
BIOGRAPHICAL SKETCH

NAME: Sheri D. Weiser

eRA COMMONS USER NAME (credential, e.g., agency login): sweiser

POSITION TITLE: Associate Professor of Medicine

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
Brown University, Providence, RI	BS	06/1993	Neuroscience
Harvard University, Cambridge, MA	MA	06/1998	Medical Anthropology
Harvard Medical School, Boston, MA	MD	06/2001	Medicine
University of California, Berkeley, CA	MPH	06/2004	Epidemiology
University of California San Francisco		07/2006	Center for AIDS Prevention Postdoctoral Fellowship

A. Personal Statement

My research over the past 17 years has examined the impact of structural barriers to HIV prevention, treatment, and care in underserved populations in resource poor and resource rich settings. A large focus of my research has been on the role of food insecurity as a barrier to sustained engagement in care, adherence and optimal health among both HIV-infected and uninfected individuals. I have led studies related to food insecurity and other structural barriers to care in Botswana, Swaziland, Kenya, Uganda and the United States. I have been principal investigator on over 20 grants including an NIMH K23, R34 and 2 R-01s to establish the association of food insecurity with poor health and have expertise in developing and evaluating food security and livelihood interventions. I was principal investigator on a pilot NIH-funded agricultural and microfinance intervention study in Kenya where we found that the intervention contributed to statistically significant improvements in food security, diet quality, and immunologic and virologic outcomes, and am now funded to conduct a 16-site cluster randomized control trial of this intervention. I am currently the principal investigator on several domestic studies to evaluate food support and urban gardening interventions among underserved populations with HIV and infectious diseases. I led an NIMH R-01 study in the Women's Interagency HIV Study (WIHS) to understand pathways for how food insecurity impacts HIV treatment and cardiovascular risk outcomes, and now am principal investigator of a K24 in WIHS focusing on the intersection between food insecurity and aging outcomes in WIHS. I am an internist, and have been working with underserved populations since 2001.

I have been actively mentoring early-career investigators since 2008, and am deeply committed to supporting a new generation of scientists to effectively intervene on structural barriers to health. I have been the primary mentor or co-mentor of 5 K awards. I have been a mentor for over 40 students, fellows and junior faculty. In 2016, I was awarded the UCSF Academic Senate Distinction in Mentoring Award, awarded to one faculty at the Associate Professor level across all UCSF for outstanding contributions to mentoring. I have also been nominated for the Global Health Sciences Outstanding Mentor Award, the AIDS Research Institute Mentoring Award, and the Pathway to Discovery Mentoring Award at UCSF.

B. Positions and Honors**Principal Positions Held**

1993-1994 Research Assistant, Motol Hospital, Department of Neurology, Prague, Czech Republic
1993-1994 Ministerial Coordinator, Czech Ministry of Health, Prague, Czech Republic
1994-1995 Research Consultant, Institute of Medicine, National Academy of Sciences, Washington, DC
1995-1996 Researcher, Israeli Ministry of Health, Jerusalem, Israel
1999-2000 Research Specialist, Harvard AIDS Institute, Gaborone, Botswana
2001-2003 Internal Medicine Resident, University of California, San Francisco, CA
2003-2006 Hospitalist, Marin General Hospital, Greenbrae, CA
2003-2006 Post-Doctoral Fellow, Center for AIDS Prevention Studies, University of California, SF, CA
2006-2009 Lecturer, School of Public Health, University of California, Berkeley, CA

- 2007-2013 Assistant Professor of Medicine, University of California, San Francisco, CA
 2013-present Associate Professor of Medicine in Residence, University of California, San Francisco, CA
 2010-present Co-chair, Research Committee, University of California Global Health Institute (UCGHI)'s Women's Health and Empowerment Centers of Expertise (CoE)

