

Gynecologic Cancer InterGroup Cervix Cancer Research Network



- Physician- **Dr. Brandon Fisher**

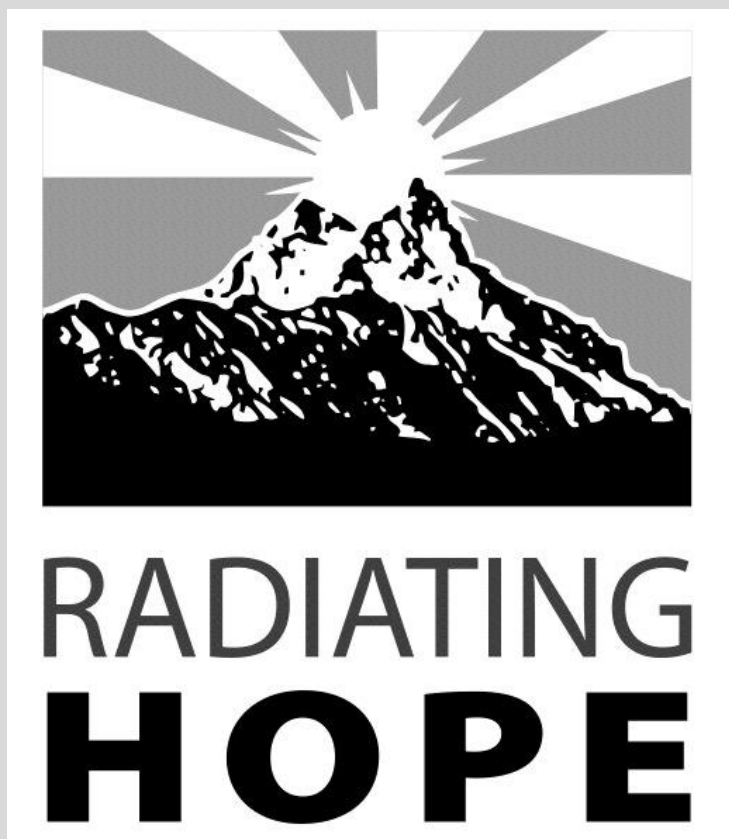
- Born in Utah- USA
- Radiation Oncology in Utah
- Philanthropist
 - President -Radiating**Hope**
 - Board of Directors - Above and Beyond Cancer
- Mountain climber
 - Weber County Search and Rescue
 - Rock and High Altitude climbing
- **Motto-** Our well-being is a product of meaning we create!



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Provide and update radiation equipment in developing countries and advance cancer care in those countries.



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- Radiating **Hope** sites:



Cervix Cancer Education Symposium, January 2019, South Africa

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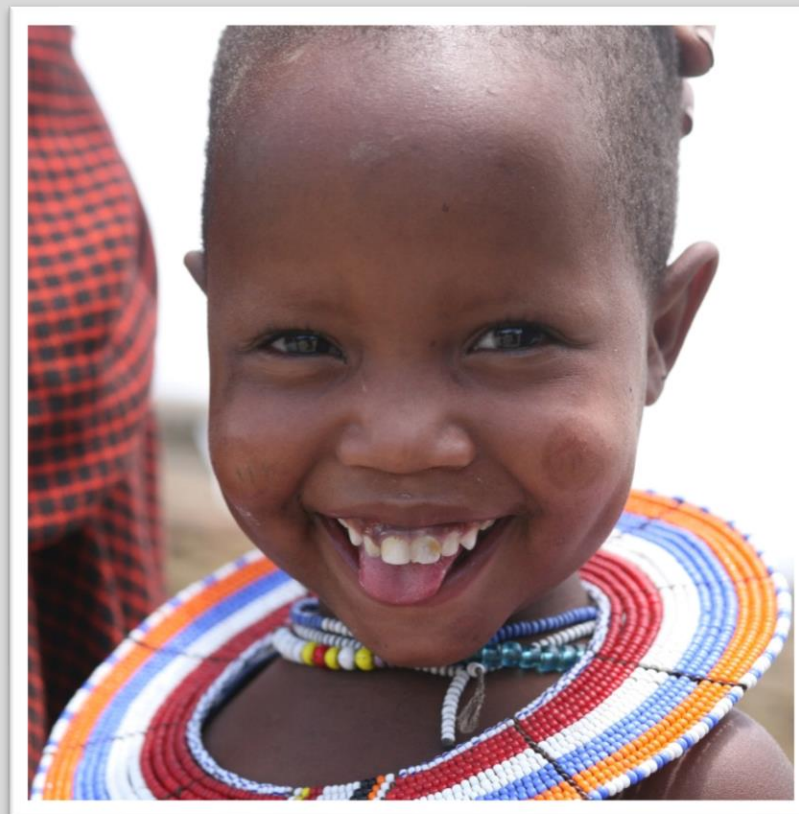


