



THE UNIVERSITY OF TEXAS
MDAnderson
Cancer Center
Making Cancer History

Productive Research Collaborations with Global Partners to Address Challenges in Low-Resource Clinics

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MD Anderson | Research Collaborations to Address Challenges in Low-Resource Clinics

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Disclosure

Research funded by NCI UH2 CA202665

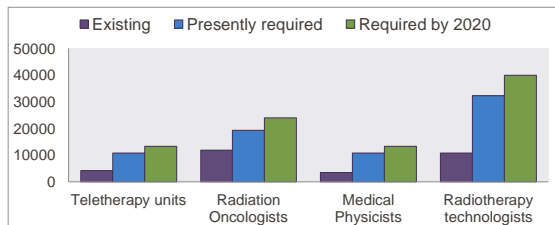
Equipment and technical support provided by:

- Varian Medical Systems
- Mobius Medical Systems

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Radiotherapy Resources in LMICs



Data from Datta NR, Samiei M, Bodis S. Radiation Therapy Infrastructure and Human Resources in Low- and Middle-Income Countries: Present Status and Projections for 2020. IJROBP. 2014;89(3):448-57.

Our Project

Create a fully automatic radiation therapy planning system that will be especially targeted for use in LMICs (low and middle income countries)

Goal of delivering high quality radiation therapy to a maximum number of patients with minimal training and expenditure

Sites: head and neck, breast (chest wall), cervix



Two Project Phases

Funded by an NCI UH2/UH3 grant

Phase 1 (UH2): Exploratory Phase

- 2 years
- System development
- Local, non-clinical testing at partner sites

Phase 2 (UH3): Validation Phase

- 3 years
- Full patient testing
- Expansion to other LMIC centers

PIs:

- Laurence Court, PhD
- Beth Beadle, MD, PhD

Our Collaborators

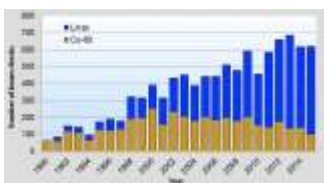


Importance of Partnership

- Insight into the 'target audience'
- Avoid imposing our outsider ideas
- Understand their clinical challenges
- Start partnership early and continue through to end



Different Technologies



Healy, BJ, van der Merwe, D, Christaki, KE, and Meghziene, A. Cobalt-60 Machines and Medical Linear Accelerators: Competing Technologies for External Beam Radiotherapy. Clin Onc. 2017; 29:110-115.



Parkes, J. SIOP Africa Congress 2012.

Huge variation in equipment and approaches



Slide courtesy of Laurence Court

Finding and Establishing Partnerships

Participate in global health activities

Use your institution's network

Cold call or e-mail

Talk to colleagues

Visit prospective partners

Get funding



Get Funding

Our grant: UH2/UH3: Cancer Detection, Diagnosis, and Treatment Technologies for Global Health

Open now: PAR-18-802 (R41/42): Cancer Prevention, Diagnosis and Treatment Technologies for low-resource settings (STTR = Small Business grant)

Due soon: PAR-18-242 R21 - Mobile health: Technologies and outcomes in LMICs

Grants.gov, Industry grants, and more



Communication

Key to success/Potential pitfall

Ease of communicating is important

Regular meetings at 1st, then as needed

Video meetings are best



In-Person Visits

- Focused attention
- Team building
- Reinforces commitment
- Nature of the visits progress along with the projects



IRB Protocols and Data Transfer Agreements

- Start early!
- Inquire early on about human research policies of a particular country
 - Could be very strict, even a deal-breaker
- Institutions within a country can vary
- Great task for in-person visits



Be Respectful and Aware

- | | |
|--|--|
| <p>DO:</p> <ul style="list-style-type: none"> • Treat your partners as equals • Respect their expertise • Have a long-term commitment • Read the literature • Respect their culture | <p>DON'T</p> <ul style="list-style-type: none"> • Have a know-it-all attitude • Be a "medical tourist" • Assume you are the first |
|--|--|

In summary...

- Do global health research!
- Establish global partnerships
- Share your experience
- Think about scaling up
- Make it sustainable

*If you want to go fast
go alone.*

*If you want to go far
go together.*

African Proverb

Principal Investigators:

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Commercial Partners

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**Special thanks to all
our collaborators!**

Thank you

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