

CURRICULUM VITAE

EVELYN NUNGARI GITAU

MAY 2016

PERSONAL DETAILS

Date of birth	14 June 1976
Place of birth	Nairobi, Kenya
Nationality	Kenyan
Present position	Programme Manager – Grand Challenges Africa
Address	African Academy of Sciences (AAS), Alliance for Accelerating Excellence in Science in Africa (AESA) 8 Miotoni Lane, Karen, Nairobi Email: e.gitau@aasciences.ac.ke Website: www.aasciences.ac.ke Skype: evelyn.gitau

PROFILE

- Research: Basic scientist with expertise in cellular immunology, molecular biology including proteomics and genomics, infectious diseases.
- Programme Management: Specialist in grants management; fundraising, strategy and policy.
- Academics: Teaching-classroom and e-learning, mentorship, teaching and facilitation for immunology, chemistry and infectious diseases and biostatistics.
- Excellent communication and team working skills.
- Experience in working effectively in a multicultural environment.

EDUCATION

- 2008** PhD, Life Sciences, Open University (UK) and Liverpool School of Tropical Medicine (UK)
Changes in protein levels as markers of severe disease: An investigation on severe malaria
(Supervisors Prof. Stephen Ward, Prof. Charles Newton & Prof. Gilbert Kokwaro)
- 2001** MSc, Biomedical Sciences, Barry University, USA
- 1997** BSc (Magna cum laude), Chemistry and Biology, Mayville State University, USA

AWARDS

- 2015** Next Einstein Forum Fellow - African Institute for Mathematical Sciences (AIMS) Group
- 2015** Travel Award Mass Spectrometry Applications to the Clinical Lab – USD \$ 500
- 2014** ISSF Travel Application 'Clinical proteomics and metabolomics mass spectroscopy in Kenya – GBP £7182
- 2013** Stars in Global Health – Round 5 Phase I, Grand Challenges Canada – CAD \$113,000
- 2010** Travel Award Multilateral Initiative on Malaria – USD\$2000
- 2007** Travel Award Keystone Symposium, Drugs Against Protozoan Diseases – USD\$2000
- 2005** Travel Award Multilateral Initiative on Malaria – USD\$2000

PROFESSIONAL ACTIVITIES

- 2016-** Member Capacity Building Advisory Committee
(KEMRI-Wellcome Trust Research Programme)
- 2015 -** Member Independent Scientific Advisory Board (ISAB), Malawi-Liverpool-Wellcome Trust Clinical Research Programme College of Medicine, Blantyre, Malawi
- 2012-2015** Member Data Governance Committee
(KEMRI-Wellcome Trust Research Programme)
(Acting Chair 2013-2014)
- 2011-2015** Member Pathogen Vector and Host Biology Department Management Group (KEMRI-Wellcome Trust Research Programme)
(Member of Strategy writing sub-committee)
- 2010- 2015** Member Scientific Steering Committee
(KEMRI-Wellcome Trust Research Programme)
- 2010- 2015** Member Programme Forum
(KEMRI-Wellcome Trust Research Programme)
(Secretary 2010-2011, Chair 2011-2012)
- 2014** Member of the Human Proteome Organization
- 2012 -** Fellow of the Royal Society of Tropical Medicine and Hygiene
- 2009-2010** Cluster Reporter, Laboratory Management Group
(KEMRI-Wellcome Trust Research Programme)

GRANTS

Administering body: Bill & Melinda Gates Foundation

Principal Applicant: Evelyn Gitau

Title of grant application: Engage existing Grand Challenges grantees in Africa to identify opportunities to increase the likelihood of success and impact of their projects

Status of Application: Project Ongoing (2015-2017) (USD \$1,041,383)

Administering body: Bill & Melinda Gates Foundation

Principal Applicant: Evelyn Gitau

Title of grant application: Travel Support for Partners in Africa & Engaging African Scientific Journalists during the AESA launch and Grand Challenges Africa launch

Status of Application: Project Ongoing (2015-2017) (USD \$270,000)

Type: Stars in Global Health Round 5 Phase 1

Administering body: Grand Challenges Canada

Principal Applicant: Evelyn Gitau

Title of grant application: Multiple biomarkers for diagnosis of infectious diseases. A solution to undiagnosed infection in Severe Acute Malnutrition in Children

