# CURRICULUM VITAE GRACE W. WANJIKU, MD MPH

Assistant Professor of Emergency Medicine Department of Emergency Medicine Brown University Alpert Medical School 593 Eddy Street, Claverick 112 Providence, RI 02903 Grace\_wanjiku@brown.edu

## **EDUCATION**

Undergraduate Wellesley College

Biochemistry and French Cultural Studies

Aug 2002 - May 2006 Bachelor of Arts, 2006

Medical School Yale University School of Medicine

Aug 2007- May 2011 Doctor of Medicine, 2011

Other Degrees Yale School of Public Health

July 2015 - May 2017

Advanced Professional MPH (Global Health) 2017

#### POST GRADUATE TRAINING

Residency Rhode Island Hospital/ Hasbro Children's Hospital/ Miriam

Hospital

Brown University Emergency Medicine Residency Program

Aug 2011- July 2015 Emergency Medicine

Fellowship Yale New Haven Health

Clinical instructor. Fellow

Acute and Critical Care Ultrasound

Aug 2015- Aug 2017

# **PROFESSIONAL COURSES**

06/2011 Advanced Trauma Life Support

06/2013 Advanced Cardiac Life Support

06/2011 Project CLEAR

	the ED. Brown University Emergency Medicine Residency Program			
06/2013	Critical care course A simulation based course on the management of multiple critically ill patients Brown University Emergency Medicine Residency Program			
05/2013	Pediatric Sedation Course A didactic and simulation based course Brown University Emergency Medicine Residency Program			
04/2013	Advanced Airway Training Course An intensive two-day course using live anesthetized animals and simulation Brown University Emergency Medicine Residency Program			
04/2013	Emergency Radiology Course Two-week course on the systematic and rapid interpretation of X-rays and CT scans tailored for the Emergency Physician Brown University Emergency Medicine Residency Program			
2011-2015	Emergency Ultrasound ACEP level certification in E-FAST, Gallbladder, AAA. Proficient in procedural applications of ultrasound e.g central line placement Brown University Emergency Medicine Residency Program			
11/2019	Independent Practitioner Canadian Point of Care Ultrasound Society: Acute Care Core Track. Areas of certification: Aortic, Sub- xiphoid cardiac, Abdominal free fluid (upper quadrants) Abdominal free fluid (Pelvis), first trimester obstetrics, Pleural effusion, Pneumothorax			
10/2021	WHO-ICRC Basic Emergency Care: Approach to the acutely ill and injured. A training course for frontline healthcare providers who manage acute illness and injury with limited resources.			
POST GRADI	JATE HONORS AND AWARDS			
2014	Framework in Global Health Scholarship, Warren Alpert Medical School, Brown University			
2014	Global Health Initiative award, Emergency Medicine Residents Association			
2014	Global Health Impact Award, Brown University Emergency Residency			
2013	Program, Warren Alpert Medical School, Brown University			
2018	Global Health impact Award, Department of Emergency Medicine, Warren Alpert Medical School, Brown University			

## **UNDERGRADUATE HONORS AND AWARDS**

2000	Full Scholarship to United World College Hong Kong
2002	Full Scholarship, Davis United World College Scholar to Wellesley College
2003	SOS International Internship, Wellesley College
2003	First Year Chemistry Award, Wellesley College
2003	National Deans List, Wellesley College
2004	Roberta D. Staley and Karl A. Staley Fund for Cancer research. Wellesley
	College
2008	M.A. Cartland Shackford Medical Fellowship
2008	Wilbur Downs International Health Student Fellowship, Yale University

## PROFESSIONAL LICENSES AND BOARD CERTIFICATION

2009	USMLE Step1
2010	USMLE Step 2 CK and CS
2011-2015	Limited Physician License, Rhode Island Board of Medical Licensure and
	Discipline
2014	Pediatric Advanced Life Support
2015	Physician license, State of Connecticut
2016	Diplomate, American Board of Emergency Medicine
2017	Physician license, State of Rhode Island
2018	Physician License, Kenya Medical Practitioners and Dentists Board

# **ACADEMIC APPOINTMENTS**

2015-2017 Clinical Instructor and Fellow

Division of Emergency Ultrasound, Department of Emergency Medicine

Yale University School of Medicine

New Haven, CT

2017- Assistant Professor of Emergency Medicine

Department of Emergency Medicine Brown University Alpert Medical School

09-11/2018 Visiting Faculty and Carnegie African Diaspora Fellow Aga Khan University Hospital, Nairobi, Kenya

## **HOSPITAL APPOINTMENTS**

2011-2015	Resident Physician
	Department of Emergency Medicine, Rhode Island Hospital
	Providence, Rhode Island
2011-2015	Resident Physician
	Department of Emergency Medicine, Hasbro Children's Hospital
	Providence Rhode Island

