

CURRICULUM VITAE

NAME: James Opiyo Ochanda, PhD

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DATE OF BIRTH 15th AUGUST 1957

MARITAL STATUS: Married with 3 children

EDUCATION:

PRIMARY: **1963 – 1970:** C.P.E: Sare Primary School, Awendo Migori District

SECONDARY: **1971 – 1974:** E.A C.E: (O-level) PE – HILL Secondary School, Migori

HIGH SCHOOL: **1975 – 1976:** E.A.A.C.E: (A-Level) Nyeri High School, Nyeri

UNIVERSITY: **1977-1980:** B.Sc. University of Nairobi, Faculty of Science (Major, Biochemistry and Zoology).

Award: Second Class Honours (Upper Division)
December 1980.

1982-1986: Ph.D., Hokkaido University, Faculty of Veterinary Medicine, (Department of Biochemistry). March 1986. Thesis title: Binding of *Clostridium botulinum* neurotoxins to receptors on synaptosomal membranes of rat brain.

PROFILE SUMMARY

James Opiyo Ochanda PhD is an Associate Professor at the Department of Biochemistry, University of Nairobi. Professor Ochanda was Director of CEBIB from 2005/6 upto 30th july 2014. Prior to then he was the coordinator of NEPAD supported Biosciences Eastern and Central Africa (BECA) program from April 2004 up to the end of March 2005. Professor J. O. Ochanda has over 25 years experience in biosciences research, focused strategically in advanced biosciences as applied in enhancing postgraduate training and institutional capacity building in Biochemistry & Biotechnology. The compelling evidence is provided by my

research publications data consisting of over, 60 papers in journals and proceedings; over 38 conferences and workshops organized and attended as well as over 20 postgraduate scientists trained at MSc and PhD levels. Professor J. O. Ochanda is a founder member and a former Chairman, of African Biotechnology Stakeholders Forum (ABSF) from 2000 – 2002 and became the Executive Director of ABSF, in 2003, where main duties included development of a formal strategic plan, operational plans and business plans with the aim of achieving the organization's vision, mission and objectives. In 2004, Prof. J. Ochanda was also the coordinator of NEPAD supported regional Biosciences for Eastern and Central Africa (BECA) Program based at ILRI, Nairobi Kenya.

To date among the outstanding achievements of Prof James Ochanda, is the lead role in the establishment of Centre for Biotechnology & Bioinformatics (CEBIB) dedicated to postgraduate training at MSc & PhD level at CBPS, University of Nairobi. The program has attracted both National & regional postgraduate students. The overall Vision & Mission of the program is to provide leadership in research excellence & product development.

Below are some of the projects & programmes, that I have coordinated, and institutional networks that I have been involved in as a founder member and developed to reputable international standards.

INSTITUTIONAL LEADERSHIP & NETWORKS DEVELOPMENT

- **2008 – to Date:** Appointed Member of Panel of Experts on Biotechnology & Biosafety for COMESA
- **2006 - to Date:** Coordinator, centre for Biotechnology & Bioinformatics (CEBIB), University of Nairobi
- **2006 – to Date:** Member of Panel of Experts on Biotechnology & Biosafety , AU Addis Ababa
- **2005 - to Date:** Chairman, University of Nairobi, institutional biosafety committee on Biotechnology (UoN - IBC)
- **2005 - to Date:** Chairman, Technical Committee on Biotechnology – Kenya Bureau of Standards.
- **2004 - 2005:** Coordinator, NEPAD supported Biosciences Eastern & Central Africa, ILRI, Nairobi
- **2003 - 2004:** Director, African Biotechnology Stakeholders Forum (ABSF).
- **2002 - 2004:** Project Coordinator of UNEP-GEF National Biosafety framework for Kenya, appointed by National Council for Science and Technology
- **2001 - 2002:** Member of ICSU Committee on Biotechnology.
- **1999 - to Date:** Chairman, KARI's institutional biosafety committee on Biotechnology (KACB).
- **1999 - 2002:** Founder and Chairman, African Biotechnology Stakeholders Forum (ABSF).
- **1998 - to Date:** Member of National Biosafety Committee on Biotechnology (NBC) appointed by National Council for Science and Technology.
- **1996 - 2002:** Member of Federation of African Societies of Biochemistry and Molecular Biology (FASBMB).

- **1995 - 2002:** Secretary to Biochemical Society of Kenya (BSK)

INSTITUTIONAL LINKAGES & RESEARCH PARTNERSHIP

1. **CEBIB – AFRICAN BIOMEDICAL CENTRE (ABC) (2006 – to Date) - :** Has lead to Research Facility strengthening through Laboratory equipment donation & Laboratory renovation at CEBIB: Limited funds donated for postgraduate fellowship.
2. **CEBIB – KEMRI – UNITID & University of MANNITOBA CANADA: Focused on training of Postgraduate student/faculty exchange & research in area of HIV –AIDS.**
3. **University of Nairobi – Columbia University medical school - link - has supported Msc student training in medical Nutrition project**
4. **University of Nairobi collaboration with The Ohio State University, Columbus, Ohio, United States of America, has led to the training of two MSc students in bioinformatics**
5. **University of Nairobi collaboration with KEMRI Wellcome Trust, Kilifi resulted in establishment of both Faculty and student exchange program in the area of health research**

EMPLOYMENT AND MANAGEMENT EXPERIENCE

1. **2006 - to Date:** - Coordinator, Centre for Biotechnology & Bioinformatics (CEBIB) University of Nairobi
2. **2004 - 2005** Coordinator, Biosciences Eastern and Central Africa
3. **1999 - to Date:** - Associate Professor, Department of Biochemistry, University of Nairobi.
4. **1991 - 1999:** - Senior Lecturer, Department of Biochemistry, University of Nairobi.
5. **1986 - 1990:** - Lecturer, Department of Biochemistry, University of Nairobi.
6. Acting Chairman of Biochemistry Department: 9th August to 4th October, 1991 & 15th - 22nd March, 1992
7. Acting Associate Dean of Pre-Clinical: 30th December, 1994-15th February 1995 & 22nd March - 31st March 1995.

SCHOLARSHIP AWARDS

1. **September-October1992:** - Awarded UNDP/UNEP Fellowship to attend R&D Management and Agricultural Biotechnology course: Queensland, Brisbane, Australia.
2. **June-December, 1989:** - Awarded the British Council Scholarship to study Molecular Biology (Recombinant DNA Techniques) at the Molecular Biology Unit. Middlesex School of Medicine University College London, Britain.
3. **1982-1986:** - Awarded the Japanese Government Scholarship to study for Doctorate Degree in Biochemistry at Faculty of Veterinary Medicine, Hokkaido University, Japan.
4. **1977-1980:** - Awarded the Kenya government scholarship to study for B.Sc degree at the University of Nairobi.

