

## CURRICULUM VITAE, 2019: EDWARD K. NGUU

### **PERSONAL DETAILS:**

**NAME:** EDWARD K. NGUU.  
**Present Position:** Associate Professor, Biochemistry Department, University of Nairobi.  
**Nationality:** Kenyan.  
**Birth date and place:** 1961- Kirinyaga County, Kenya.  
**Marital Status:** Married.  
**Languages:** Fluent in English and Swahili.  
**Address:** C/o University of Nairobi, Biochemistry Department, P.O. BOX 30197-00100, NAIROBI, KENYA.  
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### **EMPLOYMENT:**

March 2012 - present: **Associate Professor**, Biochemistry Department, University of Nairobi.

Nov 2002 – March 2012: **Senior Lecturer**, Biochemistry Department, University of Nairobi.

January 1998 – August 2002: **Lecturer**, Biochemistry Department, University of Nairobi.

April 1990-January 1998: **Graduate Assistant**, Biochemistry Department, University of Nairobi.

### **Other Appointments, University of Nairobi**

- May 2016 - present: **Associate Dean, School of Medicine**, University of Nairobi.
- August 2009 – June 2018: **Strategic Management Unit (SMU) Manager**, Students Welfare Authority, Kenyatta Medical School Hostels.
- **Acting Chairman**, Department of Biochemistry on many occasions.
- **2011- 2017: Staff Commissioner, Students Organization of Nairobi University (SONU) Elections** (Representing College of Health Sciences in Conducting Student Council elections )
- **2012 –2017: Chairman**, College of Health Sciences Standing Committee on ‘Work Environment, Internal Customer and Employee Satisfaction’

### **Additional Departmental Responsibilities:**

- **Course Coordinator (Biochemistry until 2018):** Levels **I & II** Bachelor of Medicine and Bachelor of Surgery (MBChB), Bachelor of Pharmacy (BPharm) and Bachelor of Dental Sciences (BDS).
- **Chairman: School of Medicine Admissions Committee**, College of Health Science, University of Nairobi.

## **EXTERNAL EXAMINER APPOINTMENTS AND OTHER ASSIGNMENTS**

- **2017 - present:** External Examiner, Biochemistry, Maseno University, Kenya
- **2016 - present:** External Examiner, Biochemistry Department, Egerton University, Kenya
- **2013 - 2017:** Served as External Examiner, Biochemistry Department, Kenyatta University, Kenya
- **2004 - 2018:** Served as External Examiner, Biochemistry Department, Jommo Kenyatta University of Agriculture and Technology, Kenya.
- **2009 – 2015:** Served as External Examiner for Bachelor of Pharmacy, School of Pharmacy, MT Kenya University, Kenya.
- **2012 - Present:** Appointed as an **Expert, National Biosafety Authority - [Reviewed many applications for CFT in Kenya]**.
- March, 2014 - present: **Peer Reviewer**, Commission for University Education.
- **2011 – present:** **Member**, Technical Working Group, Civil Registration and Vital Statistics Department (CRVS) – Interior Ministry representing School of Medicine, UoN
- **2009 - present:** **Associate Member**, International Services for Acquisition of Agri-Biotech Applications (**ISAAA**).
- **Feb 2010:** Participated in the European Commission funded, FP7 proposal evaluations in Brussels.
- **Nov 2008:** Participated in the European Commission, FP7 proposal evaluations in Brussels.