2011-2015 Resident Physician Department of Emergency Medicine, Miriam Hospital Providence, Rhode Island Staff Physician 2015-2017 Department of Emergency Medicine, Yale New Haven Health New Haven. Connecticut OTHER APPOINTMENTS 2006-2007 Research Assistant. Beth Israel Deaconess Medical Center. Boston, MA 2010-2011 Radiology Triage Resident. Yale New Haven Hospital Emergency and Radiology Departments. New Haven, CT 2012-2015 Critical Care Transport Physician, Rhode Island Hospital, Hasbro Children's Hospital. Physician for LifePACT adult and pediatric ambulance service. Providence, RI Chief Knowledge Officer, Helpfie Smart First Aid and Helpfie Smart EMS 2014-Ouincy MA, USA and Nairobi Kenya **UNIVERSITY COMMITTEES** 2008-2011 Founder, Clinical Tropical Medicine Elective One of two students that started the first- ever clinical tropical medicine course. Organized student, resident and faculty groups to lecture on a monthly basis. Yale University School of Medicine. New Haven, CT 2008-2011 Member, Global Health Working Group Participated in a student-led initiative that invited Global Health leaders for monthly lectures to medicine and public health students Yale University School of Medicine. New Haven, CT 2013-2015 Vice chair. Founder. Brown Minority House-staff Association (BMHA) Founded a resident-led association that promotes the advancement of underrepresented house-staff through mentorship, networking and advocacy Alpert Medical School of Brown University. Providence, RI 2018-Member, Underrepresented in Medicine-Recruitment Committee (URiM-RC) Emergency Medicine Residency Program. Alpert Medical School of Brown University, Providence, RI 2021-Member, Residency Recruitment Committee Emergency Medicine Residency Program.

#### **MEMBERSHIP IN SOCIETIES**

2007-2011 Member, African Healthcare Professionals Interest Group (AHPIG)

Alpert Medical School of Brown University. Providence, RI

# Yale University

2007-2011	Member, Student National Medical Association (SNMA)
2011-2015	Emergency Medicine Residents' Association (EMRA)
2011-	Rhode Island ACEP Chapter (RI ACEP)
2011-	American College of Emergency Physicians (ACEP) Member, International Emergency Medicine Section
2014-	Member, African Federation of Emergency Medicine (AFEM)
2015-	Emergency Medicine Kenya Foundation (EMKF) Rural Point of Care Ultrasound trainer and coordinator
2015	Society for Academic Emergency Medicine (SAEM) Committee Member, Ultrasound interest group
2016	Member, Academy of Emergency Ultrasound (AEUS)
2019-	ACEP Deputy Ambassador for Kenya

## ORIGINAL PEER REVIEWED PUBLICATIONS

- 1. Tran LT, Wang'ondu RW, Weng JB, **Wanjiku GW**, Fong CM, Kile AC, Koepp DM, Hood-DeGrenier JK. (2010) TORC1 kinase and the S-phase cyclin Clb5 collaborate to promote mitotic spindle assembly and DNA replication in *S. cerevisiae*. Curr Genet. Dec; 56 (6): 479-93.
- 2. **Wanjiku, G.** Low Uptake of Intermittent Preventive Treatment of Malaria in HIV-infected Pregnant Women at an Urban Hospital in Accra, Ghana. (2011) Yale Medicine Digital Library. 1604.
- 3. Janeway H, Modi P, **Wanjiku G,** Millan R, Kato K. Foggle J, Partridge R. Training the trainers in emergency medicine: an advanced trauma training course in Rwanda's medical simulation center. The Pan African Medical Journal. 2015;20:242
- 4. Zaver, F, Boniface K, Shokoohi H, Wachira B, **Wanjiku G.** International Scope Of Emergency Ultrasound: Barriers To Utilizing Ultrasound To Guide Central Venous Catheter Placement By Providers In Kenya. CJEM, vol 18 Issue S1. May 2016 P.S127
- 5. **Wanjiku G,** Janeway H, Foggle J, Partridge R, Wang Y, Kearney A, Levine A Carter J, Tabu J. Assessing the impact of an emergency trauma course for senior medical students in Kenya. African Journal of Emergency Medicine, Volume 7, Issue 4, 2017, Pages 167-171