TEACHING EXPERIENCE

1. **2006 – To date:** Conducting lectures for Msc students undertaking Biotechnology & Bioinformatics, Centre for Biotechnology & Bioinformatics (CEBIB), University of Nairobi.
2. **1986 – To date:** Supervision of Postgraduate undertaking Msc & PhD studies at Biochemistry & CEBIB
3. **1986 – To date:** Conducting lectures for the following **postgraduate** student degree courses in Biochemistry: Msc in Biochemistry; M.med. in psychiatry; Msc in Animal Production, and Msc in Crop Science.
4. **1986 – To date:** Conducting lectures for the following **undergraduate** student degree courses in Biochemistry: Medicine, Pharmacy, Dentistry, Bsc Nursing, Veterinary Medicine, Bachelor of Science, Bsc Agriculture and Bsc in Biomedical Laboratory Technology.

EXTERNAL EXAMINER APPOINTMENTS

1. **2005 - To date:** Department of Biochemistry and Biotechnology - Kenyatta University.
2. **2001 - 2004:** Department of Veterinary Physiology, Biochemistry, Pharmacology & Toxicology, Faculty of Veterinary Medicine, Sokoine University of Agriculture. Morogoro, Tanzania.
3. **2000 - 2004:** Department of Biochemistry, Faculty of Medicine, Muhimbili University College of Health Sciences, University Of Dare salaam, Tanzania.
4. **1999 - To date:** Department of Biochemistry and Molecular Biology, Faculty of Science Egerton University, Njoro, Kenya.

CURRENT & COMPLETED RESEARCH PROJECTS

1. Profile of research & product development programs initiated at CEBIB

(A) Health

- (i) Evaluation of Drug Resistance Profiles and Viral Characteristics in HIV-1 Non-subtype B Virus in Patients Receiving and Failing Antiretroviral
- (ii) The Role of Innate Immune factors in susceptibility to HIV-1 in cohort of HIV-1 highly exposed seronegative (HESN) individuals from majengo cohort
- (iii) Characterization of erythrocyte receptor polymorphisms in a malaria endemic opulation in Kilifi,
- (iv) Bioassay guided fractionation of *M.oleifera*, *R.caffra*, *O.in sign is*, *S.guinnense*, and *T. sylvatica* for their antitumor properties

(B) Agriculture: crop improvement:

- (i) Assessment of *Trichoderma* isolates for virulence efficacy on *Fusarium Oxysporum* F. sp. *Phaseoli*
- (ii) Screening of Kenya Soybean cultivars for resistance to various races of *Phakopsora pacryrhizi* (Soybean rust) and determination of molecular basis for rust resistance
- (iii) Control of aflatoxin producing fungi and larger grain borer in maize using native *Bacillus thuringiensis* and its products
- (iv) Genetic improvement of *Vigna unguiculata* (cow pea) for enhancement of drought tolerance through tissue culture and agrobacterium mediated transformation

(C) Bioinformatics:

- (i) A database to support *Theileria parva* vaccine development
- (ii) Most recent common ANCESTRY STRATEGY for microbial taxonomic estimation
- (iii) Analysis of **MAGE** antigens as possible cancer vaccine candidates

(D) Industrial and Environmental

- (i) Optimization for production of fish protein hydrolysate from Nile Perch (*Lates niloticus*) by products
2. National Biotechnology outreach program (2008) USAID Kenya funded under USAID Biotechnology Program.
 3. Use of appropriate micro-organism *Bacillus thuringiensis* Bacteria based biopesticide for pest management by Kenya small scale farmers (Funded by the Netherlands Government Special program on Agricultural Biotechnology)
 4. An Evaluation on **biosafety** for utilization of *Bacillus thuringiensis* (*Bt*)-based biopesticide by small-scale, resource poor farmers in Kenya, (UNEP Funded *completed*).
 5. Trypanolytic factor from non-vector haematophagous Insects. (Submitted to USAID CDR-LDC Grant for funding).
 6. Induction of Resistance to lice by Immunization (USAID) funded under CDR-LDC Grant).
 7. ***Busseola fusca***:- In this project research out on the haemolymph proteins of stalk Borer, *Busseola fusca*, in collaboration with Biochemistry Department and ICIPE, Nairobi, Kenya. In our investigation we established techniques for the isolation and purification of insect haemolymph proteins. The isolated, proteins were characterized and their properties investigated.
 8. **Tsetse fly, *Glossina morsitans***:- In this project the main aim and objective was to isolate, characterize and study properties of haemolymph proteins of the tsetse fly. The other objective was to find a unique protein that could be targeted by specific insecticides. The techniques for isolation, purification and characterization were basically similar to those employed in the project described in part (i). (The project was funded by Deans Committee, TWAS and IFS Grants).
 9. **Bacterial Plasmids**: In this project we used recombinant DNA techniques to investigate the significance of plasmids in drug resistance within some local bacterial strain isolates.
 10. Analysis of Nif-Gene Patterns in Kenya Local Rhizobium Strains (sponsored by Dean's Committee, University of Nairobi).

11. Analysis of chloroplast DNA of *Tylossema fassoglensis*, for genetic diversity. (In collaboration with Sussex University, Britain).
12. Ligninolytic enzymes of the white rat fungus (in collaboration with Botany Department, University of Nairobi, Kenya).
13. Diagnosis of Human Immunodeficiency Virus (HIV) infection by enzymes Immunoassay kit (In collaboration with Sussex University, U.K.).
14. Characterization of endotoxin protein from *Bacillus thuringiensis* bacteria (In collaboration with ICIPE, Duduville, Kasarani, Kenya).

RESEARCH PROJECTS SUBMITTED TO DONORS FOR FUNDING

1. Evaluation of Performance of Malaria RDTs in endemic region of Kilifi, Kenya:
Funded by: **Standard Diagnostics (SD Bioline): USD 30,000 in 2014**
2. Capacity building and advocacy for harmonized regional policy on GMO to improve grain (maize) trade flow within East African region: **USAID/East Africa: AIIM PROJECT: Program Budget \$ US 1,000,000**
3. **H3Africa Kidney Disease Research Network:** Overall goal is to provide evidence of genetic predisposition for diabetic nephropathy within the sub-Saharan Africa: **Budget Ksh 10,000,000 for 3 years; Overall project budget \$ US 522,000 (funded 2012)**

RESEARCH PROJECTS GRANTS AWARDED

1. National Biotechnology Outreach Program (2008) funded by USAID Kenya under USAID Biotechnology Program. Approximately USD 500,000 (USAID-Kenya **Funded**).
2. Establishment of a Molecular Biology and Biotechnology Laboratory at the College of Biological and Physical Sciences (CBPS), University of Nairobi, Kenya, (December, 2003. USD, 150,000 Rockerfellow Foundation **Funded**).
3. UNEP-GEF Implementation of the National Biosafety Framework for Kenya, through the National council of science and Technology (USD 600,000) **Funded**.
4. An Evaluation on biosafety for utilization of *Bacillus thuringiensis* (*Bt*)-based biopesticide by small-scale, resource poor farmers in Kenya (1999): sponsored by UNEP, USD \$, 5000 (Awarded).
5. Use of appropriate microorganism *Bacillus thuringiensis* bacteria based biopesticide for pest management by Kenya small scale farmers: Funded by Netherlands Government Special Program on Agricultural Biotechnology (1998 - 2001): USD 298,149 (Awarded).
6. Dean Committee Research Grant, University of Nairobi (1992): Analysis of Nif-gene patterns in Kenyan local rhizobium strains: Kshs. 110,000/=
7. International Foundation for Science (IFS) Sweden Grant: For cloning tsetse haemolymph proteins that are potential insecticides (1990): U.S. Dollar \$ 14,500 (Awarded).
8. United States Agency for International Development (USAID)-CDR grant: For development of ectoparasite Vaccine (1990 - 1994): U.S Dollar \$ 80,000 (Awarded).
9. Third World Academy of science (Trieste, Italy 1990): For Isolation and Characterization of tsetse fly haemolymph protein: Ksh 114,000/=.