Honors and Professional Memberships

- 1991 James McGill Award, and Samuel S. Stein Award, McGill University
 1993 Graduated with Honors, Magnum Cum Laude, Sigma Xi Honorary Society, Brown University
 1997 Paul Dudley White Traveling Fellowship, Harvard Medical School
 2000 Schweitzer Fellowship, Lambarene, Gabon
 2000 Harvard Medical School Research Fellowship
 2002 California Medical License
 2003 Patricia Buffler Epidemiology Fellowship
 2005 American Board of Internal Medicine, Diplomate (Internal Medicine)
 2006 Young Investigator Award, Conference on Retroviruses and Opportunistic Infections
 2006 Young Investigator Award for track C, XVI International AIDS Conference
 2007 NIH/Council of Science Editors Award for PLoS Medicine article selected for presentation as one of the top 7 articles out of over 1000 articles published as part of launch of Global Theme Issue on Poverty and Human Development.
 2008 Hellman Family Award for Early Career Faculty
 2010 Burke Global Health Faculty Award
 2012 Academic Editor and Consulting Editor, PLoS Medicine
 2013 Nomination for Pathway to Discovery Mentor Award, ARI Teaching and Mentoring Award and GHS Masters Outstanding Mentor Award
 2016 UCSF Academic Senate Distinction in Mentoring Award

C. Contributions to Science

1. I was one of the first researchers to document that food insecurity contributes to HIV/AIDS transmission risk and have been the principal investigator of at least 4 funded studies on this topic. My first manuscript in this area won the NIH/Council of Science Editors Award for the Global Theme Issue on Poverty and Human Development, and was one of 7 articles chosen among more than 1000 articles published in 235 journals. Subsequently, my mentees and I have published and presented papers in diverse settings including Uganda, Brazil, Nepal and San Francisco showing that food insecurity contributes to increased risky sex, increased STD prevalence, prevalent HIV infection, and increased risk of sexual violence. I have mentored 4 fellows or junior faculty working in this area.

- a. Palar K, Laraia B, Tsai A, Weiser SD. Food insecurity is associated with HIV, sexually transmitted infections and drug use among men in the United States. *AIDS*, 2016 Jun 1;30(9):1457-65. PMID: PMC4864057.
- b. Vogenthaler N, Kushel MB, Hadley C, Frongillo EA, Riley E, Bangsberg DR, Weiser SD. Food insecurity and risky sexual behaviors among homeless and marginally housed HIV-infected individuals in San Francisco. *AIDS and Behavior*, 2013 Jun;17(5):1688-93. PMID: PMC3618860.
- c. Tsai AC, Hung KJ, Weiser SD. Food Insecurity and HIV Transmission Risk Behavior in Brazil. *PLoS Medicine*, 2012; 9(4). PMID: PMC3323512.
- d. Weiser SD, Leiter, K, Bangsberg DR, Butler LM, Percy-de Korte F, Hlanze Z, Phaladze N, Iacopino V, Heisler M. Food Insufficiency is associated with high-risk sexual behavior among women in Botswana and Swaziland. *PLOS Medicine*. October 2007; 4(10): 1589-97. PMID: PMC2039764.

2. Along with several mentees, I have developed and published a theoretical framework to describe the bidirectional links between food insecurity and HIV/AIDS and to elucidate the nutritional, behavioral and mental health pathways through which food insecurity negatively impacts HIV acquisition risk and health outcomes. This framework has been used in a number of NIH-funded studies. In terms of nutritional pathways, my team has shown that food insecurity is associated with both malnutrition and obesity, which can worsen health outcomes among HIV-infected individuals. In terms of mental health pathways, our work in Uganda and the United States has shown that food insecurity negatively impacts depression and mental health status, which has implications for both HIV acquisition risk and HIV health outcomes. For behavioral pathways, our team showed that food insecurity is associated worse ART adherence and clinic attendance.

