



NCI Center for Global Health brief update

Satish Gopal MD MPH

16th Virtual Meeting of the National Cancer Advisory Board

Ad Hoc Subcommittee on Global Cancer Research

Recent events



BRIEFING ROOM

Fact Sheet: President Biden Reignites Cancer Moonshot to End Cancer as We Know It

FEBRUARY 02, 2022 • STATEMENTS AND RELEASES

BRIEFING ROOM

FACT SHEET: The Biden Administration's Commitment to Global Health

FEBRUARY 02, 2022 • STATEMENTS AND RELEASES



Satish Gopal, MD, MPH
@NCIGopal

Particularly meaningful @theNCI @NCIGlobalHealth to reflect on #WorldCancerDay today as @WhiteHouse @POTUS reignites #CancerMoonshot AND reaffirms our commitment to #globalhealth. Feels sort of like my 🍷 although that's a few weeks away yet!!!



1-800-4-CANCER Live

ABOUT CANCER CANCER TYPES RESEARCH GRANTS & TRAINING NEWS & EVENTS ABOUT NCI

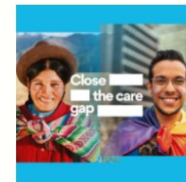
Home > About NCI > NCI Organization > CGH > CGH Spotlight Blog

World Cancer Day 2022: Close the Care Gap

Subscribe

February 1, 2022, by Satish Gopal, M.D. M.P.H.

World Cancer Day and its theme 'Close the care gap' are especially meaningful to me for many reasons this year. I have the extraordinary privilege of directing the Center for Global Health (CGH) at the United States National Cancer Institute (NCI), which is responsible for coordinating global engagement on behalf of the largest funder of cancer research in the world. World Cancer Day also neatly coincides with my anniversary date of joining the NCI (now 2 years ago!). World Cancer Day allows me to appreciate the opportunity to work at the NCI under an administration that seeks to 'end cancer as we know it' and that understands the importance of United States' global health leadership. World Cancer Day allows me to feel grateful for scientific discoveries and public health initiatives that let many of us feel protected from severe illness related to coronavirus, even as we continue to address the pandemic globally and worry about its future effects on cancer morbidity and mortality worldwide.



Credit: World Cancer Day Initiative, Union for International Cancer Control (UICC)

go.usa.gov/xtEV8

CGH 2021-2025 Strategic Plan

2011

...we have recently established the NCI Center for Global Health, which will develop an appropriate research strategy to help incorporate cancer control into global health programs; foster relevant research activities throughout the NCI's own extramural and intramural divisions; and work closely with the many potential collaborators who have displayed an interest in shared objectives.

2021

To fulfill President Biden's exhortation to "end cancer as we know it," it will be necessary to reduce cancer morbidity and mortality globally...As the Center for Global Health prepares to enter its second decade, the Center has developed an updated 5-year strategy to address these issues and to renew the NCI's commitment to a leadership role in global cancer research and control.

COMMENTARY | POLICY

Integrating Cancer Control into Global Health

Harold Varmus^{*} and Edward L. Trimble

+ See all authors and affiliations

Science Translational Medicine 21 Sep 2011:
Vol. 3, Issue 101, pp. 101cm28
DOI: 10.1126/scitranslmed.3002321

This Issue Views **8,620** | Citations **2** | Altmetric **80** | Comments **1**

Viewpoint

August 6, 2021

Cancer as a Global Health Priority

Satish Gopal, MD¹; Norman E. Sharpless, MD¹

» Author Affiliations

JAMA. 2021;326(9):809-810. doi:10.1001/jama.2021.12778

Goals

Primary focus on LMICs for CGH-led programs

Research

Support innovative, impactful research that (a) addresses key scientific issues in global cancer control and/or (b) leverages unique or unusual scientific opportunities afforded by collaboration with global partners.

Research training

Support cancer research training that enables equitable, impactful global scientific collaboration.

Dissemination

Promote the integration of current scientific knowledge into global cancer control policies and practice.

Research themes

Accelerate technology development for global cancer control.

Accelerate global cancer implementation science.

Understand and address global cancer disparities.

Increase support for cancer clinical research in LMICs.

Increase understanding of cancer prevention and biology through global collaboration.