10. Deans Committee Research grant, University of Nairobi (1989): For isolation and Characterization of tsetse fly haemolymph proteins: Kshs.59,000/=.

NATIONAL AND INTERNATIONAL TRAINING COURSE PROGRAMMES ORGANISED

1. Biotechnology & Bioinformatics Training workshop organised by the University of Nairobi, Centre for Biotechnology & Bioinformatics (CEBIB) and Inqaba Biotec (SA), 19th – 23 April 2010
2. ICRO/UNESCO International Training course on Molecular Biology Techniques and Biotechnology held at the Department of Biochemistry and Botany, University of Nairobi, 14th-29th August 1997
3. National Training Course on Molecular Biology Techniques for Technologist from Private and Public Institutions in Kenya held at the Departments of Biochemistry and Botany, University of Nairobi, from 17th-29th June 1996.
4. National Training Course on Molecular Biology Techniques for Researchers/Scientists from Private and Public Institutions in Kenya held at the Departments of Biochemistry and Botany, University of Nairobi, from 20th January-15th February 1997.
5. ICRO/UNESCO International Training course on Biochemistry of PARASITIC PROTOZOA held at the University of Nairobi, from 10th-26th August 1992.

CONFERENCES ORGANISED AND ATTENDED

1. Development of Biosafety Educational curriculum/programs for Trainers of Academic and non-academic stakeholders in East Africa; USAID PBS project: 17th - 19th April 2007: Imperial Resort Beach Hotel, Entebbe, Uganda.
2. IACUCs and Animal Research Learning from the Past, Looking to the Future: Annual IACUC Conference: 26th - 28th March 2006: Boston Park Plaza Hotel and Towers, Boston.
3. Towards a common regional policy, Regulatory and Biosafety framework on GMO's in East Africa; East African Community Stakeholder Consultative workshop: 12th - 14th September, 2006; Imperial Resort Beach Hotel, Entebbe, Uganda.
4. Introduction to Biotechnology and Biosafety training course: 23rd - 27th October, 2006; ACTS secretariat, Gigiri, Nairobi.
5. The State of Science and Technology Training Institutions in Africa and their role in Socio-economic Development: 1st African Regional Conference of Vice-Chancellors, Provosts and Deans of Science, Engineering and Technology; 15th - 17th November, 2005: La Palm Beach Hotel, Accra, Ghana.
6. National Coordinators and assistant national coordinators of the UNEP-GEF demonstration projects on implementation of National Bioasafety Frameworks 19th – 30th January, 2004.
7. UNIDO Biotechnology Global Forum - Africa Regional Consultative meeting at Windsor Hotel, Nairobi, Kenya (21st - 23rd March 2003)

8. Towards sustainable agriculture for developing countries: Options from life science and biotechnologies- United Kingdom (25th - 26th January, 2003)
9. Towards sustainable Agriculture for developing countries: Options from life science and biotechnologies- Italy, Rome (27th - 28th January, 2003)
10. Benefits of Genetically Modified Organisms (GMOs)", paper presented at the Kenya Institute of Organic Farming (KIOF) workshop on "Understanding GMOs and Biotechnology in Kenya" at KARI/NARL, Nairobi, Kenya (28th - 30th Jan. 2003)
11. Towards sustainable agriculture for developing countries: options from life science and biotechnologies- Brussels, Belgium (29th - 31st January, 2003)
12. Launching of FARM Africa Maendeleo Agricultural Trust Fund (MATF) at Nairobi Safari Club (4th April 2003)
13. UNEP-GEF workshop on "implementation of the national biosafety framework of Kenya" at Safari Park Hotel, Nairobi, Kenya (14th - 19th April 2003)
14. Annual meeting of the Forum for Agriculture Research in Africa, Dakar – Senegal (17th - 21st May, 2003)
15. Crop Life East and Southern Africa HUB and SEARCH meeting, Addis Ababa - Ethiopia (23rd - 26th June, 2003)
16. Program for Biosafety Systems (PBS) - Implementation meeting for the ISNAR led Consortium, Washington D.C. (6th - 12th July 2003)
17. 3rd Annual Conference: USAID-African Partnership Biotechnology: Strategies for Biotechnology in Africa: IITA, IBADAN, Nigeria, 17th - 19th November, 2003.
18. Biotechnology derived nutritious food for developing countries – needs opportunities and barriers at Marriot Casa Magna Cancun, Mexico (15th -17th January, 2002)
19. From the year 2002 – to date through African Biotechnology Stakeholders Forum organized several regional and national workshops as well as conferences on Outreach and Awareness Creation on biotechnology, biosafety and IPR issues.
20. Kenya Biotechnology workshop for preparatory process to the World Summit for Sustainable Development (WSSD) at PanAfric Hotel, Nairobi, Kenya (14th -15th May 2002)
21. National consultative meeting on Biotechnology and Intellectual Property Rights (IPR) at PanAfric hotel (31st May 2002)
22. Regional parliamentarians and policy - makers preparatory workshop on Africa's biotechnology position for the World Summit for Sustainable Development (WSSD) at White Sands Hotel, Mombasa, Kenya (28th - 29th July 2002)
23. Biotechnology sensitization workshop for Agricultural extension officers in the Coastal province at WOGECT, Mombasa, Kenya (30th July 2002)
24. Sustainable Horticultural Production in the Tropics at JKUAT (6th – 9th August 2002)
25. Biotechnology and food security in Africa at the Agricultural Information Centre, KARI/NARL, Nairobi, Kenya (9th August 2002)
26. World Summit for Sustainable Development (WSSD) in Johannesburg, South Africa (August/September 2002)
27. Inter-institutional meeting on WSSD resolutions and recommendations in relation to development and application of biotechnology in Africa at KARI/NARL (19th September, 2002)

28. Implementation of National Biosafety Framework, National Council for Science and Technology, Godollo, Hungary (20th - 26th, October, 2002)
29. Kenya Agricultural Research Week at the KARI headquarters, Nairobi, Kenya (11th - 15th Nov 2002).
30. Biotechnology sensitization workshop for Agricultural extension officers in the Eastern Province at the Embu Agricultural Staff Training institute, Embu, Kenya (30th July 2001)
31. Consultative meeting of the Parliamentary Committee on Education, Science and Technology on Kenya Biosafety Bill at the Grand Regency Hotel, Nairobi, Kenya (13th September 2001)
32. Biotechnology in Africa Conference at Johannesburg, South Africa (26th - 28th September 2001)
33. Sustainable Horticultural Production in the Tropics at JKUAT (3rd - 6th October 2001).
34. Communication on Biotechnology: A training workshop on enhancing scientists communication with the mass media at ICRAF campus, Nairobi, Kenya (27th - 29th November 2001)
35. Status of Biotechnology R & D Portfolio in Kenya at KARI/NARL, Nairobi, Kenya (6th December 2001)
36. Federation of African Societies of Biochemistry and Molecular Biology (FASBMB) meeting held at UNEP headquarters in Nairobi, 2nd - 6th September, 1996.

