

# ETHEL JANE CARTER, M.D.

## The Miriam Hospital

Divisions of Infectious Disease and Pulmonary/Critical Care

164 Summit Avenue, Providence, Rhode Island 02806

Tel: 401-793-2056 Fax: 401-793-4064

[E\\_Jane\\_Carter@Brown.edu](mailto:E_Jane_Carter@Brown.edu)

## EDUCATION

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<b>Wellesley College</b> , Wellesley, Massachusetts	1974-1978
• B.A. in Chemistry	
<b>George Washington University School of Medicine</b> , Washington, DC	1978-1982
• M.D.	

## POSTDOCTORAL TRAINING

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<b>Internship</b>	Internal Medicine Roger Williams Medical Center/Brown University Providence, Rhode Island	1982-1983
<b>Residency</b>	Internal Medicine Roger Williams Medical Center/Brown University Providence, Rhode Island	1983-1985
<b>Chief Residency</b>	Internal Medicine Roger Williams Medical Center/Brown University Providence, Rhode Island	1985-1986
<b>Fellowship</b>	Brown University Program in Pulmonary Medicine Memorial Hospital of Rhode Island and Roger Williams Medical Center Providence, Rhode Island	1988-1990

## HONORS AND DISTINCTION

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Teacher of the Year Award, <i>Roger Williams Medical Center</i>	1991
• In recognition by the Internal Medicine Residency House staff to best faculty teacher	
Margaret Rawlings Lupton Service Award <i>Girls Preparatory School, Chattanooga, Tennessee</i>	1999
• In recognition to alumnae who exhibit exceptional citizenship and	

service to the community in which they live.

- Physician of the Year Award, *Rhode Island Medical Women's Association* 2001
- Awarded annually to a local female physician who has demonstrated excellence and a high level of commitment to medicine, family and the community
- Excellence in Teaching Award for Clinical Faculty, *Brown University* 2001
- In recognition of exemplary teaching and dedication to the Brown Medical School's education mission
- Dean's Teaching Excellence Award, *Brown University* 2001
- In recognition of exemplary teaching (medical pathophysiology course- tuberculosis section, pulmonary)
- Dr. Sharon Zupko Award, *Traveler's Aid Society of Rhode Island* 2001
- In recognition of outstanding volunteer efforts on behalf of Traveler's Aid (Health Care for the Homeless)
- Best Physicians for Women (Pulmonary), *RI Monthly* 2001
- Awarded to recognize "Best Doctors" as recognized by their peer group
- Chairman's Teaching Award, *Brown University* 2002
- In recognition of exemplary teaching within the Department of Medicine
- Leonard Tow Humanism in Medicine Award, *Brown Medical School* 2004
- Awarded annually by the medical school class to a faculty member who demonstrates outstanding compassion in the delivery of health care, respect for patients, their families, and health care colleagues as well as demonstrating clinical excellence.
- Teaching and Education Faculty Award, *Brown Medical School* 2005
- For excellence in medical school teaching, concern for student well-being, and success, patient advocacy, and abundant contributions to the Brown Medical School community.
- Hope is a Vaccine Award, *Global Alliance to Immunize Against AIDS* 2006
- In recognition of outstanding contributions in the fight against AIDS
- World Lung Health Award, *American Thoracic Society* 2013
- Awarded to individuals with recognized contributions to world lung health in the area of basic or clinical research, delivery of healthcare, continuing education or care of patients with lung disease.
- 6<sup>th</sup> Annual Women's Leadership Award, Ronald McDonald House of RI 2014
- Honors women in the community who consistently make a positive impact and demonstrate exceptional leadership.

## PROFESSIONAL LICENSURE AND BOARD CERTIFICATION

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State of Rhode Island (License #6353)	1983-present
American Board of Internal Medicine	1986
• Diplomate (#102166)	
• Time Unlimited	
American Subspecialty Board of Pulmonary Medicine	1990
• Diplomate	Recertification 2000, 2010
American Subspecialty Board of Critical Care Medicine	1995-2005
• Diplomate	

## ACADEMIC APPOINTMENTS

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### *Brown University Program in Medicine:*

Assistant Clinical Instructor in Medicine	1985-1986
Instructor in Medicine	1986-1988
Assistant Clinical Instructor in Medicine	1988-1990
Clinical Assistant Professor of Medicine	1991-2000
Assistant Professor of Medicine	2001-2009
Associate Professor of Medicine	2009-present
Senior Consultant, RISE Clinic	2007-2013

## HOSPITAL APPOINTMENTS

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### **Active Staff:**

The Miriam Hospital	1991- present
Department of Medicine, Pulmonary Division	
Rhode Island Hospital	1991- present
Department of Medicine, Pulmonary Division	

### **Consulting Staff:**

Eleanor Slater Hospital/Zambarano Unit	1990-present
Department of Medicine, Pulmonary Division	

### **Courtesy Staff:**

Memorial Hospital of Rhode Island	1991-present
Department of Medicine, Pulmonary Division	

## **International Staff:**

Moi University School of Medicine  
Department of Medicine, Visiting Lecturer

1998, 1999, 2000,  
2004, 2014- present

## **MAJOR PROFESSIONAL SERVICE**

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### *National and International:*

#### **International Tuberculosis Foundation, Inc., Board of Directors**

*Chicago, Illinois*

- Vice-President 2002-2003
- President 2003-08
- Duties: Chair 2 meetings per year. Liaison with secretariat for grant reporting and Oversight. Development and Fund Raising

#### **North American Region, International Union Against TB and Lung Disease**

*Vancouver, British Columbia, Canada*

- Conference Implementation Committee member (2000- present)
  - Duty: Annual Program planning participation
- Abstract Committee Member (2000-present)
  - Duty: Abstract review for annual meeting
- Secretary-Treasurer (2002- 2003)
  - Duty: Assist the program chairman in annual meeting planning/management
- Vice President/Program Chairman (2003-2005).
  - Duty: Annual Meeting Program planning/management
- President Elect (2009-11)
  - Duty: Support and fill in for the president.
- President (2011-2013)
  - Duty: Oversee direction of the organization as directed by the Executive Council
  - Duty: North American Region Representative, Board of Directors, International Union Against TB and Lung Disease, Paris, France
- Immediate Past President (2013-2015)
  - Duty: Serve on the executive committee and chair the nominating committee (oversees nominations for all major awards as well as elected offices within the region.

#### **International Union Against TB and Lung Disease**

*Paris, France*

President (2011- Present)

Duty: Lead the work of the Board of Directors in crafting the direction of the UNION

#### **World Lung Foundation, Board of Directors**

2005-present

*New York, New York*

- Attend two meetings per year. Representative of North American Region of the IUATLD

**NIH Review Panel**, National Institute of Allergy and Infectious Diseases, *Bethesda, Maryland* 2006

- Panel was a national review panel for the award of both national and international grants.
- In serving on the panel I reviewed applications to the Units for HIV/AIDS Clinical Trials Network. [ZAI1 KS-A (M3)] as well as attended the ranking meeting for the awards.

**Board Member to Health Advisory Group, TB, Millennium Village Projects** 2006-2010

Colombia University Earth Institute

*New York, New York*

- Attendance at Advisory Group meetings (minimum 2/year), Review and advise the design of TB care protocols as well as outcome statistics, Review publications arising out of TB core.

**Advisory Committee for the Elimination of TB (ACET)** 2006-2014

Centers for Disease Control

*Atlanta, Georgia*

- Served as the alternate representative from the North American Region of the International Union Against TB and Lung Disease 2006-2010
- Appointed as voting member 2011- 2014
- An advisory committee for the CDC TB Elimination Division and the Health and Human Services Secretary of the United States.
- Duty: Attendance 3 meetings per year at CDC, review programs/plans/recommendations of the committee for the Division of TB Elimination and Control at CDC.

**Expert Meeting on TB Screening/Active Case Finding** May 31-June 1 2011

World Health Organization

Geneva, Switzerland

Committee appointed to advise on policy statement development for WHO.

Invited to present Country (Kenya) experience to the committee as well as to act as a committee member

**Global Fund Committee on Tuberculosis** 2012-present

Stop TB Partnership

World Health Organization

Geneva, Switzerland

This committee meets monthly by teleconference with the goal to advise on the new structure of the Global Fund reformulated in 2012 as to its emphasis and funding mechanisms for Tuberculosis.

**Proposal Review Committee, TB Reach** 9/2012- present

Stop TB Partnership

World Health Organization

Geneva, Switzerland

Committee Member - Rounds 3 and 4, Committee chairman - Round 4.

Panel to review all TB reach grants for funding awards.

**East African Institute for Pulmonary Medicine Training** 1/2013- present

Steering Committee member

This program has started the first pulmonary training program in East Africa funded through the World Lung Foundation and the Swiss Lung Foundation. The training program is at the University of Addis Abba, Black Lion Hospital, Addis Abba, Ethiopia. I performed the original site visit to prepare for the program and sit on the steering committee which meets monthly.

**Advisory Panel TB Modeling and Analysis Consortium** 2013- present

**Associate Editor, BMC Infectious Diseases** 2014- present

Local:

Rhode Island Thoracic Society

*Providence, Rhode Island*

- Organization member 1988-present
- Secretary/Treasurer 1993-1994
- Vice-President 1995
- President 1997-2000.

Duty dependent on position: financial oversight, annual program planning, general governance of the organization

Rhode Island Medical Society

*Providence, Rhode Island*

- Organization member 1990-2000
- Council Member 1994-1995 Duty: bi-monthly meetings; represent concerns of member constituents

Tuberculosis Controllers Association

*Atlanta, Georgia*

- Organization member 1995-present
- Executive Board 1998-2000
- Duty: nationally elected position to represent a low TB burden state, conference calls on ad hoc basis, annual meeting.

