HIV program quality. Given ICAP’s global experience, CDC requested ICAP to implement targeted interventions to build the capacity of local MoH and other partners to ensure continued quality assurance and quality improvement of ongoing TB and HIV care, prevention, and treatment programs.

Intern Activities

ICAP will leverage its extensive, cutting-edge QI training resources to design and implement a national QI capacity building training. The Next Gen Student will focus on the following activities to support this project:

- Support ICAP Lesotho QI team with development of a QI project tracking tool
- Document QI project progress in tracking tool
- Provide TA in developing reporting on QI project progress during TWG meetings for HIV, TB and MCH
- Provide TA during QI Supportive Supervision to a facility
- Other duties as assigned by mentor or project team

International Practicum Opportunity: Biobehavioral Survey of Key Populations at Risk of HIV in Malawi



Mentors: Gili Hrusa, Senior Data Manager, Lyson Tenthani, Malawi Country Director

Internship Focus HIV, TB, Key Populations, Training, Data Cleaning

Duration 3 months June to August

Location: Lilongwe, Malawi

Project Description

Key populations, including female sex workers (FSW), men who have sex with men (MSM), transgender women (TGW), and people who inject drugs (PWID) have higher risks of HIV. ICAP in Malawi is conducting a survey to better understand the health needs and behaviors of these groups. The survey will be conducted in 10 districts and will include population size estimation (PSE) and a biobehavioral survey (BBS) in each target population. PSE for each of the key populations will be estimated with three methods (i.e., 3-source-capture-recapture, successive sampling, and service multiplier). A BBS for each of FSW (N=4413), MSM (N=1719), TGW (N=350), PWID (N=500) will be conducted to estimate the prevalence of HIV, HIV viral suppression, active syphilis, hepatitis B and hepatitis C, as well as progress on the PrEP cascade and the 95-95-95 targets.

Intern Activities

The Next Gen Student will focus on the following activities to support this project:

- Assist with training materials.
- Assist with preparations of standard operating procedures
- Test survey instruments in tablet
- Assist the Data Manager with data cleaning.
- Perform or assist with interim ad hoc reports on survey progress
- Other duties as assigned by mentor or project team

International Practicum Opportunity: Community Advisory Board for Biobehavioral Survey of Key Populations in Malawi



Mentors: Neena Philip, Principal Investigator, Lyson Tenthani, Malawi Country Director

Internship Focus HIV, Key Populations, Survey, Community Engagement

Duration 3 months June to August

Location: Lilongwe, Malawi

Project Description

Key populations, including female sex workers (FSW), men who have sex with men (MSM), transgender women (TGW), and people who inject drugs (PWID) have higher risks of HIV. ICAP has established a Key Populations Community Advisory Board (CAB) to provide community-level oversight in upcoming biobehavioral surveys (BBS) among FSW, MSM, TGW, and PWID. During the first quarter of 2024, ICAP is leading a series of focus group discussions among the four key populations in four major urban districts in Malawi. Working with Malawi and New York staff, the scope of work would involve working closely with 2-4 CAB members to ensure health and safety needs to key populations engaging in the survey.

Intern Activities

The Next Gen Student will focus on the following activities to support this project:

- identify analysis questions of community interest from the MSM, TGW, PWID, and FSW focus group discussions
- conduct rapid qualitative analysis to jointly analyze data and interpret findings
- prepare short (3-5 slides) presentations for each analysis question
- support CAB members to present findings at a full CAB meeting to identify recommendations and advocacy strategy
- Other duties as assigned by mentor or project team

International Practicum Opportunity: Program Evaluation for PrEP Implementation, Viral Load Testing for Pregnant and Breastfeeding Women, and TB Screening in Mozambique



Mentors: Harrison Kamiru, Associate Research Scientist, Kátia Ngale Quinhas, Evaluations Director

Internship Focus HIV, PrEP, Maternal and Child Health, TB, Program Implementation and Evaluation, Data Management

Duration 3 to 6 months June to August or December

Location: Maputo, Mozambique

Requirements: Portuguese or high level of fluency in Spanish

Project Description

ICAP in Mozambique has an extensive HIV portfolio with projects addressing care, treatment, and prevention services. These projects are currently being implemented and require evaluation to assess their efficacy and impact on patient outcomes. The following three programs require evaluation:

1. An evaluation of PrEP implementation at national level to inform program implementation and priorities, identifying gaps and proposing key areas for focus to improve uptake and continuation on PrEP for at-risk population.
2. An evaluation to assess the effects of multiplexing on Viral Load (VL) testing coverage and suppression for Pregnant and Breastfeeding women and children under 5 years old living with HIV.
3. An evaluation to generate evidence and tools to support the implementation of digital X-ray/CAD used for TB screening in a parallel way to symptom-based screening in identifying TB cases among people aged 15 years and older with a history of contact with people with TB and/or belonging to high-risk groups for TB in Mozambique.