PhD STUDENTS THESIS EXAMINATION

1. Characterization of genetic resistance of Coffee Berry Disease (*Colletotrichum Kahawe* Waller and Bridge) in Arabica coffee (*Coffea arabica* L.) that is introgressed from *Coffea canephora* Pierre (2007): by Elijah Kathurima Gichuru; Department of Crop Science, CAVS, University of Nairobi.
2. The flora and ecology of soil mucorales in a dry upland forest grassland ecological zones in Kenya (1997) by Ms. Sheila O. Okoth., Department of Botany, University of Nairobi.
3. Cloning and sequence analysis of a novel *Bacillus thuringiensis* gene encoding delta endotoxin active against tsetse flies (*Glossina morsitans*) and stem borer (*Chilo partellus*) (1997) by Edward Enos Orony- Omolo., Departments of Biochemistry, University of Nairobi.
4. Trypanolysin : A molecule that lyses trypanosomes in the midgut of tsetse fly (1996) by Mr. Mahamat H. Abakar., Department of Zoology, Fouray Bay College, University of Sierra Leon.
5. Susceptibility of tsetse (*Glossina* Species) to trypanosomes infection in relation to midgut trypsin, trypsin-like enzymes and other molecules (1996) by Jedidah A. Kongoro., Department of Zoology, Kenyatta University.
6. Pathophysiological effects of a DNA virus infection on the host tsetse fly *Glossina morsitans centralis* (*Diptera: Glossinidae*) (1996) by Rosemary, C. Sang., Department of Zoology, University of Nairobi.
7. Changes in lipophorin structure and function during phase transition in *schistocerca gregaria* (Forsk.) *Orthoptera acrididae* (1994) by D.O Ogoyi., Departments of Biochemistry, University of Nairobi.

MSc. STUDENTS THESIS EXAMINATION

1. **Ms. Edwardina A.O. (1997)**, Ndhines Evaluation of Adipokinetic hormone response in the desert locust *Schistocerca gregaria* forskal under the influence of Azadirachtin and other Natural Products Department of Zoology, University of Nairobi.
2. **Mr. Peter .G. Mwitari(1996)**,Karyotype Analysis amongst indigenous sesbania species from Southern Africa Department of Botany, University of Nairobi.
3. **Mr. Osanya Alex. (1995)**.,Molecular aspects of phylogenetic relationships among *Trypanosoma (Nannomonas) congolense* Department of Biochemistry, University of Nairobi.
4. **Jane Nyakundi (1993)**. Serum tumor necrosis factor in children suffering from *Plasmodium falciparum* infection. Department of Zoology, University of Nairobi.
5. **Ms. Rebecca Waihenya. (1992)**, Isolation of *Trypanosoma congolense* stocks from East and West Africa Regions using Molecular Karyotyping . Department of Zoology, University of Nairobi.
6. **Ms. Rhoda Kariba(1992)**. Inhibitory effects of *Solanum nigrum* extracts on phytopathogenic species of *Colletotrichum Corda*, Department of Botany, University of Nairobi.

POSTGRADUATE SUPERVISION

PhD Students Supervision

1. **Bethwell Owuor (PhD) (2006 - 2011)**: Usage consensus and in-silico guided bioactivity exploration of Kamba and Luo pharmacopoeias Centre for Biotechnology and Bioinformatics (CEBIB), University of Nairobi. **Graduated**
2. **Kennedy Muinamia (PhD): 2006** Anti-malarial phyto-drug development from *Fuerstia africana* (Labiatae) and *Schkuhria pinnata* (compositae) 2006: Centre for Biotechnology and Bioinformatics (CEBIB), University of Nairobi. **Completed to Graduate in 2014**
3. **Mrs. Osano. A. A., (PhD) (1997)**. Taxonomic, Ecological and Biodegradation studies of wood inhabiting Basidiomycetes of Karura forest, Kenya (1997). Department of Botany, University of Nairobi. **Graduated**
4. **Hellen Ogot (2009)** Screening of Kenya Soybean cultivars for resistance to various races of *Phakopsora pacryrhizi* (Soybean rust) and determination of molecular basis for rust resistance: (Centre for Biotechnology and Bioinformatics): **Completed to Graduate in 2014**
5. **Ms. Meeme K. Cisily (2010)** Evaluation of Drug Resistance Profiles and Viral Characteristics in HIV-1 Non-subtype B Virus in Patients Receiving and Failing Antiretroviral : (Centre for Biotechnology and Bioinformatics): **Completed to Graduate in 2014**
6. **Bosire Carren Moraa (2010 – 2013)** Isolation and characterization of ligninocellulose biodegrading enzymes from marine wood-borers: potential in bio-ethanol production: (Centre for Biotechnology and Bioinformatics): **Graduated**

- 7 **Phanice Kheseli Otieno (2011)** Field and post harvest control of aflatoxin fungi and larger grain borer in maize using native bacillus thuringiensis and its products: (Centre for Biotechnology and Bioinformatics (CEBIB, University of Nairobi): **Ongoing**
- 8 **Irene Adhiambo Onyango (2011)** The Role of Innate Immune factors in susceptibility to HIV-1 in cohort of HIV-1 highly exposed seronegative (HESN) individuals from majengo cohort Nairobi, Kenya : (Centre for Biotechnology and Bioinformatics (CEBIB, University of Nairobi): **Ongoing**
- 9 **Beatrice Wabusya Nyongesa (2014):** Evaluation for susceptibility of maize varieties to Aspergillus species infection, Toxin accumulation and pest infestation in Kenya: **On going**

MSc. Students Supervision (Completed)

