CURRICULUM VITAE



Olubukola Oluranti BABALOLA, PhD

Pr.Sci.Nat. [NRF rated scientist]

1. Personal

Surname:	Babalola
Names:	Olubukola Oluranti
Identity number:	7008130971183
Sex:	Female
Nationality:	South African Permanent Resident (Nigerian born)
Language:	English
Marital status:	Married (Prof S.S. Babalola)
	Two children (Michella 19yrs & Daniel 16yrs)
Postal address:	Biological Sciences Department, North-West University, Mafikeng campus.
	Private Bag X2046 (Internal box 575), Mmabatho, 2735, South Africa

Director: Food Security and Safety Niche Area Principal Investigator: Microbial Biotechnology Laboratory Room G09/G10, Dept. of Biological Sciences; Faculty of Agriculture, Science and Technology, North-West University, Mafikeng campus; Private bag X2046, Mmabatho, 2735, South Africa **Tel** (work): +27 183892568; Cell: +27 786551839; **Email**: <u>olubukola.babalola@nwu.ac.za</u> **Skype**: oobabalola <u>http://en.wikipedia.org/wiki/User:Babalola_O.O.</u> <u>http://scholar.google.com/citations?user=rmHHG2UAAAAJ</u> <u>www.researchgate.net/profile/Olubukola_Babalola</u> <u>http://za.linkedin.com/pub/olubukola-oluranti-babalola/18/74b/756</u> academic.research.microsoft.com/Author/23881061/... <u>http://orcid.org/0000-0003-4344-1909</u> **http://www.pubfacts.com/author/Olubukola+Oluranti+Babalola**

2. Education

- > Ph.D. Microbiology, 2002, University of Ibadan, Ibadan Nigeria. Jan. 1997 July 17, 2002.
- M.Sc. Microbiology, 1996, University of Ibadan, Ibadan Nigeria. May, 1994 Nov. 28, 1996.
- B.Sc. (Hons). Microbiology, 1992, Ogun State University, Ago-Iwoye Nigeria. Oct. 1988 Nov. 5 1992.
- WASC (Sciences) 1987, Methodist Girls' High School, Yaba, Lagos Nigeria. 1982 June 1987 (Punctuality prefect)
- First school leaving certificate 1981, African Church Princess Primary School, Akoka, Yaba, Lagos, Nigeria.

3. Professional Certificates Courses

- Middle Management Programme, Management Skills Development Jan-Dec 2016. North-West University School of Business and Corporate Governance. NQF 6. Assoc. of MBA accredited. ETDP SETA bursary. (Modules: Organizational Behavior, Financial Accounting, Operations Management, Management Accounting, Management Economics, Marketing Management, Labour Relations). North-West University, Potchefsroom, South Africa.
- Assessors' workshop (SAQA ID: 115753; NQF 5), 15th-18th March 2016, Ikhono consulting, Academic Development Centre, North-West University, South Africa.
- Springer Peer Review Academy. 16th Nov. 2015. academy.springer.com. Convenor: Juliane Ritt
- Fellowship of the Africa Science Leadership Program. (ASLP) 07th 12th June 2015, FarmInn, Pretoria, South Africa. Convenor: Prof Bernard Slippers (http://www.up.ac.za/en/centre-for-theadvancement-of-scholarship/article/2099449/aslp-2015)
- European Molecular Biology Organization (EMBO) Laboratory Management Course for Group Leaders. 24th-27th November 2014, Villa Toskana Hotel, Hamburger Strass 4-8, D-69181 Leimen, Germany. Convenor: Martin Cairns.
- ➢ Essential Good Laboratory Practice[™] Short Course 22 24 October 2014 DNABiotec, de Havilland Crescent Persequor Park, Pretoria, South Africa. Covenor: Prof A. Olckers
- ➢ Essential Science Project Management[™] Course. 1^s-3nd July 2014, DNABiotec, de Havilland Crescent Persequor Park, Pretoria, South Africa. Covenor: Prof A. Olckers
- The "AAAS-TWAS Summer Course on Science and Diplomacy". 8th-13th June 2014, The World Academy of Sciences (TWAS) – for the advancement of science in developing counties. How scientists can work with policymakers to have an impact on international relations Trieste, Italy. Convenor: Prof Romain Murenzi, TWAS, and Dr Vaughan Turekian, AAAS
- Intelligent Lean Laboratory Management, Creating a world class lab by employing Lean and Six Sigma techniques. 8th 10th April 2014, Emperor's Palace Hotel, Johannesburg, South Africa. Convenor: Mr. Jaco Koen. Ngoboyi Training International.
- NWU leadership and management academy. New manager development programme (NMDP). Module 1: Fundamentals of management and leadership, 26-27th March 2014; Module 3: Governance, Finance, Legal and Risk, 24th June 2014; Module 4: Transformation, 15th-16th July

2014. Module 5: Strategic Planning, 29th July 2014 presented by Experiential Technologies; Module 6: People Management Skills for Managers, 18th-19th August 2014. **Mafikeng, South Africa**

- Assertiveness skill. Congruence people development specialist. Mafikeng, Feb. 25th 2014, South Africa. Convenor: Mr. Jeremy Coetzer
- Applied Dual-Use Biosecurity Education, Twelve-week Professional Development online Trainthe-Trainers course. 2012, Bradford Disarmament Research Centre, Dept. of Peace Studies, University of Bradford, UK. Convenor: Dr Simon Whitby
- ➢ Facilitator workshop (US Code: 117871), 4th-5th Oct. 2011, Buffalo park, Mafikeng, South Africa. Convenor: Mr. Hennart van Schalkwyk
- Biosafety Workshop "Problem formulation: A Strategic Approach to Risk Assessment of GMOs" Convenor: Drs. Wendy Craig and Giuliano Degrassi. 19-23rd Sept. 2011, ICGEB, Trieste, Italy.
- Emotionally Intelligent Leadership, 16-17th May 2011, Kwelanga training, Ms. Hazel Ferrer. South Africa.
- South Africa/Argentina Joint Regional Biosafety Workshop and Seminar. "Biosafety of GM crops: Emerging issues and challenges in regulatory decision making" 07-11 March 2011 Dept. of Agric., Forestry & Fisheries, Pretoria, South Africa. In collaboration with ICGEB, and Ministerio de Agricultura, Ganaderia y Pesca, Argentina. Convenor: Ms. Chantal Arendse.
- 2011 Phase 3. Institutional Course for new lecturers (ICNL) in the Foundations and Ethical Aspects of Science, (Jan 28th and June 2nd). NWU, South Africa. Convenor: Prof Hannes van der Walt.
- Designer assessment workshop (US Code: 115755), 24th-28th Jan. 2011, Buffalo park, Mafikeng, South Africa. Convenor: Mr. Hennart van Schalkwyk
- SANBio/University of Mauritius Phylogenetics workshop, 15-19 Nov. 2010, University of Pretoria, South Africa. Convenor: Prof Jaufeerally-Fakim Yasmina.
- Phylogenetics workshop, Hosted by Inqaba Biotechnical industries (Pty) Ltd and FABI. University of Pretoria, South Africa. Oct 20-22 2010. Presented by Dr Jane Wright.
- Biosafety Workshop "An introduction to the risk analysis of current genetically modified organisms (GMOs) and their products, and to possible issues raised by novel GMOs in the future" ICGEB. Convenor: Drs. Wendy Craig and Giuliano Degrassi. 27 Sept - 1 Oct. 2010, Trieste, Italy.
- Workshop on "Pathogen Genomics", 2-6 August 2010, University of Pretoria, South Africa. Convenor: Prof Jaufeerally-Fakim Yasmina.
- Personal Development Workshop: Emotional intelligence, May 2010. Presenter by Ms. Makheni, Real Solutions Training.
- Moderator workshop (US Code: 115759), 29th-31st March 2010, Academic Development Centre, North-West University, South Africa. Competitive Edge Training Consultancy. Convenor: Mr. Hennart van Schalkwyk
- Assessors' workshop (US Code: 115753), 24th-26th March 2010, Academic Development Centre, North-West University, South Africa. Competitive Edge Training Consultancy. Convenor: Mr. Hennart van Schalkwyk

- SANBio/University of Mauritius Bioinformatics workshop, 22-26 Feb. 2010, University of Mauritius, Reduit, Mauritius. Convenor: Prof Jaufeerally-Fakim Yasmina.
- Institutional Course for New Lecturers (ICNL), 26th-28th Jan. 2010, Institutional office, North-West University, Potchefstroom, South Africa. Convenor: Ms. M. Klopper
- ➤ Workshop with Practical Components. "Risks, benefits and opportunities from the release of GMOs in the African Regions". 15th-19th Sept. 2008, ICGEB Cape Town Component, Cape Town, South Africa. Convenor: Dr Helen Hinge
- Workshop on the Theory and practice of Phylogenetics, the University of Cape Town, 4-8th February 2008. (Instructor: Pablo Goloboff and Steve Farris), Convenor: Prof Tim Crowe. Funded by SABI, NRF, Dept. Sci. and Tech., and UCT. South Africa.
- United Nations Conference on Trade and Development (UNCTAD) Advanced laboratory training in Molecular biology, University of Cape Town, South Africa. October 16 2006 – January 16 2007. (cDNA synthesis, transfecting, RNA isolation, quantification, gel electrophoresis, Western blot, RT-PCR, Zymography, primer design, tissue culture, RFLP, BCA/BSA protein assay)
- Sixth International Workshop on Radiation Damage to DNA May 13 17, 2006 Tekirova, Antalya, Turkey.
- Sustainable Environmental Management, June 25 July 16, 2005. Beahrs Environmental Leadership Program. Convenors: Dr. Robin Marsh, and Prof. David Zilberman, University of California, Berkeley, USA. beahrselp.berkeley.edu/All%20Participants%20List.pdf
- BioNET Africa Training Workshop on Bioinformatics/Computational Biology. 24-25 September 2002. Institute of Computer Science, School of Biological Sciences, University of Nairobi, Riverside Drive, Nairobi. Kenya. Convenor: Dr. Daniel Masiga.
- The 3rd IUBMB/FASBMB/SASBMB Biochemistry Education Workshop. 17-19 November 2001 Cape Town, South Africa. Convenor: Dr Trevor Anderson.
- Research Project Management an interactive course for postgraduate scholars. 5-9 November 2001. The International Centre of Insect Physiology and Ecology (ICIPE), Nairobi, Kenya. Resource person: Dr. Odindo.
- Postgraduate Biostatistics for Graduate Scholars in Biological Sciences/ International Centre of Insect Physiology and Ecology (ICIPE) Nairobi, Kenya/September 24 – October 26, 2001.
- Bionet-Africa Workshop on capacity building in biotechnology and biosafety. Theme: Network for capacity building in biotechnology and biosafety for African universities. Date: 11-13 July 2001. International Centre of Insect Physiology and Ecology (ICIPE) Nairobi, Kenya.
- French for public speaking. 13 September 1999 December 2000. The International Institute for Tropical Agriculture (IITA). Instructor Dr. Saah Clotaire. French for beginners Alliance Française, Ibadan, Nigeria
- Agricultural Research Management Workshop for Graduate Research Fellows/ The International Institute of Tropical Agriculture (IITA)/. Monday 13 – Friday 17 September 1999. Ibadan, Nigeria. Instructor Dr. Wale Adekunle
- Communication skill workshop for Graduate Research Fellows/ The International Institute of Tropical Agriculture (IITA)//June 28-July 2 1999. Ibadan, Nigeria. Instructor Mr. R. P. Eaglesfield.

