Benard Wesonga Kulohoma, вsc., мsc., Ph.D., FRSTMH

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Personal information:

Date of Birth: 13th May 1984

Marital status: Married - with 2 children

Education:

- Ph.D. Bioinformatics and microbial genomics, University of Liverpool, Oct 2009 Dec 2012.
- MSc. Bioinformatics (Part-time), University of Manchester, Oct 2007 Jun 2010.
- BSc. Biochemistry (First Class Honours), University of Nairobi, Sept 2003 Dec 2006.
- Diploma in French language (Diplome de langue Français), Alliance Française 2003.
- Certificate in Research Leadership, London School of Hygiene & Tropical Medicine, Malaria Capacity Development Consortium (MCDC) & Quilibra Consulting, UK 2015.
- Upper Hill School, Grade: A-, Deputy Head Prefect (2001), 1998-2001.
- Park road primary school, KCPE, Grade A- (491/700), 1990-1997.

Professional experience:

1. University of Nairobi,

Centre for Bioinformatics and Biotechnology (CEBIB),

P.O. Box 30197 - 00100, Nairobi, Kenya

Senior Lecturer in Bioinformatics

17th April 2019 – Present

(Lecturer 5th August 2013 - 16th April 2019)

I was on Sabbatical/Unpaid leave at the University of Oxford from 4th Jan 2016 to 17th Oct 2017

I lead efforts in research, postgraduate training, and capacity building.

Responsibilities:

- Acting-Director CEBIB 22nd 26th July 2019.
- Acting-Director CEBIB 7th 18th January 2019.
- Acting-Director CEBIB 10th 20th August 2015.
- Acting-Director CEBIB 15th 22nd December 2014.
- Giving state of the art bioinformatics lectures to postgraduate students.
- Leading the bioinformatics research theme at the University of Nairobi.
- Supervision of postgraduate student research projects.
- Developing and review of learning materials, and examine & monitor students' progress.
- Mentoring of students and junior staff.
- Organizing international conferences and workshops.
- Extra-mural fund-raising through research grants.
- Foster regional and international interdisciplinary research collaborations and knowledge exchange.
- Data dissemination at conferences and through research publications.
- Public engagement, and promoting Equal Opportunities and Widening Access activities.
- Take opportunities for career development.
- 2. Wellcome Centre for Human Genetics,

Nuffield Department of Medicine

University of Oxford,

Roosevelt Drive,

OX3 7BN, Oxford, UK

Senior Research Scientist (Computational Genomics)

4th January 2016 - 17th October 2017

I led and provided sophisticated, detailed analysis of complex, high-dimensional research data across a range of projects. This enabled translation of this information in to advances in functional understanding and clinical management of type 2 diabetes.

Responsibilities:

• Developed and implemented a detailed research plan for selected Oxford-led projects within the various international consortia activities.

- Led large collaborative projects in consortia frameworks, as well as a personal portfolio of research activities that made use of available extensive data resources.
- Closely interacted with researchers within these consortia to ensure coordination of research and an exchange of scientific knowledge, data and best practice.
- Represented the research group at relevant collaborative meetings and international conferences.
- Produced relevant reporting in connection to these consortia.
- Liaised and communicated both in writing and orally to a range of collaborative partners.
- Travelled overseas where necessary for these projects.
- Used the opportunities to develop additional research projects independent of those consortia, and, where appropriate, sought grant funding to support those studies.
- Took opportunities for career development.
- Supported and be involved in other group projects as time permits.
- Supported future research strategies of the consortia.
- Supported, trained and line-managed junior staff and students working on these and other projects.
- Presented project data at conferences and produce papers for publication in peer review journals.
- Took on other tasks or duties assigned as needed.
- Participated in and supported the public engagement and widening access activities.
- 3. *icipe* International Centre of Insect Physiology and Ecology, Molecular Biology and Biotechnology Department,

P.O. Box 30772 - 00100, Nairobi, Kenya

Scientist - consultant (Bioinformatician)

1st June 2013 – 31st December 2015

Responsibilities:

- Led *icipe*'s bioinformatics research component of the Human Heredity and Health Africa (H3Africa) H3ABioNet consortium
- Oversaw the set-up the *icipe* bioinformatics platform (started July 2013).
- Closely interacted with researchers within the H3Africa and H3ABioNet consortia to ensure coordination of research and an exchange of scientific knowledge, data and best practice.
- Represented the research group at relevant collaborative meetings and international conferences.
- Presented project data at conferences and produce papers for publication in peer review journals.
- Produced relevant reporting in connection to these consortia.
- Liaised and communicated to a range of collaborative partners.
- Traveled overseas where necessary for these projects.
- Developed the center's capacity in bioinformatics.
- 4. ILRI International Livestock Research Institute,

Animal Biosciences research programme

P.O. Box 1578 - 00100, Nairobi, Kenya

Visiting scientist - consultant (Bioinformatician)

2nd July 2014 - 15th August 2014

Responsibilities:

- Developed a bioinformatics analysis plan for African swine fever disease project.
- Generated relevant data and publication ready reports on the findings.
- 5. African Institute for Mathematical Sciences

6 Melrose road, Muizenberg, Cape Town, South Africa

Postdoctoral visiting research fellow

Mathematical modeling of infectious diseases

19th August - 19th October 2013

Responsibilities:

- I took time to understand research that explores mathematical modeling to address perceivably obscure and intractable research questions.
- 6. University of Liverpool,

Department of Women's and Children's Health, Institute of Translational Medicine, Alder Hey Children's Hospital, Liverpool, UK Post-Doctoral Scientist (Bioinformatician) September 2012 - September 2013

Responsibilities:

- Led a prospective research project that identified genetic signatures during pneumococcal meningitis and HIV coinfection in children, which could be exploited as bedside diagnostic biomarkers in resource poor settings.
- 7. Multi-center international collaboration between:
- o University of Liverpool, Institute of Infection & Global Health, Faculty of Health and Life Sciences, Liverpool, UK
- o Malawi-Liverpool-Wellcome Trust Clinical Research Programme, Blantyre, Malawi

- Wellcome-Trust Sanger Institute, Hinxton, Cambridge, UK Bioinformatician and Bioinformatics doctoral candidate
 October 2009 - December 2012
- 8. KEMRI/Wellcome Trust Research Programme, Kilifi, Kenya and Department of Zoology, University of Oxford, Oxford, UK Research assistant Pneumococcal genetics and genomics February 2008 September 2009

Responsibilities:

- Determined population structure of invasive pneumococcal disease in Kilifi, Kenya, prior to the introduction of PCV-7 vaccine, using multi-locus sequence typing technique.
- KEMRI/Centre for Disease Control and Prevention (CDC) Research programme, Kisumu, Kenya Research assistant - International emerging infections program September 2007 - January 2008

Responsibilities:

- Performed routine laboratory testing for emerging and re-emerging infectious disease in clinical samples collected from clinical sites and a health demographic surveillance system.
- Generated reports on disease incidence.
- KEMRI/Centre for Disease Control and Prevention (CDC) Research programme, Kisumu, Kenya Research assistant (intern) - HIV research program February 2007 - August 2007

Responsibilities:

- Developed skills in health research.
- Performed laboratory testing for HIV diagnosis in dry blood stain, milk and serum samples.
- Identified resistance markers associated with HIV drug resistance using sequencing techniques.

Scholarships and awards:

- Bill and Melinda Gates Foundation Global Health Travel Award (24th 30th Nov 2018)
- 12th H3Africa Consortium Meeting Travel Award (15th 20th Sept 2018)
- UNESCO MARS Scientific and Steering committee 2016 to present
- The 2015 UNESCO-MERCK award (1st Prize), best young researcher award Geneva, Switzerland (19th 20th Oct 2015).
- 2015 Human Heredity and Health in Africa (H3A)-Harvard University Research Fellow (24th Aug 2015)
- Visiting research fellow, African Institute for Mathematical Sciences South Africa (19th Aug 19th Oct 2013)
- University of Liverpool's Anthony C. Hart award for doctoral students 2011.
- University of Liverpool PhD Scholarship.
- International student representative, University of Manchester (2009/2010).
- Commonwealth Scholarship: MSc Bioinformatics University of Manchester.
- Kenyan Government Scholarship: BSc Biochemistry University of Nairobi.