- 6. **Wanjiku G,** Bell G, Wachira B. Assessing a point of care ultrasound training program for rural health care practitioners in Kenya. <u>BMC Health Serv Res.</u> 2018 Aug 6;18(1):607.
- 7. Crosby J, Werku D, Zewdu T, **Wanjiku G**, Schmidt J. Acute Mesenteric Ischaemia. A case of expedited diagnosis and management using point-of-care ultrasound. African Journal of Emergency Medicine, Volume 8, Issue 4, 2018, Pages 164-166
- 8. Dreizler L, **Wanjiku G.** Tele-ECHO for Point-of-Care Ultrasound in Rural Kenya. A Feasibility Study. Rhode Island Medical Journal Vol 102, Number 7. Sept 2019
- 9. Waweru-Siika W, Barasa A, Wachira B, Nekyon D, Karau B, Juma F, **Wanjiku G**., Otieno H., Bloomfield G., Sloth E. Building focused cardiac ultrasound capacity in a low-to-middle-income country: A single centre study to assess training impact. African Journal of Emergency Medicine <u>Volume 10</u>, <u>Issue 3</u>, September 2020, Pages 136-143
- 10. Eke O, Henwood P, **Wanjiku G,** Fasina A, Kharasch S, Shookohi H. Global Point-of-care ultrasound education and training in the age of COVID-19. International Journal of Emergency Medicine 2021 14:12
- 11. Lee J, **Wanjiku G**, Nduku N, Aluisio A, Kharel R, Tabu S, Wachira B. The status and future of emergency care in the Republic of Kenya. African Journal of Emergency Medicine, Volume 12, Issue 1, 2022, Pages 48-52
- 12. Baloescu C, Parhar A, Liu R, **Wanjiku G**. Effect of Point-of-Care Ultrasound on Clinical Outcomes in Low Resource Settings: A Systematic Review. Ultrasound in Medicine & Biology, Volume 48, Issue 9, p1711-1719, September 1 2022
- 13. **Wanjiku G**, Dreizler L, Bell G, Wachira B. Utility of Project ECHO tele-mentoring to build capacity among non-specialist emergency care providers. African Journal of Emergency Medicine, Volume 12, Issue 4,2022, Pages 352-357
- 14. Nyamu N, Sugut J, Mochache T, Kimeu P, Mukundi G, Ngugi D, Njonjo S, Mustafa A, Mbuvi P, Nyagaki E, Kironji G, **Wanjiku G**, Wachira B. Facility-Oriented Simulation-Based Emergency Care Training in Kenya: A Practical Approach for Low- and Middle-Income Countries. Critical Care Clinics. Volume 38, Issue 4, 2022, Pages 839-852
- 15. **Wanjiku, G,** Dreizler, L, Wu, S. Baird J, Wachira B. Utility of hand-held ultrasound for image acquisition and interpretation by trained Kenyan providers. *Ultrasound J* **15**, 12 (2023).
- 16. Michaeli, N, De Luca, G, Gitau, M, Myers J, Ojuka D, Ouma D, Wieland T. **Wanjiku G.** Evaluation of the World Health Organization—International Committee of the Red Cross Basic Emergency Care course for senior medical students. *Int J Emerg Med* **16**, 29 (2023)

#### OTHER NON PEER REVIEWED PUBLICATIONS

- 1. **Grace Wanjiku,** Roland Stieger, Kristin Dwyer, Particia Henwood. International Ultrasound: Hepatic Vena Cava Syndrome. ACEP Emergency Ultrasound Section Newsletter August 2017.
- 2. Editor, AFEM Ultrasound Presentation Bank: Ultrasound for Dyspnea, Skin and musculoskeletal ultrasound, Ultrasound guided vascular access
- 3. **Grace Wanjiku,** Shirley Wu, Kristin Dwyer, Particia Henwood "International Ultrasound: Opportunities and challenges for the use of handheld ultrasound devices in rural Kenya." ACEP Emergency Ultrasound Section Newsletter, 2019

#### PUBLICATIONS SUBMITTED OR IN PREPARATION

- **1. Wanjiku G,** Bell G, Kapadia S, Wachira B. Impact of point-of-care ultrasound use on referral patterns in rural Kenya: A mixed methods study. *Submitted to BMC Health Services Research, under review*
- **2.** Myers, JG, **Wanjiku GW**, Ashley, S, Wangara AA, Maingi A, Dunlop SJ, Ojuka D, Othieno P, Wieland T, Platts-Mills, T. Impact of Ultrasound-in-Triage on Diagnosis and Treatment of Trauma Patients in the Accident & Emergency Department of Kenyatta National Hospital. *In preparation*
- **3. Wanjiku G,** Bell G, Kapadia S, Wachira B. Challenges of Point of care ultrasound performance in Rural Kenya. A qualitative assessment. *In preparation*