Upcoming events & programs

- New U01/U54 global cancer implementation science programs
- Expansion of D43 institutional global cancer research training program
- Dissemination of 2021 global oncology survey of NCI-designated cancer Centers
- 10th Annual Symposium on Global Cancer Research
- 2022 Global Cancer Research and Control Seminar Series

10th Annual Symposium on Global Cancer Research

Virtual – March 23-24, 2022

New Models for Global Cancer Research, Training, and Control



- Scientific panels on systems thinking applied to global cancer research & rethinking academic global cancer research with speakers from every world region
- Scientific abstract 'flash talk' session & interactive poster sessions with authors from 19 countries
- Keynote address by CS Pramesh, MS, FRCS, recipient of 2022 Rachel Pearlman Award
- Pre-conference inaugural *Early Career Investigator Day*, March 22, 2022



Register now!
Use this [link](#) or
this QR code.



NIH NATIONAL CANCER INSTITUTE

Global Cancer Research and Control Seminar Series

Financial Toxicity Following Cancer in Low-
and Middle-income Countries

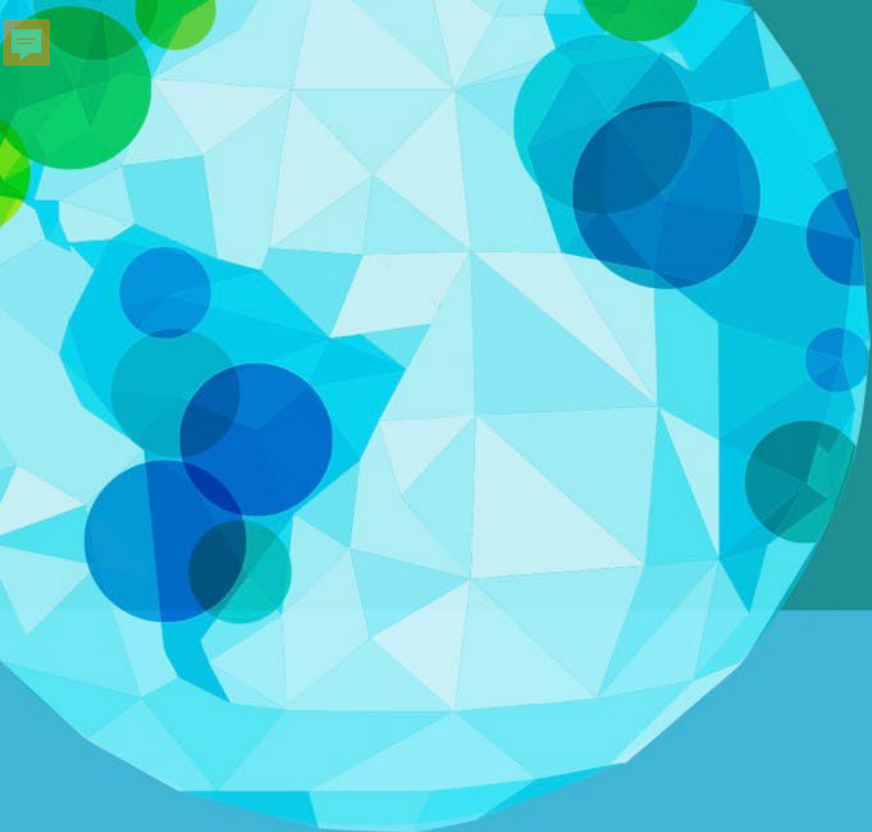
Thursday, February, 10th, 2022
9:00 a.m. ET



Nirmala Bhoo Pathy MD MPH MSc PhD
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Malaysia

cancer.gov/globalhealth

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The Affordable Cancer Technologies Program

Paul Pearlman, PhD

Program Director

Lead, Global Health Technology

NCAB Subcommittee on Global Cancer Research
February 10, 2022



Affordable Cancer Technologies (ACTs) Overview

- The ACTs Program supports
 - resource-appropriate translational technology research where affordability and potential impact in low-resource settings are essential design components; and
 - technologies supported through the ACTs program are validated in real-world health settings in LMICs, leading to additional innovations.
- The ACTs Program also forms a unique multidisciplinary & cross-cultural consortium of investigators seeking to address the significant cancer control challenges in LMICs.





