

**TOMI F. AKINYEMIJU, PhD, MS.**

Associate Professor, Department of Epidemiology  
Assistant Dean for Inclusive Excellence  
University of Kentucky, Lexington  
Phone: 517-980 1144 | Email: [tomiakin@uab.edu](mailto:tomiakin@uab.edu)

**ACADEMIC BACKGROUND**

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<b>Harvard University Medical School</b> Cancer Biology and Therapeutics Program	2016-2017
<b>Columbia University Mailman School of Public Health, New York NY</b> Post-Doctoral Fellowship	2012-2014
<b>University of Michigan School of Public Health, Ann Arbor MI</b> Epidemiological Science/ Global Health Concentration Doctor of Philosophy (PhD)	May 2012
<b>Michigan State University College of Human Medicine, East Lansing MI</b> Epidemiology/ Specialization in International Development Master of Science (M.S)	May 2006
<b>Michigan State University College of Social Sciences, East Lansing MI</b> Psychology Bachelor of Science (B.S)	August 2004

**ACADEMIC APPOINTMENTS**

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<b>University of Kentucky</b> Department of Epidemiology and Markey Cancer Center Associate Professor	2017-present
<b>University of Alabama at Birmingham School of Public Health</b> Department of Epidemiology Assistant Professor	2014-2017
<b>UAB Comprehensive Cancer Center</b> Cancer Control and Population Sciences Associate Scientist	2014-2017
<b>UAB Sparkman Center for Global Health</b> Scientist	2016-2017
<b>UAB Comprehensive Diabetes Center</b> Associate Scientist	2016- 2017
<b>Columbia University Mailman School of Public Health, New York NY</b> Department of Epidemiology Post-Doctoral Research Scientist	2012-2014

## TEACHING EXPERIENCE

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### University of Alabama at Birmingham

- Epidemiology of Chronic Diseases (EPI 602)  
Course Leader, Cancer Epidemiology Fall 2015, 2016
- Guest Lectures 2014-2017
  - EPI 710- Case Control Studies
  - HB 600- Social and Behavioral Sciences in Public Health
  - Community Research Fellows Program
  - EPI 713- Cancer Epidemiology
  - Rigor and Transparency in NIH Grant Applications
  - Community Research Fellows Training Program
- Master's Directed Research (EPI 698)
  - Independent Research Credits for MPH students Summer 2015
- Doctoral Directed Research (EPI 798)
  - Independent Research Credits for PhD students Summer and Fall 2015, Summer 2016

### Columbia University Mailman School of Public Health, New York NY

- Power and Sample Size Calculations Using SAS  
Course Instructor 2014-2017
- Epidemiology P8400: Principles of Epidemiology III: Applied Epidemiologic Analysis  
Teaching Assistant and Lab Instructor Fall 2013

### University of Michigan School of Public Health, Ann Arbor MI

- Epidemiology EPID 621: Cancer Epidemiology  
Guest Lecturer Winter 2007
- Epidemiology EPID 622: Cancer Epidemiology in Special Populations  
Guest Lecturer Winter 2007
- Community Based Research Methods  
Field training for Nigerian nurses and community health workers  
Instructor May-July 2008
- Protecting Human Subject Participants  
Field training for Nigerian nurses and community health workers  
Instructor May-July 2008

## MENTORING/ADVISING

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### PhD Students

- Justin Moore\*
- Gurudatta Naik
- DeBran Tarver
- Abby Zhang\*
- Modupe Durojaiye\*

\*Dissertation committee member

### MPH/MSPH Students

- Grace Meng¶
- Kemi Ogunsina
- Swati Shakuja
- Wole Adegbala
- Taylor Wyatt
- Xueyang Zhao¶

