• **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!
Provide and update radiation equipment in developing countries and advance cancer care in those countries.
Radiating **Hope** sites:
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

Gynecologic Cancer InterGroup
Cervix Cancer Research Network

- **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](#)

Cervix Cancer Education Symposium, January 2019, South Africa
Gynecologic Cancer InterGroup
Cervix Cancer Research Network

Cervix Cancer Education Symposium, January 2019, South Africa
Gynecologic Cancer InterGroup
Cervix Cancer Research Network

Cervix Cancer Education Symposium, January 2019, South Africa
– **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
Brandon J. Fisher, DO, * Larry C. Daugherty, MD, † John P. Einck, MD, §
Gita Suneja, MD, § Mira M. Shah, MD, ‖ Luqman K. Dad, MD, ‡
Robert W. Mutter, MD, # J. Ben Wilkinson, MD,** and Arno J. Mundt, MD †

GLOBAL HEALTH

Implementation of a High-Dose-Rate Brachytherapy Program for Carcinoma of the Cervix in Senegal: A Pragmatic Model for the Developing World
John P. Einck, MD, * Alana Hudson, MSc, † Adam C. Shulman, MS, ‡
Catheryn M. Yashar, MD, * Mamadou M. Dieng, MD, § Magatte Diagne, PhD, § Latifatou Gueye, MSc, § Fama Gningue, MSc, § Pape M. Gaye, MD, §
Brandon J. Fisher, DO, ‖ Arno J. Mundt, MD, FACRO, FASTRO, * and Derek W. Brown, PhD, FCCPM †
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.
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

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

Waiting room in Senegal- 40% Cervical Cancer

Cervix Cancer Education Symposium, January 2019, South Africa
Arrival of HDR machine

Cervix Cancer Education Symposium, January 2019, South Africa
Gynecologic Cancer InterGroup
Cervix Cancer Research Network

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

Cervix Cancer Education Symposium, January 2019, South Africa
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

Cervix Cancer Education Symposium, January 2019, South Africa