## **ACADEMIC BACKGROUND:**

- 1997: Ph.D** (Biochemistry, by research and Thesis) under the African Regional Postgraduate Programme in Insect Science (ARPPIS) Scholarship. Registered at University of Nairobi, Kenya.
- 1992: Master of Science** (Biochemistry, by coursework and thesis), University of Nairobi, Kenya.
- 1986: Bachelor of Science** (Biochemistry and Chemistry), University of Nairobi, Kenya. Obtained B.Sc., 2<sup>nd</sup> Class Honours (Upper Division).
- 1981: Kenya Advanced Certificate of Education (KACE)** (reading Mathematics, Physics and Chemistry), Kirangari High School, Kenya. Obtained principal passes in all subjects and a credit in General Paper.
- 1979: East African Certificate of Education (EACE)**, Kerugoya Secondary School, Kenya. Obtained distinction in Physical Sciences and Mathematics; 5 credits (Biology, Geography, Agriculture, History, English Literature) and a pass in English language.
- 1975:** Kiamaina Primary School, Kirinyaga County. Qualified for Secondary School admission, 1976.

### **RESEARCH TRAINING EXPERIENCE:**

**1998-2000: Postdoctoral Research Fellow**, National Institute of Sericulture and Entomological Sciences, Tsukuba, Japan.

My research project was entitled "Construction of a cDNA linkage Map in the Silkworm, *Bombyx mori*, based on Restriction Fragment Length Polymorphism Analysis".

**1992-1997: Ph.D Research Scholar** in Biochemistry under the African Regional Postgraduate Programme in Insect Science (ARPPIS) Scholarship.

My research project is entitled "The Influence of Bloodmeal and its Digestive Products on Bloodstream Trypanosome Differentiation in the Tsetse Fly, *Glossina morsitans*, Westwood".

**1987-1990: MSc. Scholar** in Biochemistry (by coursework and thesis), University of Nairobi, Kenya. My research project was on "Purification and Properties of the Low Molecular Weight Protein from Haemolymph of Tsetse Fly, *Glossina morsitans morsitans*".

### **NON DEGREE TRAINING:**

**Oct 2010 –April 2011:** Leadership Development Program under the Management Sciences for Health (MSH) program

**Jan 3-7, 2011:** Trainers Workshop on Medical Education, University of Nairobi, College of Health Sciences

**Sept 5-6, 2005:** Techniques in molecular Biology: Proteins and Proteomics workshop, University of Hertfordshire, U.K.

**Sept 7-9, 2005:** Techniques in molecular Biology: Nucleic Acids and Genomics workshop, University of Hertfordshire, U.K.

**June-August 1996:** Two-month training on **Biology of Parasitism: Modern Approaches** at the Marine Biological Laboratory, Woods Hole, Massachusetts, U.S.A.

**April 1996:** Two-week international workshop on **Use of Gene Cloning in Biotechnology**. Sponsored by the Foundation of African Development through International Biotechnology (FADIB) (University of Nigeria, Enugu, Nigeria).

**March-Sept. 1992:** Six-month course on **Insect Science**. This course was a prerequisite to joining ARPPIS Ph.D programme. Topics covered: Insect biochemistry, physiology and behavior; Insect functional morphology; Biostatistics; Insect taxonomy; Insect biocontrol; Insect ecology.

**November 1988:** Two-week course on **Practical Application of DNA Techniques in Microbiology**, funded by the **NORAD KEN 046 Project**, at Kabete, Kenya.

**Computer Knowledge:** Competent in application of a wide range of computer packages.

## **SCHOLARSHIPS AWARDED:**

- September 5-9, 2005:** British Council sponsorship to attend 1<sup>1/2</sup> week course on “Techniques in Molecular Biology” University of Hertfordshire, U.K.
- October 1998-September 2000:** Science and Technology Agency (STA) Fellowship to undertake postdoctoral research in Japan for 2 years.
- June-August 1996:** Borough Welcome Fund Fellowship to attend a two-month course on Modern Approaches in Biology of Parasitism at Woods Hole, Massachusetts, U.S.A.
- March 1992-1995:** German Academic Exchange Services (DAAD) fellowship through the African Regional Postgraduate Programme in Insect Science (ARPPIS) for Ph.D programme.
- November 1987-December 1989:** University of Nairobi Scholarship for M.Sc. program.
- October 1983-June 1986:** Government of Kenya Scholarship through University of Nairobi for undergraduate degree programme.