Translational Technology Research at the NCI





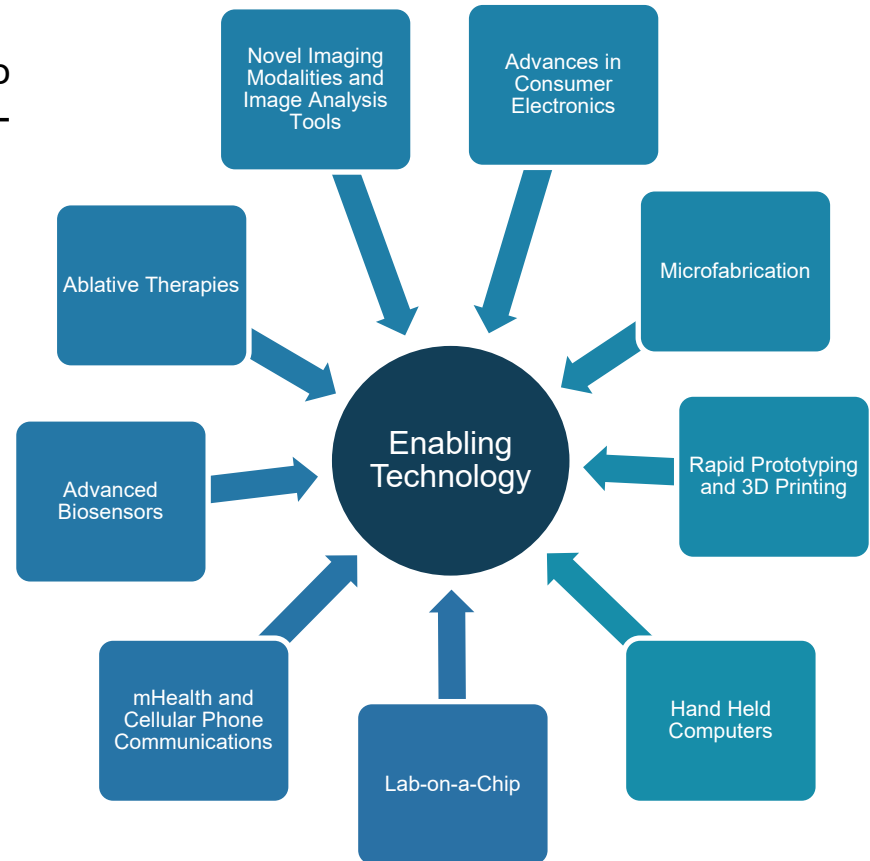
Trans-divisional Program Management

NCI Division, Office, or Center	Program Officer
Center for Global Health	Paul C. Pearlman, Ph.D.
Division of Cancer Control and Population Sciences	Rao L. Divi, Ph.D.
Division of Cancer Prevention	Jacob Kagan, Ph.D. Christos Patriotis, Ph.D. Jo Ann Rinaudo, Ph.D. Matthew Young, Ph.D. Vikrant Sahasrabudhe, M.B.B.S., M.PH., Dr.PH.
Division of Cancer Treatment and Diagnosis	Biorepositories & Biospecimen Research Lokesh Agrawal, Ph.D. Diagnostic Biomarkers & Technology Miguel R. Ossandon, Ph.D. Brian Sorg, Ph.D., M.B.A. Cancer Imaging Houston Baker, Ph.D. Pushpa Tandon, Ph.D. Radiation Oncology Bhadrasain Vikram, M.D.
Office of HIV and AIDS Malignancy	Rebecca Liddell Huppi, Ph.D.
Center to Reduce Cancer Health Disparities	Tiffany Wallace, Ph.D.
Center for Strategic Scientific Initiatives	Tony Dickherber, Ph.D.
SBIR Development Center	Ming Zhao, Ph.D.



