

BIOGRAPHICAL SKETCH

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NAME: Wester, C. William

eRA COMMONS USER NAME (agency login): wwester

POSITION TITLE: Associate Professor of Medicine

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
Bowdoin College , Brunswick, ME	BA	06/1987	Biology and Economics
Dartmouth Medical School , Hanover , NH	MD	06/1991	Medicine
Harvard School of Public Health, Boston, MA	MPH	11/2010	Quantitative Methods

A. Personal Statement

The goal of my present research includes long-term HIV complications with a focus on HIV-associated kidney disease and implementation science in resource-limited settings of the world. In addition, I have served as the Co-Chair of the leDEA Site Assessment Working Group (with Denis Nash) for the past 1.5 years and have been actively engaged in the collection and analysis of site level data for the purposes of informing and improving ongoing clinical initiatives/programs in such settings.

Recently completed grant-funded studies include the determination of clinical, laboratory, and host genetic risk factors associated with the development of lactic acidosis, pancreatitis, nevirapine-related cutaneous hypersensitivity reactions, and other metabolic/potentially inflammatory mediated complications including HIV-associated renal, hepatic, and cardiovascular disease. This work has bridged outcomes-epidemiology and clinical-translational research domains and has allowed me to successfully attain NIH-funded grants on which I serve as Principal or Co-Principal Investigator.

With my extensive HIV/AIDS research experience in resource-limited settings, focusing on long-term complications with particular expertise and leadership experience in site level data within leDEA, specifically in the area of non-communicable diseases (NCDs), coupled with my extensive regional experience, namely working (and residing full-time) in Botswana for 8 years (2000-2008) where I worked for the Harvard School of Public Health and was actively involved in clinical research plus many years of experience working with Dr. Aliyu and the team on his CDC-PEPFAR Nigerian initiative where I served a clinical advisor/trainer and was able to spend considerable time in-country engaged in the training/mentoring of physicians as well as my ongoing involvement as Project Director of our large ongoing CDC-PEPFAR funded "Avante Zambézia: Technical Assistance to the Ministry of Health (MOH) for HIV Services and Program Transition in Zambézia Province, Mozambique" grant award (2012-2017), I am uniquely qualified to serve as Contact PI of this proposed NIAID-funded Nigeria-based R01 study entitled the "**Optimal Management of HIV Infected Adults At Risk for Kidney Complications in Nigeria** ."

B. Positions and Honors

Positions and Employment

1994 - 1998	Clinical Instructor, Rush Medical College , Chicago, IL
1998 - 2000	Infectious Diseases Attending Physician, Cook County (Stroger Memorial) Hospital, Chicago, IL
1998 - 2000	Assistant Professor of Medicine , Rush Medical College, Chicago, IL
1999 - 2000	Principal Investigator, Terry Beinr Community Programs for Clinical Research on AIDS (CPCRA) , The Core Center, Cook County Hospital, Chicago, IL
1999 - 2000	Co-Investigator, Adult Clinical Trials Group (ACTG) Research Trials,, The CORE Center, Cook County Hospital, Chicago, IL
2000 -	Research Associate, Harvard School of Public Health, Boston, MA

- 2000 - 2008 Co-Study Coordinator/Site Leader/Site PI; Adult Antiretroviral Treatment and Drug Resistance (“*Tshepo*”) Study, Botswana-Harvard School of Public Health AIDS Initiative Partnership for HIV Research and Education (BHP), Gaborone
- 2001 - 2002 Director; Infectious Disease Care Clinic (outpatient HIV/AIDS clinic) , Princess Marina Hospital; Ministry of Health, Botswana, Gaborone
- 2007 - 2008 Site Leader/Site Principal Investigator, ACTG and the Gaborone PTT/CRS , Botswana-Harvard School of Public Health AIDS Initiative Partnership Clinical Trials Unit (CTU), Gaborone
- 2008 - 2014 Assistant Professor of Medicine, Vanderbilt University School of Medicine, Vanderbilt Institute for Global Health (VIGH), Nashville , TN
- 2014 - Associate Professor of Medicine, Vanderbilt University School of Medicine, Vanderbilt Institute for Global Health (VIGH), Nashville, TN

Other Experience and Professional Memberships

- 1994 - Member, Alpha Omega Alpha (AOA) Honor Medical Society
- 2011 - Member, International AIDS Society (IAS)
- 2014 - Member, International Society of Nephrology (ISN)