## **CONFERENCES AND WORKSHOPS ATTENDED**

- May 2018:** Introduction to Biotechnology & Biosafety Regulatory Frameworks - OFAB Kenya Science Café on 31st May 2018 At Nairobi
- March 12, 2017:** Participated in COP/MOP7 Kenya Stakeholders’ Preparatory Meeting, Nairobi.
- Jan & Feb 2013:** Participated in a series of Consultative workshops by the National Biosafety Authority (NBA) on Biotechnology agenda in Kenya
- Nov 18-21, 2012:** Presented a paper “Investigating the effects of heavy metal pollution on omega-3 polyunsaturated fatty acids (Pufas) levels in tilapia fish (*Oreochromis niloticus*) from Winam Gulf of Lake Victoria” at VicRes Workshop, Aquaculture Cluster, Kisumu Forum, Speke Commonwealth Resort, Munyonyo, Kampala, Uganda.
- October 9-13, 2011:** Vires Biennial Forum, Speke Commonwealth Resort, Munyonyo, Kampala, Uganda
- July 25, 2011:** Science and Risk Communication Training by ISAAA Africenter and PBS, Nairobi, Kenya.
- March 14, 2011:** Kenya National Workshop on RABESA/COMESA Regional Biosafety Policies and Guidelines

## **TEACHING EXPERIENCE**

### **i. Undergraduate lectures to:**

- MBChB, BPharm. & BDS students.
- Bachelor of Veterinary Medicine students.
- Bachelor of Biochemistry students.
- BSc Agriculture students.
- Final year BSc projects supervision.

### **ii. Postgraduate lectures to:**

- Master of Science in Biochemistry students.
- Master of Science in Crop Production students.

## **TRAINING WORKSHOPS CONDUCTED**

- **August, 2016, *Preconference workshop* at Kenya School of Monetary Studies: National Biosafety Authority 5<sup>th</sup> Annual Biosafety Conference.**
- **19<sup>th</sup> – 21<sup>st</sup> November, 2014 at ILRI (for ILRI Staff): Workshop on facility safety and safety considerations working with plant pathogens and genetically modified plants.**
- **8<sup>th</sup> -10<sup>th</sup> September, 2014 at Lukenya Getaway, Athi River, Nairobi: Journalists Training Workshop on Effective Reporting & Communication of Biotechnology and Biosafety Issues.**
- **August, 2014, *Preconference workshop* at Kenyatta International Convention Centre: National Biosafety Authority 3<sup>rd</sup> Annual Biosafety Conference.**
- **August, 2013, *Preconference workshop* at Kenyatta International Convention Centre: National Biosafety Authority 2<sup>nd</sup> Annual Biosafety Conference.**
- **August, 2012, *Preconference workshop* at Kenyatta International Convention Centre: National Biosafety Authority 1st Annual Biosafety Conference.**
- **August 2009 – to date: Annual course on “Molecular and Biochemical Laboratory Techniques”, under Clinical and Industrial Biochemistry Consultancy Unit (CIBCU), Department of Biochemistry University of Nairobi. Also in collaboration with School of Biological Sciences organised many 2weeks courses on Molecular Biology and Biotechnology for those who want to upgrade their skills.**
- **Dec 13-4, 2011 at Lukenya Getaway, Athi River, Nairobi: Water Efficient Maize for Africa (WEMA) Training Workshop for Journalists**
- **March 23-24, 2011, International Livestock Research Institute (ILRI), Nairobi: Workshop on draft “Biosafety Regulations for Genetically Modified Organisms” for ILRI staff conducting Plant transformations.**
- **August 7-9, 2010, Ostrich Farm, Nairobi: Workshop to deliberate on draft “Guidance document on the environmental risk assessment for environmental release of genetically modified organisms” for National Environment Management Authority (NEMA).**
- **2<sup>nd</sup> – 6<sup>th</sup> November 2009, Methodist Guest House, Nairobi: Capacity Building for Media Educators on Reporting Agricultural Biotechnology and Biofuels in East Africa - organised by ISAAA Africenter and School of Journalism & Mass Communication - University of Nairobi.**