Grants/Funding:

- Principal investigator The Wellcome-Trust's, THRiVE pump-priming grant 2014.
- Principal investigator Bill and Melinda Gates Foundation's, RUFORUM Research Grants (GRG) 2014.
- Malaria Capacity Development Consortium Capacity development group funding, to the University of Nairobi 2015.

Selected publications:

A. Published papers:

2019

- Community-led data collection using Open Data Kit for surveillance of animal African trypanosomiasis in Shimba hills, Kenya. Sarah A.O. Wamwenje, Ibrahim I. Wangwe, Nicodemus Masila, Caroline K. Mirieri, Lillian Wambua and **Benard W. Kulohoma**. 2019. BMC research notes 12 (1), 151. https://doi.org/10.1186/s13104-019-4198-z
- The Early Growth Genetics (EGG) and EArly Genetics and Lifecourse Epidemiology (EAGLE) Consortia: design, results and future prospects. CM Middeldorp, JF Felix, A Mahajan, M Horikoshi, NR Robertson, RN Beaumont, JP Bradfield, M Bustamante, DL Cousminer, FR Day, NM De Silva, M Guxens, DO Mook-Kanamori, B St Pourcain, NM Warrington, LS Adair, E Ahlqvist, TS Ahluwali, P Almgren, W Ang, M Atalay, J Auvinen, M Bartels, JS Beckmann, JR Bilbao, T Bond, JB Borja, A Cavadino, P Charoen, Z Chen, L Coin, C Cooper, JA Curtin, A Custovic, S Das, GE Davies, GV Dedoussis, L Duijts, PR Eastwood, AU Eliasen, P Elliott, JG Eriksson, X Estivill, J Fadista, IO Fedko, TM Frayling, R Gaillard, WJ Gauderman, F Geller, F Gilliland, V Gilsanz, R Granell, N Grarup, L Groop, D Hadley, H Hakonarson, T Hansen, CA Hartman, AT Hattersley, MG Hayes, J Hebebrand, J Heinrich, Ø Helgeland, AK Henders, J Henderson, TB Henrikson, JN Hirschhorn, MF Hivert, B Hocher, JW Holloway, P Holt, JJ Hottenga, E Hyppönen, C Iñíguez, S Johansson, A Jugessur, M Kähönen, HJ Kalkwarf, J Kaprio, V Karhunen, JP Kemp, M Kerkhof, GH Koppelman, A Körner, S Kotecha, E Kreiner-Møller, B Kulohoma, A Kumar, Z Kutalik, J Lahti, JM Lappe, H Larsson, T Lehtimäki, AM Lewin, J Li, P Lichtenstein, CM Lindgren, V Lindi, A Linneberg, X Liu, J Liu, WL Lowe Jr, S Lundström, LP Lyytikäinen, RCW Ma, A Macé, R Mägi, P Magnus, AA Mamun, M Mannikko, NG

Martin, H Mbarek, NS McCarthy, SE Medland, M Melbye, E Melén, KL Mohlke, C Monnereau, CS Morgen, AP Morris, JC Murray, R Myhre, JM Najman, MG Nivard, EA Nohr, IM Nolte, I Ntalla, P O'Reilly, SE Oberfield, E Oken, AJ Oldehinkel, K Pahkala, T Palviainen, K Panoutsopoulou, O Pedersen, CE Pennell, G Pershagen, N Pitkänen, R Plomin, C Power, RB Prasad, I Prokopenko, L Pulkkinen, K Räikkönen, OT Raitakari, RM Reynolds, RC Richmond, F Rivadeneira, A Rodriguez, RJ Rose. 2019. European Journal of Epidemiology. Volume 34, Issue 3, pp 279–300. ISSN 0393-2990. http://openaccess.sgul.ac.uk/110590/.

2018

- Modelling appropriate use of trypanocides to restrict wide-spread multi-drug resistance during chemotherapy of animal African trypanosomiasis. Ibrahim I. Wangwe, Sarah A. Wamwenje, Caroline Mirieri, Nicodemus M. Masila, Lillian Wambua, Benard W. Kulohoma. 2018. Parasitology. 1-7. https://doi.org/10.1017/S0031182018002093
- A common molecular signature of patients with sickle cell disease revealed by microarray meta-analysis and a genome-wide association study. Cherif Ben Hamda, Raphael Sangeda, Liberata Mwita, Ayton Meintjes, Siana Nkya, Sumir Panji, Nicola Mulder, Lamia Guizani-Tabbane, Alia Benkahla, Julie Makani, Kais Ghedira, H3ABioNet Consortium. 2018. PloS one 13 (7), e0199461
- Importance of human demographic history knowledge in genetic studies involving multi-ethnic cohorts. **Kulohoma B.W**. 2018. Wellcome Open Res. doi:10.12688/wellcomeopenres.14692.2

