




**Exploring Cancer**  
Examining the Role of Biology, Race, Class, and Socioeconomics 

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**Exploring Cancer**  
Examining the Role of Biology, Race, Class, and Socioeconomics



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A collaboration between



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**Exploring Cancer**  
*Examining the Role of Biology, Race, Class, and Socioeconomics*

**Fridays**  
11:00 - 11:50 AM EST/EDT

<b>August 25</b> Welcome to Cancer(s) and Health Disparities 101 - The Introduction	<b>October 13</b> Breast Cancer Health Disparities	<b>November 10</b> Precision Medicine and Immunotherapy
<b>September 4</b> Radiation Oncology - What Is It, and What Is It Good For?	<b>October 20</b> Pancreatic Cancer	<b>November 17</b> Expanding Cancer Care Quality and Delivery in Sub-Saharan Africa: a collaborative approach
<b>September 8</b> New Strategies in Treating GI Cancers	<b>October 27</b> Careers in Cancer	

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**Exploring Cancer**  
*Examining the Role of Biology, Race, Class, and Socioeconomics*

**November 17, 2023**

**Expanding Cancer Care Quality and Delivery in Sub-Saharan Africa: a collaborative approach**

 <b>Ashley Leak Bryant,</b> PhD, RN, OCN, FAAN	 <b>Benyam Muluneh,</b> PharmD., BCCP, CPP	 <b>Jen Hotchkiss,</b> RN, MSN, OCN, CNL
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**Ashley Leak Bryant,**  
PhD, RN, OCN, FAAN

Service—and the desire to provide a real patient good—in the case of Dr. Bryant and informs every aspect of her professional work. Over the course of her career, the award-winning nurse has gradually expanded beyond her working at UNC to the broader nursing community on national and international levels. The core of her professional mission is to mentor future generations of nurse and non-nurse clinicians and scientists, do as education she is guided by teaching philosophy that emphasizes collaborative learning and transformational experiences.

Dr. Ashley Leak Bryant joined the UNC School of Nursing (SON) in 2013 and during her time at UNC, she has engaged in global and nursing focused research, teaching, and service opportunities to improve the quality of care for patients, families, and communities. Her research has two themes: (1) modeling symptom and functional severity that impact quality of life of adults and older adults with breast cancer through validation and supportive care interventions; and (2) developing the nursing and cancer workforce through interdisciplinary education and global capacity building. In August 2022, Dr. Bryant was named an inaugural Assistant Director for Cancer Research, Training and Education Coordination when the Health 2.0 fellowship program for students at UNC and North Carolina Central University. The fellowship focus on capacity building of oncology nurses and the ongoing work to increase diversity in cancer clinical trials. Additionally, she developed an oncology nursing elective course (Summer 2020) across the tripartite and ~120 students have participated in the course and 80% work in practice or adult oncology or hospice settings today. She leads cross-cultural collaborations to build the oncology workforce and strengthen nursing education at both national and international levels. Dr. Bryant has continued to manage an active program of research, mentors undergraduate and graduate students across academic programs, and remains engaged in professional and service activities. Her exceptional work has been recognized by both the American Academy of Nursing and Gerontological Society of America where she is designated as a Fellow. She has a BSN (2005) and MPH/MBA/Management (2005) from UNC-Chapel Hill, a PhD in Nursing from UNC-Chapel Hill and Immunology Certificate in Aging (2012), and completed a postdoctoral fellowship at UNC-Chapel Hill Gillings School of Global Public Health (2012-2013).

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**Professional Highlights**

Empty box for professional highlights on slide 7.

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**Professional Highlights**

- 3.** Dr. Bryant is the Senior Associate Dean for Global Initiatives and a Frances Hill Fox Distinguished Professor in the School of Nursing.

Box for professional highlights on slide 8 containing one list item.

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**Professional Highlights**

- 3.** Dr. Bryant is the Senior Associate Dean for Global Initiatives and a Frances Hill Fox Distinguished Professor in the School of Nursing.
- 2.** She is the Assistant Director of Cancer Research Training Education and Coordination at the UNC Lineberger Comprehensive Care Center.

Box for professional highlights on slide 9 containing two list items.

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**Professional Highlights**

3. Dr. Bryant is the Senior Associate Dean for Global Initiatives and a Frances Hill Fox Distinguished Professor in the School of Nursing.
2. She is the Assistant Director of Cancer Research Training Education and Coordination at the UNC Lineberger Comprehensive Care Center.
1. She is a practicing nurse caring for older adults with cancer.