Intern Activities

The Next Gen Student will focus on the following activities to support this project:

- Support early program implementation
- Monitor data collection
- Support on data cleaning and data reporting
- Other duties as assigned by mentor or project team

International Practicum Opportunity: Assessing and Designing Health Facilities to Improve Service Provision and Withstand Extreme Weather Events in Mozambique



Mentors: Grace Mkemwa, Senior Project Portfolio Manager, Erin Homiak, Programs Director

Internship Focus Architectural Design, Disaster Risk Reduction, HIV/TB Care, Eco-friendly Rehabilitation

Duration 3 to 6 months June to August or December

Location: Numerous locations in Mozambique

Requirements: Portuguese or high level of fluency in Spanish

Project Description

According to the WHO, “Mozambique is one of the most vulnerable countries in the world to the impacts of climate variability and long-term climate change due to its geographical location in the inter-tropical convergence zone; its widespread poverty; the climate sensitivity of its main socio-economic activities; and its overstretched public services and infrastructure.” The country’s healthcare infrastructure is especially vulnerable to extreme weather events. ICAP in Mozambique is working to assess current infrastructures including facility weaknesses and material needs, possible funders to support improvements, and impact of architectural design on service provision.

Intern Activities

The Next Gen Student will focus on the following activities to support this project:

- Implement a needs assessment and support with bill of quantities (BOQ) and blueprint design for health facility infrastructure that needs minor rehabilitation and repairs for improved service provision of HIV/TB care and treatment services.
- Assess and understand local supplies and materials that could be used for low cost, sustainable, eco-friendly rehabilitation solutions for priority health facilities.
- Provide architectural design solutions for health facilities to withstand extreme weather and calamities, including improved storage solutions to ensure medical supplies/patient files are protected during extreme weather events.
- Evaluate health facility spaces to optimize space for service provision.
- Carry out a scoping exercise to identify donors that provide construction/disaster risk reduction funding sources.
- Implement a desk review and design a guidance document for disaster risk reduction activities that can be implemented in the context of extreme weather to mitigate health facility destruction.

International Practicum Opportunity: Bio-behavioral Survey of Key Populations in Zambia



Mentors: Neena Philip, Principal Investigator, Tafadzwa Dzinamarira, Zambia Country Director

Internship Focus HIV, Key Populations, Data Analysis, Advocacy

Duration 3 months June to August

Location: Lusaka, Zambia

Project Description

In 2022 and 2023, ICAP conducted three biobehavioral surveys (BBS) among female sex workers (FSW), men who have sex with men (MSM), transgender women (TGW), and persons who inject drugs (PWID). Working with Zambia and New York staff, the scope of work would involve working closely with 1-2 key population members in a series of meetings to develop advocacy strategies.

Intern Activities

The Next Gen Student will focus on the following activities to support this project:

- identify analysis questions of community interest from the MSM, TGW, PWID, and FSW BBS
- conduct quantitative analysis to jointly analyze data and interpret findings
- prepare short (3-5 slides) presentations for each analysis question
- support key population members to present findings at a local meeting to identify recommendations and advocacy strategy

Analyses may serve as the basis of conference abstracts or manuscripts on which the intern could participate as co-author.

Remote Practicum Opportunity: Dynamics of Contraception in Eswatini with Adolescent Girls and Young Women



Mentors: Abba Greenleaf, Assistant Professor

Internship Focus HIV, Adolescent Girls and Young Women, Sexual Reproductive Health, Data Analysis

Duration 3 to 6 months June to August or December

Location: Remote

Project Description

Adolescent girls and young women in sub-Saharan Africa have the highest rate of undesired pregnancies and HIV incidence (relative to other ages) but little is known about the dynamics of contraceptive use among this vulnerable age group because face-to-face data collection (the predominate data collection approach in sub-Saharan Africa) is too expensive and time-consuming to collect repeated measures. Therefore, contraceptive use patterns including contraceptive consistency is understudied. This study calls young women who participated in the third population-based HIV survey supported by ICAP in Eswatini, bi-weekly for two years to collect high frequency, longitudinal data about the circumstances surrounding adolescent girls and young women's sexual and reproductive health, creating actionable data for increased reproductive autonomy.

Intern Activities

The Next Gen Student will focus on the following activities to support this project:

- Assessing quality of data and data cleaning
- Support with data analysis
- Support with literature review
- Assist with manuscript and report writing
- Other duties as assigned by mentor or project team

Remote Practicum Opportunity: PHARM4PREP

Mentors: Joanne Mantell, Professor of Clinical Medical Psychology (in Psychiatry)

Internship Focus HIV, adolescent girls and young women, sexual reproductive health, data analysis

