

Curriculum Vitae

Personal Details

Name: Prof. Hamadi Iddi Boga

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Profession: University Professor; Microbiologist/Microbial Ecologist

Sex: Male

Marital Status: Married with 3 Daughters

D.O.B: 03rd December 1967

Languages: Kiswahili, German, English

Citizenship: Kenyan

Educational Background

1. July 2005-June 2006: Post-Doctoral Training

Post-Doctoral Research Stay at the Max Plank Institute for Terrestrial Microbiology supported by the Alexander von Humboldt Foundation. My Research was on Characterization of Microbial Diversity of Soil-feeding and Fungus cultivating Termites using modern molecular techniques.

2. October 1996-October 2000: Doctor of Philosophy

PhD Training at the University of Konstanz, Germany

Topic of Thesis: Numerical and Physiological Characterization of the Microbiota in the Intestinal Tracts of Soil-feeding Termitinae (University of Konstanz, Germany, 2000)

3. April 1996-october 1996: German Language Course Training. I successfully completed the PNdS exam for entry into German Universities

4. Sept 1991- Dec 1993: Master of Science (Microbiology), Kenyatta University, Nairobi

Thesis:Some aspects of the decomposition process in the mangrove swamp at Gazi Bay, Kenya (Kenyatta University 1993)

5. March 1987-Feb 1990 Bachelor of Science-Botany and Zoology, Kenyatta University, Nairobi

6. 1985-1988 Kenya Advanced Certificate of Education, Kenyatta High School, Taita.

7. 1981-1984 Kenya Certificate of Secondary Education, Voi Secondary School, Voi

8. 1974-1980 Kenya Certificate of Primary Education, Mvindeni Primary School, Kwale

Employment and Professional Experience

1. Administrative Experience

December 2012 to Date

Overseeing the Administrative and Academic functions of the College

10th August 2012 to November 2012

Acting Principal Taita Taveta University College

Overseeing the Administrative and Academic functions of the College

February 2009 to 10th August 2012

Principal, JKUAT Taita Taveta Campus

The Administrative and Academic head of the campus. Created the Campus Academic Profile and Strategic Plan. Oversaw the growth of the JKUAT TTC from zero to about 1400 students. Successfully graduated 2 cohorts of students in 2010 and 2011. Have established Certificate, Diploma, Degree and Postgraduate programs in the college. Managed to attract funding from MoPW (KSh 500 M) and CDF (KSh 12 M). Successfully transitioned campus into a Constituent College within 4 years.

18th June 2007 to February 2009

Acting Principal, Taita Taveta Campus of JKUAT

The Administrative and Academic head of the newly established campus. Overseeing the completion of rehabilitation works at TTUC and the start of programs at the campus and the successful start of programs at the campus after 15 years of stagnation.

April- June 2007

Elected Dean, Faculty of Science, JKUAT

Developing and coordinating the implementation of Faculty of Strategy with regard to curriculum, research and examinations, processing faculty examinations, and supervising Chairpersons of Department.

Nov. 2004-June 2005

Director, Institute of Biotechnology Research, JKUAT

Achievements

Developed curriculum for MSc Biotechnology, Short courses in Microbiology, Molecular Biology, Bioinformatics, Biosafety and Laboratory safety. Revised administrative structure of the Institute of Biotechnology. Member of University Senate, Deans Committee, Research Committee and other senate committees. Helped to attract funds to complete setting and operationalize the Molecular Biology Laboratory at JKUAT.

September 2002-Oct. 2004

Chairman, Botany Department, Jomo Kenyatta University of Agriculture and Technology

Achievements

Responsibilities: Chief Administrator of the Department, Chief Examination officer of the Department, Designing new programs for the Department, allocating duties to staff members of the Department. Spear headed the review and successful implementation of robust BSc Medical Microbiology and BSc Biotechnology programs. I also spearheaded the creation of areas of specialization in BSc Botany as follows: Plant Science, Microbiology, Plant Ecology, Plant Pathology and Plant Biotechnology. I also strengthened the Postgraduate programs in the Department. Was a member of University Senate, and the Senate Research Committee.

