

Developing an Academic Global Cancer Program at a NCI-Designated Cancer Center

Katherine Van Loon, MD, MPH
Associate Professor of Clinical Medicine
Director, Global Cancer Program
UCSF Helen Diller Family Comprehensive Cancer Center

ASCO/NCI-CGH Academic Global Oncology Meeting
June 25, 2020

Brief Overview

- Early Milestones, Foundational Decisions
- Developing a Mission and Objectives
- Identifying International Partners
- Supporting Early Career Investigators in an Emerging Academic Field
- Reflection: Challenges and Critical Factors for Success

Early Milestones, Foundational Decisions

Early Milestones

- Mapping the existing global cancer activities to understand institutional strengths
 - “1000 points of light”
- Stakeholder engagement
 - Internal faculty
 - External Advisory Board
 - Alignment with NCI CGH priorities
- Needs assessment of faculty with international projects

Foundational Decisions

- What are our institutional strengths in global cancer control?
- How to create a program that will survive in a highly competitive academic environment?
- Defining a model
 - Breadth vs. depth?
 - Geographic focus vs. diversification?
- Development of criteria for selection of international partners

Our Global Cancer Program Mission and Objectives

Global Cancer Program Mission

To reduce the global cancer burden through
innovative research, education, and collaboration.



To perform *innovative research* that addresses the disparate burden of cancer in low and middle-income countries (LMICs).

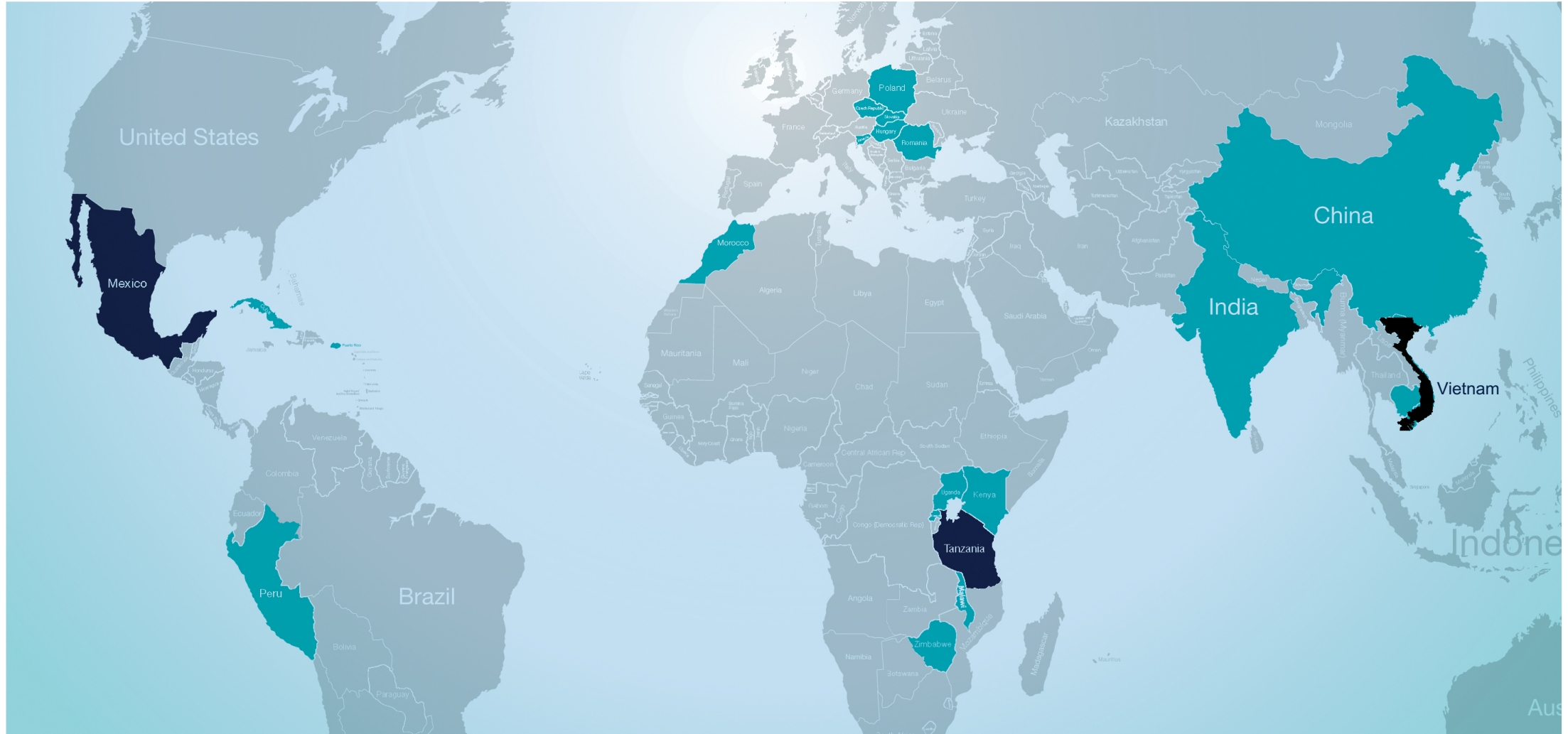
To provide *education, research training, and mentorship* for early career investigators focused on global cancer control.