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Dr. Benyam Muluach is an assistant professor at UNC Eshelman School of Pharmacy. His ongoing research endeavors include: 1) Develop strategies to improve medication adherence in clinical practice; 2) Optimize tolerability and safety of chemotherapy in cancer patients; and 3) Promote chemotherapy access and affordability to underserved and uninsured cancer patients in the United States and beyond. He also teaches in the PharmD curriculum and has a passion for international health. He is the codirector of the UNC/Ethiopia Alliance and serves as a preceptor for one of the Global Pharmacy Scholar (GPS) experiences in Ethiopia.

**Benyam Muluach,**  
PharmD., BCOR CPP

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**Professional Highlights**

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**Professional Highlights**

3. Dr. Benyam Muluneh is an assistant professor at UNC Eshelman School of Pharmacy.

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**Professional Highlights**

3. Dr. Benyam Muluneh is an assistant professor at UNC Eshelman School of Pharmacy.
2. He teaches in the PharmD curriculum and has a passion for international health.

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**Professional Highlights**

3. Dr. Benyam Muluneh is an assistant professor at UNC Eshelman School of Pharmacy.
2. He teaches in the PharmD curriculum and has a passion for international health.
1. He is the co-director of the UNC-Ethiopia Alliance and serves as a preceptor for one of the Global Pharmacy Scholar (GPS) experiences in Ethiopia.

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Jen Hotchkiss is the Nurse Director of Yawkey 9 at Dana-Farber Cancer Institute in Boston, Massachusetts. She serves as an Adjunct Faculty member at the UNC-Chapel Hill School of Nursing where she obtained her MSN. The focus of her Adjunct Faculty work is sharing her clinical oncology expertise and international nursing experience with her partners at UNC Project Malawi and Kamuzu Central Hospital to support the growth of oncology nursing in Malawi.

**Jen Hotchkiss,**  
RN, MSN, OCN, CNL

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**Professional Highlights**

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**Professional Highlights**

**3.** Jen Hotchkiss, RN, MSN, OCN, CNL is the Nurse Director of Yawkey 9 at Dana-Farber Cancer Institute in Boston, Massachusetts.

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Professional Highlights

- 3. Jen Hotchkiss, RN, MSN, OCN, CNL is the Nurse Director of Yawkey 9 at Dana-Farber Cancer Institute in Boston, Massachusetts.
- 2. She worked as the Oncology Nurse Educator for Dana-Farber Cancer Institute and Partners in Health in Rwanda

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Professional Highlights

- 3. Jen Hotchkiss, RN, MSN, OCN, CNL is the Nurse Director of Yawkey 9 at Dana-Farber Cancer Institute in Boston, Massachusetts.
- 2. She worked as the Oncology Nurse Educator for Dana-Farber Cancer Institute and Partners in Health in Rwanda
- 1. Prior to moving to Boston, worked as a CNIV on 4 Oncology at UNC Medical Center

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**Ashley Leak Bryant, PhD, RN, OCN, FAAN**  
 Frances Fox Hill Distinguished Professor, School of Nursing  
 Senior Associate Dean for Global Initiatives  
 Director, PAHO/WHO Collaborating Center in Quality and Safety for Nursing and Midwifery

Assistant Director, Cancer Research Training Education & Coordination  
 Lineberger Comprehensive Cancer Center

**Jennifer Hotchkiss, MSN, RN, OCN, CNL**  
 School of Nursing, University of North Carolina at Chapel Hill  
 Nurse Director  
 Dana-Farber Cancer Institute

UNC Schools of Nursing Global Initiatives

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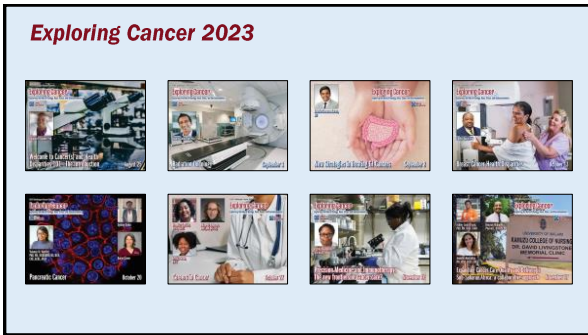
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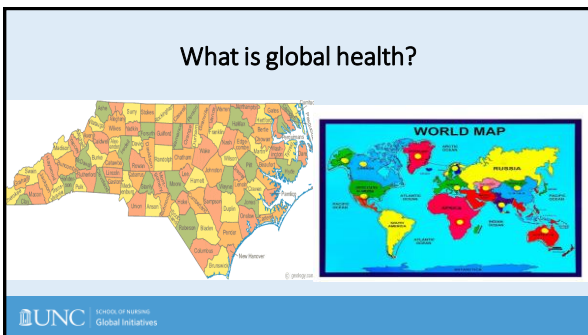
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**Cancer in Malawi**

