

## BIOGRAPHICAL SKETCH

NAME Audet, Carolyn M			
eRA COMMONS USER NAME audetcm			
POSITION TITLE: Assistant Professor, Department of Health Policy and Vanderbilt Institute for Global Health			
EDUCATION/TRAINING ( <i>Begin with baccalaureate or other initial professional education, such as nursing,</i>			
INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Princeton University, Princeton, NJ	AB	2000	Complex Civilizations
Vanderbilt University, Nashville, TN	MA	2003	Anthropology
Vanderbilt University, Nashville, TN	<b>PhD</b>	2006	Anthropology
Vanderbilt University, Nashville, TN	<b>Post-Doc</b>	2008-2009	Global Health
London School of Hygiene & Tropical Medicine, UK	<b>MSc</b>	2013	Epidemiology
Washington University in St Louis	<b>Fellow</b>	2016-2018	Implementation Science

### A. Personal Statement

I am a medical anthropologist and epidemiologist specializing in implementation and dissemination science in global health settings. I am a tenure-track assistant professor in the Department of Health Policy, based in the Institute for Global Health at Vanderbilt University Medical Center and I am currently an Implementation Research Institute Fellow at Washington University in St Louis. My intervention research has focused on engaging male partners to increase uptake of ANC services among pregnant woman (including HIV testing and treatment), hospital delivery, and post-natal care services in Nigeria and Mozambique. To engage male partners I have led several studies designed to encourage behavior-change through the de-stigmatizing of negative gender roles, the incorporation of traditional birth attendants into the health system, and changes in clinical flow- including the inclusion of male partners in ANC visits. In addition to my work with male partners, I have spent 8 years documenting treatment practices among traditional healers in South Africa and Mozambique. Funded by a K01 award from NIMH, I am developing a program to integrate traditional practitioners in patient referral and continuing care for newly diagnosed HIV-infected patients. Specifically, I am working to create a new implementation science methodology to predict successful delivery of community-based health services by minimally-trained volunteers, including traditional healers, as they have been retained in large numbers in HIV and TB programs worldwide.

My methodological skills include mixed-methods studies as well as focus groups, semi-structured interviews, ethnographic studies, and survey-style questionnaires. For this proposal, Community I-STAR Mozambique: Community Implementation of SBIRT using Technology for Alcohol use Reduction in Mozambique, I will be responsible for providing assistance in study design, implementation, and training for fellows.

### B. Positions and Honors

#### Positions

01/06 – 12/08	Lecturer, Department of Anthropology, Vanderbilt University
09/08 – 10/09	Research Fellow, Institute for Global Health, Vanderbilt University
11/09 – 03/13	Research Assistant Professor, Department of Preventive Medicine, Vanderbilt University
04/13 - Present	Positions as listed in "position title" above at Vanderbilt University

#### Honors and Memberships

2004	Center for the Study of Religion and Culture Summer Fellows Award, Vanderbilt University
2012- present	Newman's Society, Vanderbilt University
2012- present	Member, American Evaluation Association
2011- present	Member, American Anthropology Association
2010- present	Member, International AIDS Society
2013- present	Member, American Psychological Association
2015- present	Member, American Society for Tropical Medicine and Hygiene