Status of Application: Project Completed (2013-2015) (CAD \$113,000)

Type: Research Capability Strengthening for Malaria Research in Africa

Administering body: World Health Organization (W.H.O) Multilateral Initiative on Malaria (MIM)

Principal Applicant: Professor Gilbert Kokwaro; **Evelyn Gitau Co Investigator**

Title of Grant Application: "Changes in biomarkers of severe disease: A Proteomic investigation on severe malaria in children and pregnant women"

Status of Application: Project Completed (2005-2007)

CAPACITY BUILDING

Ian Nyakundi (2014-2015): Primary supervisor- Masters Project

Identification of bacteria in children presenting with acute non-traumatic coma at the Kilifi County Hospital.

Registered with University of Nairobi, Kenya

Albina Waithaka (2014-2015): Primary supervisor- Masters Project

Changes in the T cell phenotypes as a result of malaria infection and malnutrition

Registered with Kenyatta University, Kenya

James Njunge (2013-): Mentor - Post doctoral internship at the KEMRI-Wellcome Trust Research Programme

Use of Proteomic Approaches to Define Diagnostic Biomarkers of Disease In Children Presenting With Febrile Coma in Kilifi Kenya

Sapna Rupani (2011- 2015): PhD supervisor

Integration of activatory and inhibitory signals by monocytes and its effects on their function

Registered with Open University, UK

Ian Nyakundi (2014): Mentor - Post graduate internship at the KEMRI-Wellcome Trust Research Programme

Optimization studies for Clinical Proteomics

Albina Waithaka (2013): Mentor - Post graduate internship at the KEMRI-Wellcome Trust Research Programme

Assessing Immuno-affinity Methods to Enrich for Pathogen proteins in plasma

CONTRIBUTIONS TO SCIENTIFIC COMMUNITY

Provided peer reviews for following journals: Plos One and Pediatric Infectious Disease

EMPLOYMENT HISTORY

- 2015 -** Programme Manager, Grand Challenges Africa, African Academy of Sciences
- 2013 - 2015** Lead - Clinical Proteomics KEMRI-Wellcome Trust Research Programme
- 2008 - 2015** Post Doctoral Research Associate, Liverpool School of Tropical Medicine- based at KEMRI- Wellcome Trust Research Programme, Molecular and Biochemical Parasitology
- 2003 - 2007** PhD student, Open University and Liverpool School of Tropical Medicine sponsored by the KEMRI- Wellcome Trust Research Programme
- 2002 - 2003** Research Assistant, KEMRI/ Wellcome Trust Research Programme, Clinical Pharmacology
- 2001 - 2002** Research Associate, Inhibitex, Alpharetta USA, Antibody Screening Laboratory
- 2000** Student Intern, University of Miami Diabetes Research Institute Gene Therapy Laboratory
- 1997** Teaching Assistant Barry University Ecology Laboratory

SELECTED SEMINARS AND WORKSHOPS

Wellcome Trust, London UK 23 November 2015- 4th December 2015
Workshop on **Grants Management**

Oxford Learning Institute – KEMRI Wellcome Trust Programme 30 January 2015
Workshop on **Leading Change**

Oxford Learning Institute – KEMRI Wellcome Trust Programme 29 January 2015
Workshop on **Agreeing Objectives, Giving and Receiving Feedback**

Oxford Learning Institute – KEMRI Wellcome Trust Programme 29 January 2015
Workshop on **Recruitment & Selection**

Oxford Learning Institute – KEMRI Wellcome Trust Programme 29 January 2015
Workshop on **Unconscious Bias**

Oxford Learning Institute – KEMRI Wellcome Trust Programme 28 January 2015
Workshop on **Handling Conflict & Difficult Conversations**

Oxford Learning Institute – KEMRI Wellcome Trust Programme 27 January 2015
Workshop on **Role of the manager, moving from manager to leader**

Oxford Learning Institute – KEMRI Wellcome Trust Programme 27 January 2015
Workshop on **Effective Time Management**

Oxford Learning Institute – KEMRI Wellcome Trust Programme 27 January 2015
Workshop on **Bullying and Harassment in the Workplace**

Wellcome Trust Genome Campus Cambridge UK, 5 – 17 March 2012

Workshop on **Perspectives in Clinical Proteomics**

Thermo Electron European Training Institute Hemel Hempstead UK, 3rd -6th October 2005
Workshop on **Biotech Operations**