¶ Thesis committee member

## RESEARCH ACTIVITIES

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- **Social Determinants of Cancer Health Disparities- Racial, Socio-economic and Healthcare Access:** This line of research uses secondary datasets from US and globally to examine how disparities are initiated and perpetuated across the cancer prevention continuum. This line of research has resulted in over 20 manuscripts till date focused on disparities in: cancer risk factors, screening, incidence, treatment and survival. Datasets used for this research include: Surveillance Epidemiology and Ends Results data, Nationwide Inpatient Sample, NIH AARP Diet and Health dataset, and the Study of Global Ageing and Health. The goal of this research is to identify the social determinants of cancer disparities and inform strategies for improved tailoring of prevention, screening and treatment and an ultimate goal of eliminating disparities in cancer.
- **Metabolic Dysregulation and Racial Disparities in Cancer Aggressiveness and Outcome:** This line of research involves the use of prospective cohort data (the Reason for Geographic Disparities in Stroke Study) and primary data collection (Mechanisms for Established and Novel Risk Factors for Breast Cancer in Women of African Descent [MEND, PI: Akinyemiju]). The goal is to identify and describe the molecular epidemiology of cancer disparities in people of African descent (African-Americans, Africans) in order to understand the etiology of aggressive cancers in this population. A major risk factor of interest in this line of research is the role of metabolic dysregulation such as obesity, high blood pressure, dyslipidemia and insulin resistance, in the development of aggressive subtypes of cancer in this population group, and the associated higher mortality rates above and beyond the impact of socio-economic status and access to healthcare.
- **Epigenetic Mechanisms in Cancer Health Disparities:** This line of research seeks to improve understanding of epigenetic changes in key cancer genes due to environmental/lifestyle factors and genetic background. This line of research may provide critical information on the epigenetic dysregulation due to metabolic syndrome and associated risk factors, how these relate to alterations in breast cancer genes, whether these associations differ by race, and if these explain part of the increased aggressiveness of certain cancers in people of African descent. This study utilizes biological samples (blood, tumor and normal) from the multi-center case-control MEND study of newly diagnosed breast cancer patients in Ghana and Nigeria, with matched healthy controls from an NIH funded community-based cohort study of Chronic Kidney Disease in Ghana and Nigeria (PI: Ojo). Clinical, epidemiologic and epigenetic data from this study will be compared with data from African-American and White breast cancer patients in the SEER Residual Tumor Registry database in future analysis.

## PUBLICATIONS (49 published and in press)

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### AS FIRST AUTHOR

1. **Akinyemiju T\***, Ogunsina K, Sakhuja S, Ogbhodo V, Braithwaite D. Life-course socioeconomic status and breast and cervical cancer screening: analysis of the WHO's Study on Global Ageing and Adult Health (SAGE). *BMJ Open*. 2016 Nov 22;6(11):e012753. doi: 10.1136/bmjopen-2016-012753. PubMed PMID: 27881528; PubMed Central PMCID: PMC5129035.
2. **Akinyemiju T\***, Zhao X, Sakhuja S, Jolly P. Life-course socio-economic status and adult BMI in Ghana; analysis of the WHO study on global ageing and adult health (SAGE). *Int J Equity Health*. 2016 Nov 15;15(1):185. PubMed PMID: 27846854; PubMed Central PMCID: PMC5111182.
3. **Akinyemiju T\***, Ogunsina K, Okwali M, Sakhuja S, Braithwaite D. Lifecourse socioeconomic status and cancer-related risk factors: Analysis of the WHO study on global ageing and adult health (SAGE). *Int J Cancer*. 2017 Feb 15;140(4):777-787. doi: 10.1002/ijc.30499. PubMed PMID: 27813060.