Providence Medical Society

*Providence, Rhode Island*

- Organization member since 1990-2002
- Delegate to the RIMS assembly 1992-1993
- Councilor 1994-1995
- Secretary 1996-1997
- President 1997-2000
- Duty dependent on post: Represent constituent member interests to the assembly, Organize the annual meeting, Chair the monthly board meetings

Hospital Committees:

Roger Williams General Hospital, *Providence, Rhode Island:*

- Clinical Competency Committee 1985-1988; 1991-1994
- Medical Audit Committee 1985-1986
- Medical Appraisal Committee 1985-1986; 1990-1993
- Medical Records Committee (Chairman 1992-1994) 1985-1986; 1990-1994
- Pharmacy & Therapeutics Committee 1985-1986
- Patient Education Committee 1986-1988
- Credentials Committee 1991-1994
- Institutional Review Board 1991-1993
- Executive Committee 1994-1995

Miriam Hospital, *Providence, Rhode Island:*

- Infection Control Committee 2001-2011

University Committees:

Brown University, *Providence, Rhode Island:*

- Brown University Residency Committee 1985-1986
- Brown Residency International Global Health (BRIGHT) Track 2010- present
  - Faculty Advisory Committee

State Committees:

- Board of Trustees, *Rhode Island Lung Association* 1997-2000
- TB Controller, *State of Rhode Island* 1997-2009
- Member, *TB Advisory Committee, State of Rhode Island* 1994-2007
- Co-chairman, *TB Medical Advisory, Rhode Island Department of Health* 1995-2007
- Consultant in Tuberculosis, *Rhode Island Department of Health* 1993-2007

**PROFESSIONAL SOCIETIES**

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- American Thoracic Society 1988-present
  - International Health Committee 2010- present
  - Membership Committee 2012-2014
- American College of Chest Physicians (Fellow 1990-present) 1986-present
  - Governor, State of Rhode Island
- International Union against Tuberculosis and Lung Disease 1994-present
- European Respiratory Society 1995-present
- Rhode Island Medical Women's Association 1990-present

**JOURNAL AND CONFERENCE SERVICE**

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Peer-Reviewer:

- The International Journal of Tuberculosis and Lung Disease 2000-present
- Journal of Acquired Immunodeficiency Syndromes 2003-present
- AIDS Patient Care and STDs 2005
- JAIDS, Clinical Science 2005, 2012
- JAMA 2003
- Plos 2008, 2014
  
- Indian Journal of Medical Research (IJMR) 2008

Conference Abstract Committee Reviewer:

- XIVth International AIDS Conference, (TB Section) 2002
- XVth International AIDS Conference, (TB Section) 2004
- 39<sup>th</sup> Union World Congress on Lung Health 2008
- 40<sup>th</sup> Union World Congress on Lung Health 2009
- 41<sup>st</sup> Union World Congress on Lung Health 2010
- 42<sup>st</sup> Union World Congress on Lung Health 2011
- 43<sup>rd</sup> Union World Congress on Lung Health 2013
- 44th Union World Congress on Lung Health 2014

**DEPARTMENTAL AND SCHOOL SERVICE**

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**Assistant Program Coordinator, Internal Medicine Residency Program** 1986-1988

*Roger Williams General Hospital, Providence, Rhode Island*

- Worked with the Internal Medicine Chief Resident for supervision of and development of a teaching curriculum and resident evaluations.
- Oversight of the interview process for the IM residency program.
- Directly supervised teaching in the Intensive Care Unit.
- Toured all the New England medical schools ( New York City to Vermont) and acted as liaison to the residency program.

**Acting Site Director, Pulmonary Division** 2002-present

*The Miriam Hospital, Providence, Rhode Island*

- Served as the administrator for the pulmonary division where my responsibilities included privilege review for the division and quality care governance.
- Director of the Pulmonary Function Laboratory at the Miriam Hospital. Duty :Protocol development, quality control, and interpretation of all testing.
- Hospital based pulmonary practice: 2 sessions per week with 7 day per week call coverage 9 months per year.

**Acting Director of Respiratory Therapy** 2002-2008

*The Miriam Hospital, Providence, Rhode Island*



- Oversaw all activities of the Respiratory Therapy Department of the Miriam Hospital.
- Managed protocol development and quality management, medical supervision of care delivery by the department, and evaluation of student rotators from local university program.

**Director, Pulmonary Function Laboratory** 2000-2014  
*Anchor Medical, Providence, Rhode Island*

- Responsible for protocol development, quality control, and interpretation of all testing.

**External Examiner, Moi University School of Medicine** 2004  
*Eldoret, Kenya*

- In this British-styled system of education, the external examiner is in the position to oversee all examinations as well as to certify the fairness of the examinations and to make future recommendations for teaching topics and systems.

## **PUBLICATIONS**

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### Original Publication in Peer-Reviewed Journals:

1. **Carter, E.J.** and D.B. Ettensohn. Catamenial Pneumothorax. Chest 98: 713-716, 1990.
2. **Carter, E.J.**, R.M. Bradburne, J. Jhung and D.B. Ettensohn. Alveolar hemorrhage with epithelial hemangioendothelioma: A previously unreported manifestation of a rare tumor. Am Rev Resp Dis 142: 700-701, 1990.
3. **Carter, E.J.** The essentials of a tuberculosis elimination program. RI Med 1992: Sep; 75 (9): 449-450.
4. **Carter, E.J.** and S. Mates. Tuberculosis during pregnancy: the Rhode Island experience, 1987 to 1991. Chest 1994; 106: 1466-70.
5. **Carter, E.J.** and S. Mates. Sudden enlargement of a deep cervical lymph node during and after treatment of pulmonary tuberculosis. Chest 1994; 106: 1896-98.
6. A.S. DeGroot, C.G.P. Roberts, B.T. Edelson, G.E. Meister, B.M. Jesdale, R.A. Houghton, **E.J. Carter**, J. Montoya, R.C. Romulo, J.A. Berzofsky and B.D.L.L. Ramirez. A novel algorithm for the efficient identification of T cell epitopes; prediction and testing of candidate tuberculosis vaccine peptides in genetically diverse populations. Vaccines 1996: 1-7.
7. W. Pomputius, J. Rost, P. Dennehy, **E.J. Carter**. Standardization of technique improves yield in gastric aspirates diagnostic of TB in children. Pediatr Infect Dis J 1997; 16 (2); 222-226.
8. S.N. Gampper, J.A. George, **E.J. Carter**, B.M. Jesdale, T.P. Flanigan, K.H. Mayer and A.S. DeGroot. Co-infection with Mycobacterium tuberculosis and HIV in high-risk clinical care

- setting in Rhode Island. AIDS-Care 1998 Apr; 10 (2): 221-229.
9. E. F. Donnelly, T. Bertrand, U. Bandy and **E.J. Carter**. TB: Prevention and Control Issues, 1999. Medicine and Health – Rhode Island 1999 Oct; 82 (10): 372-373.
  10. **E.J. Carter**. Tuberculosis: Elimination in the Third Millenium? Medicine and Health – Rhode Island 2002 Feb;85(2): 48-51.
  11. A. Kwara, **E.J.Carter**, J. Rich, T. Flanigan. Development of Opportunistic Infections after Diagnosis of Active Tuberculosis in HIV infected patients. AIDS Patient Care and STDs. 2004.18 No 6 pp341-347.
  12. A. Kwara, T. Flanigan, **E. J. Carter**, Highly Active Antiretroviral Therapy (HAART) in Adults with Tuberculosis: Current Status. Int J Tuberc Lung Dis 9(3):248-257.
  13. J. McMurry, H. Sbai, M.L. Gennaro, **E.J. Carter**, W Martin, A.S. DeGroot. Analyzing Mycobacterium tuberculosis proteomes for candidate vaccine epitopes. Tuberculosis (2005) 85,95-105.
  14. Diero L, Kimaiyo S, Siika AM, Shaffer D, Rotich JK, Smith FE, Mamlin JJ, Einterz RM, Justice AC, **Carter EJ**, Tierney WM. Characteristics of patients with HIV infection receiving care at two Kenyan health centers. East Afr Med J 2006 .
  15. Waxman M, Kimaiyo S, Ongaro N, Wools-Kaloustian K, Flanigan T, **Carter EJ**. Initial Outcomes in an emergency Department HIV Testing Program in western Kenya, AIDS Patient Care and STDs 2007 Dec;21(12):981-6
  16. Kwara A, Herold JS, Machan JT, **Carter EJ**. Factors Associated with Failure to Complete Isoniazid Treatment for Latent Tuberculosis Infection in Rhode Island. Chest 2008;133:862-868.
  17. Waxman M, Muganda p, **Carter EJ** Ongaro N. The role of emergency department HIV care in resource poor settings: lessons learned in western Kenya. 2008 Int J Emerg Med 1:317-320.
  18. Braitstein P, Nyandiko W, Vreeman R, Wools-Kaloustian, Sidle J, Musick B, Ayaya S, Yiounnoutsis C, **Carter EJ**. The Incidence of Tuberculosis among HIV-infected Children in a Large Observational Cohort in Western Kenya. Pediatric Infectious Disease Journal 2009;28 (7):626-32.
  19. Kantor R, Diero L, Delong A, Kamle L, Muyonga S, Mambo F, Walumbe E, Emonyi W, Chan P, **Carter EJ**, Hogan J, Buziba N. Misclassification of first line antiretroviral treatment failure based on immunological monitoring of HIV infection in resource-limited settings. Clin Infect Dis. 2009 Aug 1;49(3):463-5.
  20. Vanhornwegen J, Kwara A, Martin M, Gilliani F, Fontanet A, Mutungi P, Crellin J, Obaor S,