Professional Experience

May 22nd 2010- to date

Professor of Microbiology, Jomo Kenyatta University of Agriculture and Technology

Supervision of postgraduate students, teaching graduate and undergraduate students in the area of Microbiology, Conducting and coordinating research, fundraising for the University through research grants. I have provided leadership in the area of Microbiology through the Microbiology network (<http://groups.yahoo.com/group/microbiologykenya>). I have also spearheaded the Development of the Kenya Microbial Culture Collection. I was appointed a s Board Member of the World Federation of Culture Collection (<http://www.wfcc.info>) and also helped to link JKUAT to the Global Biological Resources Centre Network (<http://www.gbrcn.org>) demonstration project.

March 2007 to May 21st 2010

Associate Professor of Microbiology, Jomo Kenyatta University of Agriculture and Technology

Supervision of postgraduate students, teaching graduate and undergraduate students in the area of Microbiology, Conducting and coordinating research, fundraising for the University through research grants. I also successfully supervised over 10 MSc and 4 PhD students in that period.

August 2003 to March 2007

Senior Lecturer, Botany Department, Jomo Kenyatta University of Agriculture and Technology

Supervising PhD, MSc and Undergraduate students; Lecturing undergraduate and postgraduate students, Curriculum development, Conducting and coordinating research. I also lectured postgraduate students in the Institute of Tropical Medicine and Infectious Diseases of JKUAT based at Kenya Medical research Institute (KEMRI), Kenya.

Jan 2001 –Aug 2003

Lecturer in the Department of Botany at the Jomo Kenyatta University of Agriculture and Technology

Responsibilities include: -

Lecturing (microbiology, microbial ecology and microbial physiology) to M.Sc. and undergraduate students, Organising practicals and field trips, Supervising M.Sc. and Undergraduate students in research activities, a resource person for the Institute for Energy and Environmental Technology where we train people on sound methods of waste management. Successfully started the MSc Microbiology programme in the Botany Department. This became the successful launching pad for my Microbiology Career. Most of my first Batch of MSc students have gone ahead to develop successful Microbiology Careers of their own.

September 1995 to January 2000

Assistant Lecturer, Botany Dept, Jomo Kenyatta University of Agriculture and Technology

Responsibilities included, teaching undergraduate students in the area of microbiology, and organising practical sessions and field trips

May 1994 to 1995

Appointed Teaching Assistant in the Department of Botany at the Jomo Kenyatta University of Agriculture and Technology

Responsibilities included, lecturing (Microbiology & Marine Botany) and organising practicals and field trips for undergraduate students

September 1991-May 1994

Ecologist, Ministry of Planning and Nat. Dev., Department of Resource Surveys and Remote Sensing.

Responsibilities: Monitoring destruction of mangrove ecosystems using remote sensing techniques.

May 1990-September 1991

Teacher, Darul-Ulum Secondary School, Likoni, Kenya

Duties: Teaching Biology, Chemistry and Geography to secondary school students

Other Professional Experiences

1. Served as the Chairman of the Directorate of Quality Assurance (DAQA) in JKUAT. Successfully steered the Board to Monitor adherence by various departments to the Internal academic Quality Assurance Standards
2. **Served as a** Member of committee appointed to establish the Academic Quality Assurance mechanisms for JKUAT. Participated in the formulation of the JKUAT Academic quality assurance policy and the establishment of the Directorate of Academic Quality Assurance.
3. **2008**-Co-Chair of the Biosafety and Laboratory Safety sub-committee. Develop the JKUAT Biosafety and Laboratory Safety policy and guidelines for teaching and research laboratories.
4. Ambassador Scientist for the Alexander Von Humboldt Foundation in Kenya
5. Served as Secretary and then as Chairman of the Kenya DAAD Scholars Association on various dates between 2002-2009. I helped revive and strengthen the Kenya DAAD Scholars Association into the most vibrant Alumni organisation in the East African Region.
6. **2000 to date**-Secretary, Kenya Society of Microbiology. Responsibilities include building and maintaining a network of microbiologists in the region, taking minutes, manning the KSM secretariat, and day-to-day running of KSM affairs.
7. **2004-2007**-Member of the National Committee on the Establishment of the Kenyan Biological Resource Centre of the National Council for Science and Technology. The

committee was tasked with developing a strategy for the establishment of a Biological Resource Centre for the conservation of Microbial Biodiversity

8. **2009to date** Chairman of the National Council of Science and Technology committee for developing the Bioscience Policy. Successfully steered the adoption of a Bioscience Policy which is ready for approval by Cabinet.
9. **Since 2002 to date:** Served as a member of the Board of various schools in Kwale County including Kwale High School, Kikoneni Secondary School, Kinondo Secondary School. I have been since 2008 the Chairperson of Matuga Girls Secondary School and have guided its rise into a High Performing School which was elevated into a National School.