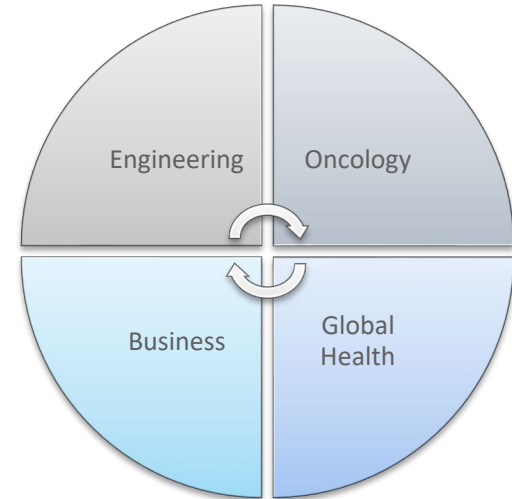
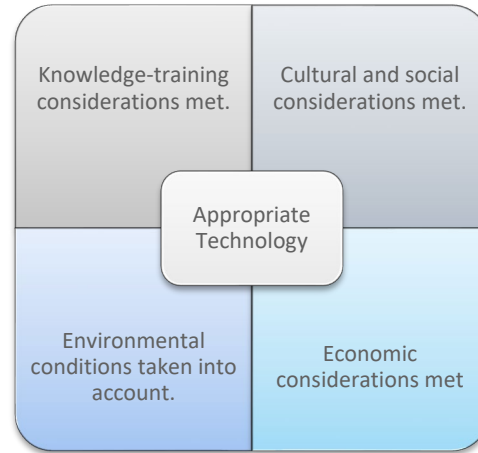
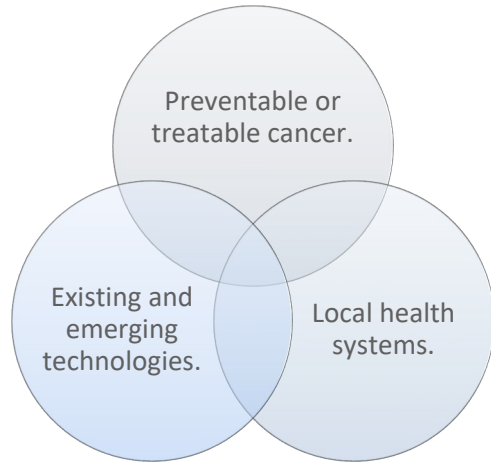
Context

- Rapid progress in several fields is contributing to the development of a new generation of point-of-care technologies (POCT).
- Needs drive opportunities for accelerated technology development:
 - Distance to Care
→ POCT for Detection/Diagnosis at Community Level
 - Limited Access to Pathology
→ Molecular Diagnostics
 - Knowledge-Training Gaps
→ Automated Sample Prep and Image Analysis/
Computer-Assisted Diagnostics





Critical Elements for and ACTs Project

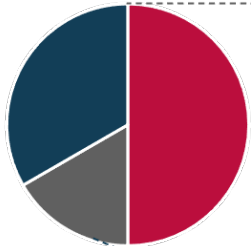


Pearlman, et al. *Journal of Translational Engineering in Health and Medicine* (2016)



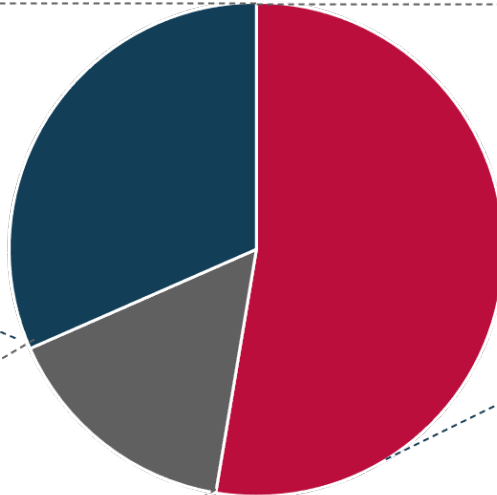
Breakdown of Current Portfolio and FOA Details

Treatment



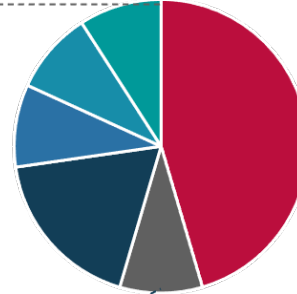
- Ablative Treatments for Cervical Dysplasia
- Image-guided PDT for Oral Cancer
- Tools to Improve RT