2017

- Comparative genomics identifies male accessory gland proteins in five Glossina species. Muna F. Abry, Kelvin M. Kimenyi, Daniel Masiga, **Benard W. Kulohoma**. Wellcome Open Res 2017, 2:73. doi: 10.12688/wellcomeopenres.12445.1.
- Bone mineral density and risk of type 2 diabetes and coronary heart disease: A Mendelian randomization study. Wei Gan, Robert J. Clarke, Anubha Mahajan, **Benard Kulohoma**, Hidetoshi Kitajima, Neil R. Robertson, N. William Rayner, Robin G. Walters, Michael V. Holmes, Zhengming Chen, Mark I. McCarthy. Wellcome Open Res 2017, 2:68. doi: 10.12688/wellcomeopenres.12288.1.
- Peripheral blood RNA gene expression in children with pneumococcal meningitis provide insights into host response mechanisms.
 Benard W. Kulohoma, Fiona Marriage, Olga Vasieva, Limangeni Mankhambo, Kha Nguyen, Malcolm E Molyneux, Elizabeth M Molyneux, Philip JR Day, Enitan D Carrol. BMJ Paediatrics Open 2017; 1:e000092. doi:10.1136/bmjpo-2017-000092.

2016

- Genome-wide associations for birth weight and correlations with adult disease. M Horikoshi, RN Beaumont, FR Day, NM Warrington, MN Kooijman, ... Early Growth Genetics (EGG) consortium...(+300 others). Nature 538 (7624), 248-252. doi:10.1038/nature19806.
- H3ABioNet, a sustainable pan-African bioinformatics network for human heredity and health in Africa. Mulder NJ, Adebiyi E, Alami R, Benkahla A, Brandful J, Doumbia S, Everett D, Fadlelmola FM, Gaboun F, Gaseitsiwe S,... H3ABioNet Consortium. Genome Res. 2016 Feb;26(2):271-7. doi: 10.1101/gr.196295.115.

2015

- Comparative Genomic Analysis of Meningitis- and Bacteremia-Causing Pneumococci Identifies a Common Core Genome. **Kulohoma BW**, Cornick JE, Chaguza C, Yalcin F, Harris SR, Gray KJ, Kiran AM, Molyneux E, French N, Parkhill J, Faragher BE, Everett DB, Bentley SD, Heyderman RS. Infect Immun. 2015 Oct; 83(10):4165-73. doi: 10.1128/IAI.00814-15.
- High multiple carriage and emergence of Streptococcus pneumoniae vaccine serotype variants in Malawian children. Kamng'ona AW, Hinds J, Bar-Zeev N, Gould KA, Chaguza C, Msefula C, Cornick JE, **Kulohoma BW**, Gray K, Bentley SD, French N, Heyderman RS, Everett DB. BMC Infect Dis. 2015 Jun 20;15:234. doi: 10.1186/s12879-015-0980-2.
- Genetic diversity of the Pneumococcal CbpA: Implications for next-generation vaccine development. Abry MF, Kimenyi KM, Osowo FO, Odhiambo WO, Sewe SO, **Kulohoma BW**. Human Vaccines & Immunotherapeutics11:5, 1-7; March 1, 2015.
- BMX: a tool for core genome size and composition definition from comparative genomics data. **Kulohoma BW**. BMC Research Notes (2015) 8:51.