Cancers globally:

- 15+ million case in 2016
- 2/3 will occur in developing countries.

“It is not an exaggeration to say that cancer represents an imminent crisis for developing countries.”

-IAEA Director General Yukiya Amano -



Cervix Cancer Education Symposium, January 2019, South Africa

Ferlay J, Shin HR, Bray F, et al: Estimates of worldwide burden of cancer in 2008: GLOBOCAN 2008. Int J Cancer 127:2893-2917, 2010.

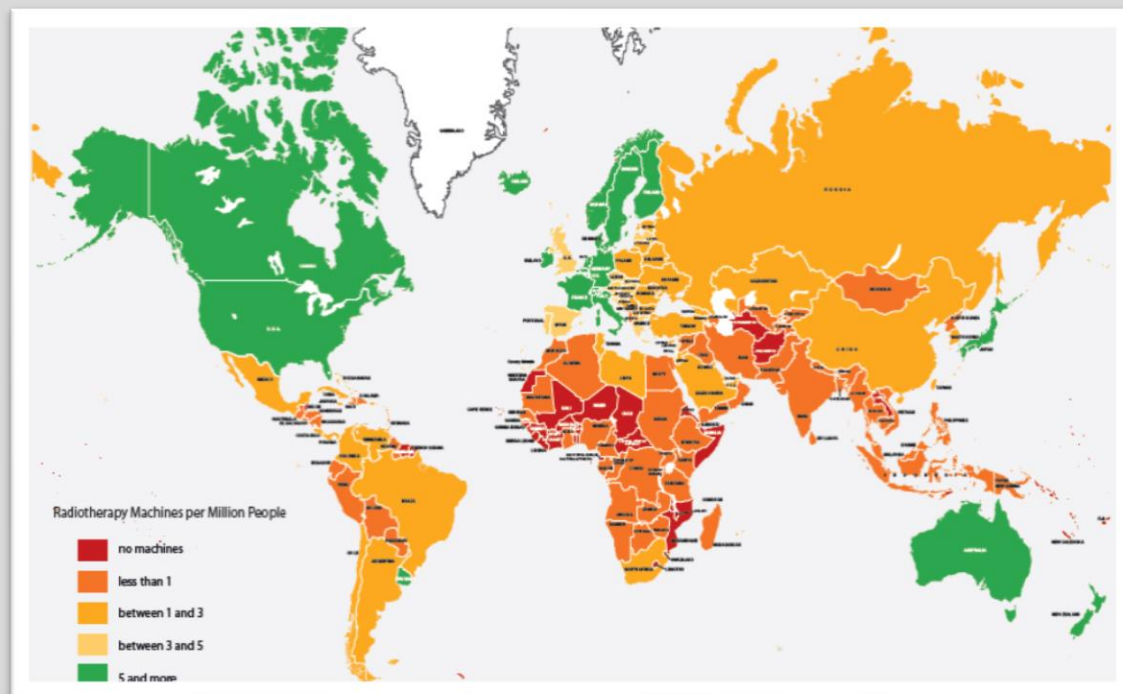
Farmer P, Frenk J, Knaul F, et al: Expansion of cancer care and control in countries of low and middle income: a call to action. Lancet 376:1186-1193, 2010.