To foster *collaborations* between UCSF and healthcare systems in LMICs to sustainably impact the global cancer burden.



Identifying International Partners

Global Cancer Program Regional Hubs



This work by **Van Loon K**, is licensed under a [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-nc-sa/4.0/).

Tanzania

- Partnership builds upon a longstanding institutional collaboration between UCSF and Muhimbili University for Health and Allied Sciences (MUHAS)
- Expanded to include Ocean Road Cancer Institute (ORCI)
- Engages a wide breadth of specialties – oncology, pathology, radiology, surgery, nursing, ENT, epidemiology
- **Key initiatives:**
 - Esophageal cancer etiology and palliation
 - Cytopathology education and validation of novel breast cancer diagnostics
 - Implementation strategy for Tanzania's first Cancer Treatment Guidelines

Funding sources: NIH, BMS Cancer Care Links, Cepheid, GloCar, UCSF Global Cancer Pilot Awards



Mexico

- Partnerships with the National Cancer Institute (INCan), the National Institute of Public Health (INSP), and the National Institute of Genomics Medicine (INMEGEN)
- Builds upon the UC-Mexico Initiative to address critical issues affecting lives on both sides of the California-Mexico border
- Activities are integrated into the ongoing research infrastructure of the national institutes
- **Key initiatives:**
 - Evaluating barriers and facilitators to colon cancer screening in Mexico City
 - Adapting a low-cost molecular sequencing platform to improve pediatric cancer diagnostics
 - HPV and HIV associated malignancies in Latin America



Funding sources: NIH/NCI (U54), Prevent Cancer Foundation, Rio Arrontes Foundation