#### **ABSTRACTS**

- 1. **Wanjiku G,** Janeway H, Foggle J, Partridge R, Wang Y, Kearney A, Carter J, Tabu S. "Impact of an Innovative Low Cost Emergency Trauma Course for Senior Medical Student in Kenya" Presented at the International Conference on Emergency Medicine. Cape Town, South Africa. 04/2016
- 2. **Wanjiku G,** Janeway H, Foggle J, Partridge R, Wang Y, Kearney A, Carter J, Tabu S. "Impact of an Innovative Low Cost Emergency Trauma Course for Senior Medical Student in Kenya" Presented at the New England Regional SAEM Meeting. Worcester, MA. 04/2016
- 3. **Wanjiku G,** Dreizler, L. "Tele-ECHO for point of care Ultrasound in Rural Kenya: A Pilot Study. Poster Presentation at the Research Symposium, Warren Alpert Medical School of Brown University . 10/2018
- 4. **Wanjiku G,** Dreizler, L. "Tele-ECHO for point of care Ultrasound in Rural Kenya: A Pilot Study." Poster presentation at the 7<sup>th</sup> EMSSA International Conference, Cape Town South Africa, 11/2019

- 5. Karume A, Sugut J, Pirirei P, Guleid A, Mwongera P, **Wanjiku G,** Myers J, Beck A. An evaluation of current practices in management of diabetic ketoacidosis in a Kenyan academic medical center. 12th KEMRI Annual Scientific and Health (KASH) conference, Nairobi Kenya, 02/2022
- 6. Karume A, Sugut J, Pirirei P, Guleid A, Mwongera P, **Wanjiku G,** Myers J, Beck A. An evaluation of current practices in management of diabetic ketoacidosis in a Kenyan academic medical center. Society of Academic Emergency Medicine (SAEM) New Orleans, Louisiana. 05/2022
- 7. **Wanjiku G,** Dreizler L, Wu S, Baird J. Utility of smart phone based ultrasound use for image acquisition, interpretation and transmission by trained Kenyan providers. Society of Academic Emergency Medicine (SAEM) New Orleans, Louisiana. 05/2022
- 8. **Wanjiku G,** Dreizler L, Wu S, Baird J. Utility of smart phone-based ultrasound use for image acquisition, interpretation and transmission by trained Kenyan providers. SAEM New England Regional Meeting (NERDS) 04/2022
- Michaeli, N, De Luca, G, Gitau, M, Myers J, Ojuka D, Ouma D, Wieland T. Wanjiku
   Evaluation of the World Health Organization (WHO) Basic Emergency Care (BEC)
   Course for Senior Medical Students in Kenya. Society of Academic Emergency Medicine (SAEM) New Orleans, Louisiana. 05/2022
- 10. Michaeli, N, De Luca, G, Gitau, M, Myers J, Ojuka D, Ouma D, Wieland T. Wanjiku G. Evaluation of the World Health Organization (WHO) Basic Emergency Care (BEC) Course for Senior Medical Students in Kenya. SAEM New England Regional Meeting (NERDS) 04/2022
- 11. Nyamu N, Sugut J, Mochache T, Kimeu P, Mukundi G, Ngugi D, Njonjo S, Mustafa A, Mbuvi P, Nyagaki E, Kironji G, **Wanjiku G**, Wachira B. Facility-oriented, simulation-based emergency care training in Kenya: A practical approach for LMICs. Sixth African Conference on Emergency Medicine, Nov 16<sup>th</sup>-18<sup>th</sup> 2022 Accra, Ghana
- 12. Myers J, <u>Sugut</u> J, Ashley S, Ngila B, Maingi A, Wieland T, Othieno P, Platts-Mills T Shams R, Wangara A, Dunlop S, Jasper C, Mbuvi P, Hunold K Kimathi P, Ojuka, D **Wanjiku G.** Outcomes before and after introducing ultrasound for trauma patients in an emergency department in Kenya. Sixth African Conference on Emergency Medicine, Nov 16<sup>th</sup>-18<sup>th</sup> 2022, Accra, Ghana
- 13. Karume A, Sankei P, Ebert E, Mwongera P, Sugut J, Myers J, Guleid A, **Wanjiku G,** Beck A. Improvement in Knowledge of Diabetic Ketoacidosis Management Following a Casebased Curriculum in Kenya. SAEM New England Regional Meeting (NERDS) 04/2023
- 14. Karume A, Sankei P, Ebert E, Mwongera P, Sugut J, Myers J, Guleid A, **Wanjiku G,** Beck A. Improvement in Knowledge of Diabetic Ketoacidosis Management Following a Case-

based Curriculum in Kenya. Society of Academic Emergency Medicine (SAEM) Dallas Texas. 05/2023

# **BOOK CHAPTERS**

**1. Wanjiku, G.** Ultrasound for Trauma. AFEM Handbook of Acute and Emergency Care. 2<sup>nd</sup> edition. Checkett, KA, Wallis LA, Reynolds TA. Oxford University Press