## C. Contributions to Science

1. **Improving prevention of mother-to-child transmission service delivery and uptake among HIV-infected women:** My work in Nigeria and Mozambique has focused on the development of innovative service delivery improvements and the engagement of community agents to increase HIV testing and treatment uptake. In Mozambique I was the PI of a ViiV Health Care funded project designed to engage male partners in ANC services, including HIV counselling and testing. We employed a community participatory process to develop an intervention to change the behaviour of pregnant woman, their partners, and traditional birth attendants in 5 communities in rural Mozambique. That project is now being scaled up with Centers for Disease Control and Prevention funds in several provinces in Mozambique.
  - a. **Audet, CM**; Meridith Blevins; Yazalde Manuel; Muktar H Aliyu; Lara Vaz; Elisio Antonio; Fernanda Alvim; Ruth Bechtel; C. William Wester; Sten H. Vermund. Engagement and participation of men in antenatal care services: Impact on HIV testing and Option B+ treatment uptake in pregnancy from a rural community participatory action program in Mozambique. *AIDS and Behavior* 23 February 2016 PMID: 26906021
  - b. **Audet, CM**, Chire YM, Vaz LME, Mkhwanazi R, Carlson-Bremer D, Amico R, Gonzalez-Calvo L. Barriers to Male Involvement in Antenatal Care in Rural Mozambique. *Qualitative Health Research*. 2015 April 8. pii: 1049732315580302 [epub ahead of print] PubMed PMID: 25854615.
  - c. Aliyu MH, Blevins M, **Audet CM**, Kalish M, Gebi UI, Onwujekwe O, Lindegren ML, Shepherd BE, Wester CW, Vermund SH. Integrated prevention of mother-to-child HIV transmission services, antiretroviral therapy initiation, and maternal and infant retention in care in rural north-central Nigeria: a cluster-randomised controlled trial. *Lancet HIV*. 2016 May;3(5):e202-11.
  - d. Dunlap J, Foderingham N, Bussell S, Wester CW, **Audet CM**, Aliyu MH, Male involvement for the Prevention of Mother-to-Child HIV Transmission: A Brief Review of Initiatives in East, West and Central Africa. *Current HIV/AIDS Reports* March 2014 10.1007/s11904-014-0200-5 PMCID: PMC4371528.
  
2. **Mixed Methods Research in Implementation and Dissemination Science:** My implementation and dissemination science research typically focuses on triangulating findings from qualitative interviews, quantitative survey data, and clinical outcomes. I recently used the ADAPT-ITT model to localize a community health worker intervention to rural Mozambique through the development and elicitation of feedback to theater presentations detailing the intervention. Currently, we are assessing acceptability among both implementers and patients, while adapting the Implementation Measurement Based Care (iMBC) model to assess implementation readiness and success at the level of each community health worker.
  - a. **Audet, CM**, Meridith Blevins; Yazalde Manuel, Muktar H Aliyu, Lara Vaz, Elisio Antonio, Fernanda Alvim, Ruth Bechtel, C. William Wester, Sten H. Vermund. Engagement and participation of men in antenatal care services: Impact on HIV testing and Option B+ treatment uptake in pregnancy from a rural community participatory action program in Mozambique. *AIDS and Behavior* 23 February 2016 PMID: 26906021
  - b. **Audet, CM**, Salato J, Belvins M, Amsalam D, Vermund SH, and Gaspar F. Educational intervention increased referrals to allopathic care by traditional healers in three high HIV-prevalence rural districts in Mozambique. *PLoS ONE* 2013; 8(8): e70326. PubMed PMID: 23936407; PubMed Central PMCID: PMC3731350.
  - c. **Audet, CM**, Meridith Blevins, Caitlin Rosenberg, Sarah Farnsworth, Jose Salato, Jorge Fernandez, Sten H. Vermund. Symptomatic HIV-positive persons in rural Mozambique who first consult a traditional healer have delays in HIV testing: A cross-sectional study. *J Acquir Immune Defic Syndr*. 2014 May 8. [Epub ahead of print] PMID: 24815853
  - d. Boehmer, Angie; **Audet, Carolyn M**; Blevins, Meridith; Gebi, Usman I; Wester, C. William; Vermund, Sten H; Aliyu, Muktar H. Patient and Provider Satisfaction With a Comprehensive Strategy to Improve Prevention of Mother-to-Child HIV Transmission Services in Rural Nigeria. *JAIDS*. 2016 Aug, Vol 72: S117-S123.

