Name: Karani Magutah (Male)

<u>Current Position:</u> Senior Lecturer in Medical Physiology at Moi University.

Interests: Farming, Epidemiology and Medical Physiology

Academic Background

- PhD in Medical Physiology from University of Nairobi.

- MSc. Medical Physiology from University of Nairobi.

- MPH (Epidemiology and Disease control) from Moi University.

- BSN from Moi University.

- KCSE mean grade A-, Kituro high school.

Post-Doctorate

- University of Auckland and Local Projects through CARTA-APHRC.

Academic Theses

PhD: The Effect of Short and Long Bouts of Home-based Moderate Intensity Exercises on Cardiorespiratory Fitness among Sedentary Western-Kenya Adults Aged at least 50 Years.

MSc: Assessment of Cardio-respiratory Fitness: A Study of Moi University (MU) Male Students.

MPH: Challenges in the Prevention of Mother to Child Transmission (PMTCT) of Human Immunodeficiency Virus (HIV) amongst Working Mothers attending Moi Teaching and Referral Hospital (MTRH).

Leadership

- Acting Chair of Department of Medical Physiology (2020-2021) at School of Medicine, Moi University.
- 2. Multiple times acting Human Participants Administrator for MTRH/MU Institutional Research Ethics Committee (IREC) over past 5 years.
- 3. Member, MTRH/MU IREC.
- 4. Past member, Community based education services (COBES) committee and college-wide coordinator, COBES 4.
- 5. Multiple times course coordinator in schools of Medicine, Nursing and Dentistry

Computer literacy

1. Proficiency in MS Office, Windows, Data management software EXCEL, and excellent skills in data analysis softwares STATA and NVIVO.

2. Average skills in data management software Epidata and data analysis software SPSS.

IRB Reviews

1. Multiple reviews for MTRH/MU IREC since 2010.

Scientific Conferences Attended

- Bridge Research, Build Bridges: Strengthening Research Capacity for Sustainable Development in Africa. The CARTA Conference 2023, at the University of the Witwatersrand in Johannesburg, South Africa on September 14th to 15th, 2023
- 2. 6th Bioethics Society of Kenya Hybrid Conference held on 10th March 2022.
- 3. Inaugural annual conference and 1st International conference on research process and research ethics by Daystar University and National Commission for Science, Technology and Innovation (NACOSTI) held in Nairobi from 28th to 30th Sept 2021.
- 4. Consortium for Advanced Research Training in Africa (CARTA) @10 virtual conference held from Nairobi, Kenya on 3rd to 4th December 2020.
- 5. The 4th Bioethics society of Kenya conference, Swiss Lenana Mount Hotel, Nairobi from 12th to 13th March, 2020
- 6. Inaugural annual Sports Conference on Transforming the World through Sports held between 20th and 22nd May 2019 at Crowne Hotel, Nairobi Kenya.
- 7. Pragmatic Evaluation in Physical Activity and Public Health, Sport England, 21 Bloomsbury Street, London, WC1B 3HF, UK, 11th to 13th October 2018.
- 8. Bioenergetics and Metabolic Disease, 21st to 25th January 2018, Keystone Resort, Keystone, Colorado, USA.
- 9. The 4th Annual Joint Advanced Seminars Conference, 14th March 2017, Makerere University, Kampala, Uganda.
- 10. Inaugural Sub-Saharan Africa Conference on Spatial and Spatiotemporal Statistics, 17th to 20th November 2014 in University of Witwatersrand, Johannesburg, South Africa.
- 11. The 54th Annual meeting of the Japanese Society of Tropical Medicine, 4th to 5th October 2013, Nagasaki, Japan.
- 12. The 6th Annual scientific conference for Moi University, 6th to 11th Sept 2010, Eldoret, Kenya.

Scientific Webinars and other Panel Discussions

 Chronicles of CARTA Fidelity round table discussion during the Bridge Research, Build Bridges: Strengthening Research Capacity for Sustainable Development in Africa, CARTA

- Conference 2023 at University of the Witwatersrand, Johannesburg, South Africa on September 14th to 15th, 2023
- 2. Writing and communicating science to a nonscientific audience https://www.youtube.com/watch?v=M50lzoZYyeE held on 10th March 2022.