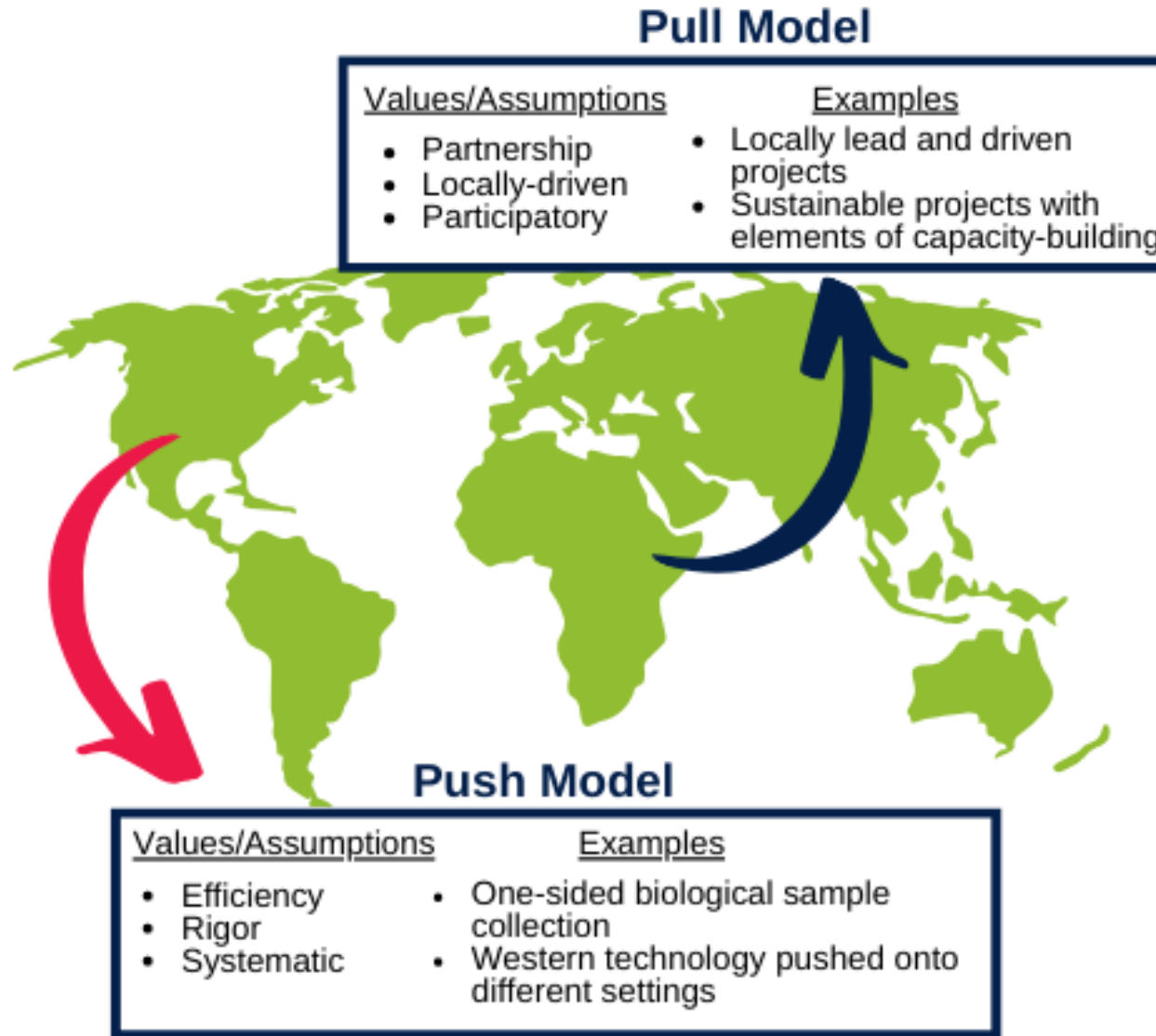
Vietnam

- Partnered with the University of Medicine and Pharmacy in Ho Chi Minh City and all hospitals caring for children with cancer in Vietnam
- **Key initiatives:**
 - MOH approved Pediatric Oncology Fellowship Program started in November 2019; lectures available nationally
 - Piloting Pediatric Cancer Registry
 - Supporting review of national ALL treatment guidelines
 - Implementing nursing chemotherapy education and leadership training course
 - Bi-weekly interdisciplinary national Tumor Board



Funding sources: Terry Fox Foundation, BMS Cancer Carelinks, UCSF Global Cancer Pilot Awards

Conceptualizing Push vs. Pull Models of Global Collaboration



The UCSF Global Cancer Program: When Do We Push vs. Pull?

Push

- Shared core values
- Adherence to ethical standards
- Transparent communication
- Reciprocity in opportunities for early career investigators
- Traditional academic benchmarks (e.g., grants, manuscripts)



Pull

- Research priorities
- Capacity building activities
- Education, mentoring, & professional development
 - Who gets trained?
 - What are the knowledge gaps?
 - What resources are needed to fill the gaps?





This work by **Van Loon K**, is licensed under a [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-nc-sa/4.0/).

Supporting early career investigators in the emerging field of global oncology

Global Cancer Fellowship Program

- Provides training and longitudinal mentorship to early career investigators at UCSF and from our international partner institutions
- Home institutions are required to demonstrate commitment to the individual's research career development
- Responsive to the needs of the individual
- Access to distance learning courses

Class of 2019-2020



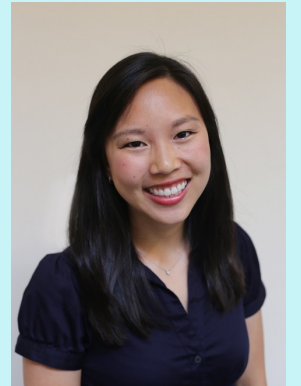
Geoffrey Buckle,
MD MPH



Aslam Nkya,
MD, MMed



Bao Truong, MD

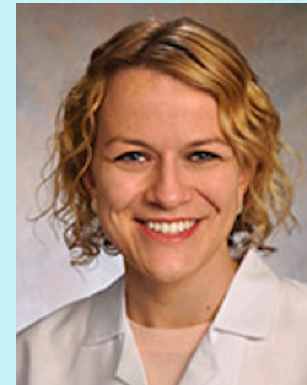


Melody Xu,
MD, MS

Class of 2018-2019



Dharma Bhatta,
PhD



Rebecca DeBoer,
MD, MA



Maricarmen Manzano
Robleda, MD



Michael Mwachiro,
MBChB

Future Global Cancer Leaders Seminar

- Interest group for trainees and early career investigators who want to pursue a career in global cancer control
- Works-in-progress presentations, project updates, and town-hall formats
- Provides opportunities for collaborations, mentorship, and community
- Host a quarterly lecture series with external speakers for the wider UCSF campus