- 3. Engaging traditional healers as healthcare extenders:** I have developed a system to effectively engage traditional healers in the allopathic health system in rural Mozambique. In Mozambique, 60% of newly diagnosed HIV-infected patients first visited a traditional healer before seeking allopathic care. My research has focused on assessing the impact of this behavior on patient health outcomes, understanding the practices of traditional healers, and assesses their potential as allopathic health care extenders in low-resource environments.
- Audet, CM.**, Jose Salato, Meridith Blevins, Wilson Silva, Larazo Gonzalez-Calvo, Sten H. Vermund, Felisbela Gaspar. Occupational hazards of traditional healers: Repeated unprotected blood exposures risk infectious disease transmission. *Trop Med Int Health*. 2016 Aug 31. doi: 10.1111/tmi.12775 PMID: 27580349
  - Audet, CM**, Salato J, Belvins M, Amsalam D, Vermund SH, and Gaspar F. Educational intervention increased referrals to allopathic care by traditional healers in three high HIV-prevalence rural districts in Mozambique. *PLoS ONE* 2013; 8(8): e70326. PubMed PMID: 23936407; PubMed Central PMCID: PMC3731350.
  - Audet CM**, Blevins M, Rosenberg C, Farnsworth S, Salato J, Fernandez J, Vermund SH. Symptomatic HIV-positive persons in rural Mozambique who first consult a traditional healer have delays in HIV testing: A cross-sectional study. *J Acquir Immune Defic Syndr*. 2014 May 8. [Epub ahead of print] PMID: 24815853
  - Audet CM**, Hamilton E, Hughart L, Salato J. Engagement of traditional healers and birth attendants as a controversial proposal to extend the HIV health workforce. *Current HIV/AIDS Reports*. 2015 Apr 10 PMID: 25855337 [epub ahead of print]
- 4. Assessing and improving quality of HIV clinical services:** In rural Mozambique health care services are under-staffed and under-funded, resulting in patient complaints about poor treatment and ultimately in patient abandonment of care. I have spent the past seven years working with our PEPFAR funded organization Friends in Global Health to identify factors that are fundamental in patients' decision to leave care and develop solutions to these challenges.
- Audet CM**, Groh K, Moon TD, Vermund SH, and Sidat M. Poor quality health services and lack of program support leads to low uptake of HIV testing in rural Mozambique. *African Journal of AIDS Research* 2012; 11(4)327-335. doi: 10.2989/16085906.2012.754832. PubMed PMID: 25860191.
  - Audet CM**, Matos CA, Blevins M, Cardoso A, Moon TD. Acceptability of Cervical Cancer Screening in Rural Mozambique, *Health Education Research* 2012; doi: 10.1093/her/cys008 PubMed PMID: 22307215.
  - Goth K, **Audet CM**, Sidat M, Vermund SH, Moon TD. Perceived Barriers to ART Adherence in Rural Mozambique: A Qualitative Analysis. *BMC Public Health* 2011, 11:650 PubMed PMID: 21846344; PubMed Central PMCID: PMC3171727.
  - Audet CM**, Gutin SA, Blevins M, Chiau E, Alvim F, Jose E, Vaz LM, Shepherd BE, Dawson Rose C. The Impact of Visual Aids and Enhanced Training on the Delivery of Positive Health, Dignity, and Prevention Messages to Adult Patients Living with HIV in Rural North Central Mozambique. *PLoS One*. 2015 Jul 6;10(7):e0130676. doi: 10.1371/journal.pone.0130676. eCollection 2015. PubMed PMID: 26147115; PubMed Central PMCID: PMC4493138.
- 5. Assessing the impact of HIV stigma and HIV knowledge on patients:** My work in the US and abroad has included a focus on the development of psychometric tools to measure HIV stigma and knowledge to assess the impact of these factors on treatment adherence, service uptake, and engagement in care. I have contributed to this field by validating two HIV stigma scales in the US and developing and validating an HIV knowledge scale in Mozambique.
- Audet CM**, Wagner L, Wallston KA. Finding Meaning in Living with HIV While Participating in an Expressive Writing Study. *BMC Psychology*. 215, 3:15 doi:10.1186/s40359-015-0070-7 PubMed Central PMCID: PMC4419455.
  - Ciampa PJ, Skinner SL, Patricio SR, Rothman RL, Vermund SH, **Audet CM**. Comprehensive knowledge of HIV among women in rural Mozambique: development and validation of the HIV Knowledge 27 Scale. *PLoS One* 2012; 7(10): e48676. Central PMCID: PMC3485372.

- c. **Audet CM**, McGowan CC, Wallston KA, Kipp AM. The relationship between HIV stigma and self-isolation among people living with HIV in Tennessee. PLoS ONE 2013; 8(8): e69564. doi:10.1371/journal.pone.0069564
- d. Aaron AM, **Audet CM**, Andemail J, Earnshaw V, McGowan CC, Wallston KA. Re-validation of the Van Rie HIV/AIDS-related Stigma Scale for use with people living with HIV in the United States. PLoS One. 2015 Mar 4; 10(3):e0118836. Doi: 10.1371/journal.pone.0118836. PubMed PMID: 23950897; PubMed Central PMCID: PMC3738573.