- Public health problem
- Malawi, along with other countries in sub-Saharan Africa, has seen an increase in cancer incidence
- Common cancers in Malawi
  - Breast
  - Cervical
  - Esophageal
  - Kaposi sarcoma
  - Lymphoma



The Cancer Atlas, <https://canceratlas.cancer.org/the-burden/sub-saharan-africa/>

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**Brief Background and History of the UNC Project in Malawi**

- Works in partnership with Malawi Ministry of Health since 1989
- Mission
  - To improve the health of the Malawians by providing service, research, and training
- Initial work validated MoH clinical treatment algorithms for sexually transmitted infections
- Currently works on variety of areas: cancer, HIV, malaria, obstetrics, gynecology, and pediatrics, mental health, general non-communicable diseases and capacity building of local Malawians

Research Focus Areas, <https://globalhealth.unc.edu/malawi/cancerprogram/research-areas/>

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**Principles of Collaboration**

**UNC Project Malawi:** To identify innovative, culturally acceptable, and affordable methods to improve the health of the people of Malawi through research, capacity building, and care.

**UNC School of Nursing:** To build capacity and training of nurses in Malawi through research, education, and practice opportunities in oncology nursing.

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December 2018 Visit

- Malawian delegation visited UNC Lineberger Comprehensive Cancer Center, June 2018
- Need assessment
  - Kamuzu Central Hospital (KCH)
  - Kamuzu College of Nursing (KCN)
  - Malawi Palliative Care
  - Malawi Ministry of Health
- Build oncology nursing capacity in Malawi

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### December 2018 Assessment

<b>Develop</b>	Short modular basic oncology nursing courses.
<b>Engage</b>	Faculty at Kamuzu College of Nursing and Kamuzu Central Hospital.
<b>Provide</b>	Mentorship to Drs. Chifundo Zimba and Agatha Bula on research proposals and obtain pilot funding.

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### Building Capacities



FACULTY      EDUCATION      PRACTICE      RESEARCH

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### Education Capacity Building

Drs. Bula and Bryant presented about global cancer care on June 5, 2019 to UNC School of Nursing students

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### Education Capacity Building



**Virtual cancer education sessions to ~50 nurses including KCN faculty**

- Introduction to Cancer, Cancer Treatment, and common cancers in Malawi

**Lack of resources for oncology nursing education**

- Provided additional oncology nursing books through Oncology Nursing Society and housed at UNC Project Library
- Made donations for Kamuzu Central Hospital Oncology Department
- Dropbox repository

**KCN will implement BScN in Oncology Nursing (2 years) Oct/Nov 2019**

- Build capacity of baccalaureate degree nurses
- Inspire students to consider oncology nursing as a specialty area

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#### What is the role of the oncology nurse leader in building oncology nursing capacity in Malawi?

**Samuel Bingo MScN, BScN**  
Oncology Nurse Leader

*Clinical Journal of Oncology Nursing, 2020, 24 (2), 215*

...responsibility goes and not being changed with negative, I have designed to address the problem which would be to give...  
...While the nursing of the Malawi Central Hospital of Malawi...  
...the development and growth...  
...the lack of oncology nursing education in Malawi...  
...the capacity and potential ability, thereby giving...  
...the capacity and potential ability, thereby giving...  
...the capacity and potential ability, thereby giving...

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**Evaluating the Knowledge Change Before and After Continuing Cancer Education in Malawian Nurses**

Hotchkiss, J., Bula, A., Zimba, C., Binga, S., Chinkhata, M., Song, L., & Bryant, A.L. (2023). Evaluating the Knowledge Change before and after Continuing Cancer Education in Malawian Nurses. *Journal of Cancer Education*, 38(1), 1624-1628.

**Abstract:** The study evaluated the knowledge of various oncology topics in Malawi before and after a continuing education program on oncology. The knowledge of cancer epidemiology, prevention, and nursing care of cancer patients among Malawi nurses was assessed. Pre-test and post-test were conducted to assess the knowledge of various oncology topics. The results showed a significant increase in knowledge scores for all topics after the continuing education program. The mean score for the pre-test was 5.8 (SD = 1.5) and for the post-test was 7.2 (SD = 1.2). The mean change from pre-test to post-test was 1.4 (SD = 1.5). The mean change from pre-test to post-test was significant for all topics (p < 0.05).