2014

• 2014 Future Earth Young Scientists Conference on integrated science and knowledge co-production for ecosystems and human well-being. Shiue I, Samberg L, **Kulohoma B**, Dogaru D, Wyborn C, Hamel P, Jørgensen PS, Lussier P, Sundaram B, Lim M, Tironi A. Int J Environ Res Public Health. 2014 Nov 10;11(11):11553-8

2013

- Population Genetic Structure of Streptococcus pneumoniae in Kilifi, Kenya, prior to the Introduction of Pneumococcal Conjugate Vaccine. Brueggemann AB, Muroki BM, **Kulohoma BW**, Karani A, Wanjiru E, Morpeth S, Kamau T, Sharif S, Scott J A G. PLoS ONE 8(11): e81539. doi:10.1371/journal.pone.0081539.
- Genomic identification of a novel cotrimoxazole resistance genotype and its prevalence amongst Streptococcus pneumoniae in Malawi. Cornick JE, Harris SR, Parry CM, Moore MJ, Jassi C, Kamng'ona A, **Kulohoma B**, Heyderman RS, Bentley SD, Everett DB. J Antimicrob Chemother. 2013 Sep 29.
- Piliation of invasive Streptococcus pneumoniae isolates in the era prior to pneumococcal conjugate vaccine introduction, in Malawi. **Kulohoma BW**, Gray K, Kamng'ona A, Cornick J, Bentley SD, Heyderman RS, Everett DB. Clin Vaccine Immunol. 2013 Nov; 20(11):1729-35.

B. Books and books chapters:

- Book Title: The Microbiology of Central Nervous System Infections. Chapter 8: Pneumococcal meningitis. **Benard W. Kulohoma**. ELSEVIER. 2018. 3, 123-133. ISBN: 978-0-12-813806-9. ISSN: 2451-9006. https://doi.org/10.1016/B978-0-12-813806-9.00007-X
- Book Title: Africa and the Sustainable Development Goals. Chapter 10: Prioritising Health Systems to Achieve SDGs in Africa: A Review of Scientific Evidence. Colette Adhiambo and **Benard Kulohoma**. Springer. In Press. (2019).

Publication quality metrics (from Google Scholar)

	All	Since 2014
Citations	299	293
h-index	7	7
I10-index	6	6

Submitted Manuscripts & Manuscripts in Preparation

- Genome sequence of tsetse bracoviruses: insights into symbiotic virus evolution. Kelvin M. Kimenyi, Muna F. Abry, Winnie Okeyo, Enock Matovu, Daniel Masiga, Benard W. Kulohoma
- Insights on the use of family history and "super controls" from the UK Biobank type 2 diabetes case-control GWAS. Benard W. Kulohoma, Wei Gan, Anubha Mahajan, Mark I. McCarthy
- Genetic flux in invasive pneumococcal disease. Teresa Mutua and Benard Kulohoma.

Innovations and Genomic datasets

- BMX (Bacterial Makeup eXplorer) a freely publicly available bioinformatics tool that computes the core genome size and composition from orthologous maps. Bacterial Make eXplorer analyses bacterial genome ortholog maps. It is accessible at this link: https://sourceforge.net/projects/bmexplorer/ . A description of how to use it can be found here: https://sourceforge.net/u/bmexplorer/wiki/Home/ .
- Contributor(s): Kulohoma B, Caroll E. Title: Expression data from human response to invasive pneumococcal disease. Homo sapiens, Expression profiling by array Query DataSets for GSE47172. Status: Public on May 23, 2013.

Student teaching and thesis supervision

Courses:

- 1. University of Malawi, College of Medicine (Undergraduate taught courses):
 - Introduction to Molecular Biology and Genetics (2010 and 2011)
- 2. University of Nairobi, Centre for Bioinformatics and Biotechnology (postgraduate taught courses):
 - SBB 602 Applied Bioinformatics
 - SBB 606 Genomics and Proteomics
 - SBB 618 Computational Biology
 - SBB 605 Programming and Data Structures

Graduated students:

- 1. Mr. Evans Sioma Kataka. University of Nairobi. I56/69336/2011. MSc thesis titled: "Time course RNASeq differential expression analysis of wild-type and jumoji (AtJMJD5) mutant of Arabidopsis thalania". Graduated August 2014.
- 2. Mr. Steven Okinyi Sewe. I56/70951/2007. MSc. thesis titled: "The genetic diversity of the CbpA gene in Streptococcus pneumoniae". Graduated August 2015.
- 3. Mrs. Muna Abry. University of Nairobi.I56/68246/2013. MSc. thesis titled: "Modulation of female sexual behaviour: a conceivable vector control strategy in tsetse flies reproduction as a target site for tsetse control". Graduated August 2015.
- 4. Mr. Kelvin Muteru. University of Nairobi. I56/70112/2013. MSc. thesis titled: "Genome sequence of tsetse polydnavirus: insights into symbiotic virus evolution". Graduated August 2015.
- 5. Mr. Ibrahim Inertia Wangwe. University of Nairobi. I56/75532/2014. MSc thesis titled: "Application of mathematical models to predict multi-drug resistance trypanosomes." Graduated December 2018.