- **February 2009, AICAD, JKUAT, Juja, Nairobi:** Capacity Building for Senior Ministry of Agriculture (MoA) Officials on Agricultural Biotechnology -organised by ISAAA and MoA.
- **August 18-19<sup>th</sup>, 2008, Kenyatta University:** Mentorship Program for Strengthening the Teaching of Agricultural Biotechnology by Science Teachers - sponsored by Monsanto, ISAAA and Kenyatta University.
- **July 19<sup>th</sup> – 22<sup>nd</sup>, 2004, Lukenya Academy, Machakos:** Kenya Teachers Agribiotech Workshop- sponsored by Tuskegee University and ABSF.

### **RISK ASSESSMENT REVIEWS**

I have reviewed many applications of national/regional/international importance, notably applications for Confined Field Trials (CFTs) for various crops from National Biosafety Authority.

### **SOCIETY MEMBERSHIP:**

- **Member**, Open Forum on Agricultural Biotechnology in Africa (OFAB), Kenya Chapter.
- **Member of the Organizing Committee**, Fifth International Congress of the African Association of Physiological Sciences (AAPS) held from 27<sup>th</sup> July –1<sup>st</sup> August 2008, Chiromo Campus, University of Nairobi, Kenya.
- **Founder Member**, Biochemical Society of Kenya
- **Member**, Physiological Society of Kenya.
- **Member**, African Association of Insect Scientists (AAIS)
- **Member**, African Biotechnology Stakeholders Forum (ABSF)
- **Founder Member**, Bionet-Africa
- **Founder Member**, Federation of African Societies of Biochemistry and Molecular Biology (FASBMB).
- **Vice-Treasurer**, Biochemical Society of Kenya (from 1997-1998)
- **Vice Treasurer**, Physiological Society of Kenya.
- **Member of the Organizing Committee**, First Pan-African Conference on Biochemistry and Molecular Biology held from 1<sup>st</sup> –6<sup>th</sup> September 1996 at UNEP Headquarters, Nairobi, Kenya.

### **PUBLICATIONS:**

#### **(a) Thesis**

- (i) **Nguu, E. K. (1997).** "The Influence of Bloodmeal and its Digestive Products on Bloodstream Trypanosome Differentiation in the Tsetse Fly, *Glossina morsitans*, Westwood". PhD, University of Nairobi
- (ii) **Nguu, E. K. (1992).** "Purification and Properties of the Low Molecular Weight Protein from Haemolymph of Tsetse Fly, *Glossina morsitans morsitans*". MSc, University of Nairobi