Management Training

On Various Dates between May 2007 and February, 2008

Participated in a three Part training on Higher Education Management dubbed International Dean's Course Organised by the DAAD, Alexander von Humboldt Foundation and the German Rektors Conference (HRK)

- Part I of International Deans Course at the Osnabruek University of Applied Sciences, Germany
- Part II of International Deans Course, JKUAT, Nairobi, Kenya
- Part III of International Deans Course, Addis Ababa University, Ethiopia,

The course focused on strategic management, quality assurance, curriculum development, soft skills, conflict management, meeting management, Higher Education Reform in Europe-the Bologna process, personal action plans (PAP), e-learning etc.

12th -15th Jan 2009

Participated in and organized a workshop on the use of e-resources and electronic databases to support education and training in Universities at AICAD organized jointly between JKUAT and Information Training and Outreach Centre for Africa (ITOCA).

13th-15th October 2010

Participated in Project Management Training organized by the German Academic Exchange Service at the Kenyatta University Conference Centre, Nairobi. The Facilitators were from *Consesa* a German Consulting Company. Participants were taken through all aspects of Project Cycle Management.

23rd June 2011: Organized and participated in a workshop on Governance in Higher Education Institution. This was facilitated by Dr Ludwig Kronthaler, Secretary General of the Max Planck Society in Germany and also former Registrar of the Technical University o Munich. This was organized under the Collaboration with the Technical University of Dortmund.

April 2011-June 2012

Organized and participated in a three Part Training on Higher Education Management for managers of Constituent Colleges with support from the NCST, CHE and the DAAD. The Training was organized in collaboration with the Centre for Higher Education Research at the University of Kassel in Germany. The training focused on strategic management, organizational development, conflict management, e-resources, financial management, auditing, Higher Education reforms, performance Contracting etc.

Fund Raising/Research Grants (2002-2012)

1. Lobbied for KSh 490,000,000 from the MoPW for the completion of TaitaTaveta University College under the stalled Government Projects Program
2. Attracted KSh 12,000,000 from Voi, Mwatate and Wundanyi CDF for various projects in the college
3. Attracted Eur. 20,000 from AvH for Molecular Biology Equipment
4. Attracted Eur. 30,000 from DAAD for the Purchase of a HPLC
5. Attracted USD 20,000 from TWAS for Establishment of a Microbiology Research Unit
6. Attracted USD 10,000 from IFS for purchase of equipment and chemicals
7. Awarded KSh 3.2 Million from JKUAT RPE for Research
8. Awarded KSh3 Million from NCST for Research Collaboration with University of Western Cape on Lake Magadi Research
9. Awarded USD 50,000 from VicRes for Research on Lake Victoria
10. Awarded USD 60,000 from RUFORUM for Research on Impact of Bt-maize on soil microorganisms.
11. Awarded Euro. 4000 for purchase of books for the University Library. Proposal written in collaboration with DVC (AA) and The University Librarian

MSc and PhD Thesis Supervision

Degree	Year	Student	Title
Ph.D.	2003-2006	Oundo Joseph	Characterization of human pathogenic <i>Escherichia coli</i> causing travelers diarrhea isolated from food handlers working in tourist hotels in three areas of Kenya
Ph.D.	2003-2007	Willie Sang	Serotypes and virulence properties of shiga toxin <i>Escherichia coli</i> from diarrheal patients in Kajiado and Narok Districts of Kenya
Ph.D.	2005-2008	David M Bugeme	The potential of pathogenic fungi on the control of economical important spider mite species <i>Tetranychusurticae</i> Koch and <i>Tetranychusevansi</i> Baker and Pritchard
Ph.D.	2005 – 2009	Romano M. Kachiuru	Characterization of the Microbial community in Lake Elementaita and Lake Nakuru
Ph.D.	2005 - 2009	Zipporah Osiemo	Studies of phylogenetic relationship of members of the Termitomyces associated with fungus-cultivating termites
Ph.D.	2008 -2011	Paulin Nana	Integrating Attraction Aggregation Attachment Pheromone (aaap) and Kairomones from <i>Calpurnia aurea</i> with Entomopathogenic Fungi for the control of <i>Rhipicephalusappendiculatus</i> and <i>Amblyommavariegatum</i>
PhD	2008-2011	Caroline Ngugi	Human Papillomavirus infections, screening options and factors affecting cervical cancer screening uptake amongst Women in Thika District, Kenya
MSc.	2003-2004	Kamanda D. N.	Isolation, characterization and identification of bacteria from the guts of fungus-cultivating termites (<i>Macrotermesspp</i>) capable of degrading some monoaromatic compounds
MSc.	2002-2004	Vitalis W.	Evaluation of pathogenic fungi <i>Beauveriabassiana</i> and