Duration 3 to 6 months June to August or December

Location: Remote

Project Description

Despite considerable policy initiatives to make PrEP available, uptake has been slow. Innovative models, such as pharmacy-based PrEP, are needed to expand venues that offer HIV testing, PrEP, and other HIV/STI prevention services to end the US HIV epidemic. Pharmacies serve people who do not routinely access healthcare, and provide preventive health services, including immunizations, health screenings, and counseling around hypertension, diabetes, and medication management. Our premise is that pharmacies are a strategic venue for identifying and starting individuals on PrEP who lack access otherwise. Pharmacists are well-positioned to provide risk-reduction counseling, enhance potential users' understanding of PrEP, and promote medication adherence; however, we need to expand their scope of practice to include providing PrEP. We will develop and pilot test the feasibility and acceptability of a pharmacy-driven model to make oral PrEP available in pharmacies. We have established an academic, government and community-led partnership, using Implementation Science, to plan, co-develop and pilot an intervention. The Project will be conducted in two phases. In Phase 1, the Collaborative will conduct a strategic planning process, grounded in community-based participation and collaboration, which will include formative research with key stakeholders. In Phase 2, the Collaborative will conduct and evaluate implementation of the feasibility, acceptability and preliminary effectiveness of a pharmacy model and train pharmacists and technicians working in the target pharmacy(ies).

Intern Activities

The Next Gen Student will focus on the following activities to support this project:

- Analyze qualitative data from 30 interviews with pharmacy leadership, healthcare providers and consumers;
- Assist in preparation of abstracts/papers; and
- Assist in planning modifications to a pharmacy's electronic record system to include PrEP implementation variables.
- Conducting qualitative interviews and developing an evaluation and monitoring plan for the intervention in Phase 2.
- Other duties as assigned by mentor or project team

Remote Practicum Opportunity: Diabetes Evaluation in TB patients in Eswatini for improving TB/HIV Care and Treatment (DETECT)



Mentors: Yael Hirsch-Moverman, Assistant Professor

Internship Focus HIV, TB, diabetes, qualitative data analysis

Duration 3 to 6 months June to August or December

Location: Remote

Project Description

HIV, tuberculosis (TB), and diabetes mellitus (DM) are major causes of morbidity and mortality globally. DM and prediabetes (preDM) are growing rapidly worldwide but 69% of persons living with DM in sub-Saharan Africa are unaware they have DM. Eswatini is an optimal setting to evaluate what proportion of TB patients are on the DM spectrum ([DMS], i.e., have DM or preDM), how their TB treatment outcomes compare to TB patients without DMS, and whether they vary by HIV status.

The DETECT (Diabetes Evaluation in TB patients in Eswatini for improving TB/HIV Care and Treatment) study uses mixed methods to assess DMS prevalence and incidence as well as TB treatment outcomes in TB patients in Eswatini and explore the suitability of lifestyle management intervention strategies to facilitate TB treatment success and glycemic control

Intern Activities

The Next Gen Student will focus on the following activities to support this project:

- Transcribe and summarize qualitative in-depth interviews
- Support qualitative analyses and preparation of conference abstracts and manuscripts
- Participate in study team calls/meetings to discuss progress and finding.
- Collaborate on the development of manuscripts and presentations
- Other duties as assigned by mentor or project team

Remote Practicum Opportunity: Promoting HIV Testing and Linkage to Care in Cross-Border Migrants in Lesotho (LeMist)



Mentors: Yael Hirsch-Moverman, Assistant Professor

Internship Focus HIV, migrant healthcare, qualitative data analysis,

Duration 3 to 6 months June to August or December

Location: Remote

Project Description

Substantial progress has been achieved in confronting the HIV epidemic; however, progress among certain vulnerable populations has been sub-optimal. The scale-up of HIV treatment programs across sub-Saharan Africa (SSA) over the past 15 years has led to more than 25 million people living with HIV (PLHIV) accessing antiretroviral therapy (ART). Awareness of HIV status is still the largest gap in the HIV care cascade, with 20% of PLHIV unaware of their HIV status in 2019; this delays access to ART and viral load suppression. In Lesotho, significantly more cross-border migrants than internal migrants reported not having tested for HIV in the past year. HIV-positive migrants were also less likely to have been previously diagnosed or virally suppressed than non-migrants. These gaps have significant implications for epidemic control.

The Promoting HIV Testing and Linkage to Care in Cross-Border Migrants in Lesotho (LeMiST) study uses mixed methods to determine the best strategy for increasing testing and linkage to treatment rates in cross-border migrants. The study aims to determine preferences for confirmatory testing and treatment in cross-border migrants who report that HIV testing outside the facility is acceptable. In Phase I, we are conducting formative research to explore determinants of migrant health and to understand the barriers and facilitators to testing and accessing treatment or prevention in cross-border migrants, exploring preferences regarding location, types of services, and opportunities to use health services in South Africa. In Phase II, we will enroll eligible participants in a discrete choice experiment (DCE) on their preferences for confirmatory testing after self- or other community-based testing, and linkage to treatment.

Intern Activities

The Next Gen Student will focus on the following activities to support this project:

- Transcribe and summarize qualitative in-depth interviews.
- Support qualitative analyses and preparation of conference abstracts and manuscripts.
- Participate in study team calls/meetings to discuss progress and findings.
- Collaborate on the development of manuscripts and presentations.
- Other duties as assigned by mentor or project team