Current students:

- 1. Teresa Mutua. University of Nairobi. I56/88033/2016. MSc thesis titled: "Characterisation of genetic flux in a global collection of Streptococcus pneumoniae".
- 2. Samuel Njoroge. University of Nairobi. I80/53816/2018. Phd. Thesis titled: "Molecular epidemiology and characterization of enterotoxigenic *Escherichia coli* in three Western Kenya counties: a one health concept".
- 3. Mathew Wekulo. University of Nairobi. I56/7368/2017. MSc thesis titled: "Using Mendelian randomization to establish genetic variants associated with trypanotolerance in cattle".

University Courses Curriculum Development/Review:

- Ph.D. in Bioinformatics, University of Nairobi Academic year 2017/2018
- MSc. In Bioinformatics, University of Nairobi Academic year 2017/2018
- BSc. Mathematics and Modelling Processes, Dedan Kimathi University of Technology Academic year 2018/2019

Selected International Conferences:

- Keystone Symposium: S5, Leveraging Genomic Diversity to Promote Animal and Human Health. Kampala, Uganda. 25th 29th November, 2018.
- 1st Annual Conference on Science for Development: Supporting Manufacturing, Affordable Housing, Universal Healthcare and Food Security. Nairobi, Kenya. 24th 25th October 2018
- 12th Human Heredity and Health in Africa (H3Africa) Consortium Meeting, Kigali, Rwanda, 16th 19th September 2018.
- International Symposium of Pneumococci and Pneumococcal Diseases (ISPPD), Melbourne, Australia, 15th -19th April 2018.
- Royal Society Commonwealth Science Conference, Singapore 12th 16th June 2017.
- European Association for the Study of Diabetes, Leiden, The Netherlands, 11th 13th May 2017.
- Early Growth Genetics consortium meeting, Copenhagen, Denmark, 19th 21st April 2016.
- H3Africa consortium meeting, Cape Town, South Africa, 9th 14th November 2015
- The 2015 UNESCO-MERCK conference, Geneva, Switzerland 19th 20th October 2015
- Malaria Capacity Development Consortium career development group meeting, Moshi, Tanzania 24th 26th August 2015
- Bioinformatics in the Tropics, Uganda Virus Research Institute, Entebbe, Uganda 6th -9th July 2015
- Malaria Capacity Development Consortium meeting, London, UK 25th June 26th June 2015
- Infectious Diseases Society of Kenya conference, Nairobi, Kenya 18th- 19th June 2015
- The 6th Human Heredity and Health in Africa (H3Africa) consortium meeting, Livingstone, Zambia, 8th -11th May 2015.
- Malaria Capacity Development Consortium meeting, London, UK 27th June 1st May 2015
- Regional Universities Form for Capacity Building in Agriculture (RUFORUM) principal investigators meeting 30th 31st March 2015
- The ISCB Africa ASBCB 2015 Conference on Bioinformatics, Dar es Salaam, Tanzania, 9th 11th March 2015.
- Malaria Capacity Development Consortium meeting, Entebbe, Uganda 25th 29th December 2015
- Malaria Capacity Development Consortium meeting, Arusha, Tanzania 6th 11th December 2014
- Computational metagenomics workshop, Mauritius, 1st -5th December 2014
- The 5th Human Heredity and Health in Africa (H3Africa) consortium meeting, Dar es Salaam, Tanzania, 8th -10th November 2014.
- The H3Africa Sickle Cell disease workshop, Dar es Salaam, Tanzania, 7th November 2014.
- Next Generation Sequencing' workshop at the European Bioinformatics Institute (EBI), Wellcome Trust Genome Campus, Cambridge, UK, 26th -31st
 October 2014.
- The H3ABioNet consortium General assembly, Casablanca, Morocco, 12th 16th October 2014.
- DFG/ICSU/ISSC Young Scientists Networking Conference on Integrated Science: Ecosystems and human wellbeing in the green economy, Villa Vigoni Lake Como, Italy, 25th 31st May 2014.
- The International Clinics on Infectious Disease Dynamics and Data, University of Florida, USA, 16th 20th December 2013.
- H3Africa consortium meeting, Johannesburg, South Africa, 3rd 6th September 2013.
- H3ABionet consortium meeting, Johannesburg, South Africa, 1st 3rd September 2013.
- African Institute for Mathematical Sciences, Cape Town, South Africa, 30th September 2013.
- The ISCB Africa ASBCB 2013 Conference on Bioinformatics, Casablanca, Morocco, 11th 15th March 2013.
- The Royal Society of Tropical Medicine and Hygiene meeting, Warwick, UK, 19th 21st September 2012.
- The 2012 Malawi-Liverpool- Wellcome Trust Annual Scientific Meeting, Liverpool, UK, 16th 18th September 2012.
- The 8th International Symposium on pneumococci and pneumococcal diseases, Iguacu Falls, Brazil, 11th 15th March 2012.
- The Wellcome-Trust, Molecular Approaches to Clinical Microbiology in Africa, Malawi, 10th 16th September 2011.
- The 2011 Malawi-Liverpool- Wellcome Trust Annual Scientific Meeting, Malawi, 18th 21st September 2011.
 The ISCB Africa ASBCB Conference on Bioinformatics, Cape Town, South Africa, 9th 11th March 2011.
- The 2011 joint International Conference of the African and Southern African Societies of Human Genetics, Cape Town, South Africa, 6th 9th March
- 2011.
- The 2010 Malawi-Liverpool- Wellcome Trust Annual Scientific Meeting, Liverpool, UK, 5th 7th September 2010.
- The Cold Spring Harbor Laboratory/Wellcome Trust meeting on Infectious Disease Genomics & Global Health at the Wellcome Trust Conference Centre on the Wellcome Trust Genome Campus in Hinxton, Cambridge, UK, 12th -15th September 2010.
- Joint International Society of Computational Biology and African Society for Bioinformatics and Computational Biology, Bamako, Mali, 30th November - 3rd December 2009.
- Conference on the Bioinformatics of African Pathogens and Disease Vectors, ICIPE, Nairobi, Kenya, 28th May 2nd June 2007.