		Wekesa	<i>Metarhiziumanisopliae</i> for the control of Tobacco spider mite, <i>Tetranychusevansi</i> Baker & Pritchard (Acarina: Tetranychidae) infesting tomatoes
MSc.	2002-2004	Dennis Wafula	Investigation of the possible role of termites of different feeding guilds and their microsymbionts in nutrient cycling in soils
MSc.	2002-2004	Lelmen Elijah	Effects of <i>Bacillus thuringiensis</i> delta-endotoxin on Arbuscularmycorrhizal fungi in Sorghum (<i>Sorghum bicolor</i>) (L.) Moench)
MSc.	2002-2004	Zowai Simo J.	In vitro effects of selected Kenyan Medicinal plant extracts on <i>Mycobacterium tuberculosis</i> and other human pathogens
MSc.	2003-2004	Suleiman S. Mzee	Increased multidrug resistance among Enterobacteriaceae shed by persons living with HIV/AIDS
MSc.	2004-2005	Romano Kachiuru M	Characterization of <i>Enterobacteriaceae</i> isolated from wells in Juja, Thika District
MSc.	2003-2005	Lucy Mackenzie	Bacterial diversity in the intestinal tract of fungus cultivating termites <i>Macrotermesmichaelseni</i> Sjöstedt and <i>Odontotermessomaliensis</i> Sjöstedt
MSc.	2005-2006	Muchiri	Enumeration and characterization of indigenous Rhizobia infecting velvet beans, <i>Mucunapruriens</i> and the common bean <i>Phaseolus vulgaris</i> at Karibaribi in Thika District
MSc.	2006-2007	Nonoh James	Isolation and Characterization of Actinobacteria Producing Secondary Metabolites with Potential for Control of <i>FusariumOxysporum</i> , <i>FusariumSpp</i> and <i>ColletotrichumKahawae</i>
MSc.	2005-2008	HellenOgot	Isolation, and identification of pesticide degrading bacteria from soil and intestinal tracts of termites from around Juja, Thika District
MSc.	2007-2008	JacquilineOyugi	Antimicrobial investigation of antidiarrhoeal medicinal plants from Rachuonyo district against clinical and environmental enteric pathogens
MSc.	2007-2008	Ibrahim Daud	Determination of the level of Toll-like receptor (TLR) expression by the lower genital tract of adolescent young women infected with Human Papilloma Virus (HPV)
MSc	2008-2009	Lily Simasi	Isolation, characterization and identification of alkalithermophiles from soda lakes in the rift valley
MSc.	2008-2009	Davies O. Kimanga	A study of factors Associated with HIV status disclosure among adult patients at Kilifi District Hospitals HIV's clinic
MSc.	2007-2009	Makonde M. Huxley	Assessment of the effects of Cry 1Ab and Cry 1Ba delta-endotoxins on prokaryotic communities in various types of soils
MSc.	2007-2009	Julius Kinuthia	Assessment of the effects of DDT on soil microbial diversity and molecular characterization of microorganisms that biodegrade DDT
MSc.	2005 - 2009	Regina Ntabo	Isolation and characterization of novel soil bacteria from around Juja in Thika District

MSc.	2007-2011	Simon Ngare	Characterization of nitrogen fixing bacteria isolates from TaitaTaveta region
MSc.	2007-2010	George Mwenda	Genetic diversity and symbiotic efficiency of Rhizobia isolates from Embu region
MSc.	2007-2011	Edward Karanja	Characterization of Enzymes from Actinobacteria isolated from National Parks in Kenya
MSc.	2008-2011	Julia Khayeli	Extraction and characterization of antimicrobial compounds from Actinobacteria isolates obtained from termite guts and termite nests
MSc	2008-2011	Anne Kelly Kambura	Isolation, Characterization and Screening of bacterial isolates from Lake Magadi for Bioactive metabolites
Msc	2008-2011	OdiliaSolano	Isolation, Characterization and Screening of fungal isolates from Lake Magadi for Bioactive metabolites
MSC	2008-2011	Evans Manyara	Isolation and characterization of extreme haloalkaliphilic microorganisms from Lake Magadi, Kenya
MSc.	2008-2011	Mutuku Irene M.	Molecular characterization and antimicrobial resistance of Enterococcal isolates from Aga Khan Hospital, Nairobi
MSc	2008-2011	Daniel Kwalimwa	Characterization of growth Conditions and requirements of Bt Isolates from various sources in Kenya.