Technologies

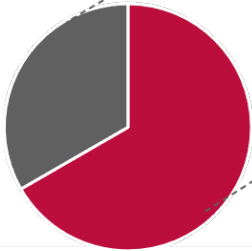


- HPV-Diagnostics
- Liver Cancer Markers
- HIV-Associated Cancer Diagnostics
- Colorectal Cancer Screening
- Esophageal Cancer Screening
- CML Diagnostics and Monitoring

in-Vitro Assays



Imaging



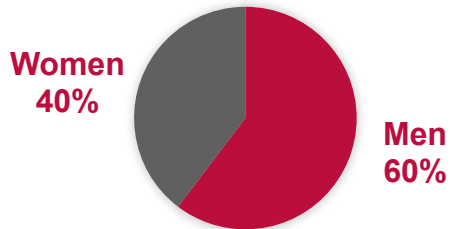
- Optical Imaging
- Ultrasound

FOA	Mechanism	Annual Budget (2 Years/3 Years)	Total Budget (per award)	Awards
RFA-CA-13-015	UH2/UH3	\$500k/\$1M (total costs) per award	\$4M (total costs)	7
RFA-CA-15-001	UH2/UH3	\$500k/\$1M (total costs) per award	\$4M (total costs)	7
RFA-CA-15-024	UG3/UH3	\$325k/\$650k (direct costs) per award	\$2.6M (direct costs)	7

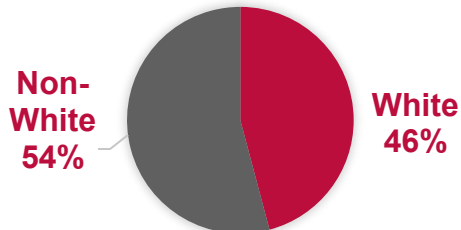


ACTs Performance Sites and Investigators

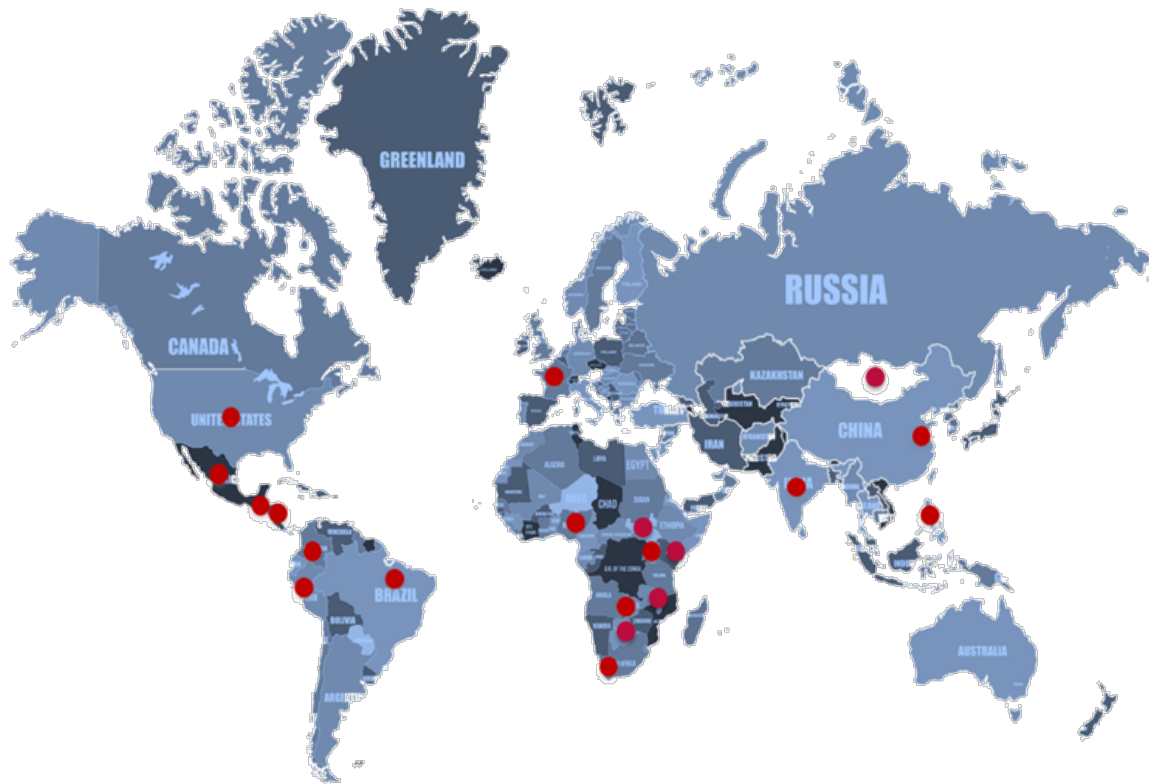
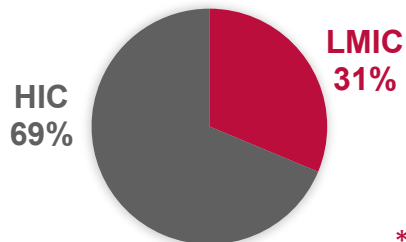
Key/Senior Personnel: 179



PIs: 38% Women



PIs: 32% Non-White



*Newest ACTs FOAs explicitly require shared leadership plans and LMIC staff as key personnel.