Statistics and statistical computing/The International Institute of Tropical Agriculture (IITA)/Feb.8-29 1999. Ibadan, Nigeria. Instructor Dr S. K. Nokoe

4. Other Professional, developmental Courses/Workshops attended

- Professional Administrative Skills, 18th-19th Nov. 2015. North-West University, Mafikeng Campus. South Africa. Convenor:
- Emotional Intelligence and Conflict Management, 5th-6th August 2015. North-West University, Mafikeng Campus. South Africa. Convenor:
- SPSS short course for researchers. July 6th-10th 2015. North-West University, Mafikeng Campus. South Africa. Convenor: Marike Cockeran.
- Time Management, 15th May 2015 North-West University, Mafikeng Campus. South Africa. Convenor: Feroza Sader
- Effective Business WritingTM RUZIVO, 13-14th May 2015 North-West University, Mafikeng Campus. South Africa. Convenor: Feroza Sader
- 2015 ADC trainings: Curriculum design 22nd April. Facilitator Prof Mwenesongole; Large class teaching 13th April, e-portfolios 15th April; Linking learning styles to blended learning/The flipped classroom. NWU, 14th /15th March. 2015 Convenor: Nico Baird
- ➢ Business Image & Corporate Etiquette. NWU, 12th Feb. 2015
- Scientific writing and Science Communication, ASSAF inaugural OWSD regional workshop, 19-22 August 2014. CSIR International Convention Centre, Pretoria, South Africa.
- ▶ Finance for non-financial managers. NWU, June 25th 2014
- ➢ Bioinformatics Workshop. September 16th-20th 2013 at the Kwazulu-Natal Research Institute (K-RITH), Durban, South Africa.
- Information Ethics in Africa, Provincial Workshops. Information Ethics in Practice, North-West University, 24th May 2013, Room 135, Institutional office.
- Employee Health & Wellness 2013: Early planning for retirement, April 11th/Financial literacy May 7th/ 2013.
- Seminar on Postgraduate Supervision. November 1^s 2012, North-West University, Potchefstroom Campus. South Africa. Convenor: Prof Laetus OK Lategan.
- Seminar on Laboratory Safety. October 1st 2012, Hall 2AG01, North-West University, Potchefstroom Campus. South Africa. Convenor: Terry Nelson
- Roadmap to financial freedom. April 12 and 19th 2012. North-West University. South Africa. Convenor: JP Fouche and RJJ Barnard.
- SANBio/University of Mauritius Bioinformatics workshop, "Genome Sequencing, Assembly and Annotation" 21-25 Nov. 2011, Bioinformatics laboratory, University of Mauritius, Reduit, Mauritius. Convenor: Prof Jaufeerally-Fakim Yasmina.
- Making a positive difference in the workplace. Oct. 14th, 2010. North-West University, Mafikeng Campus, South Africa. Convenor: Kwelanga training.
- Stress management. People Capacity Solutions (Pty) Ltd. July 2010.

- ➢ Workshop on activating IKS networks in the Southern African region. 20-22 May 2010. IKS centre of excellence, North-West University. South Africa.
- The Foundation and Ethical Aspects of Science and Scholarship Programme, NWU, Mafikeng Campus. 31st May 2010.
- Microsoft Office Word 2007 level 1, 2 & 3, 19-20th April 2010, presented by Dynamix Learning Solutions.
- > Wellness-Leadership & personal development presented by Neil Conradie & Associate
- > Produce and use spreadsheets for business. Convenor: Martin Coetsee. L.B.T. Consortium.
- IT NWU Mafikeng courses attended in 2010: Telephone services (May 5), General ledger (July 15).
- Leadership and management. Life University: Center for leadership, excellence, achievement and development. 28th July 2010. www.lifeulead.org
- Advance eFundi training, 19th March 2010, Academic Development Centre, North-West University, South Africa. Convenor: Ms. M. Pooe.
- Induction of new academic staff members, 15th March 2010, Academic Development Centre, North-West University, Mafikeng Campus, South Africa. Convenor: Dr. MA Mokoena
- Financial reporting and system management Oracle general ledger. 22nd April 2010, North-West University, South Africa. Convenor: Ms. Chimone Barends.
- MS Excel 2007 Advanced, 5th Oct. 2009. Convenor: HC Venter
- Course Writers' workshop, 27th July 2009, National Open University, Nigeria. Course material development in NOUN. Convenors: Prof A. Adebanjo and Dr. B. Abiola.
- Enzyme kinetics workshop, 18th-20th Feb. 2008. University of the Western Cape, South Africa. Convenors: Prof. Michael J. Danson and Prof. David W. Hough.
- ➢ Workshop on the Theory and practice of Phylogenetics, the University of Cape Town, 4-8th February 2008. (Instructor: Pablo Goloboff and Steve Farris), Convenor: Prof Tim Crowe. Funded by SABI, NRF, Dept. Sci. and Tech., and UCT. South Africa.
- Identifying Protein Functional Sites from Multiple Sequence Alignment and Structure Data' Schmidt Auditorium, Biological data Analysis workshop series (2004-2005) at Weizmann Institute of Science, Rehovot, Israel. Convenor: Dr. Shmuel Pietrokovski.Mining Biological Databases. January 20th 2005. Ebner lecture theatre, Weizmann Institute of Science, Rehovot, Israel. Convenor: Dr. Vered Chalifa-Caspi. Life Science Computer Courses: March – July 2005.
- Introduction to Bioinformatics. Spring Semester 2005. Ebner lecture theatre, Weizmann Institute of Science, Rehovot, Israel. Convenors: Dr. Irit Orr and Dr. Shifra Ben-Dor.
- SiRNA: Technologies and uses. January 6th 2005. Ebner lecture theatre, Weizmann Institute of Science, Rehovot, Israel. Convenor: Dr. Daniel Harari.
- Genome Browsers, December 9 2004. Schmidt Auditorium, Bioinformatics workshop series (2004-2005) at Weizmann Institute of Science, Rehovot, Israel. Convenor: Dr. Shifra Ben-Dor.
- A 5-day integrated lecture on 'Molecular and cellular basis of the normal immune response. 8-12th December, 2003. Paul Hendrickse lecture theatre, University College Hospital, Ibadan, Nigeria. Convenor: Prof. Claude P. MullerUNESCO sub-regional seminar on biotechnology. Theme:

Development through plant biotechnology. Date: Monday 2 January – Friday 13 Jan. 1995. University of Ibadan, Ibadan Nigeria.

Computer Application training (C.A.T.) Drop-in sessions IITA Training Computer Laboratory. Nigeria. Instructor Mrs. N.C. Woods

5. Teaching/Research Experience

(k) Professor/Director Food Security and Safety Niche Area (June 2015 – May 2018) Associate Professor (Jan 2013 - Dec 2015)/ Senior lecturer (Sept 2009 - Dec 2012)/ (Head of Department: March 2010 - Feb. 2012), Dept. Biological Sciences, Faculty of Agriculture, Science and Technology, North-West University, Mafikeng campus. Private bag X2046, Mmabatho, 2735, South Africa. Tel (work): +27 183892568; Cell numbers: +27786551839 and +27715769397, Fax: +27 183892134; Web: <u>www.nwu.ac.za</u>

Work schedule:

Research: Set priorities, develop a work schedule, monitor progress towards goals, and track details/data/information/activities for the research projects;

Determine strategies to move the research project forward, set goals, create and implement actions plans, and evaluate the process and results;

Adopt and promote ethical standard in research protocols and best practices for project management.

Taught/Research courses:

BGYM 214: Bacteriology and Microbial Ecology BGYM 213: Introductory Genetics MKBS 212: Introduction to Microbial Genetics MKBS 211: Introduction to Microbiology MKBS 316: Microbial Ecology BGYM 313: Bacterial Metabolism BGYM 212: Molecular Genetics and Biochemistry BGYM 221/227: Advance Molecular Genetics MKBS 223: Introduction to Recombinant DNA Technology and Bioinformatics BMCM 613: Bacteriology BMCM 622: Environmental and Industrial Microbiology BGYM 371: Research Project RESM 671: Postgraduate Honours Project BIYM 871: MSc Research Project

Project students advised (at NWU)

Degree students - 5 (2010), 5 (2011) Honours students - 6 (2010), 3 (2011), 3 (2012), 4 (2013), 5 (2014), 3 (2015), 0(2016) Masters students - 3 (2011/2012), 3 (2012/2013), 1 (2013/2014), 3 (2014/2015), 3(2015/2016) PhD students - 1 (2011), 3 (2012), 5 (2013), 5 (2014), 5 (2015), 5 (2016) Postdoctoral fellows- 1 (2011), 3 (2012), 5 (2013), 4 (2014), 4 (2015), 3(2016)

Administrative: (and academic session).

