



TRANSITIONING FROM EARLY TO ESTABLISHED RESEARCH CAREER

Presented by:

Emmanuel Balandya MD, PhD

GloCal Fellow, 2015 and PI, SPARCO-Tanzania

Senior Lecturer, Physiology and Director, Postgraduate Studies
Muhimbili University of Health and Allied Sciences (MUHAS)



GloCal Career Development Webinar
May 19th, 2021

Outline

- ◆ Professional training
- ◆ Fellowships
- ◆ Grants
- ◆ Lessons learnt

Professional Training

- MD (2000– 2005) at Muhimbili University College of Health Sciences (MUCHS), by then constitute college of the University of Dar-es-salaam (now MUHAS).



Professional Training

- ◆ Internship (2005– 2006) at Kilimanjaro Christian Medical Center in Moshi, Tanzania.



Professional Training

- ◆ PhD (2008– 2012) at Dartmouth Medical School, Hanover, NH, US.



Professional Training

- Post-doc (2012– 2014) at Harvard Medical School, Boston, MA, US.



Fellowships

- ◆ Dartmouth-Boston University Fogarty AIDS Training and Research Program (AITRP)
 - ◆ At Dartmouth (2008-2012)
 - ◆ Supported my PhD

- ◆ UCGHI GloCal Health Fellowship
 - ◆ At Muhimbili University (2015-2016)
 - ◆ Supported my relocation to Tanzania

International Institution & Mentors



International Institution – Muhimbili
University of Health and Allied Science
(MUHAS), Dar-es-salaam, Tanzania

1. UCSF Mentor - Teri Reynolds
MD, MS, PhD
2. Trans Mentor (UNMC)- Stephen
Obaro MD, PhD, FRCPC, FAAP
3. International Inst. Mentor - Julie
Makani MD, PhD, FRCP, FTAAS

Fellowships

Tanzania Journal of Health Research
Volume 19, Number 2, April 2017

Doi: <http://dx.doi.org/10.4314/thrb.v19i2.3>

Increased memory phenotypes of CD4+ and CD8+ T cells in children with sickle cell anaemia in Tanzania

EMMANUEL BALANDYA^{1*}, TERI REYNOLDS^{1,2}, SAID ABOUD¹, STEPHEN OBARO^{3,4}
¹Muhimbili University of Health and Allied Sciences, P.O. Box 65,004
²University of San Francisco, California, San Francisco, USA
³University of Nebraska Medical Centre, Nebraska
⁴University of Abuja Teaching Hospital, Nigeria
⁵University of Oxford, Oxford



CRITICAL REVIEW

Alteration of lymphocyte phenotype and function in sickle cell anemia: Implications for vaccine responses

Emmanuel Balandya,^{1*} Teri Reynolds,^{1,2} Stephen Obaro,^{3,4} and Julie Makani¹

American Journal of Hematology, doi:10.1002/ajh.24438

- [Global Health Research News](#)
- [Global Health Matters Newsletter](#)
- [Events, Conferences & Workshops](#)
- [Webcasts & Videos](#)
- [Publications](#)
- [Fogarty Trainee Profiles](#)
- [Early-career Researcher Profiles](#)
- [Making a Difference](#)
- [Manage Subscriptions](#)

COVID-19: [COVID-19 public health information from the US CDC](#) | [COVID-19 research information from the US NIH | Español](#) | [COVID-19 resources for global health researchers](#)

Profile: Fogarty Global Health Fellow Dr Emmanuel Balandya studies sickle cell immunity

January / February 2017 | Volume 16, Issue 1

- [Full January / February 2017 Global Health Matters newsletter \[PDF <1M\]](#)

By Karin Zeitvogel

The brother and sister playing in the clinic at Dar-es-Salaam's Muhimbili National Hospital reminded Dr. Emmanuel Balandya why he chose to focus his research as a [Fogarty Global Health Fellow](#) on the role of immune cells in sickle cell disease.

"Both had sickle cell anemia, which is the most common, and often most severe, form of sickle cell disease," Balandya said. "Thinking about what they will go through - especially in an African setting - reminded me of how much work remains to be done on sickle cell, and how wide the knowledge gaps are."