6th-7th January 2004, Liverpool UK

Workshop on **Mass Spectrometry for Proteomics** organized by the University of Liverpool

26-29 November 2003, Antwerp Belgium

4 day colloquium on **Cerebrospinal Fluid Analysis In Tropical Neurology** organized by the Institute of Tropical Medicine Antwerp

18-23 August 2002, Cape Town South Africa

'Drug discovery : Absorption, Distribution, Metabolism, Excretion' course provided by African Institute of Biomedical Science and Technology

17-28 July 1996, Nairobi Kenya

'Scientific Communication' provided by Centre for Tropical Veterinary Medicine, University of Edinburgh facilitated as an outreach training course for KETRI Scientists

ACADEMIC CONTRIBUTIONS AND PUBLICATIONS

Abdi, A. I., Kariuki, S. M., Muthui, M. K., Kivisi, C. A., Fegan, G., **Gitau, E.**, Newton, C. R., Bull, P. C. (2015). Differential Plasmodium falciparum surface antigen expression among children with Malarial Retinopathy. *Sci. Rep. Scientific Reports*. Dec 14 2015.

Contribution: Supervised laboratory staff in Kilifi ; did some of the laboratory experiments and involved in manuscript writing

Ogwang, C., D. Kimani, N. J. Edwards, R. Roberts, J. Mwacharo, G. Bowyer, C. Bliss, S. H. Hodgson, P. Njuguna, N. K. Viebig, A. Nicosia, **E. Gitau**, S. Douglas, J. Illingworth, K. Marsh, A. Lawrie, E. B. Imoukhuede, K. Ewer, B. C. Urban, A. V. S. Hill, and P. Bejon. Prime-boost Vaccination with Chimpanzee Adenovirus and Modified Vaccinia Ankara Encoding TRAP Provides Partial Protection against Plasmodium Falciparum Infection in Kenyan Adults. *Science Translational Medicine*. May 06 2015

Contribution: Supervised laboratory staff in Kilifi ; did some of the laboratory experiments and involved in manuscript writing

Kimani D, Jagne YJ, Cox M, Kimani E, Bliss CM, **Gitau E**, Ogwang C, Afolabi MO, Bowyer G, Collins KA, Edwards N, Hodgson SH, Duncan CJ, Spencer AJ, Knight MG, Drammeh A, Anagnostou NA, Berrie E, Moyle S, Gilbert SC, Soipei P, Okebe J, Colloca S, Cortese R, Viebig NK, Roberts R, Lawrie AM, Nicosia A, Imoukhuede EB, Bejon P, Chilengi R, Bojang K, Flanagan KL, Hill AV, Urban BC, Ewer KJ. Translating the immunogenicity of prime-boost immunisation with ChAd63 and MVA ME-TRAP from malaria naive to malaria-endemic populations. *Molecular therapy : the journal of the American Society of Gene Therapy*. Jun 16 2014.

Contribution: Supervised laboratory staff in Kilifi ; did some of the laboratory experiments and involved in manuscript writing

Huang H, Ideh RC, **Gitau E**, Thezenas ML, Jallow M, Ebruke B, Chimah O, Oluwalana C, Karanja H, Mackenzie G, Adegbola RA, Kwiatkowski D, Kessler BM, Berkley JA, Howie SR, Casals-Pascual C. Discovery and Validation of Biomarkers to Guide Clinical Management of Pneumonia in African Children. *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*. Apr 2 2014.

Contribution: Led and supervised validation study in Kilifi and involved in manuscript writing

Kariuki SM, **Gitau E**, Gwer S, Karanja HK, Chengo E, Kazungu M, Urban BC, Newton CR. Value of Plasmodium falciparum histidine-rich protein 2 level and malaria retinopathy in distinguishing cerebral malaria from other acute encephalopathies in Kenyan children. The Journal of infectious diseases. Feb 15 2014;209(4):600-609.

Contribution: Supervised laboratory experiments and wrote up laboratory methods

Gitau EN, Tuju J, Karanja H, Stevenson L, Requena P, Kimani E, Olotu A, Kimani D, Marsh K, Bull P. CD4+ T Cell Responses to the Plasmodium falciparum Erythrocyte Membrane Protein 1 in Children with Mild Malaria. The Journal of Immunology. 2014;1200547.