- ✓ Director, Food Security and Safety Niche Area: May 2015 to date
- ✓ Coordinator, Faculty Quality Committee: March 2012 to Dec 2015. (Duties: coordinate quality activities in the Faculty; FAST; ensure an active Committee; coordinate all IPE's when due (e.g. receive plan for 2011- 2016 from Campus Quality Coordinator and be guided by it); work hand in hand with the teaching and learning, study guide, and research coordinators because what they do supports quality processes; prepare an update report for Faculty Board every time; a copy of which should be forward to Campus Quality Coordinator so that s/he can also update the Campus EXCO)
- ✓ Member, Sub-committee on external examiners: Oct 2014 to date
- ✓ Member, Faculty Research Committee: March 2012 to date
- ✓ Member, School Research Committee: April 2012 to 2013
- ✓ Subject Chair, Biological Sciences: March 2010 to Feb. 2012
- ✓ Member, Faculty Science Committee: March 2010 to Feb. 2012
- ✓ Member, Faculty Extended Management Committee: March 2010 to Feb. 2012
- ✓ Member, Senate Committee for Philosophical Grounding: May 2010 to 2016
- ✓ Member, Faculty Alignment Committee: March 2010 to Feb. 2012
- ✓ Member, Faculty Quality Committee: March 2010 to Feb. 2012
- (i) Lecturer 1 (Oct. 2006- Sept 2009)/ Lecturer 11 (Oct. 2003- Sept 2006), Microbial Biotechnology, Department of Microbiology, Olabisi Onabanjo University, Ago-Iwoye, Ogun State, Nigeria.

Work schedule:

Teaching and research. I contributed to the teaching of microbiological topics in undergraduate and graduate programs.

Student advised (Seminars and Laboratory projects):

Honours students – 40 Masters students – 5

Administrative: (and academic session).

Member, Faculty ethics of publication, grants and research committee 2008/2009 Member, Faculty week committee 2008/2009 Head, Missing results search team 2007/2008 Member, Departmental board of examiners 2006/2007 Final year student seminar/project coordinator 2005/2006 Assistant departmental postgraduate coordinator 2005/2006 Member, Faculty seminar committee 2005/2006 Course adviser, 100 level B.Sc. Microbiology students 2005/2006

Undergraduate taught/research courses:

MCB 301: Microbial Genetic and Molecular Biology
Bio 305: Cell and Molecular Biology
Bio 303: General cytology
Bio 208: General Physiology
Bio 002: Basic Physiology and Genetics
MCB 201: General Microbiology 1
MCB 202: General Microbiology 11
MCB 406: Microbial Ecology
MCB 401: Seminar Topics in Microbiology
MCB 490: Research Projects in Microbiology
MCB 315: Bacteriology
MCB 311: Pathogenic Bacteriology

Postgraduate taught/research courses:

Bio 803: Advanced Molecular Biology and Biotechnology MCB 906: Advanced Molecular Genetics MCB 814: Advanced Pathogenic Bacteriology MCB 805: M.Sc. Research seminar MCB 901: Ph.D. Research seminar MCB 821: Applied Microbiology/Microbial Genetics MCB 899: Research Project Bio 804: Molecular Biology

(h) **Postdoctoral scientist (May 2007- Dec. 2008)**, Institute for Microbial Biotechnology and Metagenomics (IMBM), University of the Western Cape, South Africa.

My project entailed:

• Expanding the 16S rDNA framework for the genus Streptomycetes from specific extreme environments via metagenomics and culture-based techniques. The work involves current molecular biology techniques, and the use of bioinformatics.

Work schedule:

- Implementation of actinomycetes research project
- Day-to-day running of the research project
- Presentation of research outputs in form of papers at conferences
- Report writing and result presentation in manuscript form
- Other relevant duties as assigned by the Director

(g) **Postdoctoral fellow (July 2004 – March 2006)**, Life Science Building, Weizmann Institute of Science, Rehovot, Israel IL-76100.

The project entailed:

Transgenically enhancing the virulence of fungi used as biocontrol agent via

- 1. Designing and use of failsafe mechanisms to prevent spread and introgression
- 2. Enhancing of virulence of *Fusarium* spp against *Orobanche*
- 3. Enhancing Colletotrichum against Abutilon
- 4. Enhancing Alternaria cassiae against Cassia senna.

Work schedule:

- Set up experiments
- Implementation of research project
- Day-to-day running of the research project
- Data collection, input, statistical analysis
- Report writing and result presentation in manuscript form
- (f) Post-course trainee (May 2002 October 2002), Molecular Biology and Biotechnology Unit,

International Centre of Insect Physiology and Ecology (ICIPE) Nairobi, Kenya. (Sponsor: OWSD) Training fundamentals (schedule):

- Plasmid isolation, Northern blotting, construction of genomic DNA libraries, DNA probe, Hybridization probe, utilization of public databases on the internet, polyacrylamide gel electrophoresis, fluorescent staining, Restriction fragment Length Polymorphism, Amplified fragment Length Polymorphism, Elisa, Phenotyping, DNA footprinting.
- Bioinformatics: Sequence retrieval and analysis, multiple sequence analysis, phylogeny reconstruction.
- (e) Dissertation Research Internship (DRIP) Scholar (July 2001 December 2001), Molecular Biology and Biotechnology Unit, International Centre of Insect Physiology and Ecology (ICIPE) Nairobi, Kenya. (Sponsor: OWSD)

Work schedule:

- Determination of ethylene production from bacterial isolates using gas chromatography and mass spectrometer
- DNA extraction, RAPD-PCR and targeted PCR amplification of ethylene producing bacteria
- Bacterial identification by API techniques
- Primer design

(d) Research scholar (January 2001 – June 2001), Kenya Sugar Research Foundation (KESREF) Kisumu Kenya. (Sponsor: OWSD).

Work schedule:

- Pilot farm feasibility study of already established screen house work
- Establishment and management of multilocational on-farm research trials.
- Data collection, management and analysis using SAS for windows.
- Microbial plate counts of bacteria isolates obtained from cowpea Stand
- Ascertain probable effect of bacterial inoculum density and determination of inoculum threshold level
- (c) Visiting Research Fellow (July 1998 December 2000), Plant Health Management Division,

International Institute of Tropical Agriculture (IITA) Ibadan, Oyo State.

Work schedule:

- Isolation, purification, screening, and estimation of soil bacteria.
- Establishment and management of screen-house trials (*Striga*).
- Data collection, management and analysis using SAS for windows.

(b) Laboratory assistant (January 1994 - June 1994), Total Quality Control Department, Market Movers Nigeria Limited, Plot 22, Block 'A' Cocoa Industries Road, Ogba, Ikeja, Lagos. Duties:

- Ensuring the fruits to be processed meet all the buying specification of the company.
- Daily supervision of the Company's sanitary condition.
- Bacteriological examination of raw water.
- Supervision of the hygiene level of workers on production line.
- Ascertaining the microbiological quality of the finished products.
- Forwarding memorandum to Production Manager.
- Assessment of product recalls.

(a) **Tutor (Nov. 1992 – Nov. 1993)**, School of Nursing, Ituk Mbang, Akwa Ibom State, Nigeria (NYSC primary assignment).

6. Publications (h-INDEX 13, Google scholar: all citations)

(6a) Papers in refereed journals

2002

 Babalola O.O., Osir E.O., and Sanni A.I (2002) Characterization of potential ethylene-producing rhizosphere bacteria of *Striga*-infested maize and sorghum. African Journal of Biotechnology 1(2): 67– 69. ISSN: 1684-5315. www.ajol.info/index.php/ajb/article/view/14819/58495

- 2) Babalola O.O., Osir E.O., Sanni A.I., Odhiambo G.D. and Bulimo W.D (2003) Amplification of 1amino-cyclopropane-1-carboxylic (ACC) deaminase from plant growth promoting rhizobacteria in *Striga*-infested soil. African Journal of Biotechnology 2(6): 157–160. ISSN: 1684-5315. www.academicjournals.org/ajb/.../Babalola%20et%20al.htm
- 3) Babalola O.O (2003) Molecular techniques: An overview of methods for the detection of bacteria. African Journal of Biotechnology 2(12): 710-713. ISSN 1684-5315. www.academicjournals.org/AJB/contents/2003contentlist/December%202(12).htm - 42k

- Babalola O.O (2004) Molecular diagnosis and typing of microorganisms. Science Focus 6:118-125. ISSN: 1596-7026
- 5) Babalola O.O. and Berner D.K. (2004) Observations on preconditioning duration of *Striga hermonthica* on maize and sorghum yield attributes. Science Focus 8:79–82. ISSN: 1596-7026
- 6) Babalola O.O., Sanni A.I., and Odhiambo G.D. (2004) Isolation of rhizobacteria associated with maize and assessment of their potential for use in *Striga hermonthica* (Del.) Benth. suicidal germination. Journal of Tropical Microbiology and Biotechnology 3 (1): 64–70. ISSN: 1607-4106. http://ajol.info/index.php/jtmb/article/view/35428

2005

7) Gressel, J, Al-Ahmad, H, Amsellem, Z, Babalola, O, Meir, S (2005) Transgenic enhancement of biocontrol agents. Phytopathology (USA), 95 (6): S126–S126 Suppl. S JUN 2005 0031-949X

2007

- 8) Babalola O.O. (2007) Pectinase and cellulase enhance the control of *Abutilon theophrasti* by *Collectotrichum coccodes*. Biocontrol Science and Technology (UK). 17(1–2): 53–61 ISSN: 0958-3157 URL: http://dx.doi.org/10.1080/09583150600828783.
- Babalola O.O., Sanni A.I, Odhiambo G.D., and Baldwyn T. (2007) Plant growth-promoting rhizobacteria do not pose any deleterious effect on cowpea and detectable amounts of ethylene are produced. World Journal of Microbiology and Biotechnology (The Netherlands). 23 (6):747–752. ISSN: 0959-1354 DOI: 10.1007/s11274-006-9290-6.