HDFCCC Global Cancer Program Lecture

**Where there is no mammogram:
a model for early detection of
breast cancer in low resource
areas, lessons from Peru**

Carolyn Bain, MPH
Program Officer, Women's Cancers, PATH

October 21, 2019 4:00 pm
Mission Hall, Room 1406



*Reception
to follow*

Challenges and Reflections

Challenges: Present and Future

- Mentorship bottlenecks for both U.S.-based and international trainees in an unprecedented career path
- Enduring scrutiny of global oncology as a viable career path
- Reconciling local priorities with funding opportunities
- Ensuring sustainability:
 - Skills transfer to our international partners, so that current trainees become future collaborators
 - Reduced dependence on institutional funding

Return on Investment



A **three-fold** return through external funding sources



High impact publications

\$500K Investment

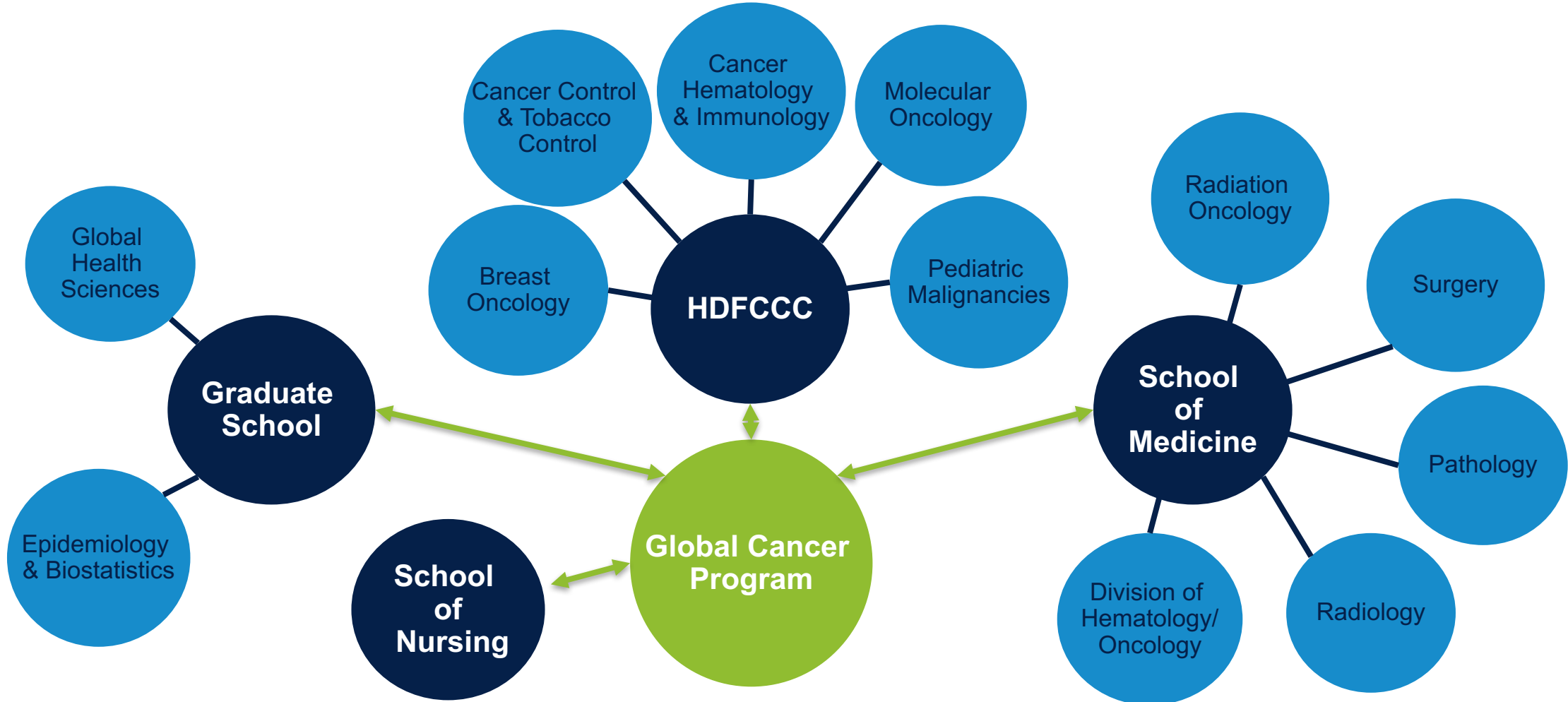


Pilot awards and **Fellowships** catalyze career development.