1. **Wangunyu Pauline Wambui (2011 - 2014):** In silico exploration of 3D structure of *pfmsp3* and *pfmsp6* invasion genes and their allelic differences: (Centre for Biotechnology and Bioinformatics (CEBIB, University of Nairobi): **Graduated**
2. **Wamae Kevin Kariuki (2011 - 2014)** In silico prediction of B-cell and T-cell epitopes in merozoite invasion proteins (EBA175, Rh5, Ripr): MSc Thesis: Centre biotechnology and Bioinformatics: University of Nairobi : (**Defended the Thesis**)
3. **Jane A. Otadoh, (2006 - 2014):** Assessment Of Trichoderma Isolates For Virulence Efficacy On Fusarium Oxysporum F. sp. Phaseoli: **Msc thesis defended**
4. **Deborah Nina Kiaye (2009 - 2014):** Distribution of Fusarium species and the occurrence of toxigenic strains of Fusarium verticillioides and Fusarium proliferation in Nandi county kenya: School of Biological Sciences, University of Nairobi: **Msc thesis submitted**
5. **Ogola Christabel Awuor (2011 - 2014):** Molecular characterization of erythrocyte receptors: BASIGN, CRI, BAND3 and DARC. MScThesis: Centre biotechnology and Bioinformatics: University of Nairobi (**submitted**)
6. **Okumu Winfred Aluoch (2010 - 2014):** Nutrient Digestibility and growth performance in pigs fed diets containing steeped canola meal with or without enzyme supplementation. (Centre for Biotechnology and Bioinformatics (CEBIB, University of Nairobi): **Graduated**
7. **Kinyanyi Dickson Bennet (2006 - 2014):**Protein Structure on a genomic scale: Application to the African swine Virus genome: (Centre for Biotechnology and Bioinformatics (CEBIB, University of Nairobi) :**Graduated**

- 4 **Nduta Faith Mwangi (2010 - 2014):** Application of loop – mediated isothermal amplification (lamp) in microbiological water quality analysis: (Centre for Biotechnology and Bioinformatics (CEBIB, University of Nairobi): **Graduated**

- 5 **Sameer Rohit Jeshbhai Patel (2009 - 2014):** Optimisation of fish protein hydrolysate from Nile Perch (*lates niloticus*) by products: (Centre for Biotechnology and Bioinformatics (CEBIB, University of Nairobi): **Graduated**

- 6 **Kugo Chepchirchir Maureen: (2010 - 2014);** Effects of β – Mannanase on Nutrient utilization and performance of laying chicken: (Centre for Biotechnology and Bioinformatics (CEBIB, University of Nairobi): **Graduated**

- 7 **Omedo Irene Akinyi (2009 - 2013):** Characterization of Erythrocyte Receptor Polymorphisms in a Malaria Endemic Population in Kilifi, Kenya. Msc Thesis: Centre for Biotechnology and Bioinformatics: University of Nairobi: **Graduated**

- 8 **Ojwang Maureiq Edith Awino (2009 - 2013):** In silico identification of universal HLA stimulating B cell and T-cell restricted peptide epitopes for vaccine development msc Thesis: Centre for Biotechnology and Bioinformatics: University of Nairobi: **Graduated:**

- 9 **Milugo Trizah Koiyi (2009 - 2013):** Phytochemical composition, antioxidant and antitumor effects of extracts from drumstick (*Moringa Oleifera*) and Quinine tree (*Rauvolfia Caffra*) Msc thesis: Centre for Biotechnology and Bioinformatics: University of Nairobi: **Graduated**

- 10 **Grace Mukiri Mariene (2008 - 2013):** Testing for ascertainment bias and RNA secondary structure morphometrics as phylogenetic signals **Graduated:**

- 11 **Melvin Atieno Obuya (2009 - 2013) :** Investigation of genetic structure and evidence of intrinsic reproductive barriers and speciation in *Tilapia* of Lake Baringo: **Graduated**

- 12 **Vincent Oduor Ayugi (2009 - 2013)** The incidence of *Aspergillus* species and Aflatoxins in Makueni county: (School of Biological Sciences, University of Nairobi): **Graduated**

- 13 **Mazereku Charles (2009 – 2012):** Evaluation of Trichoderma enhanced fertilizers on growth of common beans (*Phaseolus Vulgaris*): Centre for Biotechnology and Bioinformatics: University of Nairobi: **Graduated**

- 14 **Akello Sundy Otieno (2009 - 2012)** Characterization of Native *Bacillus Thuringiensis* Delta- Endotoxin Active Against *Prostephanus Truncatus* and *Fusarium Verticillioides* : **Graduated**

- 15 **Hellen Butungi (2007 - 2012)** Research and development of most recent common ancestor estimation strategies for pathogen profiling pipeline: (Centre for Biotechnology and Bioinformatics (CEBIB, University of Nairobi): **Graduated**
- 16 **Phanice Kheseli Otieno (2011)**: Isolation, Characterisation and Evaluation of potency of Native *Bacillus thuringiensis* against Maize insect pests and aflatoxin producing Fungi: (School of Biological Sciences, University of Nairobi): **Graduated**
- 17 **Wilberforce Zachary Ouma (2009 – 2013)**: Source of unaligned ChIP – Seq READs: Centre biotechnology and Bioinformatics: University of Nairobi: **Graduated**
- 18 **Waititu Samwel Mwangi (2008 - 2011)**: Application of Enzyme technology to improve the nutritive value of high fibre feedstuffs of non-ruminants: (Centre for Biotechnology and Bioinformatics (CEBIB, University of Nairobi): **Graduated**
- 19 **Visendi, P.,(2006 - 2011)**: Tparva DB: a database to support *Theileria parva* vaccine development; (Centre for Biotechnology and Bioinformatics (CEBIB, University of Nairobi): **Graduated**
- 20 **Onyango, A. Irene (2007 - 2011)**: Innate immune responses among highly exposed seronegative Individuals to a Live Attenuated Influenza vaccine as a model for mucosal viral infection: TLR 7/8 and 9. (Centre for Biotechnology and Bioinformatics (CEBIB, University of Nairobi): **Graduated**
- 21 **Mr. John Njoroge Mwangi (2011)** :Genetic Structure analysis of wild rice populations (*Oryza longistaminata*) from Kwale District of Kenya using microsatellite markers: **Graduated**
- 22 **Opondo S. O., (2010)**: Molecular characterization of *B. thuringiensis* with toxicity to *Chilo. Partellus*: **Graduated**
- 23 **Bosire Rosevalentine (2009 - 2012)**: Evaluation of Water Fern (*Salvinia molesta*) as an Alternative Source of Omega-3 fatty Acids for Cultured Tilapia: (Centre for Biotechnology and Bioinformatics (CEBIB, University of Nairobi): **Graduated**
- 24 **Ms. Winne Apidi (MSc. 2006 - 2009)**:Expression analysis by quantitative real time Polymerase Chain Reaction (PCR) of genes associated with resistance to HIV-1 infection in highly exposed uninfected commercial sex workers in Pumwani Sex Worker Cohort (Centre for Biotechnology and Bioinformatics (CEBIB, University of Nairobi): **Graduated**
- 25 **Ms. Virginia Wang'andu (1999)** : Bt bacterial based bio-control agents for controlling and managing nematode pests in horticultural crops. Department of Botany, University of Nairobi: **Graduated**