http://www.ingentaconnect.com/content/klu/wibi/2007/00000023/00000006/00009290

- 10) Babalola O.O., Berner D.K., and Amusa N.A. (2007) Evaluation of some bacterial isolates as germination stimulants of *Striga hermonthica*. African Journal of Agricultural Research 2 (1):27–30 ISSN 1991-637X. http://www.academicjournals.org/ajar/PDF/Pdf2007/Jan/Babalola%20et%20al.pdf
- 11) Baiyewu R.A., Amusa N.A., Ayoola O.A., and Babalola O.O. (2007) Survey of the post harvest diseases and aflatoxin contamination of marketed pawpaw fruit (*Carica papaya* L) in South Western Nigeria. African Journal of Agricultural Research 2 (4):178–181. ISSN 1991-637X
- **12) Babalola O.O.** (2007) Characterization of two isolated lactococcal strains with respect to bacteriocinconcentrations. African Journal of Food Science 1(1):5–10. ISSN 1996-0794. <u>http://www.academicjournals.org/ajfs</u>

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85) Bharti, P. K. and **Olubukola O. Babalola** (2014): Agriculture Ecology and Environment. Discovery Publishing House, Delhi, pp: 213 (**ISBN: 978-93-5056-480-6**). http://www.bagchee.com/books/BB92301/agriculture-ecology-and-environment/

(6d) Online resources

- 86) Ndeddy Aka R J. and Babalola O.O. (Jan 2015) GenBank accession numbers KP717553- KP717563
- 87) Aremu B.R. and Babalola O.O. (April 2014) GenBank accession numbers KJ784522-KJ784534
- 88) Adegboye M.F. and Babalola O.O. (March 2014) GenBank accession numbers KJ542369-KJ542390
- 89) Adegboye M.F. and Babalola O.O. (Feb 2013) GenBank accession numbers JX971505-JX971533
- **90)** Adegboye M.F. and **Babalola O.O.** (2012) GenBank accession numbers JX284398-JX284407/JX860342 JX860399.
- **91) Babalola O.O.** (2010) Introductory developmental cell biology. School of Science and Technology course material, National Open University press, Victoria Island, Lagos, Nigeria. (History and present

trends in cell biology; reproduction, cell division, cell differentiation and growth of cells. A brief study of the molecular basis of cell structure and development. Organelles, proteins and nucleic acids). www.nou.edu.ng/noun/NOUN_OCL/pdf/pdf2/BIO%20205.pdf

 92) Kirby BM, Babalola O.O., et al (2009) Uncultured actinobacterium clone A243A5 16S ribosomal RNA gene, partial sequence. Accession numbers EU931044 to EU931071 (2009); Accession numbers EU931072 to EU931097 (2009); Accession numbers EU931098 to EU931109 (2009) www.ncbi.nlm.nih.gov/pubmed/19278445

(6e) Conference Abstracts and Proceedings

- **93**) Ajilogba CF and **Babalola OO** (2016) Biocontrol and biofertilizer potentials of rhizobacteria from Bambara groundnut (Vigna subterranea). FSASR101. 2016 Autumn International Scientific Conference on Food Safety and Security. University of **Johannesburg, South Africa.**
- 94) Ajilogba CF and Babalola OO (2016) RAPD profiling of *Bacillus* spp with biocontrol potential and their effects on mineral composition of tomato. Session 9.04. The South African Society for Microbiology (SASM) 2016 Biennial Congress. 17-20 January 2016, Coastlands, Umhlanga. South Africa.
- **95) Babalola OO** (2016) Multiple metal tolerant bioaccumulating mine tailing bacteria isolated from North West Province, South Africa. Session 12.01. The South African Society for Microbiology (SASM) 2016 Biennial Congress. 17-20 January 2016, Coastlands, Umhlanga. South Africa.
- 96) Aremu BR and Babalola OO (2016) Development of PCR assay for accurate identification of macergens in exportable vegetables of South Africa. Session 15.05. The South African Society for Microbiology (SASM) 2016 Biennial Congress. 17-20 January 2016, Coastlands, Umhlanga. South Africa.
- 97) Fashola MO and Babalola OO (2016) Screening of heavy metal resistant bacterial from an abandoned gold mine tailings and soil in Krugersdorp, South Africa. Session 17.02. The South African Society for Microbiology (SASM) 2016 Biennial Congress. 17-20 January 2016, Coastlands, Umhlanga. South Africa.
- 98) Ndeddy Aka R and Babalola OO (2015) Metal tolerant, plant growth promoting soil bacteria protected plants against the toxic effects of heavy metals (Cd, Cr, and Ni). Biodiversity and Functioning of Agricultural Soils Poster No 165, In, Brabcová V., Kyselková M., Navrátilová D., Pospíšek M., Baldrian P. (Eds.), 2015. Ecology of Soil Microorganisms Book of Abstracts, Prague, Czech Republic, November 29 December 3, 2015, 357 pp.
- 99) Aremu BR and Babalola OO (2015) Specific identification of macergens from South African exportable vegetable by PCR using specific primers. 29th Effost International Conference. Food Science Research and Innovation. Delivering sustainable solutions to the global economy and society. Food microbiology: New research areas and predictive/monitoring tools for efficient and sustainable risk and food safety assessment and management EFFOST2015_0739. 10-13th Nov 2015. Greece. https://elsevier.conference-services.net/programme.asp?conferenceID=3891&action=prog_categories
- 100) Alori ET, Fawole OB, Afolayan AJ, and Babalola OO (2015) Arbuscular Mycorrhizal Fungi: Occurrence and factors affecting their distribution in selected soils of Southern Guinea Savanna of Nigeria. 29th Effost International Conference. Food Science Research and Innovation. Delivering sustainable solutions to the global economy and society. Food science and process engineering research applications contributing to food security and water conservation EFFOST2015_0755. 10-13th Nov 2015. Greece

- 101) Babalola O.O. (2015) Rhizobacterial community structure in Mahikeng rhizospheric soil and associated plant growth promoting potential. 24 -27 August 2015. 18th International Plant Protection Congress (IPPC). Henry-Ford-Bau, Garystrasse, Berlin, Germany.
- **102)** Shivakumar P. Banakar, Thippeswamy B and **Olubukola O. Babalola** (2015) Screening and production of natural food grade fungal pigments and their antimicrobial activity. International Conference and Exhibition on Biotechnology. 3rd- 5th August 2015. Hyderabad, India.
- 103) Babalola O.O. (2015) Rhizobacterial community structure in Mahikeng rhizospheric soil and associated plant growth promoting potential. 21 -25 June 2015. Rhizosphere4. Maastricht, The Netherlands.
- **104)** Olubukola Oluranti Babalola and Keokeditswe Raven Motsewabangwe (2015) Comparative analysis of autochthonous and zymogenous bacteria in Mahikeng Agricultural Ecosystem. 21 -25 June 2015. Rhizosphere4. Maastricht, The Netherlands.
- 105) Babalola OO (2015) June 16th-19th, 10th International PGPR Workshop. Universite de Liege, Liege, Belgium
- 106) Dare M.O. and Babalola O.O. (2014) Does bush burning reduce arbuscular mycorrhizal fungal spore abundance for succeeding cropping season? Paper at 5th ASM Conference on Beneficial Microbes, Washington DC, USA. September 27 30 2014.
- 107) Esuola CO, Heine T, Babalola OO, Akinyemi SOS, Schlomann M, and Tischler D (2014). Production of fine chemicals from microbial enzymes for horticultural crops development. 29th International Horticultural Congress (IHC 2014), Brisbane. www.ihc2014.org. Sustaining lives, livelihoods and landscape. 17-22 August 2014. http://ihc2014.digitalposter.com.au/posterstopics/24/24c.
- 108) Egbuta M, Mwanza M, Babalola O.O. (2014) Synergistic effects of different filamentous fungi species. The South African Society of Biochemistry and Molecular Biology Conference (SASBMB) P113.Goudini Spa, South Africa. http://sasbmbconference2014.co.za/wp-content/uploads/2014/06/SABMB%20Poster%20schedule%20and%20abstracts%2027%20June.pdf
- 109) Khantsi M. and Babalola O.O. (2014) Comparison of intraspecific variation in the bacterial strains resident in the rhizoplane and rhizosphere of Bambaranut (*Voandzeia subterranea* L. Thouars). P143: Goudini Spa, South Africa. http://sasbmbconference2014.co.za/wp-content/uploads/2014/06/SABMB%20Poster%20schedule%20and%20abstracts%2027%20June.pdf
- 110) Babalola O.O. (2014) Optimization of fermentation parameters for the production of antibiotic by Streptomyces rochei strain NWU49. The International Conference on Beneficial Microbes (ICOBM 2014). Microbes for the Benefits of Mankind. 27-29 May 2014. Parkroyal Penang resort Hotel, Batu Ferringgi, Penang, Malaysia. www.icobm.usm.my/
- 111) Esuola C.O., Babalola O.O., Schlömann M., and Tischler D. (2014) Biocatalytic Potentials of some Baeyer Villiger Monooxygenases (BVMOs). 4th International Conference on Microbial Communication. Microbe talks, MiCom decodes! Understanding interactions in the microbial world. 31st March 3rd April 2014. Rosensale. Friedrich Schiller University Jene, Furstengraben 27, Jena, Germany.
- 112) Adegboye M.F. and Babalola O.O. (2013) Isolation of Polyketides Producing Actinomycete Isolates via PCR-Based Genome Screening for PKS Gene. Molecular Life Sciences 2013 (ID: FTP42), Page 55. International Symposium of the German Society for Biochemistry and Molecular Biology (GBM). 3rd - 6th October. Campus Westend, Goethe University. Frankfurt, Germany.