# **INVITED PRESENTATIONS**

National 09/2015	Instructor, Yale New England Emergency & Critical Care Ultrasound Course. Newport RI
03/2016	Instructor, Yale Caribbean Emergency & Critical Care Ultrasound Course. Miami, FL
09/2016	Instructor, Yale New England Emergency & Critical Care Ultrasound Course. Newport RI
03/2016	Instructor, Yale Caribbean Emergency & Critical Care Ultrasound Course. Clearwater, FL
09/2017	Instructor, Yale New England Emergency & Critical Care Ultrasound Course. Newport RI
10/2017	Instructor, Vertigo Skills workshop. American College of Emergency Physicians (ACEP) Scientific Assembly, Washington DC
09/2019	Instructor, Yale New England Emergency & Critical Care Ultrasound Course. Newport RI
05/2020	Emergency Medicine and Point-of-Care ultrasound in Kenya Presented at the Center for Ultrasound Research and Education (CURE), Massachusetts General Hospital's Global Ultrasound Month Virtual Conference. Boston MA
01/2021	POCUS with a Global Focus. 4th Live Vave EduCast
05/2021	Remaining Engaged in Academic Global Emergency Medicine When Travel is Restricted. Society for Academic Emergency Medicine (SAEM) Annual Meeting 2021
01/2022	Brown Global Emergency Medicine National Education Conference. Point-of Care-Ultrasound Case presentation: Cardiac Tamponade. Providence RI

03/2022	Building a program in point-of-care Ultrasound. Center For Global Emergency Care, John Hopkins University, Baltimore USA					
06/2022	Brown Global Emergency Medicine National Education Conference. Point-of Care-Ultrasound Case presentation: First/ Second Trimester Focused Ultrasound. Providence RI					
09/2023	POCUS training and credentialling in Kenya: The Canadian POCUS (CPOCUS) outreach program. Society of Clinical Ultrasound Fellowships (SCUF) Annual Meeting 2023, Portland, Maine					
International						
10/2013	Trauma course for 13 first year emergency medicine residents. University Central Hospital Kigali (CHUK) Kigali, Rwanda					
02/2014	Ultrasound guided Central line placement training for to 34 residents in the ICU, Anesthesia and Emergency Departments Aga Khan University Hospital, Nairobi, Kenya					
02/2014	Trauma management in women, children and the elderly. 25 Emergency Department doctors and nurses. Aga Khan University Hospital, Nairobi, Kenya					
08/2014	Ultrasound in Critical care, Ultrasound Guided Central Line Placement. 45 trainees. 22 <sup>nd</sup> Kenya Society of Anesthesiologists (KSA) and 2 <sup>nd</sup> Critical Care Society of Kenya (CCSK) Scientific Conference. Mombasa, Kenya					
03/2015	Trauma Course for 22 graduating medical students. Moi University School of Medicine. Eldoret, Kenya.					
01/2016	Trauma Course for 24 graduating medical students. Moi University School of Medicine. Eldoret, Kenya.					
01/2016	Point of Care Ultrasound Course. 35 Medicine, Pediatrics and ICU doctors and nurses Nairobi Hospital, Kenyatta National Hospital. Nairobi, Kenya					
03/2016	2016 AIUM Annual Convention. New York, NY "Point of Care Ultrasound Training in Rural Kenya"					
04/2016	Point of Care Ultrasound refresher course for 20 primary rural health care practitioners. Nairobi, Kenya					
06/2016	Trauma Course for 22 graduating medical students. Moi University School of Medicine. Eldoret, Kenya.					
11/2016	Point of care 2-day pre-conference course. Third African conference on					