Sickle cell disease is a group of inherited disorders that cause hemoglobin, the protein in blood that carries oxygen around the body, to change red blood cells into a crescent - or sickle - shape, and become inflexible and sticky. Sickled red cells can cause a blockage in the circulatory system, preventing blood from carrying oxygen to tissues and organs, and causing pain and sometimes death. Most babies with sickle cell disease are born in Africa, and 50 to 80 percent of them die before the age of 5. The most common cause of death in children with sickle cell is infection. Tanzania ranks fourth in the world for sickle cell disease prevalence after Nigeria, the Democratic Republic of Congo and India.



Photo by Karin Zeitvogel

Dr. Emmanuel Balandya explains his Fogarty Global Health Fellowship research on sickle cell anemia at a poster session in July 2016.

Emmanuel Balandya, M.D., Ph.D.

Grants

Past

Grant	Duration	Aim	Role
U24 HL 135881 (Makani) - Sickle Pan-African Research Consortium (SPARCO)	2017- 2021	To promote, strengthen and develop research as a strategy for improving health, advocacy and training in sickle cell disease in Africa	Co-investigator

Grants

Present



Grant	Duration	Aim	Role
U01 HL 156853 (Balandya)- Sickle Pan- African Research Consortium (SPARCO) - Tanzania	2021- 2026	To promote, strengthen and develop research as a strategy for improving health, advocacy and training in sickle cell disease in Tanzania as part of the larger Sickle Cell Disease in Sub-Saharan Africa Network	Principal Investigator

Grants



Grants

Present

Grant	Duration	Aim	Role
R25 TW011227 (Kwesigabo/Kaaya) - Transforming Health Professions Education in Tanzania (THET)	2018- 2023	To produce health professionals through innovative education strategies, who are competent and ready to practice interprofessionally whenever they are in Tanzania to take care of patients including those with HIV/AIDS.	Co-investigator

Grants

Balandya et al. *BMC Medical Education* (2021) 21:166
<https://doi.org/10.1186/s12909-021-02611-0>

BMC Medical Education

RESEARCH ARTICLE

Open Access

Building sustainable research capacity at higher learning institutions in Tanzania through mentoring of the Young Research Peers



Emmanuel Balandya^{1*}, Bruno Sunguya¹, Daniel W. Gunda², Benson Kidenya², Tumaini Nyamhanga¹, Irene K. Minja¹, Michael Mahande³, Blandina T. Mmbaga³, Stephen E. Mshana², Kien Mteta³, John Bartlett⁴ and Eligius Lyamuya¹

Grants

Present

Grant	Duration	Aim	Role
D43 TW009573 (Adams) - Dartmouth- Boston University HIV-TB Research Training for the Infectious Disease Institute at MUHAS	2013- 2023	To build research capacity for HIV and HIV/TB epidemiology for faculty at MUHAS in order to support the MUHAS Infectious Disease Institute.	Co-investigator

Grants

Present

Grant	Duration	Aim	Role
D43 TW010946 (Hawkins/Hirschhorn) - Building capacity for patient centered outcomes research to improve the quality and impact of HIV care in Tanzania	2019-2024	To build capacity among Tanzanian investigators to lead Patient-Centered Outcomes Research (PCOR) in HIV disease prevention, care and treatment and HIV-related comorbidities.	Co-investigator

Grants

Present

Grant	Duration	Aim	Role
NORHED 69940 (Moen, Kåre) - Strengthening Doctoral Education for Health in Tanzania (DOCEHTA)	2021- 2026	To improve PhD training at MUHAS and University of Dodoma in Tanzania through development of Research Training short courses, postgraduate guidelines, online application system, training of PhD supervisors and PhD scholarships.	Co-investigator

Lessons Learnt and Advice

- ◆ Fellowships and small grants are very impactful

Lessons Learnt and Advice

- ◆ Fellowships and small grants are very impactful
- ◆ Involve yourself with established research groups

Lessons Learnt and Advice

- ◆ Fellowships and small grants are very impactful
- ◆ Involve yourself with established research groups
- ◆ Create a track record (body of work, applications)

Lessons Learnt and Advice

- ◆ Fellowships and small grants are very impactful
- ◆ Involve yourself with established research groups
- ◆ Create a track record (body of work, applications)
- ◆ You may have to allocate a block of time when you work very hard to make significant career steps





Thank you