Trainings Facilitated

- 1. Facilitator for Capacity Building for Responsible Research and Review of Research Protocols: Capacity Building of MTRH Staff (CARERE-M Project) on 25th to 28th April 2023, June 13th to 16th 2023, and 8th to 11th August 2023.
- 2. Sessions facilitator on Policy Communication Training from 22nd February to 1st March 2022, Virtual.
- 3. Sessions facilitator on Principles, guidelines and regulations governing research during the MTRH/MU IREC Annual Reviewers/Committee Workshop held from 30th November to 3rd December, 2021 at Noble hotel, Eldoret.
- 4. Trainer on Protection of Human participants in research during the 2nd to 6th Conduct of Research Training (RCR) held on November 28th to 29th 2019, November 18th to 20th 2020, 3rd to 5th March 2021, 4th to 5th August 2021 and 13th to 15th October 2021 in the Noble hotel, Eldoret.
- Trainer on Protection of Human participants in research during the 1st Conduct of RCR of 31st July to 2nd August 2019 in Kisumu Hotel, Kisumu.

Short Courses, Seminars and Workshops Attended

- 1. CARTA PhD supervisorsø workshop held from 26th to 31st May 2022 at the University of Witwatersrand in Johannesburg, South Africa.
- 2. CARTA Curriculum Review and Training of Trainers (ToT) materials development workshop held at the Safari Park Hotel in Nairobi, Kenya, from May 9th to 12th, 2022.
- 3. MTRH/MU IREC Annual Reviewers/Committee Workshop held from 30th November to 3rd December, 2021 at Noble hotel, Eldoret.
- 4. ToT for Policy Communication by Population Reference Bureau (PRB) from 16th to 24th September 2021, Nairobi, Kenya.
- 5. Certificate course on Research and public health offered online by CBEC KEMRI-Bioethics Training Initiative from 12th to 16th October 2020.
- Large project proposal 2020 CARTA Graduate Workshop, February 10th to 15th, 2020,
 African Population and Health Research Center (APHRC), Nairobi, Kenya
- Certificate course in Research Ethics for IRECs offered by NACOSTI, Kenya from 30th
 April to 3rd May 2019 at Egerton University.

- 8. CARTA PhD graduatesø workshop on grant-proposal writing, February 11th to 16th, 2019. Southern Sun Mayfair, Nairobi, Kenya.
- 9. The IREC/Reviewers Training workshop held on 17th and 18th May 2018 in Eldoret, Kenya.
- Capacity Building for Quality Research Proposal Review workshop held from 29th to 31st
 May 2017 in Eldoret, Kenya
- 11. Joint Advanced Seminar (JAS) on Research Findings Dissemination and Policy Making, Makerere University School of Public Health, Kampala, Uganda, from 26th Feb to 22nd March 2017.
- 12. The JAS on Research Writing held in the Faculty of Medicine, University of Ibadan College Hospital, Ibadan, Nigeria from 1st to 26th August 2016.
- 13. NAMBARI: Moi-Brown Partnership for Biostatistics ToT from 23rd to 25th May 2016, Eldoret, Kenya
- Critical Appraisal of Research Proposal Training Workshop, 17th to 21st May 2016, Kisumu, Kenya
- 15. On-line course on How to Write and Publish a Scientific Paper (Project-Centered Course) by Coursera Ecole Polytechnique Universite Paris-Saclay. Certificate awarded on 25th March 2016.
- 16. JAS on Research Methods in Public and Population Health held in the Faculty of Health Sciences, Wits, South Africa from 3rd to 27th November 2014.
- 17. JAS Seminar on Scientific Proposal writing held in Safari Park Hotel, Nairobi, Kenya from March 10th to April 4th 2014.
- 18. Institutional Review Board (IRB) related Collaborative IRB Training Initiative (CITI) Course. Certificate awarded on 6th June 2013.
- 19. Diabetes Care and Patient Education held from 14th to 18th August 2006 in Eldoret, Kenya.
- 20. Managerial Skills workshop held on 18th and 19th July 2006 in Eldoret, Kenya
- 21. Quality Management for Healthcare Professional held from 24th -26th Oct 2005 in Eldoret, Kenya.
- 22. Human Resource Training Links Performance Management workshop on 18th August 2005 in Eldoret, Kenya
- 23. Directly Observed Treatment, Short-course (DOTS) Strategy of Tuberculosis Control held from 22nd to 23rd February 2005 in Eldoret, Kenya.
- 24. Infant and Young Child Feeding ToT held from 22nd to 26th March 2004 in Eldoret, Kenya.