http://www.molecular-life-

sciences.de/index.php/program.html?file=tl_files/program/GBM%202013_Main%20Programmesmall.pdf

- Ajilogba C.F. and Babalola O.O. (2013) Biocontrol treatment Of Fusarium wilt In tomato. SASM 2013 (ID. 13, Poster) (The 18th Biennial Conference of the South African Society for Microbiology). 24-27 Nov. Forever Resorts Warmbaths, Bela-Bela. South Africa
- 114) Adegboye M.F. and Babalola O.O. (2013) SASM 2013 (ID. 43, Poster) (The 18th Biennial Conference of the South African Society for Microbiology). 24-27 Nov. Forever Resorts Warmbaths, Bela-Bela. South Africa. www.sasm2013.co.za
- 115) Adegboye MF and Babalola OO (2013) Isolation of Polyketides Producing Actinomycete Isolates via PCR Based Genome Screening for PKS Gene (Poster FTP42). Annual Conference of the Association for General and Applied Microbiology (VAAM) in collaboration with the Royal Netherlands Society for Microbiology (KNVM) 10-13 March 2013. Congress Center Bremen und Messe Bremen, Germany.
- 116) Modise L. and Babalola O.O. (2013) Isolation and characterization of bacterial community in cultivated plants rhizosphere of public school gardens in Mahikeng. SASM 2013 (ID. 190, Poster) (The 18th Biennial Conference of the South African Society for Microbiology). 24-27 Nov. Forever Resorts Warmbaths, Bela-Bela. South Africa
- 117) Khantsi M. and Babalola O.O. (2013) 1-Aminocyclopropane-1-carboxylate deaminase activity as a marker for identifying plant-growth promoting rhizobacteria in cultivated soil SASM 2013 (ID. 5, Oral) (The 18th Biennial Conference of the South African Society for Microbiology). 24-27 Nov. Forever Resorts Warmbaths, Bela-Bela. South Africa
- 118) Masenya K and Babalola O.O. (2013) Identification of native rhizosphere community composition of bacteria in Mahikeng soil, South Africa. SASM 2013 (ID. 54) (The 18th Biennial Conference of the South African Society for Microbiology). 24-27 Nov. Forever Resorts Warmbaths, Bela-Bela. South Africa.
- 119) Lawal T.E. and **Babalola O.O.** (2013) Poultry manure as carrier for biofertilizer: effects on maize (*Zea mays*) yield growth SASM 2013 (ID. 47, Poster) (The 18th Biennial Conference of the South African Society for Microbiology). 24-27 Nov. Forever Resorts Warmbaths, Bela-Bela. **South Africa**
- 120) Adegboye M.F. and Babalola O.O. (2013) "Isolation of glycopeptide producing Streptomyces isolates via PCR-based genome screening for oxyB genes" (abstract cod.: 238) V International Conference on Environmental, Industrial and Applied Microbiology BioMicroWorld2013, Madrid (Spain), 2-4 October 2013 http://www.biomicroworld2013.org
- 121) Lawal T.E. and Babalola O.O. (2013) Poultry manure as carrier for *Bacillus subtilis*: Effect on maize (*Zea mays*) growth and yield. OMICS Group conferences. 4th World Congress on Biotechnology. 23-25 Sept 2013. DoubleTree by Hilton Hotel Raleigh-Durham Airport at RTP, NC, USA. J. of Biotechnol and Biomater 3 (3): 96. http://dx.doi.org/10.4172/2155-952X.S1.025
- 122) Adegboye M.F. and Babalola O.O. (2013) Phylogenetic Screening for Antibiotic Producing Actinomycetes from Rhizospheric Soils. 6th Annual International Symposium on Agriculture, 15-18 July 2013, Athens Institute for Education and Research, Athens, Greece www.atiner.gr/abstracts/2013ABST-AGR.pdf

- **123)** Modise L and **Babalola O.O.** (2013) Isolation and identification of rhizosphere bacterial community with potential plant growth promotion traits. 2012/2013 DST-NRF Internship programme intern's research day, pg 51.
- **124)** Sebogodi KM and **Babalola O.O.** (2013) Isolation and molecular characterisation of sulfur-and iron-oxidizing bacteria from Kalahari Goldridge Mine, in the North-West Province, South Africa, 2012/2013 DST-NRF Internship programme intern's research day, Pg 83.
- **125)** Tak HI and **Babalola O.O.** (2012). Ni resistant bacteria isolated from the mining area modulates growth, antioxidant system in *Brassica* under different levels of Ni. *International Biofest Conference*, 12-14 Dec. Hyderabad, **India**.
- 126) Babalola O.O. and Bumunang E.W. (2012) Characterization of Plant Growth Promoting Rhizobacteria (PGPR) from field grown GM and Non-GM maize. The 1st International Conference for GM Crops and Food (ICGMCF) 27-29 November. Page 45. Cairo University, Egypt. http://ebookbrowsee.net/characterization-of-plant-growth-promoting-rhizobacteria-pgpr-from-fieldgrown-gm-and-non-gm-maize-pdf-d512436145
- **127)** Adegboye M.F. and **Babalola O.O.** (2012) Taxonomic Characterization and Antimicrobial activities of Streptomyces Isolates from Rhizospheric Soils. Oral presentation, MRC Early Career Scientists Conference 24-25 October 2012, Parow valley, Cape Town, **South Africa**.
- **128)** Babalola O.O. and Adegboye M.F. (2012) Phylogenetic characterization of culturable antibiotic producing Streptomyces from rhizospheric soils, 3rd World Congress on Biotechnology, September 13-15, Hyderabad International Convention Centre, Hyderabad, India.
- **129)** Bumunang E.W. and **Babalola O.O**. (2012) Bacterial community profiling in the rhizosphere of field grown GM and non-GM corn. P-305, 3rd World Congress on Biotechnology, September, 13-15, Hyderabad International Convention Centre, Hyderabad, **India**.
- 130) Ahmad F. and Babalola O.O. (2012) Isolation and characterisation of Bacillus isolates to determine their mechanisms of antagonism against *Fusarium solani* in vitro. P-114, 3rd World Congress on Biotechnology, September, 13-15, Hyderabad International Convention Centre, Hyderabad, India.
- 131) Adegboye M.F. and Babalola O.O. (2012) Isolation and Characterization of Rhizospheric Streptomyces with Plant Growth Promoting Potential. P-173, 3rd World Congress on Biotechnology, September 13-15, Hyderabad International Convention Centre, Hyderabad, India.
- **132)** Ajilogba C.F. and **Babalola O.O.** (2012) Cultural control of Fusarium wilt of tomato. BioFISA Phase I Programme Closure Conference: Celebrating Four Years of BioFISA, 2-6 September 2012, Irene County Lodge, Centurion, **South Africa**.
- 133) Kodisang S.L., Adegboye M.F. and Babalola O.O. (2012) Identification and characterization of culturable bacteria in the rhizosphere of field-grown crops in Mafikeng area, RSA. DST-NRF internship proggramme 2012/13 Intern Research Presentation day. University of Pretoria, South Africa. 24th February 2012.
- **134)** Ayodele A. Sobowale and **Olubukola O. Babalola** (2011) Potential of *Trichoderma* species to persist within maize (Zea mays) stem long after inoculation. South African Society for Microbiology, Southern Sun Cape Sun Hotel and Conference Centre, **Cape Town**. 6th -9th November 2011. Pg 30.

- 135) Babalola O.O., Bumunang E.W. and Akindolire A.M. (2011) Indigenous rhizobacteria of agricultural importance with peculiarity to selected food crops in Mmabatho municipality of South Africa. South African Society for Microbiology, Southern Sun Cape Sun Hotel and Conference Centre, Cape Town. 6th -9th November 2011. Pg. 31.
- **136)** Babalola O.O. (2010) *Orobanche aegyptiaca* tubercles infection by *Fusarium arthrosporioides* plus mixed enzymes. Oral presentation at the International Conference on "Bio-Processing and Application of Microbial Biotechnology in Agriculture", November 1-3, 2010, Cairo, Egypt.
- 137) Babalola O.O. (2010) Deliberate induction of microbial mutations: a potential cause of socioeconomic impact. ASSAF-DST-NRF First annual South African young scientist's conference, October 12–13, Diep in Die Berg Conference function centre, 929 Disselboom Street, Wapadrand, Pretoria, South Africa.
- 138) Kirby, B.M., Le Roes-Hill, M., Babalola, O.O., Cary, S.C., Tuffin, I.M., Burton, S.G. and Cowan, D.A. (2009) Phylogenetic Diversity of Actinobacterial Populations associated with Antarctic Dry Valley Mineral Soils. Poster presentation. 15th International Symposium on the Biology of Actinomycetes (ISBA'15), August 2009 Shanghai, China
- 139) Babalola O.O., Cook A.E., Cary S.C. and Cowan D.A. (2008) Phylogenetic and culturedependent diversity of actinobacteria in Dry Valley mineral soils. Presented at the 3rd International Conference on Polar and Alpine Microbiology, May 11-15, Banff, Alberta, Canada. <u>http://www.polaralpinemicrobiology.com/PAM_Program.pdf</u>
- 140) Babalola O.O., Cook A.E., Cary S.C. and Cowan D.A. (2008) Phylogenetic and culturedependent diversity of actinobacteria in Dry Valley mineral soils. Presented at Extremophiles-08, September 7-11, Somerset West, South Africa.
- 141) Jonathan Gressel, Sagit Meir, Yoav Herschkovitz, Hani Al-Ahmad, Babalola Olubukola and Ziva Amsellem (2006) Transgenic Biocontrol Agents to Overcome Evolutionary Barriers. Integrating new technologies for *Striga* control: towards ending the witch-hunt. November 5–11, Addis Ababa, Ethiopia.
- 142) Babalola O.O. and Gressel J. (2006) Generation of asporogenic mutants of *Alternaria cassiae* by X-ray irradiation. Poster presented at the IXth International Workshop on Radiation Damage to DNA May 13–17, Tekirova, Antalya, **Turkey**.
- 143) Babalola O.O., Shobowale A.A. and Owolabi A.O. (2006) In-vitro culturing of bacterial species resident on *Vigna unguiculata*. Endogenous scientific efforts in the development of the Nigerian economy within the context of needs. Second Int. Conf. on Science and National Development. University of Agriculture, October 10-13th, Abeokuta, Nigeria.
- 144) Sagit Meir, Ziva Amsellem, Hani Al-Ahmad, Olubukola Babalola, Yoav Herschkovitz and Jonathan Gressel (2005) Biotechnology and the management of weedy *Orobanche*. COST Action 849. Parasitic plant management in sustainable agriculture WG1+4 workshop on means for limiting *Orobanche* propagation and dispersal in agricultural fields 4–6 December 2005, Newe-Yaar Research center, Israel. cost849.ba.cnr.it/ Proceedings%20COST%20Workshop,%20Israel.pdf –
- 145) Gressel J, H. Al-Ahmad, Z. Amsellem, O. Babalola and S. Meir (2005) Transgenic enhancement of biocontrol agents (S -167). Special session: Retropathology: Disease for control of weeds. Annual meeting of the American Phytopathological Society (APS). Phytopathology 95:S126. Publication no. P-