4. **Akinyemiju T\***, Sakhuja S, Vin-Raviv N. Response to Letter to the Editor: Vitamin D status may help explain racial disparities in breast cancer hospitalization outcomes. *Cancer Epidemiol.* 2016 Dec;45:175-176. doi: 10.1016/j.canep.2016.09.009. PubMed PMID: 27697408.
5. **Akinyemiju T\***, Meng Q, Vin-Raviv N. Race/ethnicity and socio-economic differences in colorectal cancer surgery outcomes: analysis of the nationwide inpatient sample. *BMC Cancer.* 2016 Sep 5;16:715. doi: 10.1186/s12885-016-2738-7. PubMed PMID: 27595733; PubMed Central PMCID: PMC5011892.
6. **Akinyemiju T\***, Tehranifar P, Flom JD, Liao Y, Wei Y, Terry MB. Early life growth, socioeconomic status, and mammographic breast density in an urban US birth cohort. *Ann Epidemiol.* 2016 Aug;26(8):540-545.e2. doi: 10.1016/j.annepidem.2016.06.011. PubMed PMID: 27497679.
7. **Akinyemiju T\***, Moore JX, Pisu M, Lakoski SG, Shikany J, Goodman M, Judd SE. A prospective study of dietary patterns and cancer mortality among Blacks and Whites in the REGARDS cohort. *Int J Cancer.* 2016 Nov 15;139(10):2221-31. doi: 10.1002/ijc.30287. PubMed PMID: 27459634; PubMed Central PMCID: PMC5041524.
8. **Akinyemiju T\***, Meng Q, Vin-Raviv N. Association between body mass index and in-hospital outcomes: Analysis of the nationwide inpatient database. *Medicine (Baltimore).* 2016 Jul;95(28):e4189. doi: 10.1097/MD.00000000000004189. PubMed PMID: 27428218; PubMed Central PMCID: PMC4956812.
9. **Akinyemiju T\***, Sakhuja S, Vin-Raviv N. Racial and socio-economic disparities in breast cancer hospitalization outcomes by insurance status. *Cancer Epidemiol.* 2016 Aug;43:63-9. doi: 10.1016/j.canep.2016.06.011. PubMed PMID: 27394678.
10. **Akinyemiju T\***, Moore JX. Data on burden of comorbidities in the united states and medicaid expansion status. *Data Brief.* 2016 May 20;8:120-2. doi: 10.1016/j.dib.2016.05.019. PubMed PMID: 27294179; PubMed Central PMCID: PMC4889874.
11. **Akinyemiju T\***, Moore JX, Ojesina AI, Waterbor JW, Altekruise SF. Racial disparities in individual breast cancer outcomes by hormone-receptor subtype, area-level socio-economic status and healthcare resources. *Breast Cancer Res Treat.* 2016 Jun;157(3):575-86. doi: 10.1007/s10549-016-3840-x. PubMed PMID: 27255533; PubMed Central PMCID: PMC4912843.
12. **Akinyemiju T\***, Jha M, Moore JX, Pisu M. Disparities in the prevalence of comorbidities among US adults by state Medicaid expansion status. *Prev Med.* 2016 Jul;88:196-202. doi: 10.1016/j.ypmed.2016.04.009. PubMed PMID: 27095325; PubMed Central PMCID: PMC4902718.
13. **Akinyemiju T\***, Waterbor JW, Pisu M, Moore JX, Altekruise SF. Availability of Healthcare Resources and Colorectal Cancer Outcomes Among Non-Hispanic White and Non-Hispanic Black Adults. *J Community Health.* 2016 Apr;41(2):296-304. doi: 10.1007/s10900-015-0096-z. PubMed PMID: 26446012.
14. **Akinyemiju T\***, Pisu M, Waterbor JW, Altekruise SF. Socioeconomic status and incidence of breast cancer by hormone receptor subtype. *Springerplus.* 2015 Sep 17;4:508. doi: 10.1186/s40064-015-1282-2. PubMed PMID: 26405628; PubMed Central PMCID: PMC4573746.
15. **Akinyemiju T\***, Moore JX, Altekruise SF. Breast cancer survival in African-American women by hormone receptor subtypes. *Breast Cancer Res Treat.* 2015 Aug;153(1):211-8. doi: 10.1007/s10549-015-3528-7. PubMed PMID: 26250393.
16. **Akinyemiju T\***, Vin-Raviv N, Chavez-Yenter D, Zhao X, Budhwani H. Race/ethnicity and socio-economic differences in breast cancer surgery outcomes. *Cancer Epidemiol.* 2015 Oct;39(5):745-51. doi: 10.1016/j.canep.2015.07.010. PubMed PMID: 26231096.

17. **Akinyemiju T\***, McDonald JA, Lantz PM. Health care access dimensions and cervical cancer screening in South Africa: analysis of the world health survey. *BMC Public Health*. 2015 Apr 15;15:382. doi: 10.1186/s12889-015-1686-5. PubMed PMID: 25886513; PubMed Central PMCID: PMC4404041.
18. **Akinyemiju T**, Genkinger JM, Farhat M, Wilson A, Gary-Webb TL, Tehranifar P. Residential environment and breast cancer incidence and mortality: a systematic review and meta-analysis. *BMC Cancer*. 2015 Mar 28;15:191. doi: 10.1186/s12885-015-1098-z. PubMed PMID: 25885593; PubMed Central PMCID: PMC4396806.
19. **Akinyemiju T\***, McDonald JA, Tsui J, Greenlee H. Adherence to cancer prevention guidelines in 18 African countries. *PLoS One*. 2014 Aug 21;9(8):e105209. doi: 10.1371/journal.pone.0105209. PubMed PMID: 25144291; PubMed Central PMCID: PMC4140739.
20. **Akinyemiju T\***, Soliman AS, Copeland G, Banerjee M, Schwartz K, Merajver SD. Trends in breast cancer stage and mortality in Michigan (1992-2009) by race, socioeconomic status, and area healthcare resources. *PLoS One*. 2013 Apr 29;8(4):e61879. doi: 10.1371/journal.pone.0061879. PubMed PMID: 23637921; PubMed Central PMCID: PMC3639257.
21. **Akinyemiju T\***. Risk of asynchronous contralateral breast cancer: multiple approaches for a complex issue. *Gland Surg*. 2013 May;2(2):110-3. doi: 10.3978/j.issn.2227-684X.2013.05.02. PubMed PMID: 25083468; PubMed Central PMCID: PMC4115727.
22. **Akinyemiju T\***, Soliman AS, Johnson NJ, Altekruse SF, Welch K, Banerjee M, Schwartz K, Merajver S. Individual and neighborhood socioeconomic status and healthcare resources in relation to black-white breast cancer survival disparities. *J Cancer Epidemiol*. 2013;2013:490472. doi: 10.1155/2013/490472. PubMed PMID: 23509460; PubMed Central PMCID: PMC3590635.
23. **Akinyemiju T\***. Socio-economic and health access determinants of breast and cervical cancer screening in low-income countries: analysis of the World Health Survey. *PLoS One*. 2012;7(11):e48834. doi: 10.1371/journal.pone.0048834. PubMed PMID: 23155413; PubMed Central PMCID: PMC3498259.
24. **Akinyemiju T\***, Soliman AS, Yassine M, Banerjee M, Schwartz K, Merajver S. Healthcare access and mammography screening in Michigan: a multilevel cross-sectional study. *Int J Equity Health*. 2012 Mar 21;11:16. doi: 10.1186/1475-9276-11-16. PubMed PMID: 22436125; PubMed Central PMCID: PMC3414751.