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GYNECOLOGIC
CANCER INTERGROUP

An Organization of International Cooperative
Groups for Clinical Trials in Gynecologic Cancers

- **US:**
 - Approximately 1 machine for 100,000 people
 - 2% of machines are cobalt
- **Africa:**
 - 1 machine for 4.8 million people
 - 48% of machines are cobalt
- **South America:**
 - 1 machine for 600,000 people
 - 30% of machines are cobalt
- **Nepal:**
 - 1 machine for 6 million people
 - 40% of machines are cobalt



—VIDEO: [Cancer care in Tanzania](#)

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RADIATING
HOPE



– *Global Oncology*

- Implementation of Cervical Brachytherapy in Developing Countries
 - Implementation of HDR brachytherapy in Senegal





GLOBAL HEALTH

Radiation Oncology in Africa: Improving Access to Cancer Care on the African Continent

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GLOBAL HEALTH

Implementation of a High-Dose-Rate Brachytherapy Program for Carcinoma of the Cervix in Senegal: A Pragmatic Model for the Developing World

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Catheryn M. Yashar, MD,* Mamadou M. Dieng, MD,[§] Magatte Diagne,
PhD,[§] Latifatou Gueye, MSc,[§] Fama Gningue, MSc,[§] Pape M. Gaye, MD,[§]
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HDR Brachytherapy in Senegal

- West Africa has one of the highest incidence rates of **carcinoma of the cervix** in the world.
- Senegal, a country of 13 million people, had a single 60-Cobalt teletherapy unit.
- No brachytherapy capabilities.

Goal: Radiating Hope- provide first brachytherapy machine.

- **Provide curative cervical cancer treatments.**



Institut Joliot-Curie Cancer Center in Dakar, Senegal

Implementation of HDR brachytherapy -Senegal, West Africa



The Institut Curie:

- 1 Cobalt machine
- 1 Conventional Simulator
- No HDR

Faculty:

- 2 Rad Oncs
- 3 physicists
- 3 therapists
- no nurse

The cancer center:

- treats 30-40 patients per day
- only treatment facility within a 500-km radius
- provides services to several neighboring countries.



Cervical Cancer in Senegal



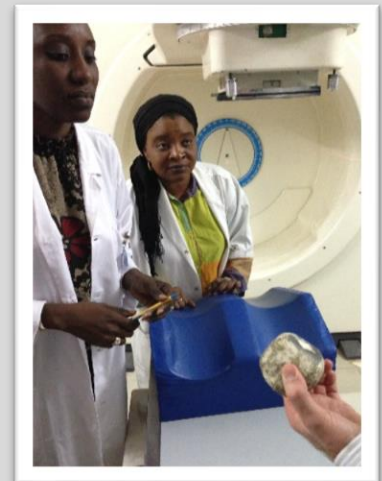
Waiting room in Senegal- 40% Cervical Cancer

Most common cancer:
-40% cervical

- Cervical cancer treatment in Senegal prior to HDR:
- 1) External beam, 45 Gy
 - 2) Boost gross disease with external beam
 - 3) Surgery

Outcomes:
• **Mostly Palliative**

Need HDR brachytherapy



Arrival of HDR machine



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- End Result: Advancing Cancer Care Globally
 - Equipment donation
 - Shipping
 - Installation
 - Training
 - Maintenance
 - Symposium
 - Training



Cervix Cancer Education Symposium, January 2019, South Africa

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• How to get involved:

- Join the [Radiating Hope Society](#)
- Become a Radiating Hope 'Center of Excellence'
 - Rotation site
 - Equipment donation
 - Shipping
 - Installation
 - Training
 - Maintenance
- [Symposium](#)
 - Be a symposium site
 - Join our symposiums
 - Training