- Gosciminski M, **Carter EJ**, Rastogi N. Impact of immigration on molecular epidemiology of TB in Rhode Island. *J. Clin. Microbiol.* December 2010. Web published ahead of print.
21. Bloomfield G, Kimaiyo S., **Carter EJ**, Binanay C. Corey GR, Einterz R, Tierney, W., Velasquez E. Chronic Non-Communicable Cardiovascular and Pulmonary Disease in sub-Saharan Africa: an Academic Model for Countering the Epidemic. *Am Heart J* 2011;161:842-7
  22. Bloomfield G, Hogan J, Keter A, Sang E., **Carter EJ**, Velasquez E, Kimaiyo S. Hypertension and Obesity as Cardiovascular Risk Factors among HIV Seropositive Patients in Western Kenya. 2011 *Plos One* 6(7): e 22288.doi:10.1371/journal.pone.0022288
  23. Mabeya H, Khozaim K, Liu T, Orango O, Chumba D, Pisharodi L, **Carter EJ**, Cu-Uvin S. Comparison of Conventional Cervical Cytology versus Visual Inspection with Acetic Acid (VIA) among HIV-Infected Women in Western Kenya. Accepted *Journal of Lower Genital Tract Disease*.
  24. Gardner A, Cohen T, **Carter EJ**. Tuberculosis Among Participants in an Academic Global Health Medical Exchange Program. 2011 *J Gen Intern Med* 26(8):841–5.
  25. Kosgei R, Lubano K, Shen C, Wools-Kalustian K, Musick B, Siika A, Mabeya H, **Carter EJ**, Mwangi A, Kiarie J. Impact of Integrated Family Planning and HIV Care Services on Reproductive Health: A Retrospective Cohort Study. 2011 *J Acquir Immune Defic Syndr.* 58 (5):e121-e126
  26. Kosgei RJ, Muia Ndavi P, Ong’ech JO, Abuya JM , Siika AM, Wools-Kaloustian K, Mabeya H, Fojo T, Mwangi A, Reid T, Edginton ME, **Carter EJ**. : Symptom screening: diagnostic usefulness to detect pulmonary tuberculosis in HIV-infected pregnant women in Kenya- Public Health Action. Advance release doi: <http://dx.doi.org/10.5588/pha.11.004>
  27. Park P, Magut C, Gardner A, O’yiengo D, Kamle L, Langat BK, Buziba N, **Carter EJ**. Increasing Access to the MDR –TB Surveillance program through a low cost collaborative model in Western Kenya. Accepted *Tropical Medicine and International Health*.
  28. Shaffer D, Obiero E, Bett J, Kiptto I, Maswai J, Sawe F, **Carter EJ**. Successes and challenges in an Integrated Tuberculosis/HIV Clinic in a Rural Resource Limited Setting: Experiences from Kericho, Kenya. *AIDS Research and Treatment*. Volume 2012. Article ID 238012, 8 pages <http://dx.doi.org/10.1155/2012/238012>
  29. Gardner A, Naurekas C, Losikoff P, Beckwith C, Martin C, Carter EJ. Experiences in Implementation of Routine HIV testing in a United States TB Clinic. *International Journal of Tuberculosis and Lung Disease* 2012; 16(9)1241-46(6).
  30. Bloomfield G. Lagat D, Akwanalo C, Carter EJ, Lugogo N, Vedanthan R, Velasquez E, Kimaiyo S, Sherman CB. Conditions That Predispose to Pulmonary Hypertension and Right Heart Failure in Persons Exposed to Household Air Pollution in LMIC. 2012 *Global Heart*

7(3): 249-259

31. Onentia D, Park P, Gardener A, Kisang G, Dipto L, Sitienei, **Carter EJ**. Community Based Treatment of Multi Drug Resistant Tuberculosis; Early Experience and Results from western Kenya. *Public Health Action* 2012; (2)2:38-42.
32. Siika A, Yiannoutsos Y, Wools-Kalustian K, Musick B, Mwnagi A, Diero L, kimaiyo S, Tierney, **Carter EJ**, Active tuberculosis is associated with worse clinical outcomes in HIV-infected African patients on antiretroviral therapy. *Plos One* e%3022 January 2013 VI 8 No 1
33. Kirui N, Gardner A., Kamene J, Pastaki S., Mwangi A, **Carter EJ**. Important co-morbidity in patients with diabetes mellitus in three clinics in western Kenya. *Public Health Action* 2012; 2(4):148-151
34. Szkwarko D, Ogaro F, Owiti P, **Carter EJ**. Implementing a Tuberculosis child contact register to quantify children at risk for tuberculosis and HIV in western Kenya. *Public Health Action* 2013; 3(3): 209-213.
35. Kosgei R, Szkwarko D, Callens S, Gichangi P, Temmerman M, Kihara AB, Sitienei J, Cheserem E, Ndavi P, Ried T, **Carter EJ**. Screening for tuberculosis in pregnancy: Do we need more than symptom screen? A case from western Kenya. *Accepted Public Health Action* 2013; 3(4): 294-298
36. Caitlin N, **Carter EJ**, Gardner A. HIV Testing in U.S. Tuberculosis Care Settings: A Survey of Current Practice and Perceived Barriers. *J Public Health Management Practice*, 2013 00(00) 1-5
37. Klasen E, Miranda J, Khattry S, Menya D, Gilman R, Tielsch J, Kennedy C, Dreibeldis R, Naithani N, Kimaiyo S, Chiang M, **Carter EJ**, Sherman CB, Breyse P, Checkley W. Feasibility Intervention Trial of two types of improved cookstoves in three resource limited settings: study protocol for a randomized controlled trial. *Trials* 2013, 14: 327 doi:10.1186/1745-6215-14-327.
38. Creswell J, Codlin A, Andre E, Micek M, Bedru A, **Carter EJ**, Yadrav R, Mosneaga A, Rai B, Banu S, Brouwer M, Blok L, Sahu S, Ditiu L. Results from early programmatic implementation of Xpert MTB/RIF testing in nine countries. *BMC Infectious Disease* 2014,14.2. <http://www.biomedcentral.com/1471-2334/14/2>
39. Lagat D, Delong A, Wellnius G, **Carter EJ**, Bloomfield G, Velasquez E, Hogan J, Kimaiyo S, Sherman C. Risk Associated with Isolated Right Heart Failure (IRHF) in women in western Kenya: a Pilot Study. *Global Heart* 9 (2014), pp. 249-254
40. Baliff M, Nhandu, wood R, Dusingize JC, **Carter EJ**, Cortes CP, McGowna CC, Diero L, Graber C, Renner L, Wawerlander D, Kiertiburanakul S, Du QT, Sterling TR, Eggger M, Fenner L. Detection and management of drug resistant tuberculosis in HIV-infected patients in lower-income countries. *Int J Tuberc Lung Dis* <http://dx.doi.org/10.5588/ijtld.14.0106>

41. Nyandiko W, Vreeman R, Mwangi A, Ayaya S, Kiptoon P, Musick B, Braitstein P, Koech J, **Carter EJ**, Hogan J. Survival and Loss to Follow-up Among HIV and Tuberculosis Co-Infected Children Below 3 Years of Age Initiating AntiTuberculosis Treatment in Western Kenya. *International Journal of Advanced Research* 2014 Vol 2 No 8: 249-262
42. Owiti P, Zachariah R, Bissell K, Kumar AM, Diero L, **Carter EJ**, Gardner A. Integrating tuberculosis and HIV services in rural Kenya: uptake and outcomes. *Public Health Action* 2015 5(1);36-44.
43. Women and Lung Disease: Sex Differences and Global Disparity. K Pinkerton, M Harbaugh, M Han, C Le Saux, L Winkle, W Martin, R Kosgei, **E J Carter**, N Sitkin, S Smiley-Jewell and M George, *AJRCCM*. Vol 192 (1): 11-16. 2015
44. Pulmonary Specialty Training to Improve Respiratory Health in Low- and Middle- Income Countries: Needs and Challenges. J Chakaya, **EJ Carter**, P Hopewell. *Ann Am Thorac Soc* Vol 12 No 4 pp486-490, Apr 2015
45. Gender Difference in Smear Positive Pulmonary Tuberculosis Treatment Outcomes in 15-49 Year Olds in Kenya. R Kosgei, J.K. Sitienei, H. Kipruto, K. Kimenye, D. Gathara, F. X. Odawa, P. Gichangi, S. Callens, M. Temmerman, J.C. Sitienei, A. B. Kahara, **EJ Carter**. *IJTLD* Vol 19(10):1176-11812015

*Books and Book Chapters (Non-Peer Reviewed):*

1. **Carter, E.J.** and D.B. Ettensohn. Utility of bronchoalveolar lavage in the clinical and pathogenetic evaluation of asbestosis and talcosis. In: *The Source Book on Asbestos Diseases*, Butterworth Legal Publishers, 1990.
2. **E.J. Carter**. Chapter 096. Management of a Health Care Worker Exposed to Tuberculosis. In: *Infectious Diseases*, Ohen, Powderly, 2003

*Other Non-Peer Reviewed Publications:*

1. J. Cohen, S. Kimaiyo, W. Nyandiko, A. Siika, K. Wools-Kalustian, J. Mamlin, and **E. J. Carter**. Addressing the Educational Void During the antiretroviral rollout. *AIDS*.2004, 18:2105-6. (Correspondence)

*Scholarly Work in Preparation*

1. Use of Isonizid Preventive Therapy in HIV/AIDS Care Program in western Kenya. K. Wools, L. Diero, B. Musick, C. Yiannoutsos, **E. J. Carter**. Submitted.
2. Nosocomial Spread of MDR TB Without Apparent Contact. **Carter E. J.**, J.V.O'Connell. In manuscript.

3. Experience at two rural health centers in western Kenya during DOTS expansion. N. Bhakta, M. Kumar, S. Kiboi, N. Buziba, **E. J. Carter**. In Manuscript.
4. **Carter EJ**, Kamle L, Bhakta N, Buziba NG. Intensified Case Finding in western Kenya. In manuscript
5. Pulmonary Destruction due to Late Diagnosis of MultiDrug Resistant Tuberculosis in Western Kenya. A. Gardner, **E. J. Carter**. Submitted for review
6. Miliary Tuberculosis; The conundrum of task shifting- is the benefit worth the cost? T. Fojo, **E.J. Carter**. In manuscript.
7. Siika A, Mwangi A, Carter EJ, Wools-Kalustian K, Musick B, Hogan J. Early antiretroviral therapy initiation improves survival in HIV infected African patients with Tuberculosis. In manuscript.
8. Mwangi A, Tau, Kantor R, Carter EJ, Hogan J. Causal Inference for Survival Times with Informative Censoring & Missing Exposure, with Application to Treatment of TB/HIV Coinfection in Western Kenya.
9. Intensified Case finding for pulmonary tuberculosis in two diabetes clinics in western Kenya. Kirui NK. Kamano JH. Pastaki SD, Manuthu E, Chege P, Gardner A, Carter EJ. Submitted.
10. Do Clinical decision-support reminders for medical providers improve IPT prescription rates among HIV positive adults?: Research protocol for a cluster randomized trial in western Kenya. Green EP, Catalani C, Diero L, Carter EJ, Gardner A, Ndwiga C, Keny A, Owiti P, Israelski D, Biondich P. Submitted.
11. Prevalence of Sexually Transmitted Infections Including HIV in Street-Connected Adolescents in western Kenya. Winston SE, Chirchir AK, Muthoni LN, Ayuku D, Koech J, Nyandiko W, **Carter EJ**, Bratistein P. Submitted.
12. Declining Tuberculosis Incidence Among 168,330 People Receiving HIV Care and Treatment Services in East Africa, 2003-2012. Saito S, Mpofo P, Carter EJ, Diero L, Wools-Kaloustian K, Yiannoutsos C, Musick B, Nash D, Tsiouris S, Elul B. Submitted.
13. Markers of Atherosclerosis, Clinical characteristics and Treatment Patterns among Patients with Heart Failure in Kenya. GS Bloomfield, A Delong, CO Akwanalo, J Hogan, **EJ Carter**, D Aswa, C Binanay, M Koech, S Kimaiyo, EJ Velasquez. Submitted.
14. Low Correlation between household carbon monoxide and particulate matter concentrations from biomass-related pollution in three resource poor settings. E Klasen, B Willis, N Nalthani, R Gilman, J Tielsch, M Chiang, P Breyse, D menya, C Apaka, E J Carter, CB Sherman, J Miranda, W Checkley. In manuscript