**Complete list of Published work in My bibliography:**

<http://www.ncbi.nlm.nih.gov/sites/myncbi/carolyn.audet.1/bibliographahy/48354806/public/?sort=date&direction=ascending>

**D. Research Support**

Ongoing Research Support

1K01MH107255-01

06/01/2015- 05/31/2019

NIMH

This National Institute of Mental Health K01 award, Traditional Healers as Adherence Partners for PLHIV in Rural Mozambique, will provide 4 years of protected time for research and training during my time as an Assistant Professor. My research will focus on developing a novel strategy for engaging traditional healers as treatment advocates, educators, and adherence coaches for patients newly diagnosed with HIV in Zambézia Province, Mozambique. The training component will include additional training in psychometrics and survey analysis.

**Role: Principal Investigator**

D43TW009675-03 (PI: Wainberg)

6/1/2014 - 5/31/2019

NIMH

PALOP mental health implementation research training

PALOP (Paises Africanos de Lingua Oficial Portuguesa) Mental Health (MH) Implementation Research Training Program. Globally, mental disorders remain 3 of the top 10 contributors to years lived with disability among those over age 15. This is even more so in low- and middle-income countries (LMICs) such as Mozambique; over 75% of those with mental disorders in LMICs receive no care despite substantial disability, and where treatment is provided, it is rarely based on evidence-based practices and human rights violations occur frequently. Partnering with Universidade Eduardo Mondlane (UEM) and in alliance with Universidade Federal de Sao Paulo (UNIFESP) and the Vanderbilt Institute for Global Health (VIGH), we propose a program in Mozambique with a North-South and South-South collaboration that will train the next generation of PALOP MH implementation scientists in a 2- year fellowship.

**Role: Consultant**

1R01HD075075-02 (Aliyu, PI)

9/28/2012-6/30/2014 (No cost extension)

NIMH

Optimizing integrated PMTCT services in rural North-Central Nigeria

To evaluate the impact and cost-effectiveness of a family-focused integrated prevention of mother-to-child transmission of HIV (PMTCT) package comprising task shifting of PMTCT services (including antiretroviral therapy) to lower-cadre workers, adoption of point-of-care CD4 testing, and a prominent role for influential family members of HIV-infected mothers in rural Nigeria. Dr. Vermund serves as Senior Advisor on this project.

**Role: Co-Investigator**

Completed Research Support

VCTRS Award Program

11/01/2012-05/30/2015

The Vanderbilt Clinical & Translational Research Scholars (VCTRS) Program provides junior faculty and fellowship level trainees up to three years of K award equivalent funding, who have been offered a faculty appointment and are committed to a career in clinical or translational investigation, with a mentored research

apprenticeship integrated with the didactic training of the MSCI or MPH programs. Research is focused on developing a formal and scalable system to incorporate traditional health practitioners into the allopathic health system in rural Mozambique and South Africa.

**Role: Principal Investigator**

PS002770-01 (Dawson-Rose, PI)  
CDC/PEPFAR

09/30/2010-09/29/2014

Scaling up Comprehensive Positive Prevention in the Republic of Mozambique

This service grant provides treatment partners with the skills necessary to improved HIV care, treatment, and support for those living in Mozambique. We are testing several strategies to improve referrals, counselling, and support for HIV positive individuals, including those living in the most rural areas.

**Role: Vanderbilt Principal Investigator**

ViiV Healthcare (200,000 per year)  
ViiV Positive Action for Children Fund

11/30/2011- 11/30/2014

We will assess the clinical impacts of educating and engaging men in antenatal care in a rural clinical site in Zambézia Province, Mozambique. We will promote education among men and their mothers to increase engagement of pregnant women in an effort to improve uptake of health services, including prevention of mother to child transmission.

**Role: Principal Investigator**

Amos Christie Award  
Vanderbilt Institute for Global Health

08/10/2011- 11/01/2014

Assessment of the impact of an educational training on traditional healers HIV knowledge and their ability to refer patients to the health care facility in Zambézia Province, Mozambique

**Role: Principal Investigator**