

SABELLA KIPRONO, PHD

CURRICULUM VITÆ

P.O BOX 190-50100 • KAKAMEGA, KENYA CELL PHONE: +254-(0)726808258/+254-(0)714139787 • EMAIL: skiprono@mmust.ac.ke
[/sabkip@gmail.com](mailto:sabkip@gmail.com); Orcid no: 0000- 0002-1622-4610; Researcher ID:
[57197779678](https://orcid.org/0000-0002-1622-4610)

PERSONAL INFORMATION

Nationality Kenyan
Gender Female
Languages Kiswahili/ English
Nationality: Kenyan
Marital status Married

Career Aspiration

I aspire to be a global health researcher and to be involved in research, Innovation and scholarly activities that encourage innovative ideas and team work for excellent performance.

EDUCATION AND RESEARCH TRAINING

July 2023-June 2024 **Postdoctoral Forgarty Global Health fellow** [Harvard University, Boston University, Northwestern University and University of New Mexico Consortium (HBNU) **University of New Mexico, USA.**

Sept 2014-June 2018: **Huazhong University of Science and Technology (China)**
Doctoral Degree in Microbiology

June 2009- March 2011: **Saint Louis University, Philippines**
Master of Science (Biology major in Microbiology)

Jan 2005- June 2008: **Egerton University (Kenya)**
Bachelor of Education Science (Biology (Botany and Zoology) and Chemistry)

Jan 2000-Nov 2003: **Sacho high school**
Kenya Certificate of secondary Education (Grade B plain)

Jan 1990-Nov 1999: **Tandui Primary school**
Kenya certificate of Primary Education 510/700 marks

April-June 2004 **Lonka communications**
Certificate of merit (computer packages)

WORK EXPERIENCE

November 2023-To date: Senior Lecturer	Masinde Muliro University of Science and Technology Department of medical laboratory sciences, School of Public health Biomedical Sciences and Technology
September 2014- November 2023: Lecturer	Masinde Muliro University of Science and Technology Department of medical laboratory sciences, School of Public health Biomedical Sciences and Technology
March 2012- September 2014: (Assistant Lecturer)	Masinde Muliro University of Science and Technology Department of medical laboratory sciences, School of Public health Biomedical Sciences and Technology
August 2011- To February: 2012- (Assistant lecturer)	Kampala International University P.0 Box 9790, Gongo La Mboto, Dar Es Salaam Department of Microbiology, school of health sciences

RESPONSIBILITIES

May 2023- To date	Member of gender mainstreaming committee
November 2020-To date	Departmental coordinator Consultancy, Research and innovations
January 2023-To Date	Member of Departmental welfare committee
November 2020-To date	Member of Departmental postgraduate studies committee
November 2020-To date	Member of departmental curriculum review and timetabling committee
2018 Oct-Oct 2020	Postgraduate studies Coordinator, School of Public Health and Biomedical Sciences and Technology, Masinde Muliro University of Science and Technology
August 2013-2014 August	Consultancy Team Member MMUSTFUNZO Kenya project
16th -21st September 2012	Facilitated the running of Health Professions Education Department while the COD was away on visiting Namibia-Windhoek on official duty
27th October -14th November 2012	Facilitated the running of Health Professions Education Department while the COD went on student-exchange programme to Oulu University Finland
12th October 2012	Facilitated the running of Health Professions Education Department while the COD attended KENET workshop on E-learning innovation in Nairobi
3rd-7th December 2012	Facilitated the running of Health Professions Education Department while the COD attended FUNZOKenya workshop in Nairobi

- 5th -16th August 2013:** Took charge of Health Professions Education Department as the COD went for annual leave
- 15th -20th September** Facilitated HPE departmental activities as the COD attended Trainer of trainer's workshop in Machakos
- 22nd January 2014** Facilitated HPE departmental activities as the COD attended meeting on dissemination of post training assessment at Nairobi