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16. Implementing Tuberculosis Intensified Case Finding among Street-connected youth and young adults in Eldoret, Kenya. Szkwarko D, Mercer T, Kimani S, Braitstein P, Buziba N, Carter EJ. Submitted Global Health Science and Practice

## ABSTRACTS

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34. One Community's Perceptions of the Relationship of TB and HIV/AIDS. N. Bhakta, J. Ballidawa, **E. J. Carter**. 37<sup>th</sup> Union World Conference on Lung Health, Paris, France, October 2006
35. Cough Monitors: Who are they and what do they do? K. Cheshari, N. Bhakta, N. Buziba, **E. J. Carter**. 37<sup>th</sup> Union World Conference on Lung Health, Paris, France, October 2006
36. Active Case Finding through the use of cough monitors; a Fidelis sponsored program in Eldoret, Kenya. N. Buziba, N. Bhakta, L. Kamle, K. Cheshari, **E. J. Carter**. 37<sup>th</sup> Union World Conference on Lung Health, Paris, France, October 2006
37. Child Screening in contagious Households of TB in Eldoret, Kenya: How are the Canaries Doing? **E. J. Carter**, L. Watetu, L. Kamle, N. Bhakta, N.G. Buziba, P. Losikoff. 38<sup>th</sup> Union World Conference on Lung Health, Capetown, South Africa, October 2007
38. TB/HIV Collaborative Education Efforts in North Rift Valley, Kenya. B. Langat, A. Gardner, S Kimaiyo, **E. J. Carter**. 38<sup>th</sup> Union World Conference on Lung Health, Capetown, South Africa, October 2007
39. Integrating HIV Care & Treatment with TB Services in Rural Kenya: A Case Study from Kericho District Hospital. E.Obiero, H. Mutai, J. Bett, C. Sigei, F. Sawe, **E. J. Carter**, T. Hamm, D. Shaffer. 38<sup>th</sup> Union World Conference on Lung Health, Capetown, South Africa, October 2007
40. Challenges to Data Collection and Management in TB Field Projects: Experience from Round 3 and Round 5 Fidelis Projects. L. Kamle, N. Bhakta, N.G. Buziba, **E. J. Carter**. 38<sup>th</sup> Union World Conference on Lung Health, Capetown, South Africa, October 2007
41. AIDS Afflicted Household Assessment of TB Transmission. L. Watetu, L. Kame, N. Bhakta, N.G. Buziba, **E.J. Carter**. 38<sup>th</sup> Union World Conference on Lung Health, Capetown, South Africa, October 2007
42. Should Concentrated Smears Be Performed at all TB Diagnostic Centers? A. Kibet, N.G. Buziba, B. VanderPol, **E.J. Carter**. 38<sup>th</sup> Union World Conference on Lung Health, Capetown, South Africa, October 2007
43. Effect of tuberculosis on antiretroviral therapy (ART) in adult African patients. A.M. Siika, K. Wools-Kaloustian, C.Yiannoutsos, B. Musick, A. Mwangi, L. Diero, S. Kimaiyo, W. Tierney, **E. J. Carter**. International Aids Society Conference. Mexico City, Mexico, August 2008
44. L. Diero, **E.J. Carter**, A.M. Siika, S. Kimaiyo, A. Gardner, C. Yiannoutsos, B. Musick, k. Wools-Kaloustian. The Experience and Outcomes of Isoniazid Preventive Therapy in an HIV Treatment Program in Western Kenya. International Aids Society Conference. Mexico City, Mexico, August 2008

45. Role of Cough Monitors to Ensure Completion of TB Evaluations in Mobile Populations. P.H. Park , L. Watetu, A.Kibet, I. Tanui, L. Kamle, L.Diero, N.G.Buziba, B.K. Langat, **E.J.Carter**. 39<sup>th</sup> Union World Conference on Lung Health, Paris, France, October 2008
46. AFB Smear Positivity Rates and Quantitation during Post-Election Violence in Western Kenya. A.Kibet, P.H.Park, N.G. Buziba,, B.K. Langat, **E.J.Carter**. 39<sup>th</sup> Union World Conference on Lung Health, Paris, France, October 2008
47. Building programs one step at a time: Eldoret, Kenya's fight to STOP TB NOW. **E.J.Carter**, P.H. Park, H.Mengech, F.Esimai, S.Kimaiyo, B.K.Langat, N.G. Buziba. 39<sup>th</sup> Union World Conference on Lung Health, Paris, France, October 2008
48. Measuring the Impact of an Intensified Case Finding Program in North Rift Valley and Western Kenya. L Kamle, W Kiboi, M Mulago, N Francsico, P park, T Mjete, NG Buziba, **EJ Carter**. 40<sup>th</sup> Union World Conference on Lung Health, Cancun, Mexico, December 2009.
49. Model Programme: Integration of PMTCT, pregnancy and TB care provision issues in Kenya. K Wools-Kaloustian, E Were, L Diero, K Lane, P Braitstein, R Kosgei, W Nyandiko, **EJ Carter**. 40<sup>th</sup> Union World Conference on Lung Health, Cancun, Mexico, December 2009.
50. Tuberculosis (TB) Among Health Care Workers (HCW), Researchers, Trainees, and Travelers to a TB-Endemic Area in Kenya with an Academic, International, Medical Exchange Program. A. Gardner, T. Cohen, **EJ Carter**. Selected for oral presentation, American Society of Tropical Medicine and Hygiene Annual Conference, Atlanta, Nov, 2010.
51. Fluoroquinolone (FQ) Use in an HIV Treatment Program in Western Kenya: Implications for TB control. A. Gardner, S. Pastakia, L. Diero A. Siika, T. Cohen S. Kiptoo, **EJ Carter**. 41st IUATLD World Conference on Lung Heath, Nov, 2010, Berlin, Germany.
52. Early Identification Strategies of Potential Tuberculosis Suspects in Communities of western Kenya. L Kamle, W Kiboi, M Mulago, NG Buziba, **EJ Carter**. 41st IUATLD World Conference on Lung Heath, Nov, 2010, Berlin, Germany.
53. Does contact tracing as a part of intensifies case finding increase TB case finding in western Kenya? T Fojo, S Kisorio, L Kamule, W Kiboi, M Mulago, J Saliama, NG Buziba, **EJ Carter**. 41st IUATLD World Conference on Lung Heath, Nov, 2010, Berlin, Germany.
54. Implementing cough monitor screening in prevention mother to child transmission and antenatal clinics. D Szkarko, R Koskei, L Kamle, **EJ Carter**. 42<sup>nd</sup> IUATLD World Lung Conference on Lung Health. October 2011, Lille, France.
55. Screening for pulmonary Tuberculosis among HIV Infected Pregnant Women in Western Kenya. R Kosgie, J Ong'ech, J Abuya, **EJ Carter**, K Wools-Kaloustian, T Fojo, A Mwangi, PM Ndavi. 42<sup>nd</sup> IUATLD World Lung Conference on Lung Health. October 2011, Lille, France.

56. Screening for TB among HIV infected pregnant women: role of the symptom screen. R. Kosgei, A Abuya, JO Ong'ech, K Wools-Kaloustian, A Mwangi, A Siika, P Ndavi, **EJ Carter**. 42<sup>nd</sup> IUATLD World Lung Conference on Lung Health. October 2011, Lille, France.
57. Burden of Tuberculosis in diabetes Clinics in western Kenya. N Kirui, S Cheng, A Gardner, **EJ Carter**, S Pastaki. 42<sup>nd</sup> IUATLD World Lung Conference on Lung Health. October 2011, Lille, France.
58. The Relationship of Indoor Air Pollution (IAP) Exposure to Isolated Right Heart Failure (IFHF) in Women of western Kenya: A pilot study. Lagat D, **Carter EJ**, Kimaiyo S, Veasquez E and Sherman CB. American Thoracic Society. May 2012. San Francisco, California.
59. Spirometric Evaluation of Patients Presenting to Moi Teaching and Referral Hospital(MTRH) with Dyspnea. Onentia Oyieng'o D, Sherman CB, Diero L, **Carter EJ**. American Thoracic Society. May 2012. San Francisco, California.
60. Finding the vulnerable: Is TB Intensified Case Finding Feasible for Street Children in Kenya? Szkwarko D, Kimani S, Mercer T, Pastaki S, Braitstein P, Jezmir J, Buziba N, Carter, EJ. 43<sup>nd</sup> IUATLD World Lung Conference on Lung Health, November 2012, Kuala Lumpur, Malaysia
61. Improving Access to Culture Capability for Smear-negative Tuberculosis Suspects in western Kenya. Jezmir J, Nyakan E, Kamle L, Injera W, Gardner A, Carter EJ. 43<sup>nd</sup> IUATLD World Lung Conference on Lung Health, November 2012, Kuala Lumpur, Malaysia.
62. Challenges to Providing Tuberculosis Lab Accessibility to Patients in Need: Bridging the Geographic Gap From Diagnostic Facility to Patient. Jezmir J, Nyakan E, Kamle L, Injera W, Gardner A, Carter EJ. 43<sup>nd</sup> IUATLD World Lung Conference on Lung Health, November 2012, Kuala Lumpur, Malaysia.
63. Prevalence of Drug Resistant Tuberculosis in Retreatment Cases and Implications for Treatment with the Kenya Standardized National Retreatment Regimen. Nyukuri W, Gardner A, Diero L, Carter EJ. 43<sup>nd</sup> IUATLD World Lung Conference on Lung Health, November 2012, Kuala Lumpur, Malaysia.
64. Intensified case finding for tuberculosis in two diabetes clinics in western Kenya. Kirui N, Kamano J, Cheng S, Pastaki S, Manuthu E, Chege P, Gardner A, Carter EJ. 43<sup>nd</sup> IUATLD World Lung Conference on Lung Health, November 2012, Kuala Lumpur, Malaysia.
65. Mobile Phone Text Messaging Reminders to Aid Adherence to Tuberculosis (TB) Care in Eldoret, Kenya. Owiti P, Gardner A, Szkwarko D, Diero L, Carter EJ. 43<sup>nd</sup> IUATLD World Lung Conference on Lung Health, November 2012, Kuala Lumpur, Malaysia.
66. Use of GeneXpert MTB/Rif for Diagnosis of Smear Negative Tuberculosis in Remote Health

- Facilities in western Kenya. Pederson B, Kamle L, Gardner A, Carter EJ. 43<sup>nd</sup> IUATLD World Lung Conference on Lung Health, November 2012, Kuala Lumpur, Malaysia.
67. Operational Challenges of GeneXpert MTB/Rif Implementation at Remote Health Facilities in western Kenya. Pederson B, Kamle L, Gardner A, Carter EJ. 43<sup>nd</sup> IUATLD World Lung Conference on Lung Health, November 2012, Kuala Lumpur, Malaysia.