	Emergency Medicine. Cairo, Egypt
11/2016	Third African conference on Emergency Medicine, Cairo Egypt. "Point of care Ultrasound Training in Rural Kenya"
11/2016	Point of Care Ultrasound initial course for 20 primary rural health care practitioners. Nairobi, Kenya
03/2018	Trauma Course for 24 graduating medical students. Moi University School of Medicine. Eldoret, Kenya.
03/2018	Acute Cardiac Clinical Care Symposium, Aga Khan University Hospital, Nairobi Kenya. Panelist: Chest pain, Shortness of breath, Cardiac Tamponade
04/2018	Point of Care Ultrasound introductory course for 14 primary rural health care practitioners. Nairobi, Kenya
11/2018	Point of care 2-day pre-conference course. Fourth African conference on Emergency Medicine. Kigali, Rwanda
11/2018	Fourth African Conference on Emergency Medicine, Kigali, Rwanda. "Global Emergency Medicine Collaborations"
02/2020	Point of Care Ultrasound introductory course for 20 primary rural health care practitioners. Nairobi, Kenya
05/2020	<b>Wanjiku, G,</b> Mwarumba, N, Oyiengo, D, Wameyo, E, Kuria, C, Kiragu, AW. Managing COVID 19 Disease in the United States: Kenyan physicians and nurses share their experiences. Kenyatta National Hospital-University of Nairobi Zoom Webinar, May 6th, 2020.
04/2020	Stone M, <b>Wanjiku G</b> , Martin J. Lung Ultrasound. What you need to know. Butterfly Network Zoom Webinar, April 15 2020 <a href="https://www.butterflynetwork.com/uk/blog/lung-ultrasound-what-you-need-to-know">https://www.butterflynetwork.com/uk/blog/lung-ultrasound-what-you-need-to-know</a>
11/2020	Point of care 1-day pre-conference course. Fifth African conference on Emergency Medicine. Virtual Conference
06/2021	Impact of POCUS use on referral patterns in rural Kenya: A mixed methods study. WINFOCUS $16^{\rm th}$ Virtual World Congress $2021$
08/2022	POCUS in Pregnancy. Virtual Emergency POCUS training for 12 Emergency Medicine Diploma trainees. Aga Khan University Hospital, Nairobi Kenya.

- 12/2022 Utility of Hand-held ultrasound for image acquisition and interpretation by trained Kenyan providers. WINFOCUS 17<sup>th</sup> World Congress Hybrid Conference, Dec 1-Dec 4, Antalya, Turkey.
- O5/2023 POCUS in Pregnancy. POCUS for Emergency and Acute Care in Resource-Limited Settings (PEARLS) virtual lecture series, Australia.
- 05/2023 Introduction to POCUS. Virtual presentation to 12 pediatric doctors in Nepal, hosted by the departments of global emergency medicine and pediatric emergency ultrasound, Brown University.

## **GRANTS**

Division of Global Emergency Medicine Seed Grant 10/2022-10/2023
 Evaluation of the World Health Organization—International Committee of the
 Red Cross Basic Emergency Care course for senior medical students
 Role: Principal Investigator

Total Costs: \$3,000

2. Global Health Scholars Program, University of North Carolina Chapel Hill 04/2023-04/2025

Needs Assessment, Implementation and Evaluation of the Basic Emergency Care Training for Kenyan Medical Students.

Role: Co-Principal Investigator

Total Costs: \$8,000

3. Carnegie African Diaspora Alumnae Fellowship 03/2020-03/2021

Curriculum development for a Masters of Emergency Medicine, Aga Khan University Hospital, Nairobi Kenya (AKUHN). Collaborative project between Grace Wanjiku (MD) Brown University and Benjamin Wachira MMED (AKUHN)

4. Kenyatta National Hospital/ University of Nairobi Research Funding 09/2020-09/2021.

Effectiveness of point-of-care ultrasound for diagnosis and management of COVID-19 in Kenya

Role: Co-Investigator Total Costs: \$ 4,000

5. UEMF Research Development Grant 09/2019

10/2018-

Kenya Rural Point of Care Ultrasound Tele-ECHO. A pilot Study

PI: Grace W Wanjiku Total Costs: \$40,000 6. Carnegie African Diaspora Fellowship 09/2018-11/2018 Curriculum development for a Masters of Emergency Medicine, Aga Khan University Hospital, Nairobi Kenya (AKUHN). Collaborative project between Grace Wanjiku (MD) Brown University and Benjamin Wachira MMED (AKUHN)

Total costs: \$19,000

7. Aga Khan University Research Council grant 03/2019

04/2018-

Impact of FATE Training on the Performance of Basic Bedside Echocardiography by Non Cardiologists at Aga Khan University Hospital, Nairobi Kenya (AKUHN)

PI: Wangari Waweru Siika. Role: Co-Investigator

Total costs: \$10,000

8. Emergency Medicine Residents Association: Global Health Initiative Award 09/2014-03/2015

To design, implement and evaluate a trauma course for graduating medical students

at Moi University School of Medicine. Eldoret, Kenya

P.I: Adam Levine, MD. Role: Principal collaborator Percent effort: 80%

Total costs: \$2,000

9. Brown University: Framework in Global Health Scholarship. 09/2014-03/2015 To design, implement and evaluate a trauma course for graduating medical students

at Moi University School of Medicine. Eldoret, Kenya

P.I: Adam Levine, MD. Principal collaborator Percent effort: 80%

Total costs: \$3,500

10. Yale University School of Medicine: Wilbur Downs International Health Student Fellowship. 06/08- 08/08

To Investigate the Uptake of Intermittent Preventive Treatment of Malaria in HIV infected Pregnant Women at an Urban Hospital in Accra, Ghana.