**Keywords:** Cancer Education, Nurse Knowledge.

**Introduction:** The burden of cancer is high in Malawi, with an increasing incidence of cancer deaths. The country is ranked 11th globally in cancer deaths. The high burden of cancer in Malawi is due to a combination of factors, including the high prevalence of human papillomavirus (HPV) infection, which is a major cause of cervical cancer. Other factors include the high prevalence of tobacco use, which is a major cause of lung cancer, and the high prevalence of alcohol use, which is a major cause of liver cancer. The high burden of cancer in Malawi is a significant public health problem that requires urgent attention. This study was conducted to evaluate the knowledge of various oncology topics among Malawian nurses before and after a continuing education program on oncology. The study was designed to assess the impact of continuing education on the knowledge of various oncology topics among Malawian nurses. The study was conducted in a tertiary care hospital in Lilongwe, Malawi. The study was conducted over a period of 6 months. The study was designed to assess the impact of continuing education on the knowledge of various oncology topics among Malawian nurses. The study was designed to assess the impact of continuing education on the knowledge of various oncology topics among Malawian nurses. The study was designed to assess the impact of continuing education on the knowledge of various oncology topics among Malawian nurses.

Evaluating Knowledge Change Before and After Continuing Cancer Education in Malawian Nurses

Journal of Cancer Education 2023, 38:1624-1628

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Horizontal lines for taking notes on slide 34.

**Evaluating Knowledge Change Before and After Continuing Cancer Education in Malawian Nurses**

- Goal: Assess the impact of virtual education programs on nursing knowledge of various oncology topics
- Design: Pre-Post Test Design
- Topics:
  - Cancer Screening
  - Survivorship
  - Radiation Therapy
  - Complementary and Alternative Therapy Use in Oncology
- Results: Positive knowledge change in all areas

Hotchkiss, J., Bula, A., Zimba, C., Binga, S., Chinkhata, M., Song, L., & Bryant, A.L. (2023). Evaluating the Knowledge Change before and after Continuing Cancer Education in Malawian Nurses. *Journal of Cancer Education*, 38(1), 1624-1628. doi: 10.1007/s13187-023-02310-y.

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**Acknowledgements**

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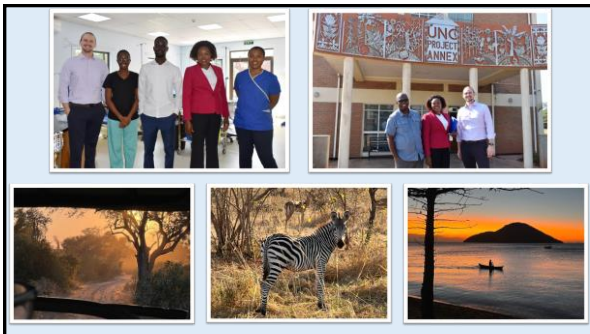
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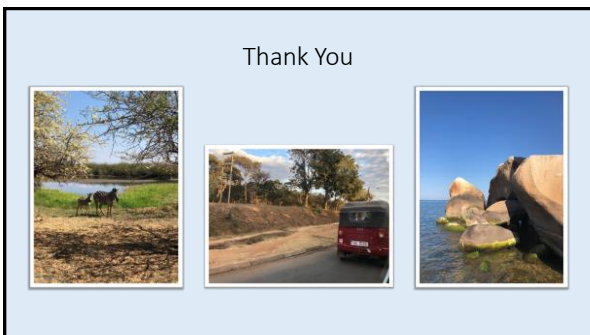
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Pharmacy Without Borders:  
Hematology/Oncology Care in Ethiopia

Benyam Mulneh, PharmD, BCO, CPP  
November 16, 2023

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If you could work/make an impact in any other part of the world (other than the United States) where would it be?

Nobody has responded yet.  
Hang tight! Responses are coming in.

Start the presentation to see live content. For screen share software, share the entire screen. Get help at [poller.com/app](https://poller.com/app)

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**My Research Goals:**  
**Optimize Chemotherapy Use in Clinical Practice**

1. Develop strategies to improve medication adherence in clinical practice
2. Optimize tolerability and safety of chemotherapy in cancer patients
3. Promote access to safe and affordable chemotherapy to cancer patients in the United States and beyond

Medication Adherence  
Equity  
Safety and Quality  
Access to Care

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### How to integrate global health into your career...

- Pursue post-graduation fellowship/training in global health
- Perhaps consider an MPH
- Search for full time positions (universities, public health agencies, abroad...)

- Once you have established your career in a clinical or industry setting, express to your employer of your global health interest
- Identify partners through professional organizations
- Over the long term, work to align your "day job" with your global health interests over time.