- a. Sirotin, N, Hoover D, Shi Q, Anastos K, Weiser SD. Food insecurity is associated with obesity among HIV-infected and at risk women in Bronx, NY. *PLoS One*, 2014 August 27;9(8):e105957. PMID: PMC4146558.
 - b. Palar K, Kushel M, Frongillo EA, Riley ED, Grede E, Bangsberg DR, Weiser SD. Food insecurity is longitudinally associated with depression among homeless and marginally-housed individuals living with HIV. *AIDS and Behavior*, 2015 Aug;19(8):1527-34. PMID: PMC4414669.
 - c. Weiser SD, Young SL, Cohen CR, Kushel MB, Tsai AC, Tien PC, Hatcher AM, Frongillo EA, Bangsberg DR. Conceptual framework for understanding the bidirectional links between food insecurity and HIV/AIDS. *American Journal of Clinical Nutrition*, Dec 2011: 94(6):1729S-39S. PMID: PMC3226026.
 - d. Whittle H, Palar K, Seligman HK, Hufstedler LL, Napoles T, Frongillo EA, Weiser SD. How food insecurity contributes to poor clinical outcomes among people living with HIV/AIDS: Qualitative evidence from the San Francisco Bay Area. *Social Science and Medicine*, Dec 2016: 170:228-236. PMID: 27771206.
3. We have conducted some of the first and most comprehensive studies to document that food insecurity negatively impacts morbidity and mortality in HIV in resource rich and resource-poor settings. These include: a) the first studies linking food insecurity with worse virologic and immunologic outcomes, and longitudinal studies on these associations; b) longitudinal studies showing that food insecurity is associated with increased measures of morbidity (opportunistic infections, physical health status), acute care utilization (hospitalizations, acute care visits) and higher mortality among HIV-infected individuals. This work has been extensively cited in the scientific literature and media and I have been invited to present nationally and internationally on the topic. I am currently mentoring 3 students or fellows in this area.
- a. Weiser SD, Palar K, Frongillo EA, Tsai AC, Kumbakumba E, Depee S, Hunt PW, Ragland K, Martin J, Bangsberg DR. Longitudinal assessment of associations between food insecurity, antiretroviral adherence and HIV treatment outcomes in rural Uganda. *AIDS*. 2014 Jan 2;28(1):115-20. PMID: PMC4629837.
 - b. Weiser SD, Hatcher AM, Frongillo EA, Guzman D, Riley EA, Bangsberg DR, Kushel M. Food insecurity is associated with greater acute care utilization in a cohort of HIV-infected indigent individuals in San Francisco. *Journal of General Internal Medicine*, 2013 Jan;28(1):91-8. PMID: PMC3539018.
 - c. Weiser SD, Tsai AC, Gupta R, Frongillo EA, Kawuma A, Senkugu J, Hunt PW, Emenyonu NI, Mattson JE, Martin JN, Bangsberg DR. Food insecurity is associated with morbidity and patterns of healthcare utilization among HIV-infected individuals in rural Uganda. *AIDS*. January 2012;26(1):67-75. PMID: PMC3606954.
 - d. Weiser SD, Fernandes K., Brandson EK, Lima VD, Anema A, Bangsberg DR, Monaner JS, Hogg RS. The association between food insecurity and mortality among HIV-infected individuals on HAART. *Journal of AIDS*. November 2009: 52(3): 342-349. PMID: PMC3740738.
4. I have been principal investigator on some of the first studies evaluating food security interventions as a way to improve health outcomes for HIV and other chronic conditions. These include: 1) A pilot study which evaluated the impacts of a multisectoral agricultural and microfinance intervention on nutrition and health outcomes among HIV-infected individuals in Kenya; 2) an intervention study at Project Open Hand, a non-profit food delivery organization in San Francisco, to assess the impacts of a 3-meal a day food support program on health outcomes for HIV-infected and diabetic clients along with one of my mentees; and 3) a study to evaluate a Bay area urban garden program as a means to improve health outcomes for migrant populations with HIV and other chronic illnesses.. Additionally, my team have published on 1) strategies for transitioning from short-term food supplementation to longer-term livelihood strategies in Uganda; and 2) the nutritional outcomes of the food by prescription program in Kenya among HIV-infected individuals.
- a. Weiser SD, Bukusi EA, Steinfeld RL, Weke E, Frongillo EA, Dworkin SL, Pusateri K, Scow K, Butler LM, Cohen CR. Shamba Maisha: Randomized control trial of an agricultural and finance intervention to improve HIV health outcomes in Kenya. *AIDS*, 2015 Sep 10;29(14):1889. PMID: PMC4573846.
 - b. Weiser SD, Hatcher AM, Lemus Hufstedler S, Weke E, Dworkin SL, Bukusi EA, Steinfeld RL, Kodish S, Butler LM, Cohen CR. Changes in health and antiretroviral adherence among HIV-infected adults in Kenya: Qualitative longitudinal findings from a multisectoral agricultural and finance intervention. *AIDS and Behavior*, 2017 Feb 1;21(2):415-27.
 - c. Nagata, JM, Cohen CR, Young SL, Wamuyu C, Armes MN, Leslie HH, Dandu M, Steward CC, Bukusi EA. Weiser SD. Descriptive characteristics and health outcomes of the Food by Prescription nutrition supplementation program for adults living with HIV in Nyanza Province, Kenya. *PLoS One*, 2014 Mar 19;9(3):e91403. PMID: PMC3960130.