OUTREACH/COMMUNITY SERVICE

- May, 2019-To date** *Board of management Member* at Talai High School, Kabartonjo, Baringo
- July 2021** Encouragement talk on *self-esteem* to form fours of Talai High School, Kabartonjo, Baringo
- August 2021** Organized and participated in *Cooperate Social responsibility on Tree planting* at Mahiakhalo Primary School, Kakamega County
- July, 2021** Organized and participated in *Cooperate Social responsibility on Reproductive health (13-20 years' girls)* in Siaya County, Ugunja Subcounty, Umina secondary school, Umala Village
- 2015-2018 June** *Vice chairperson* of Kenyan students in Wuhan Association (KENSWA) China
- 30th November, 2019** Organized and participated in *medical camp Outreach in Baringo County* in collaboration with Masinde Muliro University of science and Technology, department of Optometry and vision sciences
- 14th November 2015** Participated in *Wuhan international Christian Fellowship sports tournament* held at China Central Normal University sports ground Wuhan China
- 23rd July 2016** Participated in *Wuhan international Christian Fellowship indoor sports tournament* held at Huazhong University of Science and Technology sports complex Wuhan China

TRAINING AND PROFESSIONAL DEVELOPMENT

- 22-30 September 2023** Completed Collaborative Institutional Training Initiative **(CITI) program course** on **Biomedical Research Investigators** offered by Havard University
- 15-22 September 2023** Completed Collaborative Institutional Training Initiative (CITI) program course on **Biomedical Responsible conduct of Research** offered by Havard University
- 20th-22nd April, 2022** **Staff peer education** training sponsored by Masinde Muliro University of Science and Technology at Golf Hotel Kakamega.

18th October-14th December 2021	Wits Digital Campus Virtual course: Gender in Science, Technology and Innovation organized by South African Research and Innovation Management Association (SARIMA)
August 10, 2021.	Participated in the Online Data Collection Tools and Data Analysis Training held at Masinde Muliro University of Science and Technology
June 7th-July 4th 2021	PedaL Online Course on: Technology for Transformative Pedagogy organized by Partnership for African Social and Governance Research (PASGR)
2nd -6th Sept 2019	Attended and completed Pilot Foundations of Bioethics Certificate Course Organized by CBEC KEMRI- Bioethics Training Initiative
24th-28th Feb, 2014	Attended training on Adult Anti-retroviral Therapy Training organized by Masinde Muliro University collaboration with Funzo Kenya
23rd-24th Jan,2014	Participated in Curriculum Development and Review workshop for Public Universities in Kenya at Masinde Muliro University of Science and Technology
11-13 Nov, 2013	Participated in Integrated Human Resource Information System Training organized by Ministry of Health in collaboration with USAID, Funzo Kenya
5th-14th August, 2013	Coordinated and participated in training on Prevention of mother to child transmission (PMCTC) organized by Masinde Muliro University collaboration with Funzo Kenya
July 25-27,2012	Participated in Research Proposal Writing Training Workshop at Masinde Muliro university organized by DAAD/National Council for science and Technology
June 20-21, 2012	Participated in Induction Training on E-Learning (Moodle Enviroment) at Masinde Muliro University of Science and Technology
Oct 3-5, 2011	Attended and participated in Pedagogy in higher learning at Kampala International University (Dar es Salaam)
March 9th,2010	Participated in training on Basic CT scan and MRI interpretation at Saint Louis University, Philippines

WORKSHOPS/ WEBINARS AND CONFERENCES

28th April , 2023	Attended Laboratory diagnostics, antibiotic resistance and Frontline research in Neisseria gonorrhoea international perspective Webinar: by International federation of Biomedical laboratory Science
10th Nov, 2022	Attended seminar “ Balik Scientist Revisits IBS-UPLB ” of the institute of Biological sciences, College of arts and science, University of Philippines Los Banos
Oct 31st -Nov 4th , 2022	Attended Sustainable Development for HIV health scientific writing workshop sponsored by the National Institutes of Health (NIH) Fogarty International Center (FIC), at ICIPE Mbita Point