### **SCHOLARLY WORK PUBLISHED IN OTHER MEDIA (NON-PEER REVIEWED)**

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1. T. Flanigan, P. Shah, A. Mahjan, N. Kumarasamy, C. Carpenter, S. Cu-Uvin, H. Harwell, **E.J. Carter**, K. Mayer. A Primer for Antiretroviral Therapy for HIV infection in a Resource Poor Setting. Available in the Public Domain.
2. Voices of Hope. L Westphal, M. Allukian, J. Montoya, **E. J. Carter**. CD Video. Video history and interviews of People Living with AIDS in Eldoret, Kenya. Used to teach students and health care workers at MUSOM regarding HIV stigma.
3. **EJ Carter**, S Kimaiyo, NG Buziba. WHO Stop TB Partnership: TB HIV Newsletter. Intensified Case Finding in Eldoret Kenya: The Cough Monitor Model. January 2008. [http://www.stoptb.org/wg/tb\\_hiv/assets/documents/January%202008%20TB%20HIV%20Update.pdf](http://www.stoptb.org/wg/tb_hiv/assets/documents/January%202008%20TB%20HIV%20Update.pdf)

### **INVITED PRESENTATIONS**

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#### *International*

1. University of Santo Tomas, Manila, Philippines, Conference on Directly Observed Therapy and Treatment of Multi-Drug Resistant TB in the Philippines, November 19-20, 1996, “Essentials of a Directly Observed Program.”
2. University of Santo Tomas, Manila, Philippines, Conference on Directly Observed Therapy and Treatment of Multi-Drug Resistant TB in the Philippines, November 19-20, 1996, “DOT-the Rhode Island Experience.”
3. University of Santo Tomas, Manila, Philippines, Conference on Directly Observed Therapy and Treatment of Multi-Drug Resistant TB in the Philippines, November 21, 1996, Chairman, Workshop on Directly Observed Therapy in the Treatment of Tuberculosis
4. Grand Rounds, Moi University School of Medicine, Eldoret, Kenya, June 1998, “Tuberculosis and Public Health: Can DOTS Work in Africa?”
5. 6<sup>th</sup> Conference of the International Society of Travel Medicine, Montreal, Quebec, Canada, June 1999, Symposium: Drug Resistance, Antituberculous Drugs, Lecture and Panel Participant

6. North American Region, International Union Against TB and Lung Disease, Vancouver, British Columbia, Canada, February, 2005, Active Case Finding in Traditional and Non-Traditional Sties in western Kenya.
7. Tuberculosis Surveillance Research Unit, Paris, France, March 2005, TB/HIV Integrated Services at Moi University Faculty of Health Sciences
8. FIND Symposium on TB Diagnostics, Paris, France, October 2006. Evaluation of WHO Guidelines for the Evaluation of Smear Negative, HIV Positive Suspects
9. Coordinator, Symposium, Human resource management issues in high-burden countries. 37<sup>th</sup> Union World Conference on Lung Health, Paris, France, October 2006
10. Co-ordinator and Lecturer, TB/HIV Symposium, AMPATH Center, Eldoret, Kenya, February 2007, (Lectures centered on TB/HIV care, pathophysiology, and care algorithms)
11. Grand Rounds, Kericho District Hospital, Department of Medicine, Kericho, Kenya, June, 2007, “Difficult Issues in TB Control”
12. Grand Rounds, Moi University Faculty of Health Sciences, AMPATH Training Institute, Eldoret, Kenya, June 2007, “MDR-TB XDR: How does it happen? What do we do?”
13. 39<sup>th</sup> Union World Conference on Lung Health, Paris, France, October 2008 Symposium Topic: TB/HIV- One Patient, Two Diseases: How do health care systems merge to provide needed care? Presentation: “Two Disease, One Patient- Designing TB/HIV Care Systems: Experience from Eldoret, Kenya.”
14. 39<sup>th</sup> Union World Conference on Lung Health, Paris, France, October 2008. Moderator, Poster Discussion Session, TB Diagnosis and Control
15. FIDELIS in Western Kenya: Creating a Model of Intensified Case Finding.40<sup>th</sup> Union World Conference on Lung Health, Cancun, Mexico, December 2009.
16. TB/HIV: Challenges of Management. HIV Care Symposium. Pontificia Universidad Catholica del Ecuador (PUCE). Quito, Ecuador, March 2010
17. MDR/XDR TB. How did it happen? What do we do now? HIV Care Symposium. Pontificia Universidad Catholica del Ecuador (PUCE). Quito, Ecuador, March 2010
18. 41<sup>st</sup> Union World Lung Conference on Lung Health, Berlin, Germany, November 2010. Symposium Coordinator and Co-Moderator. Symposium: Fluoroquinolones; Friend or Foe.
19. 41<sup>st</sup> Union World Conference on Lung Health, Berlin, Germany, November 2010. Moderator, Poster Discussion Session, Epidemiology: TB in low-burden countries.

20. American Thoracic Society, Denver, Colorado, USA. May 2011. Moderator, Poster Discussion Session, Diagnostics and biomarkers for Latent and Active TB.
21. 2<sup>nd</sup> Kenya International Scientific Lung Health Conference, Nairobi, Kenya, October 2011. Workshop facilitator and lecturer. Skills Building Workshop: Implementing the Practical (Comprehensive) Approach to Lung Health: the Essentials. Lecture- Lung Function Testing Within the PAL Approach.
22. 2<sup>nd</sup> Kenya International Scientific Lung Health Conference, Nairobi, Kenya, October 2011. Workshop facilitator and lecturer. Skills Building Workshop: Implementing the Practical (Comprehensive) Approach to Lung Health: the Essentials. Lecture- Target Disease for PAL Approach
23. 42<sup>nd</sup> Union World Conference on Lung Health, Lille, France, October 2011. Moderator, Poster Discussion Session, Epidemiology: TB in low-burden countries.
24. Grand Rounds, Black Lion Hospital, University Of Addis Abba School of Medicine, Addis Abba, Ethiopia, January 2012, COPD- Diagnosis and Management 2012.
25. Ethiopian Thoracic Society Keynote Address, Addis Abba, Ethiopia. MDR XDR TB: Global Burden, Global Response, January 2015
26. 18<sup>th</sup> Annual Meeting of the North American Region of the International Union Against TB and Lung Disease, Vancouver, British Columbia, Canada. Women and Tb: The Impact of Gender. March 2015.
27. 45<sup>st</sup> Union World Conference on Lung Health, Barcelona, Spain, November 2014. Moderator, Poster Discussion Session, Developing new regimens from treating MDR TB.
28. 45<sup>st</sup> Union World Conference on Lung Health, Barcelona, Spain, November 2014, Presentation, Linking Patients to Care Through Non-Traditional Contact Tracing.

### National

1. Centers for Disease Control and Prevention, National Center for HIV, STD and TB Prevention, Division of TB Elimination, Atlanta, Georgia, National TB Controllers' Workshop, September 5-7, 1996, Moderator, Plenary Session VI-Program evaluation.
2. American Thoracic Society, San Francisco, California, May 1997, Facilitator, Tuberculosis Poster Session I
3. National Jewish Medical and Research Center, Vail, Colorado, October 1997.” Frontiers in Mycobacteriology-TB at the Millennium: Debating the Controversies. “Nosocomial Transmission of MDR TB Without Apparent Contact”
4. Health Care for the Homeless National Conference, St. Louis, Missouri, May 1998,

“Occupational Exposure to TB-Perils, Pitfalls and Pearls”

5. International Union Against TB and Lung Disease (North American Region) – 6<sup>th</sup> Annual Conference: TB in the Third Millennium: Mobilizing for Elimination. Chicago, Illinois, March 2001, Co-Moderator: Tuberculosis Efforts in the Global Arena
6. International Union Against TB and Lung Disease (North American Region) –12<sup>th</sup> Annual Conference: TB- A Disease Without Borders, San Diego, California, February 2008, Co-Presenter: Mini-symposium: How to Write a Successful Scientific Abstract.
7. NJ Medical School Global Tuberculosis Institute, Regional Training and Medical Consultation Center, Webinar. Medical Update: Tuberculosis and Pregnancy. December 2010.
8. TB: Beyond the Basics- Sponsored by the New Hampshire TB Program and the New Jersey Medical School Global Tuberculosis Institute. Tuberculosis and Diabetes. Nashua, New Hampshire. June 2011
9. TB and CoMorbidity World TB Day, New York City Department of Health, New York, New York, March 2012.
10. GENXpert In the Field: Impact on Patients and Programs. San Francisco, California, American Thoracic Society. May 2012.
11. The Power of an Academic Partnership in Addressing Global Epidemics. Rey McDonald World TB Lectureship. New Jersey Medical School Tuberculosis Institute, Newark, New Jersey. March 2013
12. Intensified Case Finding in western Kenya. Tuberculosis Grand Rounds. New Jersey Medical School Tuberculosis Institute, Newark, New Jersey. March 2013
13. Global Perspective on XDR/MDR TB with an Emphasis on Control. Grand Rounds, Wishard Hospital, Indiana University School of Medicine, Indianapolis, Indiana. August 2013.
14. Research Nested within a Global Academic Partnership: Challenges and Opportunities. Grand Rounds. Duke University School of Medicine, Durham, North Carolina. September 2013.
15. E-Cigarettes – The Path to Tobacco Cessation or Nicotine Addiction. Worcester Pulmonary Symposium. Worcester, Massachusetts. March 2015.
16. TB and Pregnancy. New England TB Clinician’s Conference Worcester, Massachusetts. May 2015
17. Global to Local: Tuberculosis 2015 and Beyond. Keynote address. New York State TB Update, Albany, New York, September 2015