**(b) Research Papers in Peer Reviewed Journals**

- Ngigi DM, Githui EK\*, Aman RA, Wanjala FM, Stella RK, Njiru PN, and Nguu EK (2018).** Populations of *Biomphalaria spp.* Snails Isolates in Kenya Show Variable Resistance to Schistosome Infection. *Research and Reviews in BioSciences* Vol 3, issue3, 1-12.
- Kariuki S. Muiruri, Anne Britt, Nelson O. Amugune, Edward K. Nguu, Simon Chan and Leena Tripathi (2017)** Expressed Centromere Specific Histone 3 (CENH3) Variants in Cultivated Triploid and Wild Diploid Bananas (*Musa spp.*) *Frontiers in Plant Science* Vol 8 article 1034, 1-12.
- Okonjo Edward, Yole Dorcas, Eric Korir, Nguu Edward, Anyango Beatrice and Ogoyi Dorington (2015).** Detection of proteins induced in the haemolymph of *Biomphalaria pfeifferi* infected with *Schistosoma mansoni*. *Journal of Applied Biosciences* 88:8211– 8222.
- Wakisa Lenard Kipandula, Benzon Mwanza, Edward Nguu and Dorington Ogoyi (2014).** Antioxidant activities in extracts of selected indigenous vegetables from Kenya and Malawi. *African Journal of Biotechnology*. 13(17), pp. 1824-1834
- Evans Nyaboga, Joshua Njiru, Edward Nguu, Wilhelm Gruissem, Herve Vanderschuren, and Leena Tripathi (2013)** Unlocking the potential of tropical root crop biotechnology in east Africa by establishing a genetic transformation platform for local farmer-preferred cassava cultivars *Front Plant Sci.* 2013; 4: 526.
- Muinde, V. M., Nguu, E. K., Ogoyi, D. O., Mwita, C. J., and Shiundu, P. M. (2013).** Effects of Heavy Metal Pollution on Omega-3 Polyunsaturated Fatty Acids Levels In Tilapia Fish from Winam Gulf of Lake Victoria. *The Open Environmental Engineering Journal*. 6 : 22–31 .
- Ogoyi, D. O., Mwita, C. J., Nguu, E. K. and Shiundu, P. M. (2011).** Determination of heavy metal content in water, sediment and microalgae from Lake Victoria, East Africa. *The Open Environmental Engineering Journal*. 4, 156-161.
- Njagi. J. W., Ngure, R. M., Nguu, E.K., Essuman, S. and Ogoyi D. O. (2011).** Induced protein profiles in haemolymph of desert locust *Scistocerca gregaria* following *Trypanosoma brucei* challenge. *Egyptian Journal of Biochemistry and Molecular Biology*. 29(1), 1-16.
- Opondo, S. O., Ngure, R. M., Nguu, E.K., and Ogoyi D. O. (2010)** Molecular characterization of *Bacillus thuringiensis* strains with differential toxicity to the spotted stalk borer *Chilo partellus*. *Journal of Applied Biosciences*. 31, 1878-1886.
- Kinyua, J. K., Nguu, E.K., Mulaa, F. J. and Ndung'u, J. M. (2005).** Immunization of rabbits with *Glossina pallidipes* tsetse fly midgut proteins: Effects on the fly and trypanosome transmission. *Vaccine*. 23. 3824-3828.
- Nguu, E. K., Kadono-Okuda, K., Mase, K., Kosegawa, E., and Hara, W. (2005).** Molecular linkage map for the silkworm, *Bombyx mori*, based on restriction fragment length polymorphism of cDNA clones. *J. Insect Biotechnology & Sericology*. 74, 5-13.
- Ogoyi, D. O., Achieng, D., Nguu, E.K. and Ochanda, J. O. (2003).** Partial characterization of trypanolysin factor from the midgut of *Scistocerca gregaria*. *East African Medical Journal*, 80(11) 575-580.
- Ogoyi, D. O., Kadono-Okuda, K., Eguchi, R., Furuta, Y., Hara, W., Nguu, E. K. and Nagayasu, K. (2003).** Linkage mapping and analysis of a non-susceptibility gene to densovirus (nsd-2) in the silkworm, *Bombyx mori*. *Insect Mol. Biol.* 12, 117-124.