Ongoing

PhD	2008-	F.I. Ndwiga	Characterization of Fungal Biodiversity in Soda Lakes
PhD	2009-	Jacquiline A. Ongachi	Metagenomic studies of Archaeal Diversity in Lake Elmenteita, Kenya
PhD	2011-	Makonde Huxley Mae	Characterization of Fungi and bacteria associated with fungus cultivating termites from Kenya
PhD	2012-	Julia Khayeli	Exploring Microbial Diversity of Lake Elmenteita
PhD	2012-	Anne Kelly Kambura	Metagenomics and metatranscriptomics of Lake Magadi and Elmenteita
PhD	2009-	Ahmed A.	Ecology of <i>Vibrio cholerae</i> in Kenya

Seminars and Conferences

DATE	SHORT COURSE/CONFERENCES
Sept. 1999	Attended a one-week "summer school" in Bad Herrenhalb, Germany organized by the German Society of General and Applied Microbiology (VAAM) on Microorganisms as multi-cellular organisms.
March 2000	Attended a conference organized by the German Society of General and Applied Microbiology (VAAM) in Munich, Germany and presented a poster entitled "Oxygen reduction by homoacetogenic bacteria isolated from termite guts"
April 2001	Attended a regional conference organized by the Kenya Society of Microbiology at Utalii Hotel Nairobi on "Practical utilization and application of microbes for poverty alleviation in Africa". I presented a paper entitled "Metabolite pools and microbial populations in the intestinal tracts of soil-feeding Termitinae"
April 2002	Attended a microbiology conference organized by the South Africa Society of Microbiology in Bloemfontein, South Africa and presented a paper entitled "Oxygen reduction by homoacetogenic bacteria isolated from termite guts"

2 nd -3 rd March 2005	Attended a workshop on Establishment of the East African Biological Resource Centre to secure the conservation and sustainable utilization of Microbial diversity. During this meeting I was selected as the secretary of the National Committee for the establishment of a Kenyan Biological Resource Centre.
March 2004	2 nd Regional Microbiology conference organized by Kenya Society of Microbiology, Nairobi, Kenya
April 2004	13 th Congress of the South African Microbiology Society in Stellenbosch, South Africa
4-6 th October 2004	A participant at a workshop on "Strategic online publishing" held at the University of Nairobi, organized by the International Network for Availability of Scientific Publications (INASP)
10 th -14 th January 2005	A participant in a workshop on Grant proposal writing organised by Kenyatta University
29 th Nov-1 st Dec 2005	Attended a workshop and Stakeholders forum organised by KEPHIS and FAO on Biosafety of Transgenic crops. Training on Biosafety issue related to transgenic crops was provided. Title of workshop was "Capacity building among Kenyan regulator agencies for handling genetically modified crops, products and processed foods".
5 th -6 th May 2006	Attended a training workshop of Food and Feed safety issues arising from transgenic crops organised by the National Council for Science and Technology at the Hilton Hotel, Nairobi
19 th -22 nd March 2006	Annual Meeting of the German Association of General and Applied Microbiology, Jena, Germany. Poster "Novel lineages of planctomycetes in soil-feeding termites".
6 th December 2006	Invited to address the 100 th General Meeting of the Board of the Alexander von Humboldt Foundation. A presentation was made on the how Alexander von Humboldt Activities can strengthen research and scholarship in Africa.
February 2006	Invited to give a lecture at the German cell and culture collection center (DSMZ), in Braunschweig, Germany.
8-9 th June 2006	Presented a talk to a workshop of German Donor Agencies organized by the Alexander von Humboldt foundation. The talk was entitled "Opportunities and challenges of research collaboration in Natural Sciences in Africa for German Scientists
4-6 th Sept 2006	Attended a workshop on "Mombasa mainland south/Kwale District regional development plan project identification, planning and implementation" at Bandari College organized by the Ministry of Lands, Department of Physical Planning.