Select Program and Grant Accomplishments

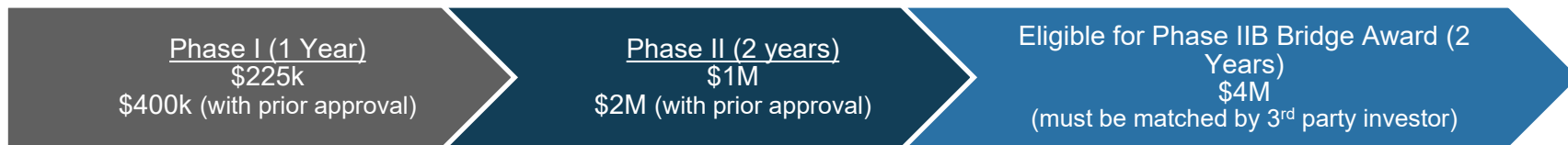
- In-country experiences have led to new iterations of devices better suited to end-users/environments.
- ACTs technologies are being extended to other targets.
- Projects have led to subsequent funding and helped catalyze large, multinational consortia, extending supported technologies to more cancer sites and settings.
- Several technologies have been licensed for further development.
- Results from ACTs grants have contributed to national and international guidelines.
- ACTs has generated interest and related programs from other USG partners.





ACTs “Companion” Funding Opportunities

- Innovative Molecular Analysis Technologies (IMAT) for Low-Resource Settings Globally
- SBIR/STTR Funding (Exception granted by SBA for foreign work.)
 - Previous – Dedicated SBIR and STTR FOAs (15 awards funded)
 - Current:
 - NOT-CA-21-062 (NOSI linked to R43/R44 and R41/R42 parent calls)
 - SBIR Contract Topic 440 - Cancer Prevention and Diagnosis Technologies for Low-resource Settings





Current U01 Opportunity (RFA-CA-21-030)

Project Organization and Management

- Individual grants require
 - HIC-LMIC partnership;
 - Expertise in oncology, engineering, & global public health;
 - Shared leadership plans including significant leadership from LMIC investigators.
- Central coordination by CGH/DOC program directors manage individual awards.
- First cohort of 7 new U01s will start ~4/2022.
- Anticipation of two subsequent annual issuances.

Mechanism	U01 (CT Optional)
Length of Awards	5 years
Award Budget	\$475,000 direct costs/year

Set Aside							
Issuance	FY22	FY23	FY24	FY25	FY26	FY27	FY28
CA21-030	\$4M	\$4M	\$4M	\$4M	\$4M		
CA22-020		\$4M	\$4M	\$4M	\$4M	\$4M	
CA23-XXX			\$4M	\$4M	\$4M	\$4M	\$4M
Total	\$4M	\$8M	\$12M	\$12M	\$12M	\$8M	\$4M



Today's Guests

Early-Stage Diagnosis of Kaposi's Sarcoma in Limited-Resource Settings using KS-Detect

- **Aggrey Semeere**, MBChB, M.med (Int.Med), MAS, FCP (ECSA), Infectious Diseases Institute, Uganda ([speaker](#))
- **David Erickson**, PhD, Sibley School of Mechanical and Aerospace Engineering, Cornell University, USA



The Radiation Planning Assistant (RPA) for Radiation Therapy Planning in LMICs

- **Hannah Simonds**, MBChB (UCT), MRCP (UK), FRCR (UK), PGDipHealthEconomics (UCT), Stellenbosch University, South Africa ([speaker](#))
- **Laurence Court**, PhD, Department of Radiation Physics, Division of Radiation Oncology, MD Anderson, USA
- **Beth Beadle**, MD, PhD, Radiation Oncology, Stanford University, USA



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<https://www.cancer.gov/about-nci/organization/cgh/research/affordable-cancer-technology>



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