- Kinyua, J. K., Osir, E.O., Ogoyi, D. O. and Nguu, E. K. (2002).** Characterization of protective antigens from midguts of the tick, *Amblyomma variegatum*. *Experimental and Applied Acarology*. 26, 101-113.
- Nguu, E.K. and Osir, E.O. (2001).** Properties of a factor in eland plasma that inhibits transformation of bloodstream-form *Trypanosoma brucei*. *Insect Science and its Applications*. 21 (2), 169-177.
- Gunzl, A., Ullu, E., Dorner, M., Fragoso, S. P., Hoffmann, K. F., Milner, J. D., Morita, Y., Nguu, E. K., Vanacova, S., Wunsch, S., Dare, A. O., Kwon, H. and Tschudi, C. (1997).** Transcription of the *Trypanosoma brucei* spliced leader RNA gene is dependent only on the presence of upstream regulatory elements. *Mol. Biochem. Parasitol.* 85, 67-76.
- Nguu, E.K., Osir, E.O., Imbuga, M. O. and Olembo, N.K. (1996).** The effect of host blood in the *in vitro* transformation of bloodstream trypanosomes by homogenates of tsetse midgut. *Med. Vet. Entomol.* 10, 317-322.
- Olembo, N.K., Nguu, E.K. Ochanda, J.O. and Ochieng, V. O. (1994).** Inhibition of bloodmeal digestion in *Glossina morsitans* fed on rabbits immunized with tsetse midgut homogenate. *East African Medical Journal*, 71: 651-655.
- Ochanda, J.O., Osir, E.O., Nguu, E. K. and Olembo, N. K. (1992).** Isolation and properties of 600-kDa and 23-kDa haemolymph proteins from the tsetse fly, *Glossina morsitans*: their possible role as biological insecticides. *Scandinavian Journal of Immunology*, 36 (Suppl. 11): 41-47.
- Nguu, E.K., Ochanda, J.O., Osir, E.O. and Olembo, N. K. (1992).** Isolation and properties of a 23 kD haemolymph protein from the tsetse fly, *Glossina morsitans*. *Insect Science and its Applications*, 189-198.
- Ochanda, J.O., Osir, E.O., Nguu, E. K. and Olembo, N. K. (1991).** Lipophorin from the tsetse fly, *Glossina morsitans morsitans*. *Comp. Biochem. Physiol*, 99B, 811-814.

### **Publication in Proceedings**

#### *Full paper:*

- Ogoyi, D. O., Mwita, C. J., Nguu, E. K., Wasonga, C. O. and Shiundu, P. M. (2009)** Effects of heavy metal pollution on microalgae richness and diversity in Lake Victoria. *Lake Victoria Research Initiative Proceedings, VicRes Pollution and Heavy Metal Cluster Workshop 2<sup>nd</sup> – 4<sup>th</sup> April, 2009*, pp193-210.

#### *Abstracts*

**Evans Nyaboga, Huahong Wang, Leena Tripathi, Edward Nguu, Wilhelm**

**Gruissem, Hervé Vanderschuren (2010).** Analysis of Cassava (*Manihot esculenta* Crantz) Stress-inducible Promoters and Modulation of Antioxidant Expression in Cassava Storage Roots. “World Food System - A Contribution from Europe”, Tropentag, September 14-16, 2010, Zurich.

## **POSTGRADUATE SUPERVISION:**

### ***(a) PhD***

**Easter Syombua (2017-present):** Establishment of a genome editing tool for yam (*Dioscorea* spp.)

**Korir, E. K (2011 – present).** Development of a potential anti-trypanosome vaccine based on attenuated *Trypanosoma evansi* parasite - **University of Nairobi**

**Kariuki Sawel (2011 - 2015):** “Development of haploid inducers in *Musa* spp. (Bananas) by modification of centromere specific histone-3 (cenH3) protein”– **University of Nairobi**

**Nyaboga, E. N. (2009 - 2013):** Functional characterization of cassava (*Manihot esculenta*, Crantz) post harvest physiological deterioration (PPD)-inducible promoters and modulation of antioxidant expression in cassava storage roots – **University of Nairobi**

**Kinyua, J. K. (2001 - 2007):** Characterization of *Glossina pallidipes* midgut molecules as vaccine candidates for human African trypanosomiasis (HAT)”. – **University of Nairobi**