18 th Oct- 19 th Oct. 2006	A participant at the Eastern African Barcoding Workshop in Nairobi, Kenya, organised by the Consortium for the Barcode of Life (CBOL) and the National Museums of Kenya (NMK)
6 th to 11 th November 2006	A participant at the Unistaff Alumni workshop on quality assurance in University education, held at Kenyatta University
11-12th March 2008	Workshop on Biosafety and Biosecurity organised by the Uganda National Academy of Sciences
June 19-22, 2008,	Workshop on “Facing Africa's Future in a Global Era –The Power of Higher Education and Research” in Addis Ababa, Ethiopia organised by Alexander von Humboldt Foundation and Catholic Academic Exchange Service (KAAD)
12th and 13th July 2008	Workshop for TWAS Research grantees at the African Safari Club Nairobi
8th August 2008	Workshop on the response of the Universities to the Post Election Crisis-organised by the Kenya DAAD Scholars Association, in Chiromo Campus, UoN.
25th-27th October 2008	Participated and organised a conference bringing together DAAD and AvH Alumni from the East African Region whose theme was “Knowledge and Research for Development in East-Africa”
12th -15th Jan 2009	Participated in and organised a workshop on the use of e-resources and electronic databases at AICAD organised jointly between JKUAT and Information Training and Outreach Centre for Africa (ITOCA)
19th-20th January 2009	Connecting worlds of knowledge-German Foreign Policy for more Education, Science and Research (Conference to launch the Research and Academic Relations Initiative Berlin)
21st-22nd January 2009	Alexander von Humboldt Alumni Network Conference "Bonds_of_Trust_2009.de – Germany Alumni in Tomorrow’s World", in Berlin
5th May - 8th May 2009	NCST National Conference presented a paper “The Search for exploitable Biology-A challenge for Kenyan Research Community” at KICC Nairobi
11-12th June 2009	Participated at CONFERENCE ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT held at Masinde Muliro University of Science and Technology presented a paper “The Search for Exploitable Biology-The Need for ex-situ conservation of Biodiversity”
20-23rd October 2009	11th TWAS General Conference held at the ICC in Durban South Africa. Presented a paper entitled “Microbial Diversity of Soda Lakes of Kenya”

13-15 Oct 2010	Participated in a training workshop on “Project Management Skills” organised by DAAD
25-26 Feb 2011	Organised an workshop International Workshop on Biological Resources in Kenya
17th to 30th April	Spent 2 weeks at the DSMZ in Germany to learn the intricacies of management of Biological Resources ex-situ
18th May 2011	Organised a stakeholders workshop on the establishment of a BRC in Kenya for ex-situ conservation of microorganisms
19th-21st May 2011	Organised a training workshop for Principals, Deputy Principals, Deans and CODs of Constituent Colleges in Kenya on Higher Education Management at Kenyatta University Conference Centre.
31st May to 5th June	Participate at the American Society for Microbiology Conference for University Educators to train leaders in Microbiology Education at the John Hopkins University Hospital in Baltimore Maryland, USA
	Participated at a workshop on University Governance and Financial Management facilitated by Dr Ludwig Kronthaler, former Kanzler of Technical University of Munich at TaitaTaveta Campus
14th-15th Sept 2011	Facilitator for Proposal writing workshop at Bondo University College
16th-1th Sept 2011	Facilitator for Proposal writing workshop at Pwani University College
17 th -20th July 2012	Organised an International Conference on “The Future of Biodiversity Research in Africa” at the Sarova Taita Hills Lodge. Supported by Alexander von Humboldt Foundation, DAAD and the NCST.

Computer Literacy

I have competence in the use of diverse computer software, using both Windows and Linux platforms. Some of the software include; Word, Powerpoint, Excel, SPSS, ARB, Xfig, Linux, Open Office for Linux, Adobe Illustrator, PaintShop, Adobe Acrobat, Adobe Distiller, ACDsee, Gelpro.

