## BIOGRAPHICAL SKETCH

NAME: Patricia Frye Walker, MD, DTM&H, FASTMH

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

POSITION TITLE: Staff Physician, HealthPartners Center for International Health; Medical Director HealthPartners Travel and Tropical Medicine Center; Senior Research Fellow, HealthPartners Institute

EDUCATION/TRAINING

| INSTITUTION AND LOCATION | DEGREE *(if applicable)* | Completion Date | FIELD OF STUDY |
|---|---|---|---|
| Gustavus Adolphus College, St. Peter, MN | BS | 1977 | Biology and Chemistry |
| Mayo Medical School, Rochester, MN | MD | 1981 | Doctor of Medicine |
| Mayo Graduate School of Medicine, Rochester, MN | Fellowship | 1984 | Internal Medicine Fellowship |
| University of St. Thomas, St. Paul, MN | | 1995 | Health Care Mgmt |
| London School of Hygiene & Tropical Medicine | DTM&H | 1997 | Tropical Medicine & Hygiene |
| Mahidol University, Bangkok, Thailand | | 1997 | Clinical Tropical Medicine |
| American Society of Tropical Medicine & Hygiene | Certificate of Knowledge | 1998 | Tropical Medicine and Travel Medicine |
| International Society of Travel Medicine | Certificate of Knowledge | 2003 | Tropical Medicine and Travel Medicine |

### A. Personal Statement

I am a Senior Research Fellow at the Institute, physician at the HealthPartners Center for International Health, Professor of Medicine at the University of Minnesota, Department of Internal Medicine, and Associate Medical Director of the Global Health Pathway. For 22 years, I was the Director for the HealthPartners Center for International Health. I continue to direct HealthPartners Travel and Tropical Medicine Center. I am currently serving as President of the American Society of Tropical Medicine and Hygiene. I have published articles and book chapters on refugee and immigrant health, tropical and travel medicine, and co-edited the first textbook of its kind, *Immigrant Medicine*. My career has focused on globally mobile populations, the definition and implementation of best practices in care, reduction of health disparities, and development of medical education interventions. I work to translate best practices in refugee and immigrant health care to useful electronic medical record tools for clinicians. In addition to other awards I have received, in 2004 I was honored as one of the Top 100 Influential Health Care Leaders in Minnesota. In 2010, was honored as a Distinguished Alumnus in Medicine from my undergraduate alma mater, Gustavus Adolphus College.. My work was profiled in the Lancet in February, 2017. http://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(17)30274-X.pdf

From 2002 through 2004, I chaired the State of Minnesota Immigrant Health Task Force, a statewide group of 70 experts who developed best practices in care for refugees and immigrants in Minnesota. These best practices are now being shared nationally and internationally.

I am serving as HealthPartners Principle Investigator on the CDC National Refugee Centers of Excellence grant.

1. **Walker PF**, Barnett ED, Stauffer WM. Healthcare for adult immigrants and refugees. In: Baron EL, editor. UpToDate. Waltham, MA: UpToDate; 2015.
2. Barnett ED, **Walker PF**. Role of immigrants and migrants in emerging infectious diseases. Med Clin North Am. 2008 Nov;92(6):1447-58.
3. **Walker PF** and Barnett ED, editors. Immigrant Medicine. Philadelphia, PA. Saunders Elsevier 2007.

4. **Walker PF.** Preventative healthcare and management of chronic diseases in adults. IN: **Walker PF** and Barnett ED, editors. Immigrant Medicine. Philadelphia, PA. Saunders Elsevier; 2007;pp537-66.