### ***(b) MSc.***

- 1. Muendo, Daniel (2016 - present):** Effect of heavy metal pollution on levels of omega-3 polyunsaturated fatty acids in Nile tilapia fish (*Oreochromis niloticus*) from pollution-simulated aquaria. **University of Nairobi.**
- 2. Wakisa Kipandula (2010–2013):** Antioxidant activities in extracts from indigenous vegetables from Kenya and Malawi - **University of Nairobi.**
- 3. Muinde, V. M (2008 - 2012):** Investigating the factors affecting levels of Omega-3 polyunsaturated fatty acids (PUFAs) in commercial fish species in Lake Victoria - **University of Nairobi.**
- 4. Korir, E. K. (2007-2010):** Relationship between assembly behavior and molecular responses in foveal gland of unfed and fed adult *Rhipicephalus appendiculatus* - **Egerton University**
- 5. Dorothy A. Opondo (2006 -2010):** Comparison of proteins of parasite stages *Schistosoma mansoni* and those of the tissues of the snail vector *Biomphalaria pfeifferi* - **University of Nairobi.**
- 6. John M. Gitau (2007 - 2009):** Isolation and characterization of trypanosome-lysing factor from the desert locust *Schistocerca gregaria*. **Egerton University**
- 7. Juliet W. Njagi (2007 - 2008).** Induced protein profiles in the haemolymph of desert locust, *Schistocerca gregaria*, following Trypanosomatid, *Trypanosoma brucei brucei* challenge - **Egerton University**
- 8. Kinyua, J. K. (1998 - 2000):** Biochemical and Immunological Identification and Characterization of Protective Antigens from the gut of the Tick, *Ablyomma variegatum*- **University of Nairobi.**

*(c) Undergraduate*

Supervised over thirty (40) BSc. Biochemistry final year projects since year 2005.

**RECENTLY EXAMININED THESIS**

- I have sat in many postgraduate Examination Boards in the School of Medicine, School of Biological Sciences and School of Physical Sciences, University of Nairobi.
- I have also served as examiner for many Masters and Phd thesis, the recent ones are listed below:-

**Thesis externally examined**

In the last 10 years, I have examined more than 30 Masters and PhD thesis from mainstream University in Kenya.

**CURRENT RESEARCH INTEREST:**

1. Molecular characterization of the factors responsible for parasite development of in their vectors. The goal is to identify targets for disrupting disease transmission cycle.
2. Effect of Heavy Metal Pollution on Omega-3 Polyunsaturated Fatty Acids (PUFA) in Commercial Fish Species in Lake Victoria.
3. **On Collaboration basis:** Application of Biotechnology in Crop Improvement

**RESEARCH GRANTS SECURED:**

1. Ogoyi, D. O., Nguu, E. K, Shiundu, P.and Mwitwa Chacha, M. O. (2007). Investigating the Effects of Pollution on Omega-3 Polyunsaturated Fatty Acids (PUFA) in Commercial Fish Species in Lake Victoria. Project Funded by VicRes (US\$ 150,000 - for 3 years).
2. Infrastructural Building for Molecular Biology and Biotechnology Laboratory at the old ICIPE premises. A Joint Proposal by the Departments of Biochemistry, Botany and Zoology, College of Biological and Physical Sciences, University of Nairobi. Project Funded by Rockefeller Foundation (US\$ 150,000). - Year 2004
3. PhD research grants for Lucy W. Kariuki: US\$ 10,000 [From TDR] and Kshs 800,000 [From DAAD].

## **REFEREES**

- 1. Professor Dorington O. Ogoyi**  
**Chief Executive Officer**  
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Nairobi, Kenya  
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- 2. Prof. Charles A. Omwandho.**  
Deputy Vice-Chancellor, Kirinyaga University & Professor of Immunology  
% Kirinyaga University,  
**P. O. Box 143-10300 Kerugoya**  
**Tel: 0710888835 ; Email : [charlesomwandho@gmail.com](mailto:charlesomwandho@gmail.com)**
  
- 3. Prof. Peter W. Kinyanjui**  
Associate Professor,  
Department of Biochemistry  
University of Nairobi  
P. O. Box 30197, Nairobi, Kenya  
**Tel: 0722394442, 020-44442841**