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### My Path... Less straightforward

- 2010: Graduated from Pharmacy School
- 2011: Trip to Malawi as a resident
- 2012: Started working at UNC Health as a Clinical Pharmacist
- 2015: Personal trip to Ethiopia (opportunity to teach)
- 2017: First rotation experience for trainees
- 2018: UNC-Ethiopia alliance formalized
- 2019: Started as a faculty member at UNC School of Pharmacy

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### Global Health Challenges

Pharmacy, Cancer and Beyond

- Fragile medication supply chains
- Narrow therapeutic drugs
- Lack of data to drive decisions
- Healthcare worker safety

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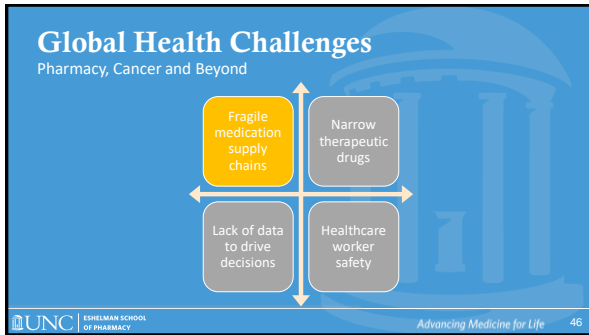
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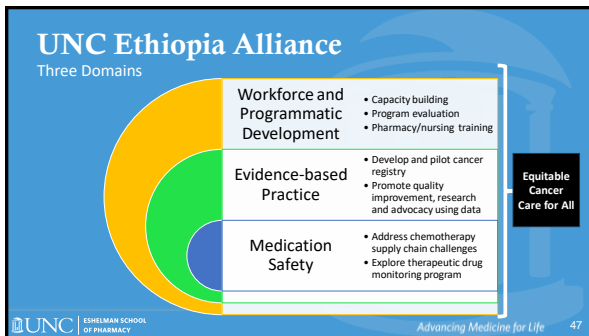
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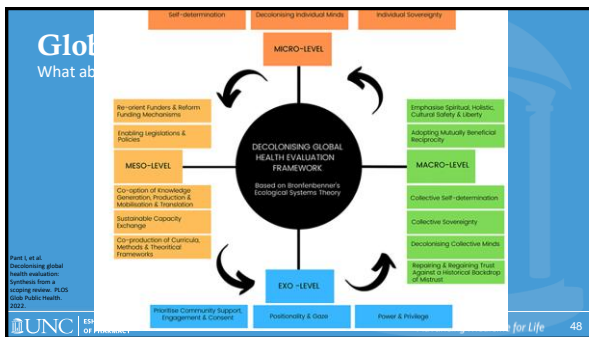
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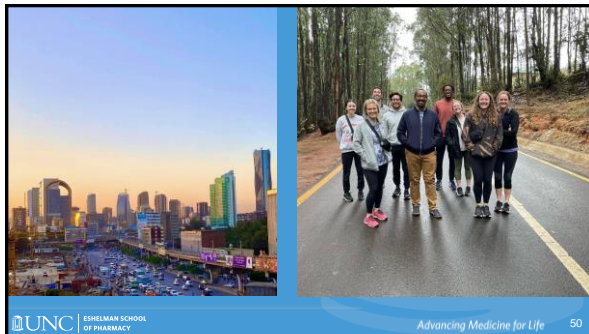
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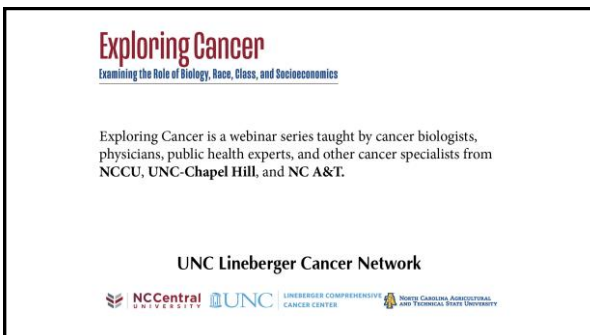
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**Exploring Cancer**  
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[exploringcancer.org/recordings](https://exploringcancer.org/recordings)

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**Exploring Cancer**  
Examining the Role of Biology, Race, Class, and Socioeconomics

**Series Survey**

Please keep a look out for a series survey next week to help us prepare for 2024!

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**Exploring Cancer**  
Examining the Role of Biology, Race, Class, and Socioeconomics

**Thank you for participating!**

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 Call: (919) 445-1000

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