Professional society memberships:

- The International Society for Computational Biology (Since 2007)
- The African Society of Bioinformatics and Computational Biology (Since 2007)
- BioinfoAfrica group ((Founding member) 2007)
- Kenyan Young Scientists ((Founding member) Since 2008)
- Fellow of the Royal Society of Tropical Medicine and Hygiene (Since 2012)

Competence:

- Broad based knowledge of science, research and deep knowledge across multiple disciplines.
- Provision of high-level technical oversight for dynamic, goal-oriented project activities, ensuring high quality, technically sound outputs.
- Critical evaluation of research literature and findings, and robust interpretations of data.
- Conception, management and provision of technical assistance to strategic data driven multi-disciplinary projects, and create new research directions.
- Credible skills in innovative experimental design, and creativity in analysis and navigating the peer review process.
- Competent at recruiting, supervising, mentoring and motivating the project technical teams.
- Knowledge in developing and administering plans and budgets.
- Capable of coordinating stakeholders on common goals and activities.
- Able to generate reports, write grants proposals, write for nonscientists, and write scientific publications.

Computing proficiency:

- Programming skills in: STATA, PERL and BioPERL, HTML and CSS, R and Bioconductor, and Bash/Shell scripting.
- Can comfortably use Mac OsX, Linux, Unix and Windows operating systems.

Language proficiency:

English (fluent), Swahili (fluent), French (fluent)

References:

Prof. Enitan Carrol Prof. Wallace D. Bulimo
Chair in Paediatric Infection Department of Biochemistry,
Institute of Child Health, University of Nairobi,
University of Liverpool. P.O. Box 30197 - 00100,

& Honorary Consultant in Nairobi, Kenya.

Paediatric & Chief Research Officer,

Infectious Diseases and Kenya Medical Research Institute/
Immunology, United States Army Medical Research

Alder Hey Children's NHS, Unit - Kenya (USAMRU-K) Eaton Road, Liverpool, L12 2AP. Email: bulimow@gmail.com

Email: edcarrol@liverpool.ac.uk