2005-0040-SSA. July 30-August 3. Austin, Texas, USA. meeting.apsnet.org/2005/ program/pdfs/2005FullProgramBook.pdf

- 146) Ziva Amsellem, Sagit Meir, Olubukola O. Babalola, Hani Al-Ahmad, Einat Safran and Jonathan Gressel (2005) Transforming NEP1 toxin gene and other genes into two Fusarium spp. to enhance mycoherbicidal activity against Orobanche –failure, success and progress. Joint Working Groups and MC meeting of COST Action 849, Broomrape biology, control and management 15–17 September 2005, Reading University, UK. Website: <u>http://cost849.ba.cnr.it/</u>
- 147) Babalola O.O., Odhiambo G.D., and Sanni A.I (2004) Screening of three *Striga hermonthica*stimulating rhizobacteria for phytotoxicity in cowpea. Section 7, Grain crop pest management. Advances in Plant Protection Strategies and Technology. 15th International Plant Protection Congress (IPPC 2004) 11-16 May 2004, Beijing, China. http://www.ipmchina.net/ippc/ippc2004/list/section7.htm
- Babalola O.O., Berner D.K., and Sanni A.I (2004) Effect of plant pathogenic *Pseudomonas* strains and their method of application on *Striga hermonthica*-infested maize and sorghum. Section 3, Bio-control. Advances in Plant Protection Strategies and Technology. 15th International Plant Protection Congress (IPPC 2004) 11-16 May 2004, Beijing, China. http://www.ipmchina.net/ippc/ippc2004/list/section3.htm
- 149) Babalola O.O., Osir E.O., Sanni A.I., Torto B., and Odhiambo G.D. (2002) Ethylene-forming bacteria a means to an end in *Striga hermonthica* control. Page 3. In: Christine Silvy (Ed.). The role of genetics and evolution in biological control. Abstracts of the Global International Symposium of the Organisation for Biological Control of Noxious Animals and Plants (IOBC), co-organized with C.I.L.B.A. 14–16 October, 2002. Montpellier, France.
- 150) Babalola O.O., Osir E.O., Hassanali A., and. Masiga D.K (2002). First report of ethylene production in *Enterobacter sakasakii* and *Klebsiella oxytoca*. 8th Symposium of the Biochemical Society of Kenya (BSK). 26–27 September 2002. Institute of Computer Science, School of Biological Sciences, University of Nairobi, Riverside Drive, Nairobi. Kenya.
- **151)** Babalola O.O, Odhiambo G.D, and Odulaja A. (2002) Incidence of Striga hermonthica infestation depths on Striga infection indices and maize yield component. Proceedings of the Horticulture Seminar on Sustainable Horticultural Production in the Tropics. 3rd 6th October 2001, Wesonga JM, Losenge T, Ndung'u CK, Ngamau K, Ombwara FK, Agong SG, Fricke A, Hau B, and Stutzel H.(eds). Department of Horticulture, Jomo Kenyatta University of Agriculture and Technology (JKUAT), Juja-Kenya. ISBN: 9966-923-03-9
- 152) Babalola O.O, Sanni A. I. and Odhiambo G.D. (2001) Screening of three Striga hermonthica stimulating fluorescens bacteria for phytotoxicity in cowpea. Proceedings of the Horticulture Seminar on Sustainable Horticultural Production in the Tropics. 3rd 6th October 2001, Wesonga JM, Losenge T, Ndung'u CK, Ngamau K, Ombwara FK, Agong SG, Fricke A, Hau B, and Stutzel H.(eds). Department of Horticulture, Jomo Kenyatta University of Agriculture and Technology (JKUAT), Juja-Kenya. ISBN: 9966-923-03-9
- **153)** Babalola O.O, Odhiambo G.D, and Sanni A. I. (2001) Study of the synergistic effects of *Pseudomonas* isolates 8mr5, 4mks8 and 10mkr7 on *Striga hermonthica*. 18th conference of the Weed

Science Society of Eastern Africa (WSSEA). 29th October-2nd November 2001 Kenya Agricultural Research Institute hqr, Kaptagat road, Loresho, **Nairobi**.

154) Babalola O.O., Sanni A.I., Emechebe A.M., and Onilude A.A. (2000) Effect of bacterial application systems on *Striga hermonthica* infested maize (*Zea mays* l.). Page 34. Abstract of the 38th Annual Conference of Science Association of Nigerian (SAN), 10–14th Dec., 2000, Ogun State University, Ago-Iwoye, Nigeria. Sciencenigeria.org

(6f) Dissertation Research Projects

- <u>2002, PhD Thesis</u>: Interactions between *Striga hermonthica* (Del.) Benth. and fluorescent rhizosphere bacteria of *Zea mays*, L. and Sorghum bicolor L. Moench for *Striga* suicidal germination In *Vigna unguiculata*. University of Ibadan, Ibadan. <u>http://twas.assaf.org.za:8080/browse?type=author&value=Babalola%2C+Olubukola+Oluranti</u>
 - http://twas.assaf.org.za:8080/bitstream/handle/123456789/38/BABALOLA.pdf?sequence=1
- <u>1996, MSc Thesis</u>: Screening for nisin producing *Lactococcus lactis* in milk and milk products. University of Ibadan, Ibadan.
- <u>1992, BSc (Hons) Thesis</u>: Quality control study of some processed fruit Juices: A case study of Caprisonne products. Ogun state University, Ago-Iwoye.

7. Networking

- 1) 2nd Thünen Symposium on Soil Metagenomics, 11 13 December 2013, www.soilmetagenomics.org. Braunschweig, Germany
- SARIMA 2011 Conference. Preparing research innovation managers for the next decade. 08-10 June, Umhlanga, Durban, South Africa.
- Indigenous knowledge and community innovations in the biosciences and biotechnology in Southern Africa. Regional symposium, 17-19 August 2010. Kwa Maritane lodge, Pilanesberg, South Africa.
- BIO-08, a combined conference supported by the South African Society for Microbiology, Biotech SA and the South African Society for Biochemistry and Molecular Biology, (SASM -Biotech SA – SASBMB). Jan 21-25, 2008. Grahamstown, South Africa.
- 2nd South Africa Proteomics and Genomics Conference, University of the Western Cape. 03-05 March 2008. Cape Town, South Africa.

8. Research Interests

My research interests are centered on the application of molecular/ irradiation biology techniques to understand:

Microbial biotechnology, molecular fingerprinting, soil metagenomics

- Molecular plant-microbe interactions, rhizosphere biology, biofertilizer, bioherbicides, Symbiosis, Rhizosphere Microbiome, New Concepts and Methods in the Rhizosphere, Below and Above Ground Interactions, Rhizo Remediation, Root Endophytes
- > Biological control of noxious plants with microbes, plant pathogens
- > GMO, biosafety and biosecurity

9. Academic recognitions

(9a) Invited Talks

- Jan 24-30, 2016, Visiting Scientist, CE3C Centre for Ecology, Evolution and Environmental Changes Faculdade de Ciências da Universidade de Lisboa, Edifício C2, Piso 5, Sala 2.5.03 Campo Grande, 1749-016 Lisboa, Portugal
- 5th Jan- 4th Feb 2016, visiting research scientist UMR CNRS 5557 Microbial Ecology of Lyon University Lyon 1, Bat. Mendel 43 Bd du 11 Novembre 1918 69622 Villeurbanne (Cedex) – France.
- Oct 7- 21, 2015, Visiting Scientist, Department of Plant Pathology & Microbiology, Iowa State University, Iowa, USA.
- April 28th-30th 2015, Panelist. Knowledge Exchange Forum: Important early career milestones and support. Gender Summit 5 Africa. Cape Town, South Africa.
- Oct -21 Nov 2014, Guest lecturer/Visiting research scientist. UMR CNRS 5557 Microbial Ecology of Lyon University Lyon 1, Bat. Mendel 43 Bd du 11 Novembre 1918 69622 Villeurbanne (Cedex) France.
- August 18th-22nd 2014, Session Chair. The Organisation for Women in Science for the Developing World (OWSD) Fellowship Holders Regional Workshop on Scientific Writing and Science Communication. CSIR International Convention Centre (ICC), Pretoria, South Africa.
- July 15th -18th 2013, Speaker and Session Chair. 6th Annual International Symposium on Agriculture, Athens Institute for Education and Research, Athens, Greece.
- June 19th -July 14th 2013, Visiting, National and Kapodistrian University of Athens, School of Sciences, Faculty of Biology, Department of Genetics and Biotechnology, Athens, Greece.
- September 13-15, 2012. Speaker and Session Chair: 3rd World Congress on Biotechnology, Hyderabad International Convention Centre, Hyderabad, India.
- ➢ May 2010, Exploitation of microbes. South Africa's celebration of the international year of biodiversity (by UNESCO, DST, NRF and SAASTA), Cooke's lake, Mafikeng, North West province, South Africa.
- February 2008, Effective studying and note taking technique, University of Stellenbosch, Stellenbosch, South Africa.
- **Visiting research scientist** February 2007, Japan Atomic Energy Agency, Tokai-Mura, **Japan**.