- 28th Oct 2022** Attended and participated in 1st Biophysical Society sponsored conference on Biophysics, **Future of Health interventions** virtually held in Egerton University, Njoro, Kenya
- 22nd Oct 2022** Attended Microbiology Consortium of Philippines webinar on “ **Engineering probiotic yeast for drug delivery in the large intestines**”
- 21st Oct 2022** Participated in Biophysical Society sponsored conference on **sensitization, dissemination and advocacy of biophysical science with Training in Nanoscience and Nanotechnology** held at Masinde Muliro University of Science and Technology, Kenya
- 14th Oct 2022** Participated in Biophysical Society sponsored conference on **Demystifying Biophysics Education and Research in Africa:** held at Masinde Muliro University of Science and Technology, Kenya: An integral Approach
- June 2nd -3 rd 2022** Participated in the Masinde Muliro university of Science and Technology Workshop “**Cultivating the biosafety and Biosecurity Program for global competitiveness**” sponsored by IFBA
- May 19-21st 2021** Attended the 14th Multidisciplinary Virtual Conference on “**Innovative Technology Transfer for Universal Health Care (UHC); Food Security; Affordable Housing and Manufacturing for Sustainable Development.**” Held at Masinde Muliro University of Science and Technology (MMUST)
- 15th June-13 July 2020** Attended virtual onsite training workshop on **Research and Grants Management** run by the BRECCIA project and South African Research and Innovation Management Association (SARIMA)
- 19th -21st June, 2019** Attended 13th multi-disciplinary international conference, Masinde Muliro University of Science and Technology
- 16th April 2010** Attended a conference on **Cardiovascular Essentials: Basics and Beyond** organized by Philippine Heart Association
- 6th March, 2010** Attended conference organized by The Philippine Society of Parasitology INC on **A Revisit of the Neglected Tropical Parasitic Diseases**
- 23rd Jan ,2010** Attended conference on **Microbes in Action: Monitoring, control and prevention** organized by the Philippines Society For Microbiology INC
- 25-26 February,2010** Attended conference on “**Strengthening and simplifying Approach to women’s Health Care**” organized by the Philippines society of physicians

- 7th November, 2009** Attended a conference on **Global Alert! Microbes at work: Are we ready?** Organized by the Philippines Society For Microbiology INC
- 23rd-24th October, 2009** Attended the 2nd International Annual PSCB conference and General meeting “**Cell Biology in Health and Medicine**” organized by the Philippine Society for Cell Biology
- 18th June 2009** Attended and participated in workshop organized by the Institute of Graduate Studies and Graduate Students Association of Central Luzon State university, Philippines held a workshop on “**Are We Ready to Fight Dreadful Disease?**”

ORAL PRESENTATIONS IN CONFERENCES/ PUBLICATIONS

- 28th Oct 2022** Attended 1st Biophysical Society sponsored conference on Biophysics, Future of Health interventions virtually held in Egerton University, Njoro, Kenya Participated in **oral presentation on Microencapsulation of probiotics for treatment of gastrointestinal disorders**
- 19-21 November 2021** Attended the 3rd International Symposium on nanocellulosic material virtually held at Guangzhou, China: Participated in oral presentation on **Preparation and evaluation of hydrogel capsules for encapsulation of probiotics for oral delivery of Bovine Serum Albumin**
- 31st August 2021** Participated in Masinde Muliro University of Science and Technology 1st Blended Research dissemination conference. Oral Presentation on **Ethnomedicinal uses of stingless bee honey and conservation of native stingless bee colonies in Baringo County, Kenya**
- May 20-22, 2017** Attended the 1st International Symposium on Nanocellulosic Materials, at Hangzhou, Zhejiang, China. Participated in oral presentation titled as “**Biofabrication based on microbes: Magnetic manipulation of *Gluconacetobacter xylinus* for ordered cellulose production**”
- 4th-8th Sep, 2012** Attended 8th Annual International Conference at Moi University on Adaptations to Global Dynamics Challenges and Opportunities. Participated in oral presentation on “**Knowledge. Attitude and practices of students enrolled in health-related courses towards Human Papillomavirus at Saint Louis University, Philippines**”