#### AS SENIOR AUTHOR

25. Naik G<sup>¶</sup>, **Akinyemiju T\***. Disparities in hospitalization outcomes among African-American and White prostate cancer patients. *Cancer Epidemiol*. 2017 Feb;46:73-79. doi: 10.1016/j.canep.2016.12.001. PubMed PMID: 28056390.
26. Adebala O<sup>¶</sup>, Martin KD, Otuada D, **Akinyemiju T\***. Diabetes Mellitus with Chronic Complications in Relation to Carotid Endarterectomy and Carotid Artery Stenting Outcomes. *J Stroke Cerebrovasc Dis*. 2017 Jan;26(1):217-224. doi: 10.1016/j.jstrokecerebrovasdis.2016.09.012. PubMed PMID: 27810149.
27. Okwali M<sup>¶</sup>, Greenlee H, Ginindza T, Jolly P, **Akinyemiju T\***. Adherence to cancer prevention guidelines in South Africa is associated with health care access. *Int Health*. 2016 May;8(3):211-9. doi: 10.1093/inthealth/ihv044. PubMed PMID: 26198028.

28. Moore, JX<sup>¶</sup>, Chaudhary N, **Akinyemiju T\***. Metabolic Syndrome Prevalence by Race/Ethnicity and Sex in the United States, National Health and Nutrition Examination Survey, 1988-2012. Preventing Chronic Diseases, In Press