Presentation in Scientific Conferences and Published Abstracts

- Magutah K., Mbuthia GW., Osengo G., Odhiambo D., and Meiring R. Prevalence of Modifiable Risk Factors for Cardiovascular Disease among School-going Children and Adolescents in Eldoret, Kenya. Poster presentation during the Bridge Research, Build Bridges: Strengthening Research Capacity for Sustainable Development in Africa, CARTA Conference 2023 at the University of the Witwatersrand in Johannesburg, South Africa on September 14th to 15th, 2023
- 2. Mbuthia GW., Mwangi J., Magutah K., McGarvey ST. Preliminary efficacy of a community health worker homebased intervention for the control and management of hypertension in Kiambu County, Kenya. Oral presentation during the Bridge Research, Build Bridges: Strengthening Research Capacity for Sustainable Development in Africa, CARTA Conference 2023 at the University of the Witwatersrand in Johannesburg, South Africa on September 14th to 15th, 2023
- 3. **Magutah K.,** Experiences and Challenges of the Scientific and Ethical Review Process at MTRH/MU-IREC oral presentation during the 1st International Conference on Research Process and Research Ethics held in Daystar University from 28th to 30th September 2021.
- 4. **Magutah K.,** Nilesh B.P., Thairu K., Effect of Very Short Moderate Intensity Exercise Bouts on Cardiovascular Function in Sedentary Older Adults. Oral presentation during the CARTA@10 Conference held from Nairobi, Kenya on 3rd and 4th December 2020.
- 5. **Magutah K**, Meiring R, Nilesh P, Thairu K. Sports and Health: Regular brief moderate exercise and health. Keynote speaker during the Inaugural International Sports Conference themed Transforming the World through Sports held between 20th and 22nd May 2019 at Crowne Hotel, Nairobi, Kenya.
- 6. Magutah K, Meiring R, Nilesh P, Thairu K, Effect of Short moderate Intensity Exercises in Modifying Cardio-metabolic Markers in Sedentary Kenyans aged at least 50 years. Poster presented at January 21st to 25th 2018 Keystone Symposia meeting Bioenergetics and Metabolic Disease, Keystone, Colorado, USA.
- 7. **Magutah K**, Nilesh P, Kihumbu T. Effect of Sub 10 Minutes Moderate Intensity Exercises in Cardiorespiratory Fitness Markers of Sedentary young-old Kenyans; Oral presentation in 4th Annual JAS Conference, 14th March 2017, Makerere University, Kampala, Uganda.
- 8. Takahashi R, Wilunda C, **Magutah K**, T Thein TL *et al*, A Survey of Knowledge and Practices related to Dengue among Caretakers of School Children in a High Dengue Transmission area in Thailand; poster presented at the 54th Annual meeting of the Japanese Society of Tropical Medicine, 4th to 5th October 2013, Nagasaki, Japan.

- 9. **Magutah K**. A Comparison of Fitness amongst University Students Basing on Past Exercise History. Oral presentation during 6th Annual Scientific conference at Moi University Eldoret, Kenya on 6th to 11th September 2010; abstract no. 4-# -5-16.
- 10. **Magutah K.,** Bukachi F, Ojiambo R. Changes in Physical Fitness among Students at Different Levels of Study. Oral presentation during 6th Annual Scientific conference at Moi University Eldoret, Kenya on 6th to 11th September 2010; abstract no. 4-# -5-17.