POSTER PRESENTATION IN CONFERENCE

- Oct 30th -Nov 3rd, 2022** Poster Presentation at American Society of Tropical Medicine and Hygiene 2022 annual meeting, held in Seattle, Washington on “**Antimicrobial resistance patterns in clinical isolates from children with bacteremia and malaria in a holoendemic *Plasmodium falciparum* transmission region of western Kenya**”

CONFERENCE /WORKSHOP ORGANIZED

- March 22, 2023** **Synthetic biology training Workshop**
Introduction to Synthetic biology
Applications of Synthetic biology in biology and biophysics
- October 2022** **Networking conference on Sensitization, Dissemination and Advocacy of Biophysical Science among the Staff and Students of the University.**
Sponsored by Biophysical society

PUBLICATIONS

Book chapter

1. *M. W. Ullah, S. Manan, Sabella J. Kiprono, G. Yang*: Synthesis, structural, and physico-mechanical characteristics of bacterial cellulose In: *Nanocellulose: From Fundamentals to Advanced Materials*, First Edition. Edited by Jin Huang, Alain Dufresne, and Ning Lin © 2019 Wiley-VCH Verlag GmbH & Co. KGaA. Published **2019** by Wiley-VCH Verlag GmbH & Co. KGaA.

Book

1. *Sabella Kiprono, Suge Titus K., Gaudeli A. Reyes*: Human Papillomavirus (HPV): Knowledge, Attitude and Practices of Students enrolled in Health Related Courses at Saint Louis University towards HPV. Publisher: LAP LAMBERT Academic Publishing (October 30, 2012). ISBN-10: 365925293X ISBN-13 : 978-3659252938

Journal publication

1. Christine Chepkemoi, Timothy K Bett, Elias Mandela, **Sabella Kiprono**, Jared Onyancha, Sammy Kimoloi: In-vitro Antimicrobial Effects and Phytochemical Contents of Stingless Bee *Meliponula beccarii* Honey and Pollen from Baringo County, Kenya: *The Journal of Phytopharmacology* **2023**; 12(6):366-376
2. **Sabella J. Kiprono**, Gladys Mengich, Bartholomew N. Ondigo, Charles Mutai and Sammy Kimoloi; Therapeutic uses of stingless bee honey by traditional medicine practitioners in Baringo County, Kenya: *Journal of Pharmacognosy and Phytotherapy* **2022**
3. Erick Ngetich, **Sabella Kiprono**, Dominic Marera: Stability of Selected Biochemical Analytes in Serum Stored at Room Temperature for 24 Hours at Kericho County Referral Hospital, Kenya. *East African Journal of Health and Science* **2022** 5 (1), 300-310.
4. **Sabella Kiprono**, Gladys Mengich, Jackline Kosgei, Charles Mutai, Sammy Kimoloi: Ethnomedicinal Uses of Stingless bee honey among native communities of Baringo County, Kenya. *Scientific Africa* (17) **2022** e01297
5. Magondu, R. N., Ramesh, G. P. & **Kiprono, S. J. (2022)**. Isolation and Identification of Bacteria Present on Frequently Used Fomites in University of

Eastern Africa Baraton in Nandi County, Kenya. *Journal of Research Innovation and Implications in Education*, 6(2), 382 – 388.