## B. Positions and Honors

### Positions and Employment

1984-1985 Emergency Department Staff Physician, St. Joseph Mercy Hospital, Mason City, IA
1985-1987 Medical Director, Emergency Department, Mount Sinai Hospital, Minneapolis, MN
1987-1988 Medical Director, International Rescue Committee, Khao I Dang Holding Center for Kampucheans, Aranyaprathet, Thailand
1988-2008 Staff Physician, Health Center for Women, St. Paul, MN
1988-2010 Medical Director, HealthPartners, Center for International Health, St. Paul, MN
1988-Pres. Medical Director, HealthPartners Travel and Tropical Medicine Center, St. Paul, MN
1988-Pres. Staff Physician, HealthPartners, Center for International Health, St. Paul, MN
2004-2009 Assistant Professor, Division of Infectious Disease & International Health, Department of Internal Medicine, Minneapolis, MN
2004-Pres. Associate Medical Director, Global Health Pathway, University of Minnesota, Minneapolis, MN
2009-Pres. Associate Professor, Division of Infectious Diseases & International Health, Department of Internal Medicine, Minneapolis, MN
2011-Pres. Senior Research Fellow, HealthPartners Institute, Minneapolis, MN

### Awards and Honors

1995-1998 Bush Foundation Medical Fellowship Award
1994 "Forty Top Physicians Under Forty," award given by Minnesota Physician Magazine
1994 "Minnesota Woman Physician Of the Year", award given by Minnesota Women Physicians
1995 "Community Service Award – International Health Services at Ramsey", Minnesota Hospital Association
1995 "40 Under 40", award given by City Business, Minneapolis/St. Paul Business Journal
1997 Twin Cities International Citizen Award (Given by Twin Cities Mayors)
1998 Minority Affairs Committee Meritorious Service Award, MN Medical Assoc. (one physician awardee)
2002 "Humanism in Medicine" featured alumnus, Mayo Medical School 35th Anniversary celebration
2005 "Community Health Commitment" Award from Minnesota Hospital Association
2005 "Top 100 Influential Health Care Leaders in Minnesota"
2005 "Champions of Health" Award, Blue Cross Blue Shield Foundation of MN. (20 awardees in Minnesota)
2007 "Women-friendly Family Doctor" Voted Top Doc by Minnesota Women's Press March 2007 "What Women Want" issue
2010 Distinguished Alumni Citation in the Field of Medicine, Gustavus Adolphus College
2013 Fellow, American Society of Tropical Medicine and Hygiene
2015 "Favorite Role Model for Women in Health Care" Minnesota Women's Press, Annual Reader's Survey (two awardees – Dr. Patricia Walker and Mary Brainerd, CEO of HealthPartners)
2016 Shotwell Award, Twin Cities Medical Society Foundation, "in recognition of your dedicated service to mankind, research, innovation and overall contributions to the field of medicine."

## C. Contribution to Science

**1. Refugee and immigrant health care.** My clinical, research and teaching career focus has been globally mobile populations, particularly refugees and immigrants, defining and implementing best practices in care and developing medical education interventions, all to reduce health disparities. I have been a clinician and medical educator focused on refugee and immigrant health care since 1979. From 1988-2010, I was the Medical Director at HealthPartners Center for International Health, a nationally known refugee and immigrant health clinic. I stepped down as Director to pursue research in global health, but remain active as a clinician at the Center. I am internationally recognized for my work in defining the body of knowledge that encompasses refugee and immigrant health care. From 2002 to 2004, I chaired the State of Minnesota Immigrant Health Task Force, a group of 70 experts who developed best practices in care for refugees and immigrants in Minnesota that are being shared internationally. I have published multiple articles and book chapters on refugee and immigrant health, and co-edited a medical textbook published in October 2007, "Immigrant Medicine", the first of its kind. I have received more than 16 grants totaling more than $1.5 million, focused

primarily on defining best practices in culturally competent care and disseminating them in HealthPartners and nationally. I maintain an active practice in clinical care of refugees and immigrants, and in women's health.

a. **Walker PF, http://www.startribune.com/executive-order-on-refugees-here-s-what-i-know-about-the-most-vetted-people-around/412215643/ Minneapolis Star Tribune commentary 30 January 2017**

b. **Walker PF**, Barnett ED, Stauffer WM. Healthcare for adult immigrants and refugees. In: Baron EL, editor. UpToDate. Waltham, MA: UpToDate; 2015.
c. Barnett ED, **Walker PF**. Role of immigrants and migrants in emerging infectious diseases. Med Clin North Am. 2008 Nov;92(6):1447-58.
d. **Walker PF** and Barnett ED, Editors. Immigrant Medicine. Philadelphia, PA. Saunders Elsevier 2007.
e. **Walker PF**, Preventative healthcare and management of chronic diseases in adults. IN: **Walker PF** and Barnett ED, editors. Immigrant Medicine. Philadelphia, PA. Saunders Elsevier; 2007;pp 537-66.