Peer Reviewed Publications

- 1. Okwako JM, Mbuthia GW, **Magutah K.** Barriers to Male Partner Accompaniment and Participation in Maternal and Child Health Care in Thika and Kiambu Level Five Hospital, Kenya. *Pan Afr Med J.* 2023 April 20; 44:189. doi: 10.11604/pamj.2023.44.189.38293. eCollection 2023.
- Magutah K, Mbuthia G, Akiruga JA, Haile D, Thairu K. Effect of Fixed 7.5 Minutesø Moderate Intensity Exercise Bouts on Body Composition and Blood Pressure among Sedentary Adults with Prehypertension in Western-Kenya. *PLOS Glob Public Health*, 2022 2(7): e0000806. https://doi.org/10.1371/journal.pgph.0000806
- 3. Maureen KJ, Kariuki JG, Mogere DM, **Magutah K**., & Jeruto E. Factors Influencing the Uptake of Breast Cancer Screening Services among Women of Reproductive Age: A Case Study of Turbo Sub-county, Kenya. *International Journal of TROPICAL DISEASE & Health*, 2022 43(8), 13-24. https://doi.org/10.9734/ijtdh/2022/v43i830606
- Magutah K, Mbuthia G. Physical activity engagement in Eldoret, Kenya, during COVID-19 pandemic. *PLOS Glob Public Health* 2022 2(4): e0000339. https://doi.org/10.1371/journal.pgph.0000339
- 5. Mbuthia GW, **Magutah K**, Pellowski J. Approaches and Outcomes of Community Health Worker's Interventions for Hypertension Management and Control in Low-income and Middle-income Countries: Systematic Review. *BMJ Open.* 2022 Apr 1;12(4):e053455. doi: 10.1136/bmjopen-2021-053455.
- Mbuthia GW, Magutah K, McGarvey ST, "The Prevalence and Associated Factors of Hypertension among HIV Patients", *International Journal of Hypertension*, vol. 2021, Article ID 5544916, 8 pages, 2021. https://doi.org/10.1155/2021/5544916
- Magutah K, Patel NB, Thairu K. Effect of Short Moderate Intensity Exercise Bouts on Cardiovascular Function and Maximal Oxygen Consumption in Sedentary Older Adults. BMJ Open Sport & Exercise Medicine 2020; 6:e000672. doi:10.1136/bmjsem-2019-000672

- 8. **Magutah K,** Patel NB, Thairu K. Effect of Moderate Intensity Exercise Bouts Lasting <10 Minutes on Body Composition in Sedentary Kenyan Adults aged ×50 years *BMJ Open Sport & Exercise Medicine* 2018;4:e000403. doi:10.1136/bmjsem-2018-000403
- 9. Keitany C, Magutah K, Getanda A. Assessment of Immediate Newborn Care Practices among Health Care Workers in Moi Teaching and Referral Hospital (MTRH) Kenya. *International Journal of Basic and Applied Sciences. Vol. 7 No. 4. 2018. Pp. 119-128*
- 10. Takahashi R, Wilunda C, Magutah K, Mwaura-Tenambergen W, Atwoli L, Perngparn U. Evaluation of Alcohol Screening and Community-Based Brief Interventions in Rural Western Kenya: A Quasi-Experimental Study. *Alcohol Alcohol*. 2018 Jan 1;53(1):121-128. doi: 10.1093/alcalc/agx083
- 11. **Magutah K**, Meiring R, Patel NB, Thairu K. Effect of Short and Long Moderate-intensity Exercises in Modifying Cardiometabolic Markers in Sedentary Kenyans aged 50 years and above. *BMJ Open Sport & Exercise Medicine* 2018;4:e000316. doi:10.1136/ bmjsem-2017-000316
- Takahashi R, Wilunda C, Magutah K, Tenambergen W M, Wilunda B and Perngparn U.
 Correlates of Alcohol Consumption in Rural Western Kenya: A Cross-sectional Study.
 BMC Psychiatry (2017) 17:175 DOI 10.1186/s12888-017-1344-9
- 13. **Karani M**, Nilesh B. P., Kihumbu T. Majority of Elderly Sedentary Kenyans show Unfavorable Body Composition and Cardio-metabolic Fitness. *Journal of Aging Science*. 2016, 4:160. doi:10.4172/2329-8847.1000160
- 14. **Karani M,** Wambui T, Ojiambo R, Mureithi M. Cardio-Pulmonary Fitness among University Students based on past Exercise History. *Kenya J Health Sci*, 2015, 3, 62-74
- 15. Wambui T, **Magutah K**, Mbuthia G. Awareness of Sexually Transmitted Infections among Low-Income Men in Western Kenya. *Afr J Health Sci.* 2015; 28 (1): 25-34
- 16. Takahashi R, Wilunda C, Magutah K, Thein T-L, Shibuya N and Siripanich S. Knowledge, Attitude, and Practices Related to Dengue among Caretakers of Elementary School Children in Chanthaburi Province, Thailand. *International Journal of Tropical Disease & Health* 2014, 4(2): 123-135.
- 17. **Magutah K.** Cardio-respiratory Fitness Markers among a Kenyan University Studentsø Cohort by use of a 20 M SRT. *African Health Sci*, 2013; 13 (1): 10-16
- 18. **Karani J. M** Bukachi F, Ojiambo R. Changes in Physical Fitness among Students at Different Levels of Study. *Kenya J Health Sci*, 2013, 2, 16-21
- 19. Ojiambo R. M., **Magutah K.,** Thairu K., Takahashi R., Wilunda C. The Relation between Physical Activity and Indicators of Body Fatness in Kenyan Adolescents. *J. Appl Med Sci*, 2013, 2(1) 43-59