- 26 **Mrs. Eva C.A.Oduor (1997):** Characterization of Aminopeptidase enzyme in midgut of body louse *Pediculus humanus humanus.*, Departments of Biochemistry, University of Nairobi: **Graduated**
- 27 **Mr. J.K Okuru., (1996) :** Characterization and properties of louse midgut antigenic proteins recognized by resistant host Departments of Zoology, University of Nairobi: **Graduated**
- 28 **Mr. F.W Wamunyokoli (Msc Thesis 1993):** Isolation, purification and characterization of *Bacillus thuringiensis* crystal delta Endotoxin Active Against mosquito larvae Department of Biochemistry, University of Nairobi: **Graduated**
- 29 **Mr. G.N Magoma (1993).** Purification and characterization of *Bacillus thuringiensis* crystal delta Endotoxin Active Against *Chilo partellus* and *Spodoptera exempta.*, Department of Biochemistry, University of Nairobi: **Graduated**
- 30 **Mr. Ochieng Vincent Oduol (Msc Thesis 1992):** Temporal synthesis of cuticle proteins during larval development in tsetse fly *Glossina morsitans morsitans.*, Department of Biochemistry, University of Nairobi: **Graduated**
- 31 **E.K Nguu (Msc Thesis 1990) :** Purification and properties of the low molecular weight protein from hemolymph of tsetse fly *Glossina morsitans* Departments of Biochemistry, University of Nairobi: **Graduated**
- 32 **Dr. D.O Ogoyi Msc Thesis 1989):** Isolation and Characterization of lipophorin from the larva stalk Borer *Busseola fusca* (., Department of Biochemistry, University of Nairobi: **Graduated**

MSc. Students Supervision (On going)

1. **Mr. Johnstone Omia (2006):** student carrying out studies on: Genome Sequence Determination of Nairobi Sheep Disease Virus to Underpin Vaccine Development: **On going**

RESEARCH PAPERS AND PUBLICATIONS

JOURNALS

1. **Awino Maureiq Edith Ojwang**, Daniel A Achiko, Anton Domer, Robinson Musembi, Walter Mwanda, James Ochanda (2014): In *silico* identification of universal HLA stimulating B and T – cell restricted mage epitopes for vaccine development. *Online J. bioinformatics*, vol 15(1):114 - 132
2. **Trizah K. Milugo**, Leonida K. Kerubo, James O. Ochanda, Bethwell O. Owuor, Fred A. Wamunyokoli, Julius O. Oyugi and Joel W. Ochieng (2013): Antagonistic effect of alkaloids and saponins bioactivity in the quinine tree (*Rauvolfia caffra sond.*): further evidence to support biotechnology in traditional medicinal plants: **BMC complementary and Alternative Medicine 13:285**
3. **M.Bosire Carren**; Ochanda James; Abubakar Laila and O. Bosire Jared (2013): Culturable gut of marine wood boring invertebrates *Dicyathifer manni* (Wright, 1866), *Sphaeroma terebrans* (Bate, 1866) and *Cirolana sp.* **J. Bio & Enviro. Sci. Vol.3 No.11, p 12 -20**
4. **M. Carren Bosire**; Laila Abubakar; James Ochanda and O. Jared Bosire (2013): Lignocellulolytic activities of crude gut extractives of marine woodborers *Dicyathifer mannii* and *Sphaeroma terebrans*: **IJB Vol3, No12 P. 1 - 11**
5. **Kheseli P. O.; Ochanda, J. O;** Okoth, S (2011) : Evaluation of potency of native *Bacillus thuringiensis* against maize insect pests and aflatoxin producing fungi in Kenya *J. Tropical Microbiol Biotechnol.*, 7(1) **9 - 15**
6. **Kheseli P. O;** Ochanda, J. O; Okoth, S (2011): Isolation and characterization of *Bacillus thuringiensis* from coastal intertidal brackish sediments and from farmlands in Machakos District Kenya *J. Tropical Microbiol Biotechnol*, 7(1)
7. Owuor, B.O.; **Ochanda, J.O;** Kokwaro, J.O and Akala, H.M. (2012), In vitro antiplasmodial activity of selected Luo and Kuria medicinal plants:Ethnopharmacological communications(**Accepted: JEP 2012**)
8. Visendi, P., Nganga, W., Bullimo, W., Bishop, R., **Ochanda, J.**, and Etienne, P, de Villiers (2011): TparvaDB: a database to support *Theileria parva* vaccine development; Database, vol. 2011. Article ID bar015, doi:10.1093/database/bar015
9. Onyango, A. Meyers, Y. Keynan, J. Oyugi, J. Kimani, F. Plummer, **J. Ochanda**, B. Ball. Innate immune responses among highly exposed seronegative Individuals to a Live Attenuated Influenza vaccine as a model for mucosal viral infection: TLR 7/8 and 9. AIDS Vaccine conference, **12th to 15th September 2011** Bangkok, Thailand. AIDS RESEARCH AND HUMAN RETROVIRUSES Volume 27, Number 10, 2011 pages A63 – 64 <http://www.liebertonline.com/doi/pdfplus/10.1089/aid.2011.1502>

10. Onyango, A. Meyers, Y. Keynan, J. Oyugi, J. Kimani, F. Plummer, J. Ochanda, B. Ball. Innate immune responses among HIV-1 highly exposed seronegative (HESN) individuals to a live attenuated influenza vaccine as a model for mucosal viral infection: TLR 3 and 4. 6th IAS Conference on HIV Pathogenesis, Treatment and Prevention, 17th to 20th July 2011, Rome, Italy. <http://pag.ias2011.org/Abstracts.aspx AID=2298>
11. Okoth, Sheila A.; Otadoh, Jane A. **Ochanda James O.** Improved Seedling Emergence And Growth Of Maize And Beans By Trichoderma 'harziunum Tropical and Subtropical Agroecosystems, vol. 13, num. 1, (2011), PP: 65-71 Universidad Autónoma de Yucatan Yucatan, Mexico
12. Otadoh, Jane A.; Okoth, Sheila A, **Ochanda, James;** Kahindi, **James P** (2011) Assessment Of Trichoderma Isolates For- Virulence Efficacy On Fusarium Oxysporum F. Sp. Phaseoli Tropical and Subtropical Agroecosystems, vol.13, num. 1, 2011, pp. 99-107 Universidad Autónoma de Yucatan Mexico
13. Opondo S. O., Ngure, R. M., Nguu, E. K. and **Ochanda J.O.** and Ogoyi, D.O (2010): Molecular characterization of *B. thuringiensis* with toxicity to *Chilo. Partellus*: Journal of Applied Biosciences 31: 1878 – 1886
14. **J. Ochanda (2010)**, Introduction to potential areas of collaboration and communication strategies between researchers and potential user community of GMO Vectors: In Progress and Prospects for the Use of Genetically Modified Mosquitoes to Inhibit Disease Transmission: Report on Meeting 1: Technical Consultation on Current Status and Planning for Future Development: WHO-HQ, Geneva, Switzerland, 4-6 May 2009
15. Theresa Sengooba, Rebecca Grumet, James Hancock, Barbara Zawedde, Lazaro Kitandu, Cholani Weebadde, Margaret Karembu, Eucharia Kenya, Karim Meredia, Paul Nampala, James . **O. Ochanda**, Hector Quemada and Mugassa Rubindamayug. (2009) Biosafety education relevant to genetically engineered crops for academic and non-academic stakeholders in East Africa" **E-Journal of Biotechnology Vol. 12 No 1 Page (1 – 13).**
16. Wangóndu V.W.; Kahindi, J.H.P.; Olembó, N.K. and **Ochanda, J.O. (2007)**: Screening of local *Bacillus thuringiensis* isolates for toxicity to *Chilo partellus*, *Sesamia calamistis* and *Busseola fusca* in Kenya. **J.Trop..Microbiol. 3(2) 27 – 35**
17. Osano, A.A.; Siboe, G.M.; Ochanda, J.O. and Kokwaro K.O. (2004): Biodegradation properties of **white rot** fungi in Karura forest, Kenya; Discov.Innov. **16(1/2) 76-84.**
18. Jonathan Gressel, Abdelhaz Hanafi; Graham Head, Wally Marasas, Babatunde Obiliana, **James Ochanda**, Thouraya Souissi and George Tzotzos (2004). Major heretofore intractable biotic constraints of African food security that may be amenable to novel biotechnological solutions. Crop Protection **23:661-689.**
19. Ogoyi D.O.; Achieng, D.; Nguu, E.K. and **Ochanda J.O. (2003)**. Partial characterization of a trypanosome-lysing factor from the midgut of the Desert Locust *Schistocerca Gregaria*: East African Medical Journal **80: (11) 575-580.**