Awards

1991-Awarded a DAAD Scholarship for MSc Training at Kenyatta University

1996-Awarded a DAAD Scholarship for PhD Training at University of Konstanz, Germany

2005-Awarded the Georg Forster Fellowship of the Alexander von Humboldt Foundation for Post Doctoral Training at the Max Planck Institute for Terrestrial Microbiology in Marburg, Germany

Scientific Publications

2015

1. Gregor Reid*, Nicholas Nduti, Wilbert Sybesma, Remco Kort, Tobias R Kollmann, Rod Adam, Hamadi Boga, Eric M Brown, Alexandra Einerhand, Hani El-Nezami, Gregory B Gloor, Irene I Kavere, Johanna Lindahl, Ameer Manges, Wondu Mamo, Rocio Martin, Amy McMillan, Jael Obiero, Pamela A Ochieng', Arnold Onyango, Stephen Rulisa, Eeva Salminen, Seppo Salminen, Antony Sije, Jonathan R Swann (2014). Harnessing microbiome and probiotic research in sub-Saharan Africa: recommendations from an African workshop. *Microbiome*, 2(1), 12.
2. Miriti, P., Magoma, G., Boga, H. I., & Nyende, A. (2014). Isolation and characterization of linuron degrading bacteria from soils under horticultural production in Kenya. *International Journal of Environmental Bioremediation & Biodegradation*, 2(5), 220-227.
3. Boga, H. I. (2015). 12 Local scientist's experience with bioscience research authorization process in Kenya. *Research and Development on Genetic Resources: Public Domain Approaches in Implementing the Nagoya Protocol*, 181.
4. Julia Khayeli Akhwale, Markus Göker, Manfred Rohde, Peter Schumann, Hans-Peter Klenk, Hamadi Iddi Boga (2015) *Belliella kenyensis* sp. nov., isolated from an alkaline lake. *Int J Syst Evol Microbiol*, 65: 457-462, doi: 10.1099/ijms.0.066951-0
5. Julia Khayeli Akhwale, Markus Göker, Manfred Rohde, Cathrin Spröer, Peter Schumann, Hans-Peter Klenk, Hamadi Iddi Boga (2015). *Streptomyces alkaliphilus* sp. nov., isolated from sediments of Lake Elmenteita in the Kenyan Rift Valley. *Antonie van Leeuwenhoek* 03/2015; DOI:10.1007/s10482-015-0418-2
6. David Mugisho Bugeme, Markus Knapp, Sunday Ekesi, Adenirin Chabi-Olaye, Hamadi Iddi Boga and Nguya Kalemba Maniania (2015) Efficacy of *Metarhizium anisopliae* in controlling the two-spotted spider mite *Tetranychus urticae* on common bean in screenhouse and field experiments. *Insect Science* (2015) 22, 121–128

2014

7. Paulin Nana • Felix Nchu • Sunday Ekesi • Hamadi Iddi Boga • Pierre Kamtchouing • Nguya Kalemba Maniania (2014) Efficacy of spot-spray application of *Metarhizium anisopliae* formulated in emulsifiable extract of *Calpurnia aurea* in attracting and infecting adult *Rhipicephalus appendiculatus* ticks in semi-field experiments. *Journal of Pest Science*. DOI 10.1007/s10340-014-0637-8
8. Hamadi Iddi Boga (2014). The Control of Export and Dual Use Materials from Kenya. In: Odette Jankowitsch-Prevor, Quentin Michel, Sylvain Paile-Calvo (Eds) *Modelling dual-use Trade Control Systems* P.I.E Lang, Brussels. pp 71-78
9. Njeru Mercy, Ahmed Abade Mohamed, Ng'ang'a Zipporah, Goutam Chowdhury, Gururaja Perumal Pazhani, Thandavarayan Ramamurthy, Hamadi I Boga, Samuel M Kariuki, Oundo Joseph (2014). Phenotypic and genetic characterization of *Vibrio cholerae* O1 isolated from various regions of Kenya between 2007 and 2010. *The Pan African Medical Journal*. 2014;19:8 doi:10.11604/pamj.2014.19.8.2496

10. David M. Bugeme, Markus Knapp, Hamadi I. Boga, Sunday Ekesi and Nguya K. Maniania (2015) Susceptibility of developmental stages of *Tetranychus urticae* (Acari: Tetranychidae) to infection by *Beauveria bassiana* and *Metarhizium anisopliae* (Hypocreales: Clavicipitaceae). *International Journal of Tropical Insect Science* Vol. 34, No. 3, pp. 190–196, 2014
11. Anastasiah Ngigi, Zachary Getenga, Hamadi Boga & Paul Ndalut (2014) Isolation and Identification of Hexazinone-Degrading Bacterium from Sugarcane-Cultivated Soil in Kenya. *Bull Environ Contam Toxicol* (2014) 92:364-368
12. Boga, H. I. (2014). Empowerment of Youth and Communities in the Coast Province through Strategic Investments in Education. *Citizen Participation in Decision Making: Towards Inclusive Development in Kenya*, 139.