- d. Yager JE, Kadiyala S, and Weiser SD. Food aid and livelihood programs in Uganda. The way forward. *PLoS One*. October 2011; 6(10): e26117. PMID: PMC3192151.
 - e. Palar K, Napoles T, Hufstedler LL, Seligman H, Hecht FM, Madsen K, Ryle M, Pitchford S, Frongillo EA, Weiser SD. Comprehensive and Medically Appropriate Food Support Is Associated with Improved HIV and Diabetes Health. *Journal of Urban Health*. 2017 Feb 1;94(1):87-99.
5. I have expertise in studying other important determinants of ART adherence including HIV stigma and depression, and also in linking women's disempowerment with poor health outcomes. I published one of the first papers to examine barriers to ART adherence in sub-Saharan Africa.
- a. Weiser S, Wolfe W, Bangsberg D, Thior I, Gilbert P, Makhema J, Kebaabetswe P, Dickenson D, Mompoti K, Essex M, Marlink R. Barriers to antiretroviral adherence for patients living with HIV and AIDS in Botswana. *Journal of Acquired Immune Deficiency Syndrome*. 2003; 34(3):281-288. PMID: 14600572.
 - b. Gupta R, Dandu M, Packel L, Rutherford G, Leiter K, Phaladze N, Tuller D, Iacopino V, Weiser SD. Depression and HIV in Botswana: A Population-based Study on Gender-Specific Socioeconomic and Behavioral Correlates. *PLoS One*. December 2010; 5(12):e14252. PMID: PMC2999532.
 - c. Shannon K, Leiter K, Phaladze N, Hlanze Z, Tsai AC, Heisler M, Montaner JG, Iacopino V, Weiser SD. Gender inequity norms are associated with increased male-perpetrated rape and sexual risks for HIV infection in Botswana and Swaziland. *PLoS One*. January 2012. 7(1): e28739. PMID: PMC3256140.
 - d. Hatcher AM, Tsai AC, Kumbakumba E, Dworkin SL, Hunt PW, Martin JN, Clark G, Bangsberg DR, Weiser SD. Sexual Relationship Power and Depression among HIV-infected Women in Rural Uganda. *PLoS One*, December 2012;7(12):e49821. PMID: PMC3530575.
 - e. Tsai AC, Bangsberg DR, Kegeles SM, Katz IT, Muzoora C, Martin JN, Weiser SD. Internalized stigma, social distance, and disclosure of HIV seropositivity in rural Uganda. *Annals of Behavioral Medicine*. 2013 Dec;46(3):285-94. PMID: PMC3795853.

Link to NCBI MyBibliography:

<http://www.ncbi.nlm.nih.gov/sites/myncbi/collections/bibliography/43156383/>

D. Research Support

Ongoing Research Support

K24 AI134326-01 NIAID Weiser (PI) 07/14/2017 – 06/30/2022

Mentoring in Patient Oriented Research on Food Insecurity, HIV and Aging

The overall objective of this proposal is to develop a comprehensive plan for career development, mentoring, and research, which together work towards the goal of reducing HIV health disparities, including an expansion of her research into a new direction by examining how FI affects aging outcomes in HIV.

San Francisco General Hearts Foundation SFDPH, Nguyen, Weiser (MPI) 7/01/2016-06/30/2018

Cardiac Recovery through Dietary Support (CaRDS) Study: Providing medically appropriate meals to patients after hospital discharge for congestive heart failure. This study will investigate the impact of providing medically appropriate food support and nutrition education to low-income patients after hospital discharge for congestive heart failure. Primary outcomes are 30-day readmission and heart failure quality-of-life.

Role: Multiple Principal Investigator

R01MH109506 NIH/NIMH Butler (PI) 07/01/2016-06/31/2021

Multi-Sectoral Agricultural Intervention to Improve Nutrition, Health, and Developmental Outcomes of HIV-infected and Affected Children in Western Kenya

The overall objective of this cluster-randomized controlled trial is to test the effectiveness and cost-effectiveness of a multisectoral agricultural intervention on improving nutrition, health and development outcomes of HIV-affected children under 5 years old in Western Kenya.