20. Howarth E. Bouis, Bruce M. Chassy and **James O. Ochanda (2003)**. Genetically modified food crops and their contribution to human nutrition and food quality. Trends in Food Science and Technology **14**: 191 – 209.
21. Wangóndu, V.W; Kahindi, J.H.P.; Olembo, N.K. and **Ochanda, J.O. (2003)**: Isolation and characterization of *Bacillus thuringiensis* strains from soil samples from Kakamega and Machakos districts in Kenya. J.Trop.Microbiol: **2:3-10**.
22. **Ochanda, J. O.**, Oduori, E. A. C., Galun, R., Imbuga, O. M. and Mumcuoglu, K. Y. (2000). Partial purification of the aminopeptidase from the midgut of the human body louse, *Pediculus humanus humanus*. Physiol. Entomol. **25:242-246**.
23. Osano A.A., Siboe, G.M.,Ochanda,J.O. and Kokwaro, J.O., (1999) Biodegradation of DDT: The Role of *Pleurotus sp.*, a lignicolous fungus. In Bioremediation of Nitroaromatic and Haloaromatic Compounds: Proceedings of the fifth international in situ and on – site Bioremediation Symposium. Editors, Bruce C. Alleman and Andrea Leeson: Battelle Press, Columbus. Richland. Page (69 – 74).
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28. Ochanda,J.O. Mumcuoglu,K.Y.,Ben-Yakir,D; Okuru,J.K. Oduol, V.O and Galun, R. (1996). Characterization and properties of louse midgut antigenic protein recognized by resistance host: Medical and Veterinary Entomology **10**, 35-38.
29. Mumcuoglu,K.Y., BenYakir, D., Ochanda,J.O. and Galun, R. (1995). Development of a vaccine against human lice. Ann. Meeting Israel Soc.Skin Research, January 19, Bellinson Hospital, Petach Tikva. Israel J. of Med. Science **Vol. 31,pp 66**Ben-Yakir,D; Mumcuoglu, K.Y;Manor, Ochanda,J.O;Okuro, and Galun, R. (1994). Immunization of rabbits with a midgut extract of the human body louse (*Pediculus humanus humanus*): The effect of the induced resistance on the louse population: Medical and Veterinary Entomology. **8**, 114-118.

30. Olembo, N.K., Nguu, E.K., Ochanda, J.O. and Ochieng, V.O. (1993); Inhibition of bloodmeal digestion in tsetse fly *Glossina morsitans centralis* fed on rabbits immunized with tsetse midgut proteins: East African Medical Journal **Vol. 71. No.10 Page, 35-39.**
31. Ogoyi, D.O., Ochanda, J.O. and Osir, E.O. (1993): Lipophorin from the larva stalk Borer, *Busseola fusca*. Purification and characterization: Insect Sci. Applic. **14 (2) 176-173.**
32. Ochieng, V.O., Ochanda, J.O., Osir, E.O and Olembo, N.K (1993): Temporal synthesis of cuticular proteins. During larval Development in *G. morsitans*. J.Biochem. Physiol **Vol. 105B. No 2, pp 309-316.**
33. Nguu, E.K., Ochanda, J.O., Osir, E.O and Olembo, N.K (1992): Isolation and properties of a 23 KD haemolymph protein from tsetsefly *G.M morsitan*. Sci. Applic. **Vol. 13, No 2: pp 189-197.**
34. Ochanda, J.O., Osir, E.O, Nguu, E.K., and Olembo, N.K (1992): Isolation and properties of 600-KDa and 23 KDa haemolymph protein from tsetsefly *G.M morsitan*. Scand. J. Immunol. 36. Suppl. **11; 41-47.**
35. Rowe, A., Richman, J.M., Ochanda, J.O. and Brickell, P.M. (1991): Retinoic acid treatment alters the pattern of retinoic acid receptor *beta* expression in the embryonic chick limb : Dev. Pattern of Vert. Limb (pp **97-100**).
36. Ochanda, J.O., Nguu E.K., Olembo, N.K and Osir, E.O (1991) Isolation and characterization of lipophorin from Adult tsetse fly haemolymph *J.Comp.Phys. and Biochem.* **Vol 998 No. 4, pp. 811-814.**
37. Ochanda, J.O., B. Syuto., I.Ohishi., M.Naiki and S. Kubo, (1986): Binding of *Clostridium botulinum* neurotoxin to gangliosides, J. Biochem. **100, 27-33.**
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39. Terajima J., B. Syuto., J.O. Ochanda and S. Kubo, (1985): Purification and characterization of neurotoxin produced by *Clostridium botulinum* type C 6813. Infect. Immun. **48, 312-317.**
40. Naiki, M., Ramasamy., J.O. Ochanda and G.Maina (1985): Lipid composition of *Schistosoma mansoni* and surface labelling of glycolipids. Jpn. J.Vet. Sci. **47, 777-786.**
41. Ochanda, J.O., B. Syuto., K. Oguma., H. Iida and S. Kubo, (1984). Comparision of antigenicity of toxins produced by *Clostridium botulinum* type C and D strains. Appl. Environ. Microbial. **47, 1319-1322.**

THESIS

1. Ochanda, J.O., (1986): Binding of *Clostridium botulinum* neurotoxins receptors on synaptosomal membrane of rat brain. (Ph.D Thesis). Hokkaido University, Faculty of Veterinary Medicine Library.

PROCEEDINGS

2. Ogoyi, D.O. and Ochanda, J.O. *Bacillus thuringiensis*: State of usage by small scale farmers in Kenya. Presented at the PanAfrican hotel, Nairobi, Kenya (29th Feb to 3rd March, 2000).