AS CONTRIBUTING AUTHOR

29. Forouzanfar MH, Liu P, Roth GA, Ng M, Biryukov S, Marczak L, Alexander L, Estep K, Hassen Abate K, **Akinyemiju TF**, Ali R, Alvis-Guzman N, Azzopardi P, Banerjee A, Barnighausen T, Basu A, Bekele T, Bennett DA, Biadgilign S, Catalá-López F, Feigin VL, Fernandes JC, Fischer F, Gebru AA, Gona P, Gupta R, Hankey GJ, Jonas JB, Judd SE, Khang YH, Khosravi A, Kim YJ, Kimokoti RW, Kokubo Y, Kolte D, Lopez A, Lotufo PA, Malekzadeh R, Melaku YA, Mensah GA, Misganaw A, Mokdad AH, Moran AE, Nawaz H, Neal B, Ngalesoni FN, Ohkubo T, Pourmalek F, Rafay A, Rai RK, Rojas-Rueda D, Sampson UK, Santos IS, Sawhney M, Schutte AE, Sepanlou SG, Shifa GT, Shiue I, Tedla BA, Thrift AG, Tonelli M, Truelsen T, Tsilimparis N, Ukwaja KN, Uthman OA, Vasankari T, Venketasubramanian N, Vlassov VV, Vos T, Westerman R, Yan LL, Yano Y, Yonemoto N, Zaki ME, Murray CJ. **Global Burden of Hypertension and Systolic Blood Pressure of at Least 110 to 115 mm Hg, 1990-2015**. JAMA. 2017 Jan 10;317(2):165-182. doi: 10.1001/jama.2016.19043. PubMed PMID: 28097354.
30. Zhang X<sup>¶</sup>, Li Y, **Akinyemiju T**, Ojesina AI, Buckhaults P, Liu N, Xu B, Yi N. Pathway-Structured Predictive Model for Cancer Survival Prediction: A Two-Stage Approach. Genetics. 2017 Jan;205(1):89-100. doi: 10.1534/genetics.116.189191. PubMed PMID: 28049703; PubMed Central PMCID: PMC5223526.
31. Vin-Raviv N, **Akinyemiju T**, Meng Q, Sakhuja S, Hayward R. Marijuana use and inpatient outcomes among hospitalized patients: analysis of the nationwide inpatient sample database. Cancer Med. 2017 Jan;6(1):320-329. doi: 10.1002/cam4.968. PubMed PMID: 27891823; PubMed Central PMCID: PMC5269570.
32. Li Y, Zhang X, **Akinyemiju T**, Ojesina A, Szychowski J, Liu N, Yi N. A two-stage approach for combining gene expression and mutation with clinical data improves survival prediction in myelodysplastic syndromes and ovarian cancer. Journal of Bioinformatics and Genomics, 2016, 1-1; doi: 10.18454/jbg.2016.1.1.2
33. GBD 2015 Maternal Mortality Collaborators. Global, regional, and national levels of maternal mortality, 1990-2015: a systematic analysis for the Global Burden of Disease Study 2015. Lancet. 2016 Oct 8;388(10053):1775-1812. doi: 10.1016/S0140-6736(16)31470-2. PubMed PMID: 27733286; PubMed Central PMCID: PMC5224694.
34. GBD 2015 Child Mortality Collaborators.. Global, regional, national, and selected subnational levels of stillbirths, neonatal, infant, and under-5 mortality, 1980-2015: a systematic analysis for the Global Burden of Disease Study 2015. Lancet. 2016 Oct 8;388(10053):1725-1774. doi: 10.1016/S0140-6736(16)31575-6. PubMed PMID: 27733285; PubMed Central PMCID: PMC5224696.
35. GBD 2015 Risk Factors Collaborators.. Global, regional, and national comparative risk assessment of 79 behavioural, environmental and occupational, and metabolic risks or clusters of risks, 1990-2015: a systematic analysis for the Global Burden of Disease Study 2015. Lancet. 2016 Oct 8;388(10053):1659-1724. doi: 10.1016/S0140-6736(16)31679-8. PubMed PMID: 27733284.
36. GBD 2015 Mortality and Causes of Death Collaborators.. Global, regional, and national life expectancy, all-cause mortality, and cause-specific mortality for 249 causes of death, 1980-2015: a systematic analysis for the Global Burden of Disease Study 2015. Lancet. 2016 Oct 8;388(10053):1459-1544. doi: 10.1016/S0140-6736(16)31012-1. PubMed PMID: 27733281.
37. GBD 2015 SDG Collaborators.. Measuring the health-related Sustainable Development Goals in 188 countries: a baseline analysis from the Global Burden of Disease Study 2015. Lancet. 2016 Oct 8;388(10053):1813-1850. doi:10.1016/S0140-6736(16)31467-2. PubMed PMID: 27665228; PubMed Central PMCID: PMC5055583.

38. GBD 2015 HIV Collaborators., Wang H, Wolock TM, Carter A, Nguyen G, Kyu HH, Gakidou E, Hay SI, Mills EJ, Trickey A, Msemburi W, Coates MM, Mooney MD, Fraser MS, Sligar A, Salomon J, Larson HJ, Friedman J, Abajobir AA, Abate KH, Abbas KM, Razek MM, Abd-Allah F, Abdulle AM, Abera SF, Abubakar I, Abu-Raddad LJ, Abu-Rmeileh NM, Abyu GY, Adebisi AO, Adedeji IA, Adelekan AL, Adofo K, Adou AK, Ajala ON, **Akinyemiju TF**, .... Zoeckler L, Zuhlke LJ, Lopez AD, Murray CJ. Estimates of global, regional, and national incidence, prevalence, and mortality of HIV, 1980-2015: the Global Burden of Disease Study 2015. *Lancet HIV*. 2016 Aug;3(8):e361-87. doi: 10.1016/S2352-3018(16)30087-X. PubMed PMID: 27470028; PubMed Central PMCID: PMC5056319.
39. Jolly PE, **Akinyemiju TF**, Jha M, Aban I, Gonzalez-Falero A, Joseph D. Temporal Variation and Association of Aflatoxin B<sub>1</sub> Albumin-Adduct Levels with Socio-Economic and Food Consumption Factors in HIV Positive Adults. *Toxins (Basel)*. 2015 Nov 30;7(12):5129-40. doi: 10.3390/toxins7124868. PubMed PMID: 26633502; PubMed Central PMCID: PMC4690118.
40. Vin-Raviv N, **Akinyemiju TF**, Galea S, Bovbjerg DH. Depression and Anxiety Disorders among Hospitalized Women with Breast Cancer. *PLoS One*. 2015 Jun 2;10(6):e0129169. doi: 10.1371/journal.pone.0129169. PubMed PMID: 26035180; PubMed Central PMCID: PMC4452789.
41. Tehranifar P, **Akinyemiju T**, Terry MB. Incidence rate of breast cancer in young women. *JAMA*. 2013 Jun 19;309(23):2433-4. doi: 10.1001/jama.2013.6461. PubMed PMID: 23780448; PubMed Central PMCID: PMC4072452.
42. Pham P, Williams L, Obot U, Padilla L, Aung M, **Akinyemiju T**, Carson A, Jolly P. Epidemiology of CHikungunya fever outbreak in Western Jamaica during July-December 2014. *Research and Reports in Tropical Medicine*.
43. Jolly P, Simangele M, Padilla L, Pettis J, Winston S, **Akinyemiju T**, Turner HJ, Ejiawoko A, Brooks R, Preko L and Preko P. Screening, prevalence, and risk factors for cervical lesions among HIV positive and HIV negative women in Swaziland. *BMC Public Health (2017) 17:218*.