Role: Co-investigator; UCSF subcontract Principal Investigator

R01 MH107330 NIH/NIMH Weiser/Cohen (MPI) 05/07/2015-04/30/2020

Agricultural intervention for food security and HIV health outcomes in Kenya

Project aims: 1) To determine the impact of a multisectoral agricultural intervention among HIV-infected farmers on ART on HIV clinical outcomes; 2) To understand the pathways through which the multisectoral intervention may improve HIV health outcomes; and 3) To determine the cost-effectiveness of the intervention and obtain the information necessary to inform scale-up in Kenya and similar settings in SSA.

Role: Principal Investigator

R01 MH104114, NIH/NIMH Turan (PI) 04/01/2014-03/31/2019
Mechanisms and Longitudinal Effects of Stigma on Women's Adherence and Outcomes
This research will contribute to public health efforts to improve the health of women living with HIV, by conducting an in-depth examination of the effects of HIV-related stigma and discrimination. We propose to examine these issues among women enrolled in the Women's Interagency HIV Study (WIHS), a longitudinal cohort of HIV-positive women in the United States. The purpose is to identify the role of stigma as a barrier to adherence among women living with HIV, particularly among minority women, and to develop responsive interventions.

Role: Co-Investigator: Sub-contract Principal Investigator

5U01 AI034989 (Tien, Greenblatt, Aouizerat (MPI)) 01/01/2013 – 12/31/2018
NIH/NIAID

Women's Interagency HIV Study (WIHS) V

The Northern California WIHS site is one of nine national WIHS sites. The major goal of the WIHS is to investigate the progression of HIV in women with and at risk for HIV with special attention to the effect of HIV and its therapy on behavioral and long-term outcomes including neurocognitive disorders, liver, kidney, musculoskeletal, and vascular injury, and malignancies.

Role: Co-investigator

Selected Completed Research

Kaiser Community Benefits Weiser/Palar (MPI) 12/01/2015-11/31/2017
Changing Health through Food Support (CHeFS): RCT to identify potential health impacts of providing food support to individuals with HIV. The objective of this randomized controlled trial is test the impact of the CHeFS comprehensive food support program on nutrition, mental health, ART adherence and HIV health outcomes. We will also conduct a mixed methods process evaluation and cost-effectiveness analysis to guide scale-up of the intervention.

Role: Principal Investigator

R01 MH095683, NIH/NIMH Weiser (PI) 08/01/2012-11/30/2017
Pathways from Food Insecurity to Health and Treatment Outcomes in Women with HIV
Project aims: Four-year longitudinal study with interdisciplinary team to identify pathways linking food insecurity to HIV treatment and cardiovascular health in the Women's Interagency HIV Study (WIHS). We hypothesize that food insecurity will be associated with worse HIV treatment and cardiovascular risk outcomes, and that the relationship between food insecurity and these outcomes will be partially mediated by nutritional (food quality/quantity, obesity), mental-health (depression, stress, drug use), and behavioral (treatment non-adherence, missed appointments) pathways.

Role: Principal Investigator

R34 MH094215, NIH/NIMH Weiser/Cohen (PI) 08/17/2011-05/31/2015
Pilot agricultural intervention for food security and HIV health outcomes in Kenya
Project goals: To conduct a pilot agricultural intervention study among people living with AIDS in Western Kenya to determine the preliminary impact of the intervention on food security, household economic indicators, and on HIV treatment outcomes.

Role: Principal Investigator

R21 MH096645 Butler (PI) 04/01/2012-03/31/2014
Agricultural Intervention to Improve Health of HIV-infected and Affected Children
The overall objective of the proposed study is to determine the impact of an agricultural intervention targeting HIV-affected households in Nyanza Province, Kenya on important measures of health for children under five years of age, including: nutritional status, disease incidence, and development.

Role: Co-investigator

K23 MH079713, NIH/NIMH Weiser (PI) 04/01/2007 – 03/31/2013 with NCE
The Impact of Food Security on HIV Outcomes and Sexual Risk Behavior in Uganda
This project aimed to understand the impact of food insecurity on ART adherence, HIV treatment outcomes, and risky sexual behaviors among HIV-infected individuals enrolled in care in rural Uganda.