Honors

- 1991 Outstanding Medical Resident Teaching Award, (Six Consecutive and Maximum Eligible Terms), Rush-Presbyterian St. Luke’s Medical Center
- 1992 Outstanding Internal Medicine Resident Annual Award, Rush-Presbyterian St. Luke’s Medical Center
- 1994 Full Scholarship Recipient, SHEA-CDC Training Course
- 1994 Aesculapios Award (Outstanding Medical Resident), Rush Medical College
- 2010 William Schaffner Teaching Award Recipient in Infectious Diseases, Vanderbilt University School of Medicine, Division of Infectious Diseases
- 2010 Teacher Recognition Award , Vanderbilt University School of Medicine

C. Contribution to Science

1. Scale-up of Comprehensive HIV/AIDS Services in Resource-limited settings / Implementation Science:
 - a. Wester CW, Busmann H, Koethe J, Moffat C, Vermund S, Essex M, Marlink RG. Adult combination antiretroviral therapy in sub-Saharan Africa: lessons from Botswana and future challenges. *HIV Ther.* 2009 Sep 1;3(5):501-526. PubMed PMID: [20161344](#); PubMed Central PMCID: [PMC2774911](#).
 - b. Aliyu MH, Blevins M, Audet C, Shepherd BE, Hassan A, Onwujekwe O, Gebi UI, Kalish M, Lindegren ML, Vermund SH, Wester CW. Optimizing PMTCT service delivery in rural North-Central Nigeria: protocol and design for a cluster randomized study. *Contemp Clin Trials.* 2013 Sep;36(1):187-97. PubMed PMID: [23816493](#); PubMed Central PMCID: [PMC3786261](#).
 - c. Aliyu MH, Blevins M, Parrish DD, Megazzini KM, Gebi UI, Muhammad MY, Ahmed ML, Hassan A, Shepherd BE, Vermund SH, Wester CW. Risk factors for delayed initiation of combination antiretroviral therapy in rural north central Nigeria. *J Acquir Immune Defic Syndr.* 2014 Feb 1;65(2):e41-9. PubMed PMID: [23727981](#); PubMed Central PMCID: [PMC3818360](#).
 - d. Moon TD, Jequicene T, Blevins M, José E, Lankford JR, Wester CW, Fuchs MC, Vermund SH. Mobile clinics for antiretroviral therapy in rural Mozambique. *Bull World Health Organ.* 2014 Sep 1;92(9):680-4. PubMed PMID: [25378759](#); PubMed Central PMCID: [PMC4208568](#).
2. Complications of HIV/AIDS (including antiretroviral medication-related toxicity and end-organ complications):
 - a. Wester CW, Koethe JR, Shepherd BE, Stinnette SE, Rebeiro PF, Kipp AM, Hong H, Busmann H, Gaolathe T, McGowan CC, Sterling TR, Marlink RG. Non-AIDS-defining events among HIV-1-infected adults receiving combination antiretroviral therapy in resource-replete versus resource-limited urban

setting. *AIDS*. 2011 Jul 31;25(12):1471-9. PubMed PMID: [21572309](#); PubMed Central PMCID: [PMC3188442](#).

- b. Wester CW, Eden SK, Shepherd BE, Bussmann H, Novitsky V, Samuels DC, Hendrickson SL, Winkler CA, O'Brien SJ, Essex M, D'Aquila RT, DeGruttola V, Marlink RG. Risk factors for symptomatic hyperlactatemia and lactic acidosis among combination antiretroviral therapy-treated adults in Botswana: results from a clinical trial. *AIDS Res Hum Retroviruses*. 2012 Aug;28(8):759-65. PubMed PMID: [22540188](#); PubMed Central PMCID: [PMC3399551](#).
- c. Wester CW, Stitelman OM, deGruttola V, Bussmann H, Marlink RG, van der Laan MJ. Effect modification by sex and baseline CD4+ cell count among adults receiving combination antiretroviral therapy in Botswana: results from a clinical trial. *AIDS Res Hum Retroviruses*. 2012 Sep;28(9):981-8. PubMed PMID: [22309114](#); PubMed Central PMCID: [PMC3423643](#).
- d. Abraham AG, Althoff KN, Jing Y, Estrella MM, Kitahata MM, Wester CW, Bosch RJ, Crane H, Eron J, Gill MJ, Horberg MA, Justice AC, Klein M, Mayor AM, Moore RD, Palella FJ, Parikh CR, Silverberg MJ, Golub ET, Jacobson LP, Napravnik S, Lucas GM. End-stage renal disease among HIV-infected adults in North America. *Clin Infect Dis*. 2015 Mar 15;60(6):941-9. PubMed PMID: [25409471](#); PubMed Central PMCID: [PMC4357817](#).

