

Application for Geospatial Analysis for Cancer Research in Africa Training
African Organization for Research and Training in Cancer
November 2-3, 2025

Training overview

Sub-Saharan Africa faces a growing burden of cancer, exacerbated by an aging population, rapid urbanization, and environmental pollution. Geospatial analysis, defined as the use of geographic data to compare rates of disease and use of health services across different places and people, can generate insights to improve targeting of cancer prevention and control strategies. Yet, few opportunities are available to African oncology researchers for gaining hands-on training in geospatial methods relevant to oncology and cancer epidemiologic research. *African scientists are best placed to study these patterns and develop context-appropriate responses.*

This short course, building on successful delivery through an online platform and hybrid model, is designed to promote awareness and strengthen capacity among African cancer researchers and health professionals. The training will use publicly available environmental and health datasets and open-source tools, reducing costs and promoting sustainable engagement after the workshop concludes. Participants will be selected based on their potential to apply these skills in academic, clinical, or public health settings and to disseminate knowledge within their home institutions. The program will foster development of collaborative research manuscripts and funding proposals focused on cancer control in African contexts.

This initiative addresses an urgent need in global cancer control and will foster long-term global collaborations to generate impactful, spatially-informed cancer research.

This training has three key objectives:

1. Introduce key concepts in geospatial analysis to African Organization for Research and Training in Cancer members
2. Disseminate technical geospatial analysis skills using publicly available data
3. Foster networks and mentorship for early career researchers seeking to incorporate geospatial environmental, health services, and cancer data into epidemiology research

Who should apply?

We invite AORTIC members with backgrounds in public health, medical school, nursing, or other allied health professions who are interested in geospatial analysis to apply. Some prior coursework in epidemiologic methods and biostatistics is an advantage, but not required. For invited applicants who are inexperienced R users, we will provide supplementary materials prior to the start of the course to provide basic instruction in software operation and analytic procedures.

Location and Dates: The workshop will take place during the AORTIC conference in Hammamet, Tunisia at the Medina Convention Centre.

Address: 9G9M+796, Yasmine Hammamet, Tunisia

Sunday, November 2

9:00am-12:00pm

Room Cesar 3

Monday, November 3

2:00pm-5:00pm

Room Cesar 3

Important Dates

Application deadline	
Period for accepting applications	7/18/25-9/19/25
Notify invited applicants	9/29/25
Pre-workshop assignments (GEE, R) for selected applicants	10/13/25
Workshop (Dates/Times)	11/02/25-11/03/25

Workshop facilitators and planning committee:**Hari S. Iyer, ScD***Assistant Professor, Rutgers Cancer Institute**Director, Geospatial Data Hub, Rutgers Center for Climate, Health and Health Care*

Dr. Iyer's research investigates how neighborhood and environmental factors influence the risk and progression of prostate cancer, particularly in high-risk populations such as Black/African American men. He has co-authored over 85 publications examining how environmental risk factors and geographic access to care influences cancer and other health outcomes, including the Lancet Commission on Diagnostics as a geospatial expert. His research is funded by Prostate Cancer Research, UK and the National Institute of Environmental Health Sciences.

Tara M. Friebe-Klingner, PhD, MPH*Assistant Research Professor, Rutgers Global Health Institute*

Dr. Friebe is a cancer epidemiologist specializing in global oncology and implementation science, with a focus on the prevention, early detection, and treatment of breast and cervical cancer in sub-Saharan Africa. Her research addresses disparities in cancer care in low-resource settings, with a particular emphasis on understanding and improving access to cancer services in Botswana and Tanzania. She has investigated geographic, clinical, and sociodemographic factors affecting patients, identified sub-districts with disproportionately high cancer rates, and demonstrated associations between travel time and stage at diagnosis—informing strategies to promote equitable access to care.

Temidayo Fadelu, MD, MPH*Assistant Professor, Harvard Medical School**Deputy Director, Center for Global Health Equity, Division of Population Sciences, Dana-Farber Cancer Institute*

Dr. Fadelu engages implementation science research in global oncology. His work has been focused on Rwanda and Haiti, identifying gaps in care of patients with breast cancer as well as developing and evaluating interventions to address these gaps. His research has incorporated geographic techniques in addressing access to cancer care. His research is supported by the Conquer Cancer Foundation, Breast Cancer Research Foundation, Robert Wood Johnson Foundation, and the American Association for Cancer Research.

Costs

Participants will be expected to cover costs of travel, lodging, and registration for AORTIC, but there are no additional costs for this training. Participants must have a laptop computer to allow participation in class exercises.

In order to apply, please complete the survey on the following page and submit by email to: aortic.gis@gmail.com

Job Title:**Name:** _____**Primary Institutional Affiliation:** _____**Highest degree earned:**

- ☐ Master's
- ☐ MBBS/MD
- ☐ PhD
- ☐ Other _____

Please choose your major for the degrees listed.

- ☐ Public Health
- ☐ Geographic Information Systems
- ☐ Statistics/Biostatistics
- ☐ Epidemiology
- ☐ Medicine
- ☐ Computer science
- ☐ Data Science
- ☐ Other _____

Briefly (100 words) describe your research interests.

Please tick the statistical package(s) you are familiar with:

- R
- SAS
- Stata
- SPSS
- ArcGIS

Do you conduct your own statistical analysis for your research?

- ☐ Yes
☐ No

In no more than 200 words, please share reasons for your interest in this workshop and how you intend to apply it in your research, cascade to your colleagues and support the project for scaling up

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Please submit by email to aortic.gis@gmail.com