KEY: \* Senior/Corresponding author; ¶Supervised student manuscript

## AWARDS and HONORS

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### ACTIVE

K01TW010271-01 (Akinyemiju)	10/01/2016-09/30/2021	9.0 CM
NIH/NCI/FIC	\$127,575 (Year 1 direct)	

#### **Metabolic Syndrome and Epigenetic Markers on Breast Cancer in Nigerian Women**

Breast cancer rates in Nigeria are increasing very rapidly, and are predominantly of aggressive sub-types with poor prognosis. However, few studies have determined the factors associated with the increasing rates. This study provides critical information on the influence of metabolic syndrome as a risk factor for breast cancer in this population, and examines potential biological mechanisms through which it influences breast cancer.

<b>Loan Repayment Program Grant</b>	08/01/2016-09/30/2018
NIH	\$35,000/year

Description: A competitive loan repayment program grant given to meritorious scientists with ongoing research projects in the area of health disparities

UAB Health Disparities Research Training Program	05/01/2016-09/01/2017
UAB School of Public Health Back of the Envelope Award	12/01/2015-12/01/2017
UAB Institutional	\$50,000 (direct)

### **Lifestyle Intervention to Ensure Cancer Survival**

Description: This project aims to test the feasibility of an intensive lifestyle intervention using low-carbohydrate diet and moderate physical activity to eliminate components and biomarkers of metabolic syndrome among African-American women with Triple Negative Breast Cancer.

Role: PI

**UAB Comprehensive Cancer Center Faculty Pilot Grant** 11/1 2015- 10/31 2017

UAB Institutional \$50,000

### **Epigenetic markers of aggressive breast cancers**

Description: The goal of this pilot grant is to procure breast cancer tumor tissue samples from the Surveillance Epidemiology and Ends Results Tumor Biorepository and characterize global DNA methylation and miRNA changes associated with breast cancer in African-American and European-American women.

Role: PI

## **PENDING**

R21CA215895 (Akinyemiju) 04/01/2017-03/31/2019 3.0 CM

NIH/NCI \$125,000 (Year 1 direct)

### **Healthcare Access and Racial Disparities in Cancer Treatment and Survival**

Black cancer patients may reside in neighborhoods with more abundant medical resources, but we observed in recent studies that this did not translate into higher utilization of cancer treatment or better survival outcomes compared with White breast cancer patients. The present study aims to more comprehensively examine other dimensions of healthcare access such as affordability and accessibility among Black and White breast cancer patients, and assess the relationship with guideline adherent treatment and 5-year survival rate. Without better understanding of factors predicting differential access to high quality and timely cancer care by race, disparities in breast cancer outcomes are likely to persist.

## **COMPLETED**

**UAB Faculty Development Grant** 09/2015-10/31/2016

UAB Institutional \$10,000

### **Adherence to cancer prevention guidelines and cancer mortality among older adults**

Description: The goal of this study is to examine racial differences in mortality rates due to cancer comparing Blacks and Whites in relation to adherence to cancer prevention guidelines (focused on obesity, physical activity, nutrition, smoking and alcohol) among an urban population of older adults.