- 20. **Magutah K,** Takahashi R, Wilunda C. Academic Exposure to Benefits of Physical Fitness Does Not Give Medical Students an Edge over Students from Non-Health-Related Disciplines. *J Appl Med Sci*, 2012, 1(2) 61-67
- 21. Ojiambo R. M., **Magutah K.** Objective Measurement of Physical Activity and Indices of Adiposity in Kenyan Children. *Kenya J Health Sci.* In press

On-going Research work

 Prevalence of Risk Factors for Cardiovascular Disease among School-going Children and Adolescents in Eldoret, Kenya.

Manuscripts under Review

- 1. Prevalence of Modifiable Risk Factors for Cardiovascular Disease among School-going Children and Adolescents in Eldoret, Kenya.
- 2. Prevalence and Factors Associated with Abdominal and Total Obesity among Low-Income Urban Population of Kiambu County, Kenya.
- 3. Strategies for Promoting Male Involvement in Maternal, Newborn and Child Health Care in a Kiambu County

Manuscripts under Preparation

- Body Composition and Blood Pressure Relationship among Western-Kenya School Children and Adolescents
- 2. Preliminary Efficacy of a Community Health Worker Home-based Intervention for the Control and Management of Hypertension in Kiambu County, Kenya.

Postgraduate supervisions

- Cyprian Mabonga, HSM 402-0843/22 (PhD On-going at JKUAT) Effects of Vitamin D on Predictors Of Insulin Resistance And Glycemic Status In Polycystic Ovary Syndrome Patients At Mediheal Fertility Center, Eldoret
- Joseph Mukobe, adm no. HSN411-3275/2017 (PhD On-going at JKUAT) on Male Partner involvement in Maternal and Newborn Health: A Facility-Based Evaluation of Gatundu Sub-County Hospital.
- 3. Winnie Choni Barawa, adm no. MPH/2019/57768 (MPH, on-going) on COVID-19 Health Seeking Behavior among Slum Dwellers of Railways, Mombasa County, Kenya.
- Koech J Maureen Reg No. MPH/2019/56698 (MPH, Completed) on Factors Influencing the Utilization of Breast Cancer Screening Services among Reproductive Age Group Women (15-49) in Turbo Sub-county, Uasin Gishu County, Kenya

- 5. Annastacia M. Kivondo Reg no. MPH/2018/38507 (MPH, on-going) on Prevalence and Factors Contributing to Obesity among Adolescents in Machakos County, Kenya.
- Hamdi Mohamoud Samriye Reg no: MPH/2018/38170 (MPH, on-going) on Factors Influencing Utilization of Skilled Birth Care among Women of Reproductive Age (15-49 years) in Jilab Internally Displaced Persons Camp- Garowe, Somalia.
- 7. Winnie Kipchumba, adm no. MPH/2018/21709 (MPH, on-going) on Knowledge and Awareness of Cervical Cancer among Women of Age 25 to 49 years in Ainabkoi Constituency, Uasin Gishu County, Kenya
- 8. Brender Daisy Ridweys, adm no. MPH/2019/41659 (MPH on-going) on Socio-economic Determinants of Health Care Access among older Adults (60 plus years) in Likuyani Sub-County, Kakamega County, Kenya
- Abdinasir Ahmed Sheikh SPH/PGH/1025/11 (Awarded MPH from Moi University, 2021) on Factors Associated with Abuse of Codeine-Containing Drugs among Youth in Mandera County.
- Dr Ombeni Ernest adm no. MPH/2015/24938 (Awarded MPH from MKU, 2021) on Desire for Reproduction among Sero-discordant Couples in Huye district, Southern Province of Rwanda.
- 11. Carol J Keitany (Awarded Moi University MSc in 2018) on Assessment of Immediate Newborn Care Practices in Riley Mother and Baby Hospital, MT&RH, Kenya.
- 12. *Multiple consultations with MMed students on research methods since 2018*