18. TB and Pregnancy. Grand Rounds, Lemuell Shattuck Hospital, Boston, Massachusetts, October 2015

Local

1. Grand Rounds, Roger Williams Medical Center, Providence, Rhode Island, April 1992, "Multi-drug Resistant Tuberculosis"
2. Grand Rounds, Roger Williams Medical Center, Providence, Rhode Island, March 1993, "Update in Tuberculosis"
3. Grand Rounds, Rhode Island Hospital, Providence, Rhode Island, December 1993, "Issues in Tuberculosis" Rhode Island Nursing Association, Newport, Rhode Island, May 1994, "Clinical Management in Tuberculosis"
4. Grand Rounds, Roger Williams Medical Center, Providence, Rhode Island, June 1994, "Issues in Tuberculosis: Is the Hospital a Safe Place?"
5. Grand Rounds, The Miriam Hospital, Providence, Rhode Island, December 1994, "Update in Tuberculosis: What's Happening in Rhode Island?"
6. Continuing Education Rounds, Harvard Community Health Plan (Rhode Island Division), Providence, Rhode Island, June 1995, "Issues in Tuberculosis: Are health care facilities safe?"
7. Grand Rounds, The Miriam Hospital, Providence, Rhode Island, March 1996, "The Third Epidemic: MDR TB"
8. Rhode Island State Nurses Association, April 1996, "Update on Tuberculosis (Tuberculin Skin Testing, Pharmacology of Antituberculous Agents, Clinical Management of TB Infection and Disease)"
9. Hasbro Children's Hospital, Providence, Rhode Island, Third Annual Hasbro Children's Hospital Pediatric Symposium, October 12, 1996, Panel participant, Panel on Tuberculosis.
10. Grand Rounds, Brockton / West Roxbury Veterans Administration Hospital, West Roxbury, Massachusetts, November 6, 1996, "Tuberculosis-Captain of the Men of Death"
11. Grand Rounds, South County Hospital, Wakefield, Rhode Island, January 24, 1997, "Directly Observed Therapy in the Management of Tuberculosis"
12. Grand Rounds, Rhode Island Hospital, Providence, Rhode Island, August 1997, "Tuberculosis for the Primary Care Provider: Screening, Preventive Therapy and Infection Control"

13. 39<sup>th</sup> New England Conference of Radiology Technologists, Sturbridge, MA, September 1997, “Tuberculosis 1997-Should We Be Concerned?”
14. 39<sup>th</sup> New England Conference of Radiology Technologists, Sturbridge, MA, September 1997, “Tuberculosis-Lessons from the Radiographs”
15. Grand Rounds, Roger Williams Medical Center, Providence, Rhode Island, October 1998, “International Health: Experiences in Kenya”
16. Grand Rounds, Women and Infant’s Hospital, Providence, Rhode Island, August 1999, “TB in Obstetrics: Is There a Cause for Concern?”
17. Case Management Conference, Rhode Island Hospital, Providence, Rhode Island, January 1999, “Pleural Tuberculosis”
18. Grand Rounds, Roger Williams Medical Center, Providence, Rhode Island, November 1999, “New Lessons From an Old Disease”
19. Infection Control: Spanning the Continuum of Healthcare, Mansfield, Massachusetts, November 1999, “Where are we with TB in Southern New England?”
20. Grand Rounds, Memorial Hospital of Rhode Island, Pawtucket, Rhode Island, June 2000, “Demystifying the PPD: When to Screen? When to Treat?”
21. Grand Rounds, Rhode Island Hospital, October 2001, Brown Kenya Program: Lessons For – and From-Both Worlds.
22. American College of Physicians/ American Society of Internal Medicine –Rhode Island Chapter, Internal Medicine Update, Newport, Rhode Island, November 2001, “Demystifying TB Infection: When to Screen. When to Treat.”
23. Rhode Island Chapter of Emergency Medicine Physicians Annual Meeting, Newport, Rhode Island, May 2002, Pulmonary Symptoms in the Returned Traveler.
24. Grand Rounds, Landmark Medical Center, Woonsocket, Rhode Island, March 2002, Tuberculosis 2002
25. Rheumatology Grand Rounds, Brown University, January 2003, TB Guidelines in Arthritis Patients: Rheum for Improvement
26. Grand Rounds, Memorial Hospital of Rhode Island, Pawtucket, Rhode Island, December 2003, Tuberculosis update: What’s new in 2003?
27. Panel Participant-The Global Consequences of AIDS: Reconnaissance on the Worldwide Impact-The Pandemic and Treatment. April (24) 2004. Pandemic/AIDS Symposium. Brown

- University, Providence, Rhode Island.
28. Clinical Laboratory Science Society of Central New England. Providence, Rhode Island. May 2005. Tuberculosis: Detection, Treatment, and Prevention.
  29. Division of Geriatrics Fundamentals Lecture Series, Brown Medical School, Providence, Rhode Island, August 2005. Tuberculosis for the Geriatrician.
  30. URI Advanced Microbiology Course MTC 541, Providence, Rhode Island, May 2007, Mycobacterium Tuberculosis.
  31. American Society for Clinical Laboratory Science – Central New England. Providence, Rhode Island, May 2010, Mycobacterium Tuberculosis Update.
  32. Family Medicine Grand Rounds, The Memorial Hospital, Pawtucket, Rhode Island, December 2011, Treatment of Latent TB Infection.
  33. Grand Rounds, Providence VA Medical Center, Providence, Rhode Island, December 2012. The Role of Primary Care in TB Elimination in the United States.
  34. Public Health Grand Rounds, Tuberculosis and Latent Tuberculosis Infection (LTBI) in Rhode Island: Epidemiology, Screening and Treatment. RI Department of Health, Providence, Rhode Island, February 2013.
  35. American Society for Clinical Laboratory Science – Central New England. Providence, Rhode Island, May 2013, The Challenge of Global TB Control.
  36. Grand Rounds, Roger Williams Medical Center, Providence, Rhode Island, May 2013. The Role of Primary Care in TB Elimination in the United States.
  37. Grand Rounds, Rhode Island Hospital, Providence, Rhode Island, March 2014. E-Cigarettes: the path to or from tobacco addiction?
  38. Grand Rounds (Global Health), The Memorial Hospital of Rhode Island, Pawtucket, RI. August 2014. The Role of the Primary Care Physician in TB Elimination in the US.
  39. Grand Rounds, Lemuel Shattuck Hospital, Boston, Massachusetts, December 2014, Intensified Case Finding in Western Kenya
  40. Rheumatology Grand Rounds, Roger Williams General Hospital, Providence, Rhode Island, March 2015, A Guide to TB Screening for Rheumatologists.

## **INVITED PARTICIPATION**

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International TB Consultancy Training Course

July 2002-2003.

**University of Alberta**

*Edmonton, Canada*

- One year distance based learning initiative that met every two weeks.
- Course funded by USAID to develop expertise in international consultancy skills.
- Only 23 individuals invited globally to participate; only 5 (including myself) completed the entire module. This course was held only once.
- Court Director—Anne Fanning

International TB Consultancy Course

June 2003

**NAR IUATLD/ATS/Gorgas TB Initiative,**

*Cambridge, Massachusetts*

- This course was a week long course funded by the International Union Against TB and Lung Disease to develop global expertise in international TB consulting skills.
- There were 25 invited participants and was held only once.

Independent Reviewer

2006, 2009

International Standards for Tuberculosis Care.

WHO

- I was one of three independent reviewers for the international guidelines (1<sup>st</sup> and 2<sup>nd</sup> editions)
- [http://www.who.int/tb/publications/2006/istc\\_report.pdf](http://www.who.int/tb/publications/2006/istc_report.pdf)

Independent Reviewer

2013

International Standards for Tuberculosis Care. Edition 3.

WHO

- I was one of three independent reviewers for the international guidelines.
- [http://www.who.int/tb/publications/2006/istc\\_report.pdf](http://www.who.int/tb/publications/2006/istc_report.pdf)

## GRANTS

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1. Directly Observed Therapy (DOT) for TB/HIV in Western Kenya  
Principal Investigator: Timothy Flanigan, M.D.  
Principal Researcher: **E. Jane Carter, M.D.**  
1 R03 TW006234-01  
3 years – Start date September 2003 (no cost extension granted 2008)  
\$30,000/year
2. Investigator- AHATT study (Aids Associated Assessment of TB Transmission)  
Center for Aids Research Developmental Grant  
1 year – Start date July 2004 (extended to 2008 due to delays by the Kenya based IRB)  
\$30,000/year
3. Technical Advisor\* – Tuberculosis Active Case Finding in Traditional and Non-Traditional Sites in Western Kenya  
FIDELIS Round 3– The International Union Against TB and Lung Disease

1 year – Start date July 2004; 3 month no cost extension granted  
\$199,000

\*The International Union Against TB and Lung Disease will not award a grant outside of the developing country in which the project is set. Although the award is formally to the Director of the hospital and the Dean of the medical school, I wrote and carried out the project. There were only 52 Fidelis grants awarded internationally and I was the technical advisor (i.e. PI) of two of these.

4. Technical Advisor\*\* – DOTS Expansion: Lab to Community Mobilization in North Rift Valley, Western Kenya  
FIDELIS Round 5– The International Union Against TB and Lung Disease  
1 Year – Start date April 2006; 3 month no cost extension granted  
\$250,000

\*\*The International Union Against TB and Lung Disease will not award a grant outside of the developing country in which the project is set. Although the award is formally to the Director of the hospital and the Dean of the medical school, I wrote and am carrying out the project.

5. Technical Advisor\*\*\*- FIND demonstration project: Use of rapid TB culture technology impact on the diagnosis of smear negative Tuberculosis in the developing world.  
Find Diagnostics-2 years Start date October 2006  
\$250,000

\*\*\*FIND will not award a grant outside of the developing country in which the project is set. Although the award is formally to the Director of the hospital and the Dean of the medical school, I wrote and am carrying out the project.