2013

13. Huxley M Makonde, Hamadi I Boga, Zipporah Osiemo, Romano Mwirichia, J Benjamin Stielow, Markus Göker, Hans-Peter Klenk (2013) Diversity of termitomyces associated with fungus-farming termites assessed by cultural and culture-independent methods. *PLoS ONE 01/2013; 8(2)*
14. C K Mutoni, E Magiri, I H Boga, S Mugo (2013) Inadvertent presence of genetically modified elements in maize food products in Kenyan markets. *African Journal of Biotechnology* 07/2013; DOI:10.5897/AJB12.1809
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Scientific and Professional Networks

I have strong networking skills and belong to the following networks/Association

1. Kenya DAAD Alumni Association-A strong Network of Kenyans Trained in Germany. I have led this network for over 6 years creating chapters across all universities and University Colleges (<http://groups.yahoo.com/group/Daadscholars>)
2. Africa German Network for Scientific Excellence-A founder member of the Africa German Network of Scientific Excellence (AGNES). Its objectives are to promote cooperation of top scientists across Africa with their German Counterparts. It is funded by the Alexander von Humboldt Foundation (<http://www.avh.org>)
3. A member of the American Society of Microbiology (ASM) and a recipient of the UNESCO-ASM leadership Program in Microbiology Education (www.asm.org)
4. A founder member and leader in the Kenya Society of Microbiology (<http://groups.yahoo.com/group/microbiologykenya>)
5. A member of the REAL-Alumni Network. This has membership from Kenya, Ethiopia, Tanzania, Uganda and Malawi. Members are cooperate in training on Higher education issues across the region, including Quality Assurance, Management, Tracer studies, Governance. The develop workshops for training leaders from Higher Education Institutions on these issues. The network is supported by the DAAD.Realdiesalumni@gmail.com
6. A member of the Humboldt Network in Kenya and Globally. This is a Network of top scientists across the world trained and supported by the Alexander von Humboldt Foundation. I am currently the Ambassador of the Alexander von Humboldt Foundation in Kenya.<http://www.humboldt-foundation.de/web/start.html>

Community Participation/Involvement in Education Matters

1. A active Board Member of various schools including Kwale High school, Matuga High School, Voi Secondary School, Kikoneni Secondary School, and Kinondo Secondary School on diverse dates since 2002. As a member of the Board out duties were to steer the schools and work with the teachers to ensure efficient and cost effective delivery of quality service.
2. I have championed the mentoring of High school students in Taita Taveta, Kwale and Kilifi Counties in the areas of Mathematics and the sciences so as to boost their

performance. This mentoring is being done the department of Mathematics and Informatics at the Taita Taveta University College and is aimed to improve performance in the sciences.

3. A champion of embracing education as a solution to challenges society in the Coast region. I have since 2007 spoken in many schools, public gatherings, youth meeting and also Coast Head Teachers meetings addressing various topics on improving the learning experience for students in the Coast. Together with Pwani University and Mombasa Polytechnic University College, we held a Conference on the Status of Education in the Coast Region. The findings of that conference have been packaged as interventions that have been shared with various cadres of Education Stakeholders.
4. Have actively engaged in Civic Education championing the adoption of the Constitution and peaceful existence between communities. Through funding from Equity Bank and the Kenya Investment Authority, Successfully organized the first Coast Investment Conference (COPIC I) and the Second Coast Investment Conference (COPIC II). The output was a catalogue of Investment Opportunities in the Coast Region.
5. Working Political Leaders in the Taita Taveta County we helped to review the Proposed Mining Bill and generated issues for inclusion in the final Mining Bill which is due before parliament.
6. Have worked with the Department of Physical Planning to develop the Kwale and Mombasa Mainland South Physical Development Plan. This was launched in September 2012.
7. Have been involved in the discussions and planning of Diani/Ukunda as a Resort City envisioned in the Vision 2030. This has been undertaken together with the Ministry of Lands, Department of Physical Planning.

Referees

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