3. Ochanda, J.O., Oduor, E.A.C., Mumcuoglu, K.Y., Imbuga, M.O, Oduol, V.O BenYakir, and Galun, R. (1998). Characterization of body louse midgut proteins. Proceedings of the First Meeting of Federation of African Society of Biochemistry and Molecular Biology. Page (305-314).
4. Osano A.A., Siboe, G.M., Ochanda, J.O. and Kokwaro, J.O., Biodegradation properties of white rot-fungi in Karura, Forest, Kenya-workshop on fungal diversity in Sub-saharan ecosystems and their role in rural development. Dar-es-Salaam, Tanzania, **29th November-1st December, 1995.**
5. Ochanda, J.O., Mumcuoglu, K.Y., BenYakir, D., Okuro, J.K., Oduor, E.C.A., Oduol, V.O. and Galun, R. (1994). Characterization and properties of body louse midgut antigenic proteins recognized by resistant host. The 2nd Federation of African Immunological Societies (FAIS) **October, 23-27**, Hotel Intercontinental Nairobi, Kenya (In Proceedings of, African Journal of Health Science).
6. Mumcuoglu, K.Y., Ochanda, J.O., Ben-Yakir, D., Klaus, S., Okuro, J.K., Oduol, V.O. and Galun, R.(1994). Characterization and properties of body louse midgut antigenic proteins recognised by resistant host. Eighth International congress of parasitology. **10th-14th October, IZRMIR-TURKEY.**
7. Wamunyokoli F., Osir, E.O., Ochanda, J.O., and Olembo, N.K (1994): Studies of *Bacillus thuringiensis* S- endo-toxin active against *Aedes egypti* larvae. In Proceedings of the African Regional Symposium Biotechnology for Rapid Development in Africa held at ILRI Nairobi on **17-21 February 1992 PP 279-288.**
8. Ochanda, J.O., Okuro, J.K., Oduor, E.A.C., Mumcuoglu, K.Y., Ben-Yakir, D. and Galun, R.(1993); Characterization of Louse gut antigenic proteins recognized by resistant laboratory hosts. Induction of resistance to lice by Immunization. (Abstract in proceedings of Biotech SA 93 held at Rhodes University, **31 January-3 February 1993.**)
9. Ochanda, J.O., Ogema, M. and Thitai, G. (1993): Policy needs to increase Agricultural production through Biotechnology: Proceedings of the National Agricultural Biotechnology Workshop; Kenya Agricultural Biotechnology Platform Ed. Wekundah J.M and Visser B: 99 107-116; **13th-16th September, 1993, SAFARI PARK HOTEL, NAIROBI, KENYA.**
10. Nguu, E.K., Ochanda, J.O., Osir, E.O and Olembo, N.K (1990); Purification and properties of a low molecular weight lipoprotein from adult tsetse fly haemolymph. Proceedings of the 11th Annual Medical Scientific Conference, Nairobi, Kenya.
11. Osano A.A., Siboe, G.M., Ochanda, J.O. and Kokwaro, J.O., (1998) Biodegradation of DDT(1,1,1-Trichloro-2,2-bis)(4-Chlorophenyl) ethene by the white rot fungus *Pleurotus Luteoalbus* leeli. First Meeting of Federation of African Society Biochemistry and Molecular Biology. Page (233-236)
12. Ogoyi, D.O., Ochanda, J.O and Osir, E.O. (July, 1988): Lipophorin from the larva stalk Borer, *Busseola fusca*. Purification and characterization; Presented in the International Union of Biochemists Conference in Prague. (Abs. Pub. in Int. Union of Biochem. Bulletin).
13. Ogoyi, D.O., Ochanda, J.O and Osir, E.O. (July, 1988): Lipophorin from the larva stalk Borer, *Busseola fusca*. Purification and characterization; Proceedings of the 10th Annual Medical Scientific Conference, Nairobi, Kenya.
14. Ochanda, J.O., B.Syuto., H.Kitagawa and S. Kubo (1986): Solubilization and characterization of *Clostridium botulinum* toxin binding component from synatosomal

membrane of rat brain. Proceedings of the 10th Annual Medical Scientific Conference page, 189. Nairobi, Kenya.

15. Osano A.A., Siboe, G.M., Ochanda, J.O. and Kokwaro, J.O., Biodegradation of DDT(1,1,1,1-Trichloro-2,2-bis)(4-Chlorophenyl) ethene by the white rot fungus *Pleurotus Luteoalbus* . First, Pan-African Conference on Biochemistry and Molecular Biology, **September, 2-6**, Nairobi, Kenya. Book of Abstract P. (181).

OTHER PUBLICATIONS & BOOKS

1. A member of International Council for Science (ICSU) and International Union of Toxicology (IUTOX) task force that produced an ICSU monograph on: **Genetically Modified Foods for Human Health and Nutrition: The Scientific Basis for Benefit/Risk Assessment**: Published in Trends in Food Science and Technology 14 2003.
2. A member of the National Biosafety Committee task force constituted by the National Council of Science and Technology to develop and produce the **Biotechnology Policy document for Kenya**, (15-19th July, 2002).
3. Ochanda, J. O., (1998). **Containment specification for micro-organisms, plants and animals**. In proceedings of the National workshop on regulations and guidelines for safety in Biotechnology for Kenya. Edited by, Grace N. W. Thitai, John S. Mbaya and Johnson Nyangeri.
4. Proceedings of the First Pan-African Conference on Biochemistry and Molecular Biology 2nd-6th September, 1996, Nairobi, Kenya. Edited by J.O. Ochanda., J. K. Kiaira and D.W Makawiti. Published by Biochemical Society of Kenya.
5. A member of the task force that wrote and compiled: **Regulations and Guidelines of Biosafety in Biotechnology of Kenya**: Published by National Council for Science and Technology.

CONSULTANCY PROJECTS UNDERTAKEN

1. **2003 - 2004:** - Director, African Biotechnology Stakeholders Forum
2. **2001:** -. A member of the national and international task force appointed by the USAID to assess the biotechnology status of Kenya.
3. **2000:** -. A consultant for the World Bank Institute program in the area of Biotechnology information dissemination.
4. **1992 - to date:-** Resource person for the Kenya Agricultural Biotechnology platform programs (KABP) on Biotechnology current name Biotechnology Trust Africa.

OTHER ACTIVITIES

1. Reviewer for Sida-Sweden supported Lake Victoria Basin Research (VicRes) Program.
2. Reviewer for Discovery and Innovation Journal published by African Academic Science Publishers.
3. Bulletin of the Chemical Society of Ethiopia Published by the Chemical Society of Ethiopia.

MEMBERSHIP OF SCIENTIFIC ORGANISATIONS

1. **1995 - to date**:- Secretary to Biochemical Society of Kenya (BSK).
2. **1996 - to date**:- Member of Federation of African Societies of Biochemistry and Molecular Biology (FASBMB).

REFEREES

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