6. Emily G. Kiptui, **Sabella J. Kiprono**, Gladys J. Mengich: Risk factors of visceral leishmaniasis among residents of Baringo County, Kenya; *International Journal of Community Medicine and Public Health* **2021** Nov;8(11):5251-5257
7. Hellen Jeruto Sawe, **Sabella J Kiprono**, Tom Were: Performance of acid-fast techniques and genexpert in diagnosing pulmonary tuberculosis in Uasin Gishu county health facilities, Kenya; *IP International Journal of Medical Microbiology and Tropical Diseases* **2021**;7(3):165–170
8. **Sabella J. Kiprono**, M.W. Ullah & G. Yang: Encapsulation of *E. coli* in biomimetic and Fe₃O₄-doped hydrogel: structural and viability analyses; *Applied Microbiology and Biotechnology* **(2018) 102:933–944**.
9. **Sabella J. Kiprono**, M.W. Ullah & G. Yang: Surface engineering of microbial cells: Strategies and applications: *Engineered Science*; **(2018)**, 01, DOI: 10.30919/es.180325.
10. Geoffrey Arasa Ouno· Scolastica Chepngetich Korir· Joane C.Cheruiyot· **Sabella J. Kiprono**: Isolation, identification and characterization of urinary tract infections bacteria and the effect of different antibiotics (ISSN 2224-3186, VOL 13, NO. 6, **2013**)
11. Eliakim Mbaka, Godfrey Omare, Geoffrey Arasa Ouno, Benard Moronge Mabeya and **Sabella J Kiprono** “Molecular Identification of Soil Bacteria by 16S rDNA Sequence” , Vol 3, No 14 (**2013**) pp 51-58.
12. Suge T.K, Wilda O, **Sabella J. Kiprono**, Jeridah M, Enock O, Awareness and Attitudes of Healthcare Professionals in Baguio-Benquet towards Adverse Drug Reaction Reporting: A Cross-sectional Study Vol 2, No 7 (**2012**)
13. Wilda O, **Sabella J. Kiprono**, Jeridah M, Enock O, Suge T.K, Efficacy of Plant Extracts Against Multi-Drug Resistant *Escherichia Coli* from Urinary Tract Infection (ISSN 2224-3208, VOL 2, NO.7, **2012**)
14. Jeridah Moindi, Enock Onyambu, **Sabella J. Kiprono**, Suge Titus K, Wilda Onyancha “Studies of Biodegradation of Ipomea Carnea Weed from Kavinadu Big Tank in Pudukkottai District (India)” Vol 2, No 6 (**2012**)
15. **Sabella J. Kiprono**, Awuoche Erick, Suge Titus K, Wilda Onyancha, Onyambu Enock, Jeridah Moindi “Knowledge. Attitude and practices of students enrolled in health related courses towards Human Papillomavirus at Saint Louis University, Philippines” Vol 2, No 6 (**2012**)
16. Mengich, J.Gladys and **Kiprono J. Sabella**: Identification of competencies for training: A case study on Physiotherapy course at Kenya Medical Training College, Nairobi. *Journal of Natural Sciences Research* Vol.2, No.8, **2012**; ISSN 2224-318

RESEARCH INTERESTS

1. Microencapsulation of probiotics and designing synergistic delivery system
2. Biomaterials-Bacterial cellulose production and its biomedical application
3. Ethno medicinal uses of medicinal products and its antimicrobial profiles (stingless bee honey)
4. Biosecurity

GRANTS /FUNDING

- **CRDF GLOBAL Grant:** Project Title: Masinde Muliro University of Science and Technology Cyber Biosecurity Enhancement. Grant Number: 71198 **(2023/2024)**
- **Networking event Grants** by Biophysical Society **(2022):**
Title: Sensitization, Dissemination and Advocacy of Biophysical Science among the Staff and Students of the University.
- Masinde Muliro University of Science and Technology **RESEARCH FUNDS AWARD** academic year **2019-2020 (MMU/COR:40005(039))**
Project title: Ethno medicinal uses of stingless bee honey and its impact on conservation of native stingless bee colonies in Baringo County, Kenya

ACADEMIC AWARDS/ HONOURS AND ACHIEVEMENT

- Postdoctoral Fogarty Global Health Fellow; [Harvard University, Boston University, Northwestern University and University of New Mexico Consortium (HBNU)] **(July 2023-June 2024)**
- Huazhong University of Science and Technology (China) Biomaterials, Biomacromolecular Biofabrication laboratory excellent paper award **2018**
- Chinese government scholarship- Huazhong University of Science and Technology (China) to study doctorate Degree **(2014-2018)**
- Huazhong University of Science and Technology (China) Academic excellent award **2016-2017)**
- Huazhong University of Science and Technology (China) Biomaterials Biomacromolecular Biofabrication laboratory Research award [**2016/2017**]

THESIS EXAMINATION

PhD thesis examined

- Seasonal phenotypes and genotypes of enteric bacteria and antibiotic resistance among diarrhaeic children seeking treatment at mbagathi hospital, nairobi city, kenya (*Mark Kilongosi 2021*)