6. Principal Investigator, Fogarty International Research Scholars Program (FIRCS) and Fogarty International Research Fellows Program (FIRCF). Awarded Fall 2009.

The Fogarty International Clinical Scholars training grant funds both a US and a Kenyan student (FIRCS) as well as both a US and Kenyan resident/fellow to work on research projects and receive international research/project experience for one year at the Moi University Faculty of Health Sciences.

The Fogarty International Clinical Fellows grant funds both US and Kenyan junior faculty members for one year to perform their research projects on site at Moi University School of Medicine.

7. National Heart Lung Blood Institute Cardiopulmonary Center of Excellence RFP-NIH-NHLBI#HV-09-12  
The aim of the grant is to develop clinical researchers and human research capacity in cardiopulmonary medicine in western Kenya. Pulmonary PI. 5 % effort.

- a.) Supplemental Grants to Parent Award
  - i.) Indoor Air Pollution and its Resultant Health Effects in Kenya and Bangladesh ( 5 % effort) PI: Kimaiyo Subcontract Award Pending.
  - ii.) Feasibility Intervention Trial of two Types of Improved Cookstoves in three Developing Countries (5% effort) PI: Miranda. Subcontract Award # HHSN268200900033C
- 8. Operational Research in Tuberculosis (Memorandum of Understanding)
 

This MOU funds two junior Kenyan faculty to perform operational research in Tuberculosis. The deliverable products for the grant will be 2 submitted manuscripts per trainee. Awarded August 2010.  
\$50,000

  - a. Rose Kosgei, MBCHB- Intensified Case Finding in PMTC ( Prevention of Mother to Child Transmission of HIV) and Antenatal Clinics in western Kenya
  - b. Nicholas Kirui, MBCHB – Prevalence and Screening for TB in Diabetes clinics of western Kenya
- 9. Lot Quality Assurance Survey for Drug Resistant TB in western Kenya. World Health Organization. The aim of the grant is to apply new techniques ( lot quality assurance survey) to TB drug resistance surveillance programs. \$60,000 Awarded March 2011.
- 10. TB Reach- World Health Organization. Wave 2.
 

The purpose of the grant is to perform active case finding for TB in western Kenya. There are four goals: 1.) Community based active case finding for smear positive TB, 2.) Culture based case finding in smear negative TB, 3.) GenXpert based case finding in smear negative TB, and 4.) pediatric TB. \$999,257. One year – awarded 2011 July.
- 11.) TB Reach – World Health Organization Wave 2. Year 2.
 

The purpose of the grant is to perform active case finding for TB in western Kenya. There are four goals: 1.) Community based active case finding for smear positive TB, 2.) GenXpert based case finding in smear negative TB, 3.) pediatric TB. And 4.) TB Case Finding at District and Subdistrict Hospitals. \$800,000. One year – awarded 2013 July.

## **MAJOR RESPONSIBILITIES – ADMINISTRATIVE, TEACHING, RESEARCH**

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### **Medical Director**

1992-2007

RISE Clinic

*Providence, Rhode Island*

The Rise Clinic is the only TB clinic in the state of RI (8200 patient visits per year, serving a population of 1,000,000, highly immigrant state, Tb incidence 5/100,000).

- Acted as administrative liaison with hospital administration where clinic based and Department

- of Health, Grant preparation for clinic support
- Responsible for physician coverage of all sessions of the TB Clinic, either in terms of coverage schedule or personal coverage. Phone coverage for the clinic in off clinic hours. Direct patient care varies annually (3-6 clinics per week)
- Attending physician with teaching responsibilities for rotators through the clinic (Nursing students, medical students, fellows-ID, pulmonary, Pediatric ID), formal TB Public Health month course, longitudinal site (students, residents)
- Served as a consultant by telephone or on site for TB questions/difficult care questions for any provider in the state (including difficult diagnostic issues, complicated cases of co-morbidity, infection control, and outbreak investigation).
- Consulted for the Department of Health TB Control Division- outbreak investigation, case management outside of the TB Clinic
- Developed protocols for clinical care.

**Senior Consultant**

2007-2013

RISE Clinic

*Providence, Rhode Island*

- Worked three sessions per week in TB Clinic (75% of all clinic sessions).
- First call responsibilities for the Rise Clinic nine months of the year.
- Consultant backup for the nine sessions per week staffed by two other physicians; coverage of these additional clinic sessions for all vacations or travel.
- Consultation by telephone or on site for TB questions/difficult care questions for any provider in the state (including difficult diagnostic issues, complicated cases of co-morbidity, infection control, outbreak investigation).
- Attending physician with teaching responsibilities for rotators through the clinic (Nursing students, medical students, fellows-ID, pulmonary, Pediatric ID), formal TB Public Health month course, longitudinal site (students, residents)
- Grand Rounds and lectures locally for general TB education

**Brown-Kenya Medical Exchange Program Director**

1997-present

The Miriam Hospital

*Providence, Rhode Island*

In 1998, I co-founded the Brown-Kenya Program as a partnership between the Alpert Medical School at Brown University and the Moi University School of Medicine (MUSOM) in Eldoret, Kenya. The program was initially founded with two aims: 1) providing a bilateral educational exchange opportunity for faculty and students at both schools and 2) enhancing healthcare delivery services in western Kenya in conjunction with MUSOM. Today, after 10 years as Program Director, the program is now incorporated under the Department of Medicine International Programs since 2001 and is still successfully meeting and building on these goals.

Duties while on-site at Brown:

- Oversight of all education and training aspects of the exchange program described above. This includes the introductory lectures, applicant interviews, curriculum development for

rotations, and review of evaluations for all participants (the Brown student rotation is IM 320: Tropical Medicine in East Africa).

- Fiscal and managerial oversight of the program. This includes direct supervisory responsibilities over the administrative, medical education and research program staff at Brown and the appropriate procurement of philanthropic donations.
- Support and advise all Brown-associated faculty with interests in developing projects in Kenya. Specifically, I help anyone interested in writing grants to work in Kenya with MOSOM IRB regulations, human resource issues Kenyan government labor and employment regulations), general advice for supervision and coordinating twinning between Brown faculty and a Kenyan counterpart.
- Fund raising in conjunction with the Development offices of the Miriam Hospital, the RIH, Alpert Medical School and Brown University with the goal of expanding University awareness with alumni and potential donors.
- Coordinating with the Director of the Asante Consortium at Indiana University to develop new, mutually beneficial, initiatives.
- Participation in monthly IU-Kenya Partnership meetings.
- Personally leading the Brown Kenya Program Meeting every other month.
- Writing and editing the newsletter and web site.

I also spend on average 12 weeks per year in Kenya directly overseeing my several operational research grants. While on-site, my duties include:

1. Supervision of staff in Kenya. Currently, over 100 individuals are employed through grants or programs that I won or created.
2. The fiscal management of all grant and philanthropy funded projects on site with Kenyan Research Sponsored Projects Office. Responsibilities include: monthly budget reviews, direct oversight of all program fund transfers and signing-off on all equipment purchases using philanthropic funds.
3. I serve as the primary technical advisor for all TB related activities at Moi Teaching and Referral Hospital. As a result, I coordinate all existing programs and new initiatives with both the public sector appointees within the Ministry of Health, the National Tuberculosis and Leprosy Programme and MOSOM, i.e. Dean of Moi University Faculty of Health Sciences, Director of the Moi Teaching and Referral Hospital. In addition, I liaison with staff at private organizations such as AMPATH.
4. Designing large scale public health TB detection, treatment and control programs. My CV describes adequately the multiple successful research and operational grants and projects that I have brought to Eldoret and Brown.
5. Lecturing to students, residents and faculty as well as participate in AMPATH trainings—generally I give a minimum of two educational lectures per trip.
6. Clinical work—I serve as the weekly consultant at the MUSOM Chest Clinic every week I am on-site.

**AMPATH Technical Consultant in TB and TB/HIV**  
USAID PEPFAR AMPATH  
*Eldoret, Kenya*

2004- present



- TB/HIV technical consultant for both the USAID AMPATH PEPFAR site at Eldoret, Kenya (serving the North Rift Valley).
- Helped to design the TB/HIV care delivery system for both sites as well as design the clinical protocols for care at each site in conjunction with the Kenya National TB and Leprosy Program.
- Ran a TB/HIV training program at AMPATH (Eldoret, Kenya) for all HIV care providers (155) to introduce the new TB care guidelines for coordinated care.
- Served as liaison between AMPATH, MTRH/MUFHS and the Division of Lung Disease, TB and Leprosy, Kenyan national Government.
- Coordinated fiscal management of TB/HIV USAID funding (PEPFAR).
- Oversaw training activities in TB and TB/HIV- administrative as well as content design
- Evaluated and monitored program USAID AMPATH TB program

**International Technical Consultant in TB and TB/HIV**

2005-2007

PEPFAR Walter Reed Project  
*Kericho, Kenya*

- TB/HIV technical consultant for both the USAID Walter Reed PEPFAR site at Kericho, Kenya (serving the South Rift Valley).
- I have performed direct mentorship teaching at Kericho District Hospital to start their coordinated care program.
- Helped to design the TB/HIV care delivery system for both sites as well as design the clinical protocols for care at each site in conjunction with the Kenya National TB and Leprosy Program.
- Coordinated fiscal management of TB/HIV USAID funding (PEPFAR).
- Oversaw training activities in TB and TB/HIV- administrative as well as content design

**HOSPITAL TEACHING ROLES**

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**Teaching Attending (Internal Medicine)**

Roger Williams Medical Center  
*Providence, Rhode Island*

1986-1988; 1990-1995  
*(at least one month per year)*

**Teaching Attending (Internal Medicine)**

Rhode Island Hospital  
*Providence, Rhode Island*

2000  
*(November)*

Pulmonary Consult Service (Teaching Service) 3 months/year

The Miriam Hospital  
 Providence, Rhode Island

2013- present

Conference Series:

Chest Conference

1990-present

Brown University

*Providence, Rhode Island*

- Weekly pulmonary conference with minimum of 1 lecture per year.

Infectious Disease Conference

1993-present

Brown University

*Providence, Rhode Island*

- Weekly infectious disease conference with minimum of 1 lecture per year on tuberculosis.