(9b) Professional avocation/responsibilities

- ✓ Member, advisory board, NGO SEHAT-India (Society for Environment, Health, Awareness of nutrition & toxicology).
- ✓ Host Institution Supervisor, Climate Impact Research Capacity and Leadership Enhancement Programme for sub-Saharan Africa (CIRCLE). The Association of Commonwealth Universities, UKaid.
- ✓ Member NRF Advisory panel for Agricultural Sciences (Thuthuka funding programme) 2013 present.
- ✓ Member NRF Advisory panel for Microbiology and Biochemistry (CPRR & CSUR funding programme) 2013 present
- ✓ Member review panels, Advisory sub-committee GMO act South Africa 2011-present.

(9c) Manuscript reviews responsibilities

Acta Physiologiae Plantarum	2013- to date
Journal of Basic Microbiology	2013- to date
Journal of the Saudi Society of Agricultural Sciences	2013- to date
Polar Biology (Canada)	2011 - to date
Applied Soil Ecology (USA)	2011- to date
Annals of Microbiology (Springer, USA)	2011- to date
Journal of Yeast and Fungal Research	2010 -to date
International Journal of Biological and Life Science	2010 -to date
International Research Journal of Agricultural Science	2009-to date
African Journal of Plant Sciences	2009 -to date
Journal of Horticulture and Forestry	2009 -to date
African Journal of Food Science	2008- to date
African Journal of Microbiology Research	2007- to date
African Journal of Biotechnology	2007 -to date

(9d) External Assessor/examiner (funding and student thesis evaluation)

External examiner/moderator (Microbiology), University of Limpopo, Turfloop campus. 2016. SMIB 032, SCIN 082, SBTC 082, SMOL 081, SBTB 031, SMIC 080, BIOC 302, SANL 081, SBIC 080.
MSc (Microbiology), Rhodes University, South Africa. June 2015 (Miss Aviwe Fulmaka, g13F7779). Title: Investigating soil microbial interactions of Portulacaria afra.
External reviewer, Appointments and Promotions Committee, Faculty of Science, University of Fort Hare (2015)
PhD (Microbiology), VIT University, Vellore, India. Genetic Polymorphic Studies in *Heteropneustes fossilis* and *Clarias gariepinus* using Microsatellite Markers" 2015.
PhD (Microbiology), Bharathidasan University, Tiruchirappalli, Tamil Nadu, India. 2015. (Mr. K Rajesh).
MSC (Microbiology), University of Fort Hare. March 2015 (Ms Busisiwe Makapela, 200906220)
MSC (Microbiology), University of Fort Hare. Jan 2015 (Ms Chinwe Juliana Iwu)

PhD (Nanotechnology), Anna University, Chennai, India, **2015** (Mr S. Satheeskumar). Title: "Synthesis, characterization and application of ZnMgAlO nano material".

Post-harvest Innovation Programme 2014

PhD (Microbiology), Ms. Shafaq Rasool, School of Biotechnology, Shri Mata Vaishno Devi University, Katra, J&K, India.

MSc (Microbiology), University of Fort Hare. June 2014 (Ms Nozuko Zukiswa Seti)

MSc (Microbiology), University of Fort Hare. June 2014 (Ms Andiswa Unathi Badela)

PhD (Microbiology), Bharathidasan University, Tiruchirappalli, Tamil Nadu, India, 2014 (Mrs. P.

Priyadharsini). Title: "Diversity, Characterization and Bioherbicidal potential of terrestrial Actinobacteria against the selected weeds"

PhD (Environmental Science), University of Pune, Ganeshkhind, Pune-4111007, India, **2014** (Aparna B. Gunjal). Title: "A Technology for Developing Soil Conditioner through Microbial Enrichment of Agro-Industry By-Products"

PhD (Microbiology), North-West University, Potchefstroom campus, **2013** (Mrs SG Mulamattathil), Student No: 11284404).

MSc (Microbiology), University of Limpopo, Turfloop campus. **2013** (Ms. K Mokatse 200626704), Title: "Production, Characterization and Evaluation of Fungal Cellulases for Effective Digestion of Cellulose"

PhD student thesis evaluation, Bharathiyar University, Coimbatore, Tamilnadu, India, 2013

PhD (Environmental Science), University of Pune, Ganeshkhind, Pune-4111007, India, **2012** (Mrs. Nita Bhagwan Patil)

NRF Five Year Review of DST/NRF South African Research Chairs Initiative (SARChI) grant holder review assessment, 2013 (1 candidate)

NRF Thuthuka applications review panel **2013**

NRF research funding (proposals) applications 2011(4 candidates), 2012(1 candidate), 2013(1 candidate), 2014 (Blue skies, 2 candidates)

PhD (Environmental Science), North-West University, Potchefstroom campus, 2012(1 candidate)MSc (Microbiology), University of Fort Hare. Jan 2012 (Mr. SS Gusha)

MSc (Biochemistry), University of Fort Hare. Feb. 2012 (Mr. Fredrick Matongo)

MSc (Biochemistry and Microbiology), University of Fort Hare. 2010 (Zimasa N Cwala), 2011

MSc (Microbiology), University of Limpopo, Turfloop campus. **2011** (Ms. R Maribeng, Student No: 200402212, Title: Screening, isolation and characterization of lectins from mushrooms indigenous to Southern Africa)

MSc (Environmental Science), North-West University, Potchefstroom campus, 2011 (Ms. SL Ferreira, Student No: 13036912)

External examiner/moderator: Biochemistry and Microbiology undergraduate modules (MIC 312 June, July; MIC 511, 512 degree exam; MIC 311June, degree exam; MIC 311July, supplementary, Nov 2013, Jan 2014), University of Fort Hare, South Africa. **2012 to date**

Biochemistry and Microbiology (Degree and Supplementary, MIC 311; Honours, MIC 511, 512, and 504/514), University of Fort Hare, South Africa. **2011**

(9e) Honors and Awards

- Established Researcher, National Research Foundation (NRF) Rating, (South Africa) Jan. 2012-2017: C3.
- **2.** Fellow: African Scientific Institute (ASI) 2016
- 3. Fellow: Africa Science Leadership Program (ASLP) 2015
- **4.** Most productive female research, North-West University, FAST, Mafikeng campus, North-West University 2014.
- 5. Most productive NRF rated researcher Mafikeng campus, North-West University 2014.
- South Africa /Argentina Joint Science and Technology Research "Prospection, identification and characterization of cellulases coding gene for obtaining bioethanol" (Aug 2013) UID: 91990. R450, 000.
- Indigenous Knowledge Systems Call 2013 (IKS12102214311) July 2013- June 2014. "Studies on the resident root-nodule bacteria from landraces of *Vigna subterranean* (Bambara groundnut). R500,000
- 8. Top 20% performer bonus (R36 686.00) 2013; (R40 701.00) 2014
- 9. Merit Bonus, for contribution to 2011 research output (R138 480.00) 2012
- **10.** Knowledge Interchange and Collaboration (**KIC**) funding, UID: 83109, 2013 (**R**35, 000), UID: 98460, 2015 (**R**25, 000).
- 11. Merit Bonus, Institutional Research Excellence Award (IREA) 2011
- 12. Merit Bonus, for contribution to 2010 research output (R19 944.30) 2011
- Online Distance Learning, University of Bradford, UK, Applied Dual-Use Biosecurity Training Course Bursary, United States Department of State, Bioengagement Program (£1,860 Sterling) 2012.
- 14. Merit Bonus, Institutional Teaching Excellence Award (ITEA) 2011.
- 15. North-West University, Faculty (of Agric, Sci. & Tech) Travel grant. (R28, 000) for an international meeting, Sept. 2011, Italy.
- 16. Merit Bonus, Institutional Research Excellence Award (IREA) 2010.
- 17. Vice Chancellor's award (North-West University) for the Top 20 employees 2010.
- 18. North-West University, Faculty (of Agric, Sci. & Tech) Travel grant. (R21, 000) for an international conference, Nov. 2010, Egypt.
- **19.** National Research Foundation, **financial support** UID73792 (R15, 000) to attend ICGEB-Biosafety Workshop, Sept 2010, Italy.
- **20.** North-West University, Faculty (of Agric, Sci. & Tech) **Research grant**, April 2010. Microbial diversity of Mmabatho municipality (R30, 000).
- 21. Award of Olabisi Onabanjo University Senate Research grant (OOU/SRG/07/5) (N200, 000), 2008.
- **22.** University of the Western Cape, NRF/UWC block grant for overseas conferences, May 11-15, 2008 Banff, Alberta, Canada
- 23. Network of Centers of Scientific Excellence, UNCTAD Advanced laboratory training in Biotechnology and Molecular biology, University of Cape Town, South Africa. October 16 2006 – January 16 2007.

- **24.** DBT-TWAS (2006, 12 months) Postdoctoral fellowship Award, Centre for Biotechnology-Jawaharlal Nehru University, New Delhi (Prof Uttam Pati). Gratefully declined
- **25.** Junior Investigator Award. National Institute of Standards and Technology (NIST, USA), (covers the registration fee, accommodation expenses, meals and drinks, and the Airport-Hotel-Airport transfers) to participate in *the IX International Workshop on Radiation Damage to DNA* held on May 13-17, 2006 in Tekirova, Antalya, Turkey.
- **26.** International Atomic Energy Agency (IAEA) Fellowship, for training in Plant Breeding and Genetics, administered by Weizmann Institute of Science (WIS) from September 2005 February 2006.
- **27.** Beahrs Environmental Leadership Program, University of California at Berkeley. Partial scholarship, 22 June 16 July 2005, for training in Sustainable Environmental Management. Funded by the David and Lucile Packard Foundation.
- Postdoctoral Fellowship: Feinberg Graduate School, Weizmann Institute of Science (WIS), Israel July 2004 – August 2005.
- **29.** Travel aid (for a conference in Paris): International Centre of Insect Physiology and Ecology (ICIPE) October 2002.
- **30.** Young Scientist Travel Award (for a conference in South Africa): International Union of Biochemistry and Molecular Biology (IUBMB). November 2001.
- **31.** Doctoral fellowship: Third World Organization for Women in Science (TWOWS, now OWSD). Trieste Italy January 2001 31st December 2001, 14th May 2002 14th November 2002.
- **32.** Visiting Research Fellowship: International Institute of Tropical Agriculture (IITA), Training Program. July 1998 December 2000
- **33.** Ogun State Governor, once-off bursary for BSc (Hons), 1992.