**2. Travel and tropical medicine.** I have been director of the HealthPartners Travel and Tropical Medicine Center since 1988. I received my Diploma in Tropical Medicine and Hygiene from the London School of Hygiene and Tropical Medicine in 1997, and studied clinical tropical medicine as part of a Bush Medical Leadership Fellowship at Mahidol Hospital for Tropical Diseases in Bangkok, Thailand and Chiang Mai University in Thailand. I also received my Certificate in Tropical Medicine and Travelers Health from the American Society of Tropical Medicine and Hygiene, and a Certificate of Knowledge in Clinical Tropical Medicine from the International Society of Travel Medicine. I conduct pre-travel consultations with patients, as well as tropical medical consultation for illness contracted after international travel. Additionally, I co-direct the Minnesota GeoSentinel site, as one of the CDC's network of 57 clinics worldwide which report on illness in returning travelers, for surveillance of the spread of infectious disease. I have researched characteristics and spectrum of disease among ill returned travelers from pre- and post-earthquake Haiti using this data. I am currently serving as the President of the American Society of Tropical Medicine Hygiene, the sixth female president in the 113 year history of the Society.

a) Rosenthal PJ, Hill DR, Bausch DG, Goraleski KA, Higgs S, **Walker PF**, Plowe CV. The (International) American Society of Tropical Medicine and Hygiene. Am J Trop Med Hyg. 2016 Nov 2;95(5):980-982.

**b)** Marano N, Wojno AE, Stauffer WM, Weinberg M, Klosovsky A, Ballew JD, Shetty S, Cookson S, **Walker P**, Cetron MS. Partnerships that facilitate a refugee's journey to wellbeing. Am J Trop Med Hyg. 2016 Nov 2;95(5):985-987.

**c)** Fabrizius RG, Anderson K, Hendel-Paterson B, Kaiser RM, Maalim S, **Walker PF**. Case Report: Guillain–Barré Syndrome Associated with Zika Virus Infection in a Traveler Returning from Guyana. Am. J. Trop. Med. Hyg., 2016;95(5):1161–1165.

d) Anderson KB, Pureza V, **Walker PF**. Chikungunya: acute fever, rash and debilitating arthralgias in a returning traveler from Haiti. J Travel Med. 2014 Nov-Dec;21(6):418-20.
e) **Walker PF**. Pre-travel consultation and hepatitis B: a double opportunity for preventing infection in at-risk patients and life-threatening complications in HBV carriers. J Travel Med. 2013 May-Jun;20(3):143-5.
f) Barnett ED, Weld LH, McCarthy AE, So H, **Walker PF**, Stauffer W, Cetron M; GeoSentinel Surveillance Network. Spectrum of illness in international migrants seen at GeoSentinel clinics in 1997-2009, part 1: US-bound migrants evaluated by comprehensive protocol-based health assessment. Clin Infect Dis. 2013 Apr;56(7):913-24.
g) McCarthy AE, Weld LH, Barnett ED, So H, Coyle C, Greenaway C, Stauffer W, Leder K, Lopez-Velez R, Gautret P, Castelli F, Jenks N, **Walker PF**, Loutan L, Cetron M; GeoSentinel Surveillance Network. Spectrum of illness in international migrants seen at GeoSentinel clinics in 1997-2009, part 2: migrants resettled internationally and evaluated for specific health concerns. Clin Infect Dis. 2013 Apr;56(7):925-33.