The Miriam Hospital

1994-present

*Providence, Rhode Island*

- 2 lecture series on tuberculosis

Pulmonary and Critical Care Fellowship Program

1994-present

Brown University

*Providence, Rhode Island*

- Introductory lecture series for the fellows: Tuberculosis, Diagnosis and Management

Rhode Island Hospital

1997-present

*Providence, Rhode Island*

- 2 lecture series on active tuberculosis

Veterans Administration Medical Center

1997-2009

*Providence, Rhode Island*

- 1 lecture on active tuberculosis

Center for AIDS Research

2001-present

Brown-Tufts

*Providence, Rhode Island*

- Weekly lecture series with one conference per year on AIDS and TB issues in Africa.

Women & Infants Hospital

1998-1999

*Providence, Rhode island*

- 1 lecture on tuberculosis management

Roger Williams Medical Center

1993-1998

*Providence, Rhode Island*

- 3 lecture series on Tuberculosis

## **BROWN UNIVERSITY TEACHING ROLES**

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**Preceptor, BioMed 350**

1984-1988; 1990-1994 and 1997

Warren Alpert School of Medicine

*Providence, Rhode Island*

**Preceptor, Clinical Clerkship in Medicine** 1985-1988; 1991-1994  
Warren Alpert School of Medicine  
*Providence, Rhode Island*

**Preceptor, Tuberculosis Clinic** 1992-present  
RISE Clinic  
*Providence, Rhode Island*

- Pulmonary fellows, infectious disease fellows and pediatric infectious disease fellows each spend one-half day per week in the TB Clinic.
- Presently a site for longitudinal clinic for one Internal Medicine resident and for 1 pulmonary fellow.
- Miscellaneous rotators through the Tuberculosis Clinic include internal medicine residents (1 month Public Health elective- average 6-8/year), nurse midwives (from the University of Rhode Island) as well as physicians and nurse practitioners from the entire state of RI.

**Lecturer, second year Pathophysiology course** 1996, 1999, 2000-2004,  
2008- present  
Warren Alpert School of Medicine  
*Providence, Rhode Island*

**Lecturer, Pharmacology course** 1996-2000  
Warren Alpert School of Medicine  
*Providence, Rhode Island*

**Preceptor, Tropical Medicine in Kenya BMS Course # 320** 2002- present  
Warren Alpert School of Medicine  
*Providence, Rhode Island*

**Fogarty International Training Program in HIV/AIDS** 2007-present  
Warren Alpert School of Medicine  
*Providence, Rhode Island*

Executive Committee Member representing the Kenya Program.

Responsibilities: In order to add Kenya to the Lifespan Tufts AITRP, the following steps needed to be taken: 1.) secure an NIH grant (R03 in grants). 2.) Write a supplement grant to add Kenya (submitted 2004; re-submitted 2006 – received best score in the US on the resubmission).

One Kenya added to AITRP, Duties:

- 1.) Identify potential Kenyan trainees, including on site interview and assistance in application process
- 2.) Oversight of all Kenyan trainees at Brown
- 3.) Monthly meetings of the Fogarty Executive Committee as well as email review of candidate's application from all participating countries.
- 4.) Advise and assist with re-entry grants for Kenyan trainees, including IRB submission, fiscal accountability and reporting for grant awards related to AITRP, and logistical training on site in Kenya

Kenya trainees accepted to date:

- 1.) Dr. Hillary Mabaye, Chief, Reproductive Health, Moi Teaching and Referral Hospital, 3 month rotation: topic- HIV in women 2006
- 2.) Dr Esther Nabakwe, Staff pediatrician, Moi University School of Medicine, 3 month rotation: topic- TB/HIV in children 2006
- 3.) Ann Mwangi, Biostatistician, AMPATH (Academic Model For the Prevention and Treatment of HIV/AIDS, Eldoret, Kenya) – PHD candidate Biostatistics, Brown University-matriculated 9/07
- 4.) Dr. Winstone Nyandiko, Head of Research, AMPATH (Academic Model For the Prevention and Treatment of HIV/AIDS, Eldoret, Kenya) accepted 6 month rotation: topic-clinical trial design, accepted for Spring 2009; MPH candidate Harvard School of Public Health
- 5.) Dr. Rose Kosgei, Medical Officer AMPATH, Reproductive Health, 6 month rotation: Reproductive Health/TB. Masters Degree in Clinical Trial Management. London School of Tropical Hygiene. Matriculated September 2010.
- 6.) Edwin Sang, Data manager AMPATH, Completed his Master’s Degree in Biostatistics, matriculation September 2013
- 7.) Kirwa Kiprotu, Faculty in Public Health, Moi University School of Public Health, accepted for PhD Epidemiology, matriculated September 2010
- 8.) Ms. Lydia Kamle, Program Manager TB Projects Office, Moi University, Masters in Research administration/Business, Moi University School of Medicine, Matriculated fall 2010.
- 9.) Ms. Christine Chuani, Co-Director Research Sponsored Projects Office, AMPATH/Moi University School of Medicine. Masters Degree in Research Administration, Emmanuel College. Matriculated September 2011.
- 10.) Mr. Robert Rono, Co-Director Research Sponsored Projects Office, AMPATH/Moi University School of Medicine. Masters Degree in Research Administration, Emmanuel College. Matriculated September 2011.
- 11.) Ms. Sylvia Shangani, Research Staff AMPATH, completed Masters in Behavioral Medicine, September 2014 at Brown University now accepted to the PHD program
- 12.) Ms. Evon Okidi completed her Masters degree in Biostatistics matriculated September 2014 at Brown University
- 13.) Dr. Nicholas Kirui accepted for MMED matriculated at Moi University School of Medicine September 2012

## **MENTORING**

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### **T32 HIV Clinical Research Training Fellows**

- Jonathon Cohen, MD 2002-3 – Year 1 Project: Initiation of an antiretroviral therapy program for HIV/AIDS at a rural health center. Year 2: RI Foundation grant to design the AMPATH training program for HIV Care and administrate the first training session ( has grown to become the largest HIV training program in Kenya)..
- Micheal Waxman, MD 2005-6 – Project: Initiation of rapid on-site HIV testing as part of routine care in the casualty (emergency ) room of the Moi Teaching and Referral Hospital, Eldoret,

- Kenya.
- Adrian Gardener, M.D. 2009-2011. Fluoroquinolone resistance in Tuberculosis in the Developing World.
- Susannah Winston, M.D. 2010-2011. Sexual Health Risks and HIV Prevalence in Street Involved Youth in Western Kenya

### **Brown University Students**

- Sophy Wong: (2004) Project: Development of an evaluation tool of medical student knowledge regarding HIV/AIDS in western Kenya
- Alexander Westphal, Jennifer Montoya, Myron Allukian: (2005) Project: Voices of Hope Documentary, a film regarding the impact of HIV care delivery on stigma in western Kenya
- Monica Kumar; (2006) 9 month rotation on site in Kenya. Project: Introduction of Diagnostic testing and Counseling for HIV in the TB Clinic of Moi Teaching and Referral hospital.
- Nickhill Bhakta, (2004-present) 12 month rotation on site in Kenya; Projects: Intensified case Finding for TB in western Kenya, Stigma roles in TB and HIV in western Kenya. Publications in manuscript.
- Caitlin Naurekas ( 2013- present). Summer research grant. TB Case Finding in western Kenya.

### **Brown University Residents and Fellows**

- William Pomputius, M.D.(1994-1996)- Pediatric Infectious disease fellow. Continuity care clinic once per week for one year. Publication #7
- Elizabeth Dufort, MD- Pediatric Infectious Disease fellow (2006-9) Mentor panel participant. Paper in manuscript: Pediatric TB in western Kenya

### **Non-Brown University Students**

- Paul Park-Year long rotation on site in Kenya (2008-09) - TB logistics including development of first community based MDR treatment program in Kenya
- Koreem Khozain- Year long rotation on site in Kenya (2009-10) – Cervical cancer screening in HIV infected women cared for in the USAID AMPATH partnership (NIH funded ).
- Julia Jezmir-Fulbright Scholarship (2011-present)- year long rotation in Kenya to work on two of my projects: LQAS and TB Reach

### **Fogarty International Clinical Research Scholars**

Todd Fojo 2009-2010. Projects: 1.) Does Contact Tracing for Active TB Increase Yield in an Intensified Case Finding Program? 2.) Miliary TB- The conundrum of task Shifting- is the benefit worth the risk?

Daria Szkarko 2010-2011 Projects: Intensified case Finding in PMTC and ANC clinics in western Kenya. 2.) Institution of a Child Tracker System for TB Household Contacts.

Ben Pederson 2011-2012 Projects: Implementation of the Use of Gen Expert in TB Case

## Finding

### **Fogarty International Clinical Research Fellows**

Gerald Bloomfield -2009-10 Project: Prevalence of Markers of Atherosclerosis among Adult Patients with Congestive Cardiac Failure

Thomas Holland – 2010-2011 Project: Prevalence of Rheumatic Heart Disease in Western Kenya; An Echocardiographic Study

Matthew Strothers – 2010-2011 Project: Phase II Trial of Single Agent Gemcitabine for HIV Associated Kaposi Sarcoma in Western Kenya

Erin Dainty- 2011-2012 Project: Screening for Cervical Cancer in HIV Positive Kenyan Women: the Role of Human Papillomavirus Typing

### **International Trainees**

- Sopheak Thai, MD. – AITRP trainee – TB Chief, Center of Hope Hospital, Phenm Phen, Cambodia. Supervision for 6 month training on site at Brown followed by grant work consultation and assistance (writing and editing)
- Lameck Diero, MD.- Assisted in training Dr Diero as first bronchoscopy trained physician at Moi University School of Medicine ( including procurement of equipment, set-up of bronchoscopy suite on site, and protocol development) . Abstract #28 on publication list.
- Abraham Siika, MD.- Mentor panel member 2007-8 during Masters in Clinical Research, Indiana University, Thesis development: Cause of Death in HIV patients cared for in the USIAD AMPATH partnership ( submitted NIH December 2008).
- Bernard Olayo, MD – Mentor since medical school training at Moi University School of Medicine ('02) and through year of training at Harvard School of Public Health ('05). Presently Medical Director, Millennium Village Project, Nairobi, Kenya.
- Yanis Ben Amor, PhD.- Dr. Amor is now the director of the TB initiatives at the Millenium Village Projects, EARTH Institute. I have provided mentorship consultation through the last year of his fellowship (2006-7) and his first years in his present role. Technical clinical advice in TB issues as well as manuscript advice and review.

Rev.10.2015