 $P.I.: Elijah \ Paintsil, \ MD \ Role: Student, \ research \ assistant \ Percent \ effort: \ 80\%$ 

Total costs: \$2,500

11. Wellesley College: Roberta D. Staley and Karl A. Staley Fund for Cancer research 09/2004-05/2006

To Investigate the secretory pathway in the yeast *S. cerevisiae* model P.I: Jennifer Hood-Degrenier P.hD. Role: Research Assistant Percent effort: 60%.

Total costs: \$2,500

#### UNIVERSITY TEACHING, ADVISING and MENTORING ROLES

*Undergraduate teaching* 

12/2015 Medical Student Point-of-Care Ultrasound Workshop "Understanding body anatomical planes" Yale School of Medicine, New Haven, CT

07/2019 Medical Student Point of Care Ultrasound Workshop "Basics of Ultrasound" The Warren Alpert Medical School of Brown University, Providence R

# **Mentoring**

1. Lindsay Dreizler, MD Candidate 2021, Warren Alpert Medical School of Brown University. 2018-Present

<u>Funding:</u> Summer Assistantship, 2018. \$ 3,500

<u>Publication:</u> Dreizler L, Wanjiku G. Tele-ECHO for Point-of-Care Ultrasound in Rural Kenya. A Feasibility Study. Rhode Island Medical Journal Vol 102, Number 7. Sept 2019

2. Jennifer Loehner MD Candidate 2023 University of Washington School of Medicine Summer 2020

Funding: Global Innovation Fund, University of Washington School of Medicine \$ 10,000

<u>Project:</u> Developing milestones and assessment tools for the EM residency program at Aga Khan University Hospital, Nairobi Kenya

3. Derrick Ochieng, MB ChB Candidate 2021, University of Nairobi School of Medicine Summer 2020-

<u>Publication:</u> Michaeli, N, De Luca, G, Gitau, M, Myers J, Ojuka D, Ouma D, Wieland T. Wanjiku G. Evaluation of the World Health Organization—International Committee of the Red Cross Basic Emergency Care course for senior medical students. *Int J Emerg Med* **16**, 29 (2023)

4. Mary Gitau: MB ChB Candidate 2021, University of Nairobi School of Medicine Summer 2020-

<u>Publication:</u> Michaeli, N, De Luca, G, Gitau, M, Myers J, Ojuka D, Ouma D, Wieland T. Wanjiku G. Evaluation of the World Health Organization—International Committee of the Red Cross Basic Emergency Care course for senior medical students. *Int J Emerg Med* **16**, 29 (2023)

5. Sonja Kapadia: MD Candidate 2026, Warren Alpert Medical School of Brown University. 2021-present

<u>Project:</u> Impact of point-of-care ultrasound use on patient referral decisions in rural Kenya: A mixed methods study

#### Residents

08/2015 "Sono-wars" Resident point of care ultrasound skills competition. Emergency Medicine Residency Conference, New Haven, CT

05/2016	"Pass the Pointer" Resident Ultrasound Image review. Yale Department of Emergency Medicine Residency Conference, New Haven, CT
05/2016	Ultrasound use in critical care. Residency Area of Concentration (AOC) lecture and hands –on workshop.  Department of Emergency Medicine Residency Conference, New Haven, CT
08/2016	"Sono-wars" Resident point of care ultrasound skills competition. Emergency Medicine Residency Conference, New Haven, CT
10/2016	"Pass the Pointer" Resident Ultrasound Image review. Yale Department of Emergency Medicine Residency Conference, New Haven, CT
01/2017	Determination of fluid responsiveness using carotid flow time. Residency Area of Concentration (AOC) lecture and journal club. Department of Emergency Medicine Residency Conference, New Haven, CT
07/2018	Intern Point of care ultrasound bootcamp. Brown University Emergency Medicine Residency Program. Providence, RI
07/2019	Intern Point of care ultrasound bootcamp. Brown University Emergency Medicine Residency Program. Providence, RI
09-10 /2019	Supervisor, Clinical Rotation at Kenyatta National Hospital, Nairobi Kenya Dr. Andrew Beck, Brown Emergency Residency Program Presentation "Organophosphate Poisoning" At the Brown Global Emergency Medicine Division's Education Conference 11/2020
10-11 /2019	Supervisor, Clinical Rotation at Kenyatta National Hospital, Nairobi Kenya Dr. Michael Wilk, Brown Emergency Residency Program Presentation "Management of pneumothorax in a low resource setting" At the Brown Global Emergency Medicine Conference. 02/2020
01/2020	Global Emergency Medicine Division Point of Care Ultrasound Case presentation, Brown University Emergency Medicine Residency Program. Providence RI
07/2020	Intern Point of care ultrasound bootcamp. Brown University Emergency Medicine Residency Program. Providence, RI
06/2021	Brown Global Emergency Medicine National Education Conference. Point-of Care-Ultrasound Case presentation: Lung Ultrasound. Providence RI
07/2021  Mentoring	Intern Point of care ultrasound bootcamp. Brown University Emergency Medicine Residency Program. Providence, RI