3. Prevention of Mother-to-Child Transmission (PMTCT):

- a. Aliyu MH, Blevins M, Audet C, Shepherd BE, Hassan A, Onwujekwe O, Gebi UI, Kalish M, Lindegren ML, Vermund SH, Wester CW. Optimizing PMTCT service delivery in rural North-Central Nigeria: protocol and design for a cluster randomized study. *Contemp Clin Trials*. 2013 Sep;36(1):187-97. PubMed PMID: [23816493](#); PubMed Central PMCID: [PMC3786261](#).
- b. 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. *Curr HIV/AIDS Rep*. 2014 Jun;11(2):109-18. PubMed PMID: [24633806](#); PubMed Central PMCID: [PMC4371528](#).
- c. Audet CM, Chire YM, Vaz LM, Bechtel R, Carlson-Bremer D, Wester CW, Amico KR, González-Calvo L. Barriers to Male Involvement in Antenatal Care in Rural Mozambique. *Qual Health Res*. 2015 Apr 8;PubMed PMID: [25854615](#).
- d. Aliyu MH, Blevins M, Megazzini KM, Parrish DD, Audet CM, Chan N, Odoh C, Gebi UI, Muhammad MY, Shepherd BE, Wester CW, Vermund SH. Pregnant women with HIV in rural Nigeria have higher rates of antiretroviral treatment initiation, but similar loss to follow-up as non-pregnant women and men. *Int Health*. 2015 May 25;PubMed PMID: [26012740](#).

4. Risk Factors for Untoward HIV/AIDS Outcomes (mortality, loss to follow-up, etc.):

- a. Mujugira A, Wester CW, Kim S, Bussmann H, Gaolathe T. Patients with advanced HIV type 1 infection initiating antiretroviral therapy in Botswana: treatment response and mortality. *AIDS Res Hum Retroviruses*. 2009 Feb;25(2):127-33. PubMed PMID: [19239353](#).
- b. McDonald B, Moyo S, Gabaitiri L, Gaseitsiwe S, Bussmann H, Koethe JR, Musonda R, Makhema J, Novitsky V, Marlink RG, Wester CW, Essex M. Persistently elevated serum interleukin-6 predicts mortality among adults receiving combination antiretroviral therapy in Botswana: results from a clinical trial. *AIDS Res Hum Retroviruses*. 2013 Jul;29(7):993-9. PubMed PMID: [23590237](#); PubMed Central PMCID: [PMC3685692](#).
- c. da Silva M, Blevins M, Wester CW, Manjolo J, José E, Gonzalez LC, Shepherd BE, Moon TD, Vaz LM. Patient loss to follow-up before antiretroviral therapy initiation in rural Mozambique. *AIDS Behav*. 2015 Apr;19(4):666-78. PubMed PMID: [25096897](#).
- d. Aliyu MH, Blevins M, Megazzini KM, Parrish DD, Audet CM, Chan N, Odoh C, Gebi UI, Muhammad MY, Shepherd BE, Wester CW, Vermund SH. Pregnant women with HIV in rural Nigeria have higher rates of antiretroviral treatment initiation, but similar loss to follow-up as non-pregnant women and men. *Int Health*. 2015 May 25;PubMed PMID: [26012740](#).

A full list of my publications may be found at:

<http://www.ncbi.nlm.nih.gov/sites/myncbi/1HSsewwv6gd5A/bibliography/43390763/public/?sort=date&direction=ascending>.

D. Research Support

Active Research Support

1U2GGH000812-03, Wester, C. William (PI)

2012/09/30-2017/09/29

Centers for Disease Control and Prevention / President's Emergency Plan for AIDS Relief (CDC-PEPFAR)
Avante Zambézia: Technical Assistance to the Ministry of Health (MOH) for HIV Services and Program
Transition in Zambézia Province, Mozambique

This large CDC-PEPFAR-funded initiative entitled "Avante Zambézia" ("Go forward" Zambézia province) where Dr. Wester and the team offer comprehensive HIV services (including the provision of ART including ART for PMTCT) to HIV-infected persons residing in 14 of Zambézia provinces 23 districts. Avante Zambézia goals are as follows: (i) To expand HIV-related clinical services; (ii) To enhance clinical knowledge and skills among health care workers at health facility, district, and provincial levels to provide quality HIV-related care; (iii) To increase the quality and capacity of health care planning and management among health sector staff at facility, district, and provincial levels; (iv) To strengthen linkages between communities and the health sector in order to increase enrollment and retention of HIV+ patients; and, notably, and (v) To strengthen capacity of existing local organizations and to transition technical support activities over the project period.

Role: PI

U01 AI096186-04, Wester, C. William (PI)

2011/07/01-2016/06/30

National Institute of Allergy and Infectious Diseases (NIAID)

International epidemiologic Databases to Evaluate AIDS (IeDEA) Network Coordinating Center (INCC) at
Vanderbilt

Role: PI