Role: PI

2P30AG031054 (Burgio) 10/01/2015-09/30/2016 2.4 CM

NIH/NIA \$50,000 (direct)

### **Adherence to Cancer Prevention Guidelines and Racial Disparities in Cancer**

Primary prevention through adherence to cancer prevention guidelines may be the key to eliminating racial disparities in cancer incidence. We will examine the association between adherence and cancer incidence among older African-Americans. This information will provide evidence for intervention strategies aimed at improving adherence in this population.

Role: Project PI

### **NIH/NCI Training Program in Cancer Related-Populations Sciences**

Dates: September 2012-September 2014

Role: Post-Doctoral Research Scientist

Description: The purpose of this grant is to train the next generation of epidemiologists focused on several aspects of cancer research. The training program incorporates didactic training, weekly seminars focused on cancer prevention and outcomes research, research presentations and mentoring.



### **Rackham Graduate Merit Fellowship, University of Michigan**

Dates: 08/2006-12/2011

Description: The purpose of this competitive fellowship is to provide full time financial and academic support for outstanding PhD students at the University of Michigan. Recipients of the RMF are provided with tuition and salary support, research stipend, and ongoing mentorship throughout the duration of the PhD program. Recipients are required to present research results at periodic seminars and meetings, and attend skill-building workshops such as grant writing, financial management and academic success.

### **University of Michigan Center for Afro-American and African Studies Research Grant**

Dates: 2008

Description: The purpose of this research grant is to provide funds for outstanding research projects focused on African-American or African populations at the University of Michigan. This research grant was used to support study design and data collection activities for examining the prevalence and sub-type of Human Papilloma virus in rural Nigeria.

### **University of Michigan Rackham Graduate Student Research Grant**

Dates: 2007-2008

The purpose of this research grant is to provide funds for outstanding graduate students conducting research projects at the University of Michigan. This research grant was used to support study design and data collection activities for examining the prevalence and sub-type of Human Papilloma virus in rural Nigeria.

### **University of Michigan Department of Epidemiology Dissertation Research Grant**

Dates: 2007-2008

Description: The purpose of this research grant is to provide dissertation funds for outstanding PhD students at the department of epidemiology at the University of Michigan. This research grant was used to support study design and data collection activities for examining the prevalence and sub-type of Human Papilloma virus in rural Nigeria.

### **Education Opportunity Fellowship, Michigan State University**

Dates: Fall 2005

Description: The Education opportunity fellowship is awarded to outstanding undergraduate students at the Michigan State University. The fellowship provides tuition support and mentorship.

## **ACADEMIC AND PROFESSIONAL HONORS**

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2003 - 2005	McNair Scholar, Michigan State University
2004 - 2005	Education Opportunity Scholarship, Michigan State University
2005 - 2010	Member, American Public Health Association
2006 - 2012	Rackham Merit Fellowship, University of Michigan
2009 -	Member, African Organization for Research and Training in Cancer
2010 -	Member, Society for Epidemiology Research
2013-	Member, American Society for Preventive Oncology
2015-	Vice Chair, International Issues in Cancer Special Interest Group, ASPO
2016-	Scholar, UAB Sparkman Center for Global Health
2016-	Scientist, UAB Comprehensive Diabetes Center
2017-	Member, United States Preventive Services Task Force (USPSTF) Systematic Review Cmte.

## **PEER REVIEW**

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### **Journals and Book Chapter**

- **Ad Hoc Reviewer.** JAMA, American Journal of Public Health; Oncotarget; Cancer Causes and Control; PLoS One; BMC Public Health; BMC Cancer; Journal of Cancer Epidemiology; International Journal of Women's Health; Journal of Cancer Education; European Journal of Cancer Care; Journal of

Onco Targets and Therapy; British Journal of Applied Science and Technology; Western Journal of Nursing Research; J Healthcare for the Poor and Underserved; J Cancer Education; International Journal of Public Health

- **Associate Editor.** BMC Public Health, Medicine, PLOS One
- **Book chapter:** Epidemiology – Theory, Research and Practice

### NIH Study Section

- NCI Exploratory Grant (P20) in Low and Middle Income Countries
- NIH International Research Scientist Development Award (K01)
- NIH Emerging Global Leader Award (K43)