1 Sonya Naganathan MD, Fellow, Division of Global Emergency Medicine, Department of Emergency Medicine, Warren Alpert Medical school of Brown University

<u>Funding Framework in Global Health Award, Warren Alpert Medical School of Brown University</u> \$3,500

<u>Project:</u> Impact of ultrasound in triage on diagnosis and treatment of trauma patients at the Accident and Emergency Department of Kenyatta National Hospital

2 Nichole Michaeli, MD, Brown Emergency Residency Program. Scholar, Brown Residency International/Global Health Training Pathway (BRIGHT) Program

<u>Funding:</u> Framework in Global Health Award, Warren Alpert Medical School of Brown University \$ 3,500

<u>Publication</u> Michaeli, N, De Luca, G, Gitau, M, Myers J, Ojuka D, Ouma D, Wieland T. Wanjiku G. Evaluation of the World Health Organization—International Committee of the Red Cross Basic Emergency Care course for senior medical students. *Int J Emerg Med* **16**, 29 (2023)

3 Giovanna Deluca MD, Emergency Medicine resident, Brown Emergency Residency Program

<u>Funding</u>: Division of Global Emergency Medicine seed grant: \$3000 <u>Publication Michaeli</u>, N, De Luca, G, Gitau, M, Myers J, Ojuka D, Ouma D, Wieland T. Wanjiku G. Evaluation of the World Health Organization—International Committee of the Red Cross Basic Emergency Care course for senior medical students. *Int J Emerg Med* **16**, 29 (2023)

4 Andrew Beck MD Emergency Medicine resident, Brown Emergency Residency Program

<u>Project:</u> Implementation of an educational intervention to address DKA management at Kenyatta National Hospital, Nairobi Kenya

#### HOSPITAL TEACHING ROLES

09/2011 Brown Emergency Medicine Residency Program

Journal Club Presentation

Topic: Clinical outcomes related to adrenal suppression secondary

to Etomidate use for rapid sequence intubation Rhode Island Hospital, Providence, Rhode Island

04/2013 Brown Emergency Medicine Residency Program

Toxicology Conference Topic: Iron Toxicity

Rhode Island Hospital, Providence, Rhode Island

09/2013 Brown Emergency Medicine Residency Program

Clinical Pathological Conference (CPC)

Topic: Multiple ED bounce backs, Febrile patient. Still's Disease

Rhode Island Hospital, Providence, Rhode Island

10/2013 Brown Emergency Medicine Residency Program

LifePACT Emergency Medical Services Lecture Series

Topic: EMS in Kenya

Rhode Island Hospital, Providence, Rhode Island

2013-2015 Brown Emergency Medicine Residency Program

**Medical Student Lecture Series** 

Dizziness/ Syncope. Orthopedic injuries. Taught on multiple days

Rhode Island Hospital, Providence, Rhode Island

2014-2015 Brown Emergency Medicine Residency Program

Emergency Medicine Morning Report: Multiple topics: 30 minute lectures

Rhode Island Hospital, Providence, Rhode Island

#### CURRICULUM DEVELOPMENT

#### International

09/2019-11/2019	Curriculum	for Master	of Medicine	in Emergency	Medicine	(M.Med

EM) Aga Khan University, Nairobi, Kenya. Developed a curriculum for a 4-year Masters of Medicine in Emergency Medicine, submitted it to the Dean of the Medical school and to the Commission of University

Education

09/2019- 11/2019 Curriculum for Undergraduate Medical Student Core Clerkship in

Emergency Medicine, Aga Khan University, Nairobi, Kenya. Developed the curriculum for a 3-week core clerkship in Emergency Medicine,

submitted to and approved by the Dean of the Medical School

09/2019-11/2019 Curriculum for The Emergency Care Course (TECC), a 5-day course

developed by the Emergency Medicine Kenya Foundation, targeted to health care workers who work in emergency centers all across Kenya.

#### **PUBLIC SERVICE**

2015- Member, Emergency Medicine Kenya Foundation (EMKF). A non-profit organization to guide and inform the development of a sustainable emergency medical care system in Kenya appropriate for the local healthcare system.

Founding Member, EMK foundation. A 501(c)(3) public charity established in the US to support Emergency Medicine Kenya Foundation and other non-profit emergency care organizations in line with our mission.

# Grace W Wanjiku MD