A robust and diverse portfolio of projects **globally** and at **UCSF**

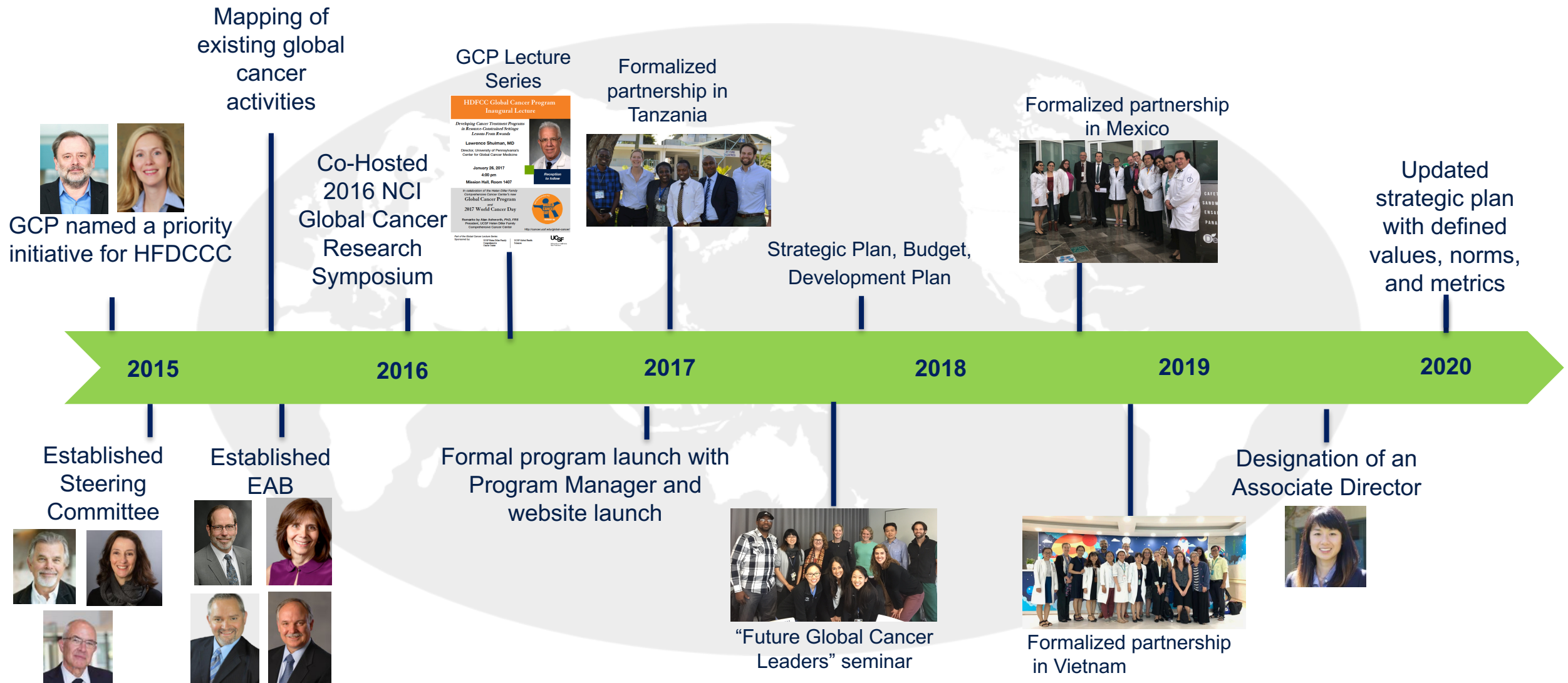
The Global Cancer Program's Interconnectedness throughout UCSF



Reflection: Critical Factors for Success

- Supportive institutional environment with investment of resources
- International partners with shared core values and strong in-country leadership
- Multi-disciplinary engagement and team building through development of regional hubs
- Flexibility to match our institutional resources to needs of our international partners
- Orientation to traditional academic benchmarks, with incorporation of education and capacity-building in all aspects of work

Timeline of Program Development



Thank you