## CONFERENCE PRESENTATIONS AND INVITED TALKS

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### INVITED TALKS

- American Public Health Association Annual Meeting. Dietary patterns and Cancer mortality among Older Blacks and Whites in the REGARDS cohort. October 2016
- Racial Disparities in Breast Cancer Risk Factors. Susan G. Komen Lunch and Learn Seminar, October 2016
- Roundtable panel discussion at the 2016 Society for Epidemiologic Research. Career development opportunities in epidemiology for students and early career professionals. Miami Florida, June 2016
- American Society for Preventive Oncology International Issues in Cancer Breakfast Session. Opportunities and Challenges in Global Cancer Research. Columbus Ohio, March 2016
- International Breast Cancer Prevention Symposium, Rennes, France 2011. The Influence of Socio-Economic Status and Health Care Access on the Association Between Race and Breast Cancer Survival
- Black Graduate Student Symposium, Michigan State University. February 2005. How does social support and disease progression affect psychological well-being in HIV/AIDS affected African Americans?
- Measurement error and the potential for residual confounding in race health outcomes. Mastering the Art of Reproducible Science Seminar, UAB Graduate Biomedical Sciences Program. October 2016
- Demystifying Breast Cancer. National Meeting of the Pastor's Wife Forum. Dallas, Texas. 2014
- Breast Cancer in Women of Color Conference, New York City. Demystifying cancer research. October 2013

### CONFERENCE POSTER PRESENTATIONS

- Taylor Wyatt¶, Vikash Pernekil¶, Tomi Akinyemiju. Trends in breast and colorectal cancer screening among US adults by race, healthcare coverage, and SES before, during, and after the Great Recession. 2016 UAB Comprehensive Cancer Center Research Retreat
- Vikash Pernekil¶, Taylor Wyatt¶, Tomi Akinyemiju. Smoking and obesity trends among US adults by race and SES before, during and after the great recession and affordable care act rollout. 2016 UAB Comprehensive Cancer Center Research Retreat

- DeBran Tarver¶, Tomi Akinyemiju. Racial and socioeconomic disparities in hospitalization outcomes among adolescent and young adults with Acute Lymphoblastic and Acute Myeloid Leukemia. 2016 UAB Comprehensive Cancer Center Research Retreat 2016
- Tomi Akinyemiju, Howard Weiner, Maria Pisu. Racial disparities in cancer related risk factors and risk of major cancers. 2016 Faculty Development Grant Poster Session
- American Society for Preventive Oncology conference, Memphis Tennessee 2013. Titled: Racial disparities in breast cancer survival: impact of area SES and healthcare resources
- Michigan Epidemiology Conference, Ann Arbor, MI 2011. Titled: Perception of Risk and its Association with Cancer Screening Behaviors among African-Americans in Michigan
- University of Michigan Department of Epidemiology Doctoral Day Conference, Ann Arbor, MI 2011. Titled: Neighborhood Healthcare Access and Breast Cancer Mortality Trend
- American Association of Public health Annual meeting, Philadelphia, PA 2005. Titled: Impact of financial dependence on condom negotiation in low SES African American women.
- Michigan Undergraduate research Forum, Capitol building, Lansing MI 2005. Research titled: The effects of systemic interleukin-1 $\beta$  on tyrosine hydroxylase and IL-1 receptor mRNA in noradrenergic regions of the brain stem.
- Columbia University School of Public Health Chronic Disease Cluster Seminar. Title: Health Disparities in Chronic Disease. March 2013

KEY: ¶Supervised student poster

## COMMUNITY ENGAGEMENT

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- Susan G. Komen North Central Alabama Affiliate, 2016-
- Member, Research Advisory Group Southeast Michigan Partners Against Cancer, 2010-2011
- Crisis Volunteer at the Lansing Area AIDS Network, 2006
- Volunteer at Gramium NGO at Kulithalai, Tamil Nadu province, India 2005
- Mentor: Boy's and Girl's Club of Lansing 2005
- McNair/SROP scholarship program, 2004
- Volunteer at The Listening Ear (Crisis Counseling Center), Lansing MI, 2003-2005

## PROFESSIONAL ORGANIZATION MEMBERSHIP

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- American Public Health Association
- Society for Epidemiologic Research
- American Association for Cancer Research
- American Society for Preventive Oncology
- AORTIC: The African Organization for Research and Training in Cancer

## OTHER PROFESSIONAL/LEADERSHIP ACTIVITIES AND TRAINING

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- Member, University of Michigan Institutional Review Board for Health

- Judge, UAB Department of Medicine Medical Students Research Showcase
- Judge, UAB Sparkman Center for Global Health- Global Health Showcase Competition
- Judge, UAB Comprehensive Cancer Center Annual Retreat
- Mentor, UAB Medical School Summer Research Project
- Research Outreach, Young Breast Cancer Survivor Network
- AACR Integrative Molecular Epidemiology Workshop
- Mentor, UAB Minority Health and International Research Training Program