



MAKING
Hope
A REALITY



FRONTIERS IN CANCER
prevention
& **control**



HOLLINGS CANCER CENTER
MEDICAL UNIVERSITY OF SOUTH CAROLINA
CHARLESTON, SOUTH CAROLINA

HOLLINGS CANCER CENTER THE **CANCER PREVENTION** & **CONTROL PROGRAM**

Under the leadership of Anthony J. Alberg, PhD, MPH, Associate Director for Cancer Prevention and Control, and Marvella E. Ford, PhD, Associate Director for Cancer Disparities, the Hollings Cancer Center places a premium on building an interdisciplinary Cancer Prevention & Control research program that addresses **epidemiology, primary prevention, early detection, and survivorship.** **Cancer disparities** is a focus that cuts across all these areas.

OUR MISSION

Our mission is to use epidemiology and prevention and control research to advance understanding of the causes of cancer, to develop new methods to detect or prevent cancer, and to apply this knowledge to reduce the occurrence of cancer. For cancer patients, we seek to increase survival and enhance quality of life.



EPIDEMIOLOGY

The aim of epidemiologic research is to identify the causes of cancer. For example, advancing what we know about the links between cancer and personal characteristics such as genetic predisposition and lifestyle factors like tobacco use, diet, exercise, and obesity. Learning more about the specific causes of cancer will lead to new prevention strategies.

Funding from the National Cancer Institute (NCI) supports our current research exploring genetic variation in DNA repair pathways as a possible explanation for the excess risk of subsequent malignancies in people with a history of non-melanoma skin cancer.

PRIMARY PREVENTION

Preventing cancer is the basis of primary prevention research. Findings from primary prevention research are used to develop effective intervention strategies that can be widely disseminated to diverse populations.

★ Our primary prevention research includes:

- Evaluating racial and ethnic differences in smokers' perceptions of nicotine replacement therapy.
- A study funded by the National Institute of Health (NIH) to test a behavioral intervention to motivate recalcitrant smokers to quit.
- A study funded by the NIH to study stimulus control among adolescent occasional smokers.
- A study funded by the NCI to identify barriers to administering the Human Papilloma Virus (HPV) vaccine to adolescent girls. The focus is on medically underserved girls of different ethnic backgrounds.

Cigarette smoking causes one-third of all cancer deaths. An emphasis of our program is **SMOKING PREVENTION** and **CESSATION**.



CHEMOPREVENTION

Chemoprevention is a unique area of primary prevention that explores the use of natural and synthetic agents that inhibit the development of cancer.



Examples of our chemoprevention research include:

- Exploring the ability of catechins in green tea to alter cell signaling pathways corrupted by tumor cells.
- Testing whether antioxidant compounds in common dietary herbal supplements suppress carcinogenesis by inducing cell death.



The South Carolina Center for **BOTANICAL MEDICINE**, established by MUSC's Hollings Cancer Center and Clemson University, will explore the potential of state-grown vegetables and herbs to fight disease and be developed into medicines.

EARLY DETECTION

Early detection research explores ways to identify precancerous and cancerous conditions while they are easily treatable.



Our initiatives include:

- Investigating better ways to differentiate benign from malignant nodules observed on CT scans.
- Studying ways to address barriers to cancer screening.
- A project funded by AT&T Foundation to evaluate prostate cancer screening and education programs for rural and underserved communities.
- Funding from the Centers for Disease Control & Prevention (CDC) to develop strategies to increase breast and cervical cancer screening among African Americans.

SURVIVORSHIP

Hollings Cancer Center is developing a comprehensive survivorship program that includes case management, navigation, and support services from diagnosis through the acute phase of treatment and beyond. With NCI funding, we are conducting a study evaluating the psychosocial and physical benefits to cancer survivors of participating in different types of exercise programs such as dragon boat paddling and walking.

HOLLINGS CANCER CENTER
is studying the benefits of physical
activity for cancer survivors.



Support Hollings Cancer Center's Prevention and Control efforts by making a gift to the Medical University of South Carolina Foundation's Hollings Cancer Center Director's Prevention and Control Fund. Mail to the Hollings Cancer Center, Office of Development, 86 Jonathan Lucas Street, Charleston, SC 29425, or make your gift on-line by visiting our website at hcc.musc.edu. For more information on giving, to take a tour, or to volunteer, please call 843.792.9335. Thank you for your support.



FOR MORE INFORMATION, CONTACT:

86 Jonathan Lucas Street | PO Box 250955 | 843.792.3922
Charleston, SC 29425 | <http://hcc.musc.edu>