External/Internal examiner-ship (most recent)

- Dr. Akora Rosemary Moraa (MMed Radiology, Moi University. Reg SM/PGR.08/18).
 Thesis titled Diagnostic Accuracy of Chest Computed Tomography in Diagnosis of Lung Tumors Based on Histopathology among Adults at Moi Teaching and Referral Hospital.
- Moses Kefa Ndanyi (Msc Medical Physiology; JKUAT). Thesis titled Anti-Thyroid Activity of *Myrica Salicifolia* (Bayberry) Methanol Root Extract In Levothyroxine-Induced Hyperthyroidism in Male Wistar Albino Rats.
- 3. Dr Audrey Nafuna Mukhwana (PGRIRE/07/13, Moi University). Thesis titled Ethical Implications of Obtaining Voluntary Informed Consent on a Longitudinal International Health Research in Western Kenya.
- 4. Multiple others

Consultancies

1. Team Consultancy for Population Reference Bureau (PRB) Policy Communication Curriculum Review for Consortium for Advanced Research Training in Africa.

- 2. Team Consultancy to Review course outlines and to develop ToT courses for CARTA graduate workshops (GW), ToT for GW facilitators and ToT for GW leads (all related to grant person-ship).
- Responsible conduct of research curriculum development consultancy for Moi University
 MTRH
- 4. WHO consultancy ó Immunization coverage in North-Western Kenya.

Community and extended services

- Journal reviewer for PLOS Global Public Health Journal; F1000 Research; Nutrition, Metabolism and Cardiovascular Disease Journal; African Health Sciences Journal; Palgrave Communications ó Nature; PLOS ONE, African Journal of Health Sciences among other journals and publishers.
- 2. Multiple times acting MTRH Human Participants Administrator regards research with humans in western Kenya.
- 3. Founder and group Chairman, Board Games and Fitness sports Forum for ages 7 to 21 years, Eldoret Kenya.

Health/clinical Services

1. Voluntary patient care services at MTRH.

Research and Academic Awards

- 1. CARTA 2022 Post-doctorate Fellowship Grant worth USD 50,000.
- 2. CARTA 2020 Re-entry Grant Award worth USD 50,000.
- 3. Two different research related travel grants worth about USD 2,200
- 4. CARTA PhD fellowship award worth USD 100,000.
- 5. Moi University GSREC research grant worth about USD 2,900.
- Deutscher Academischer Austausch Diensst (DAAD) scholarship award worth about USD 8,306.
- 7. Moi University GSREC research grant worth USD 3,077.
- 8. The Prof. Japheth Kiptoon award for KCSE grade A achievers from Baringo County, worth USD 100.

Other Awards – Financial and non-Financial

- 1. A 2021 financial award following Population Reference Bureau Policy Communication winning project.
- 2. A 2017 award for timely successful completion of Joint advanced seminars (JAS 1 to 4) by Consortium of Advanced Research Training in Africa.

- 3. COBES II award for outstanding performance in Community Based Education and Services
- 4. Best student in Mathematics contest held at Kituro High school, Kabarnet, Kenya.
- 5. Best Science Congress Project for Agricultural Category dubbed The A Frame for Baringo County.

Hobbies

- 1. Landscaping and Keep-it-Green beautification.
- 2. Chess and Scrabble, Table Tennis and routine 30 to 55 kilometers weekly running (in 3 sessions) at 11 to 13 km/hr speeds.
- 3. Currently learning to play Piano as a musical instrument.

Referees

Magak Ngøwena (PhD) Professor of Medical Physiology, Maseno University. Box 333, Maseno. Robert Ojiambo (PhD) Chair of Division of Basic Sciences, University of Global Health Equity. Box 6955, Kigali.