**3. Health disparities and culturally competent health care.** I have served on HealthPartners Equitable Care Sponsor and Oversight Group since their inception in 2000, and helped lead the subgroup that defined HealthPartners demographic data collection, which is critical to reducing health disparities. I also led the design for the current Equitable Care Fellows Program at HealthPartners, on a Medtronic Foundation grant.

a. **Walker PF**. Culturally competent cancer screening. Minn Physician. 2014 Aug;28( 5):22.
b. Krohn K, **Walker PF**. Lost in translation: a simple lesson about our emergency system might have saved a life. Minn Med. 2013 Apr;96(4):24-5.
c. Bjorklund AB, Cook BA, Hendel-Paterson BR, **Walker PF**, Stauffer WM, Boulware DR. Impact of global health residency training on medical knowledge of immigrant health. Am J Trop Med Hyg. 2011 Sep;85(3):405-8. PMCID: PMC3163857.
d. Solberg LI, Flottemesch TJ, Foldes SS, Molitor BA, **Walker PF**, Crain AL. Tobacco-use prevalence in special populations taking advantage of electronic medical records. Am J Prev Med. 2008 Dec;35(6 Suppl):S501-7.

**Complete List of Published Work in My Bibliography:**
http://www.ncbi.nlm.nih.gov/sites/myncbi/patricia.walker.1/bibliography/48103963/public/?sort=date&direction=ascending

## D. Research Support

### Ongoing Research Support

**Using Systems Science Methods to Study Cardiac Risk in the Somali Community (Westgard)**
Source: NLHBI/R01HL118282
Role: Other Significant Contributor 01/01/2014-12/31/2018
Cardiovascular disease is a major public health problem in the United States, especially among immigrants. Although evidence supports the importance of the social environment for cardiovascular risk, there is little evidence of how the social environment, in particular social networks, affects metabolic syndrome, a multiple risk factor for cardiovascular disease. We propose using highly innovative systems science methods to analyze the social network and profile of metabolic syndrome in the Somali community in Minneapolis. We also propose to predict the effects of various preventive interventions on metabolic syndrome. The results will help direct policy and programs implementation of optimal targeted prevention strategies in communities.

**The CENTER: Center of Excellence, a Network for Training and Epidemiology in Refugee Health (Mamo)**
Source: CDC/MDH
Role: Site Principal Investigator 09/30/2015-09/29/2017
The Minnesota Department of Health Refugee and International Health Program (MDH RIHP) and its principal partners, the University of Minnesota (UMN), HealthPartners Center for International Health (HP CIH) and the Philadelphia Refugee Health Collaborative (PRHC), propose to create The CENTER: Center of Excellence, a Network for Training and Epidemiology in Refugee health. Refugee health programs in eight other states (CO, IA, IL, IN, ND, RI, TX, WA), along with VOLAGs, CBOs, and human services departments in MN and PA, will also collaborate on the CENTER's activities. The CENTER will build on existing infrastructure and its partners' extensive experience to identify and monitor refugee health issues and needs, contribute to evidence-based policies and guidelines, educate health care and service providers working with refugees, facilitate communication with refugees about health care issues and services, and ultimately improve continuity of care and health outcomes for refugees.

**Reducing U.S. Malaria by Testing Multiple Interventions (Boulware)**
Source: CDC/U01CK000357
Role: Site Principal Investigator 09/01/2015-08/31/2017
The objectives of this project are to: (1) identify populations at risk for malaria, available healthcare services and conduct an assessment of the existing barriers associated with malaria prevention among VFR travelers, (2) implement targeted interventions in a multi-site stepped-wedge, randomized trial design and (3) to monitor and evaluate interventions to assess their effectiveness at reducing malaria.

**Medtronic Foundation Global Health Fellowship**
Source: Medtronic Foundation
Role: Fellow 05/01/2015-05/01/2018
The goal of this fellowship is to expand and leverage my life's work by collaboratively leading medical education and intervention activities which demonstrably decrease health disparities for globally mobile populations, with a focus on refugees and immigrants. I will continue to describe, define, teach and pilot interventions designed to reduce disparities in outcomes for globally mobile populations. Through this work I am connecting a consortium of refugee health providers nationwide, as well as providing in person and on line educational resources to train the next generation of health care providers in best practices in refugee and immigrant health. In addition, I am active in public policy and advocacy through my role as a President of the American Society of Tropical Medicine and Hygiene.

### Completed Research Support (within the last 3 years)

Multiple accomplishments via the Medtronic Foundation Global Health fellowship, as described above.