Master Thesis examined

- Prevalence, genotypic characterization and coinfection rate of non-tuberculous mycobacterium in patients with presumptive tuberculosis (*Anne Akumu Ochayo 2023*)
- Haematological Response to iron and folic acid supplementation among expectant mothers attending Kakamega County Referral hospital Kenya. (*Dennis Kirui 2022*)
- Knowledge, attitude and perception of contact lens wear by adults with refractive errors in Masinde Muliro university of science and technology, kenya. (*Chikasimbori Timothy 2022*)
- Predictors of Male Partner Involvement in Promoting Antenatal Care and Skilled Delivery Attendance in Bumula Sub-County in Bungoma County (*Rose Nyangau 2021*)
- “Evaluation of thyroid cytomorphology and hormonal profiles of patients presenting with enlarged thyroid gland at Moi Teaching and Referral Hospital” (*Ndichu Elias Ngure 2019*)
- Anaemia burden and predictors among adults defaulting antiretroviral treatment at Siaya County Referral Hospital, Western Kenya: *Philemon Wafula Makhanu (2018)*
- Utilization of Information and Communication Technology in Teaching and Learning in Medical Training Colleges within Kakamega County: *Janepher Abuti Ogot (2018)*

TRAINING/MENTORSHIP/ SUPERVISION

Supervision to completion (Masters Students)

1. *Kiptui Emily Giken*: The burden of visceral leishmaniasis and associated risk factors in Baringo county
2. *Hellen Jeruto Sawe*: Assessing performance of acid-fast techniques and genexpert in diagnosing pulmonary tuberculosis in Uasin Gishu county health facilities, Kenya
3. *Magondi Richard*: opportunistic bacteria types on frequently used fomites in University of Eastern Africa Baraton in Nandi County

Supervision ongoing

PhD students (ongoing)

1. *Winnie Ngeno*: Knowledge, Perception and Uptake of typhoid vaccine among food handlers in Eldoret town, Uasin Gishu county
2. *Sarah Kindiki*: Molecular characterization and risk factors, of surgical site *pseudomonas aeruginosa* infection at Kakamega county referral hospital, Kenya

Masters students (ongoing)

1. *Erick Kiprotich Ngetich*: Storage conditions and stability of 15 selected blood biochemical analytes in samples stored over a defined duration (state the duration if possible): *a case study of Kericho county referral hospital*
2. *Christine Chepkemoi*: Antimicrobial activities of honey and pollen of *meliponula beccarii* and *plebeina hildebrandti* from baringo county, Kenya
3. *Timothy Kipchirchir Bett*: Diversity, ecology, and conservation status of the native subterranean stingless bees in baringo county, Kenya
4. *Priscilla Aywa*: Antimicrobial activity of Bacterial cellulose loaded with plant extracts for wound healing

AFFILIATED SOCIETIES

- Royal Society of Tropical Medicine and Hygiene 1D:0023938
- Biophysical Society ID: 114703
- American Society of Tropical Medicine and Hygiene ID 74187
- American society of Microbiology Membership ID: 57090466
- International Associate member of the Society for General Microbiology Membership ID: 20001123

REFEREES/ SUPERVISORS

Douglas J. Perkins, PhD
Director and Professor of Medicine
Centre for Global Health
University of New Mexico
Department of Internal Medicine
MSC10-5550, 1 University of New Mexico
Albuquerque, NM 87131-0001
Email: dperkins@salud.unm.edu

Prof. Gladys Mengich,
School of Public Health Biomedical Sciences and Technology,
Masinde Muliro University of Science and Technology,
P.O Box 190-50100, Kakamega, Kenya.
Cell: +254721877112
Email:gmengich@mmust.ac.ke

Dr. Evan Raballah
Dean, School of Public Health Biomedical Sciences and Technology,
Masinde Muliro University of Science and Technology,
P.O Box 190-50100, Kakamega, Kenya.
Cell: +254724476744
Email:eraballah@mmust.ac.ke