Contribution: Developed and validated laboratory assays; supervised all experiments; analysed the data and wrote up the manuscript.

Olupot-Olupot P, Urban BC, Jemutai J, Nteziyaremye J, Fanjo HM, Karanja H, Karisa J, Ongodia P, Bwonyo P, **Gitau EN**, Talbert A, Akech S, Maitland K. Endotoxaemia is common in children with Plasmodium falciparum malaria. BMC infectious diseases. 2013;13:117.

Contribution: Supervised laboratory work and edited manuscript.

Gitau EN, Kokwaro GO, Karanja H, Newton CR, Ward SA. Plasma and cerebrospinal proteomes from children with cerebral malaria differ from those of children with other encephalopathies. The Journal of infectious diseases. Nov 1 2013;208(9):1494-1503.

Contribution: Conceived ideas, performed all experiments and data analysis, and wrote up the manuscript.

Gitau EN, Tuju J, Stevenson L, Kimani E, Karanja H, Marsh K, Bull PC, Urban BC. T-cell responses to the DBLalpha-tag, a short semi-conserved region of the Plasmodium falciparum membrane erythrocyte protein 1. PloS one. 2012;7(1):e30095.

Contribution: Conceived ideas, performed all experiments and data analysis, and wrote up the manuscript.

Gitau EN, Kokwaro GO, Newton CR, Ward SA. Global proteomic analysis of plasma from mice infected with Plasmodium berghei ANKA using two dimensional gel electrophoresis and matrix assisted laser desorption ionization-time of flight mass spectrometry. Malaria journal. 2011;10:205.

Contribution: Conceived ideas, performed all experiments and data analysis, and wrote up the manuscript.

Ochola LI, **Gitau E**. Challenges in retaining research scientists beyond the doctoral level in Kenya. PLoS Negl Trop Dis. 2009;3(3).

Contribution: Conceived ideas and wrote up the manuscript

Casals-Pascual C, Idro R, Gicheru N, Gwer S, Kitsao B, **Gitau E**, Mwakesi R, Roberts DJ, Newton CR. High levels of erythropoietin are associated with protection against neurological sequelae in African children with cerebral malaria. Proceedings of the National Academy of Sciences of the United States of America. Feb 19 2008;105(7):2634-2639.

Contribution: Performed some experiments

Gitau EN. Use of global proteomics to define protein profiles of severe disease: An investigation on severe malaria.

Contribution: Paper presented at: AMERICAN JOURNAL OF TROPICAL MEDICINE AND HYGIENE 2007.

Gitau EN. Changes in Protein Levels as Markers of Severe Disease: An Investigation of Severe Malaria, the Open University; 2007.

Contribution: PhD Thesis

Gitau EN, Newton CR. Review Article: blood-brain barrier in falciparum malaria. Tropical medicine & international health : TM & IH. Mar 2005;10(3):285-292.

Contribution: Conceived ideas and wrote up the manuscript

Gitau E, Kokwaro G, Newton C, Ward S. Use of plasma proteomics to discriminate between malaria infected mice from non-infected control mice [MIM-EG-111840].

Contribution: Paper presented at MIM : ACTA TROPICA 2005.

Githiga IM, Muchohi SN, Ogutu BR, Newton CR, Otieno GO, **Gitau EN,** Kokwaro GO. Determination of paraldehyde by gas chromatography in whole blood from children. Journal of chromatography. B, Analytical technologies in the biomedical and life sciences. Jun 15 2004;805(2):365-369.

Contribution: Performed some experiments and data analysis, and helped write up the manuscript

Gitau EN, Muchohi SN, Ogutu BR, Githiga IM, Kokwaro GO. Selective and sensitive liquid chromatographic assay of amodiaquine and desethylamodiaquine in whole blood spotted on filter paper. Journal of chromatography. B, Analytical technologies in the biomedical and life sciences. Jan 5 2004;799(1):173-177.

Contribution: Performed all experiments and data analysis, and wrote up the manuscript

LANGUAGES

Spoken and Written

English *Excellent*, Swahili - *Excellent*, French –*Spoken limited, Written fair*, Spanish -*Limited*

Referees

Will be provided on request