10. Research Niche Area

Title: Food Security and Safety Sub-programme 1: Plant Food production

11. Professional association

Member, South African Council for Natural Scientific professions (SACNASP: 400260/10) 2010 to date Member, Royal Society of South Africa (RSSA) 2010 to date Member, South African Society for Microbiology (SASM) 2010 to date

Member, South African Society for Biochemistry and Molecular Biology (SASBMB) 2007 to date

Member, South African Women in Science and Engineering (SAWISE) 2010 to date

Member, Org. of Women Scientists for the Developing World (formerly, TWOWS; now OWSDW, ID 3591) 2000 to date

Member, The Science Advisory Board (SAB)

Member, American Society of Microbiology (ASM)

Member, Southern African Research and Innovative Management Association (SARIMA) 2011 to date

Member, South African Association of Women Graduates (SAAWG) 2010 to date Member, International Society for biosafety research (ISBR)

12. Community engagements

- Biotechnology enlightenment projects for the community by students in the Microbial Ecology course were organized annually
- A programme (Bio4LIFE) was developed for the rural areas concerning the importance of careful use of chemical fertilisers

13. Skills/Strength/Competency

- <u>Good leadership skill</u>: Many have testified to my high emotional intelligence. I am a role model amongst offspring's from my parents. I led the Department of Biological Sciences successfully in my tenure. I resolved conflict amicably. I am actively leading a group of upcoming scientists in Microbial Biotechnology. The team comprises of Hons, MSc, PhD students and postdoctoral fellows. I handled the Quality Control committee for my Faculty in a time saving manner.
- <u>Excellent background in Biology</u>: Besides my BSc (Hons), Msc and PhD in Microbiology, I demonstrated a good background in the design and layout of all my experiments (laboratory, screenhouse and field) techniques, enzyme activity assay methods, microbial ecology of bacterial-plant/fungal-plant relationships, isolation and identification of microbes (Microbial techniques). Evidently I have two international postdoctoral exposure in Biotechnology.
- I identified research problems, developed, analyzed and executed the proposals
- <u>Statistical analyzes</u>: I disseminated significant findings using SAS for Windows and JMP4.
- <u>Computer knowledge</u>: I handled Word Processing, Power Point presentations, Excel spreadsheet, Cricket Graph, Endnote and Reference manager, UNIX, and other operating systems. I am Conversant with workflow system (**Oracle**) and I used advance **eFUNDI**: to communicate with students, deposit teaching material, conduct assessment, and make announcement.
- <u>Current molecular biology techniques</u>: I managed a team of upcoming scientists in my research team on DNA extraction methods (genomic DNA, plasmid), RNA extraction methods (bacteria, fungi), RAPD, PCR (RT-PCR, Nested PCR, Quantitative real-time PCR, touchdown PCR, colony PCR), T-RFLP, AFLP, RFLP, ARDRA, DGGE, RNAi, Western blot, Southern blots, dot blots, DNA electrophoresis, protein electrophoresis (SDS polyacrylamide gel electrophoresis), principle of gene manipulation, construction and screening of a plasmid genomic (and metagenomics) DNA libraries, cloning (competence cell, transformation, enzymatic digest), sequence analysis, protein purification, and Tissue culture techniques.
- <u>Strong communication skills and good written skill</u>: This is evident in my prolific publication style. 2010 (5 single authored journal articles); 2011 (9 journal articles); 2012 (14 journal articles). To this end, I directed every student that passes under my mentorship to write and publish their research findings.

- <u>Interdisciplinary teams, and multicultural settings capacity:</u> I served in Nigeria (many years), Kenya (2 years), Israel (2 years), South Africa (>7 years), besides my other scientific endeavors in Africa, Asia, Europe, North America, and South America. I partnered with international scientists in my field:
- <u>Working knowledge of bioinformatics</u>: I implemented my routine research work in association with NCBI, Pubmed, Oligo (primer design), CLUSTALW, CLUSTALX, Blast, Multalign, DNAMAN, MEGA5, Internet information retrieval, Phylowin, TNT, BioEdit, PHYLIP, MP, MAFFT. I attended bioinformatics workshops to keep abreast of latest developments in the field.

Collaborator	Institution	Nature/Extent of
		partnership
Dr Katherine M.	National and Kapodistrian University of Athens, School	Research
Pappas	of Sciences, Faculty of Biology, Department of Genetics	
	and Biotechnology, Athens, Greece	
Dr Eugenia Barros	The Council for Scientific and Industrial Research	Research/co-
	(CSIR) in South Africa.	supervision
Dr Claire Prigent	UMR CNRS 5557 Microbial Ecology of Lyon	Implementation of
Combaret	University Lyon 1, Bat. Mendel	joint research
	43 Bd du 11 Novembre 1918	projects, book
	69622 Villeurbanne (cedex) - France	chapter,
Prof Bernard R. Glick	Department of Biology, University of Waterloo,	Publications
	Canada	
Dr Paola Monica Talia	Instituto de Biotecnología CICVyA, CNIA INTA	Implementation of
	Castelar. Los Reseros y Las cabañas s/n Hurlingham.	joint research
	Argentina	projects
		Student exchange
Dr Dhanasekaran	Department of Microbiology Bharathidasan University,	Publication, expert
Dharumadurai	Tiruchirappalli – 620024. Tamil Nadu, India	committee member,
		reviewers, evaluation
Prof Gwyn A. Beattie	Department of Plant Pathology & Microbiology	Research
	Iowa State University, Iowa, USA	
Dr Stefan Marius	"Alexandru Ioan Cuza" University, Faculty of Biology,	Implementation of
	B-dul. Carol I, nr. 20 A, 700506, Iasi, Romania	joint research
		projects
Prof Cristina Cruz	CE3C - Centre for Ecology, Evolution	Research
	and Environmental Changes	
	Faculdade de Ciências da Universidade de Lisboa,	
	Edifício C2, Piso 5, Sala 2.5.03	
	Campo Grande, 1749-016 Lisboa, Portugal	

14. Collaborators

15. News

Raven in Argentina

http://intranet.inta.gob.ar/noticias/boletin-de-noticias/boletin-301/compartir-el-conocimiento-para-crecer-juntos

Tumelo in Argentina

http://inta.gob.ar/noticias/argentina-es-el-lugar-elegido-por-tesistas-extranjeros

16. Personal interests

Traveling, cuisine, swimming

16. Referees

Prof Diran Makinde

Director, AU/NEPAD-African Biosafety Network of Expertise (ABNE) University of Ouagadougou, 06 BP 9884 Ouagadougou 06, **Burkina faso** Tel: +226 50 33 15 01; Cell: +226 76 69 02 10 **Email**: <u>diran.makinde@nepadbiosafety.net</u>

Prof Anthony I. Okoh

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Prof Bernard R. Glick

Department of Biology, University of Waterloo, Waterloo, Ontario, N2l 3G1, **Canada** Tel: (519)888-4567 ext. 5208; Fax: (519) 746-0614. **Email:** glick@sciborg.uwaterloo.ca

Prof (Mrs.) Eucharia Unoma Kenya

Biotechnology, Biosafety & Biosecurity Consultant International Centre for Health Interventions & Research in Africa P.O. Box 76662 - 00508, Yaya Towers; Tel: +254 722 721 435 Nairobi, **Kenya**. **Email**: <u>eucharia.kenya2012@gmail.com</u>

Prof Abiodun I. Sanni

Department of Microbiology, Faculty of Science, University of Ibadan, Ibadan, Nigeria

Tel: +2348023341920. Email: abiodun_sanni@yahoo.co.uk

Prof Chris Gehring

Division of Chemistry, Life Science & Engineering, Building 2, Room 4222 P.O. Box # 2035 4700 King Abdullah University of Science and Technology Thuwal 23955-6900. Kingdom of **Saudi Arabia** T: + 966 (2) 808 2388 or + 922 (2) 808 2382 **E-mail:** christoph.gehring@KAUST.edu.sa

Dr Ellie Osir, Ph.D.

Senior Program Specialist Innovation, Policy and Science (IPS), Regional Office for Southeast and East Asia (ASRO), International Development Research Centre (IDRC), 22 Cross Street, #02-55, South Bridge Court, **Singapore**. Tel: +65-6438-7877; Fax: +65-6438-4844. **Email**: <u>eosir@idrc.org.sg</u>

17. Post graduate students (for the period at NWU)

Prior to joining NWU: Graduated 47 Hons, and MSc At NWU: 22 Hons, 7 Msc, and 3 PhD

Degree	Student	Supervisor	Result
BSc (Hons) research projects students			
2010	Madyibi Lorato M (18037852)	Babalola OO	Pass
2010	Bumunang Emmanuel M (22048219)	Babalola OO	Pass
2010	Sebogodi Keletso M (17099587)	Babalola OO	Pass
2010	Ndeddy Aka Robison (18022200)	Babalola OO	Pass (characterization and identification of enterobacteriaceae from fresh bovine tripe)
2011	Mokone Peter Ho (18035302)	Babalola OO	Pass
2011	Kodisang Seiphepo Lena (23409525)	Babalola OO	Pass
2011	Akindolire Muyiwa Ajoke (22826424)	Babalola OO	Pass
2012	Mogatianyane Keneilwe (21449090)	Babalola OO	Pass
2012	Esau Boipelo (21910040)	Babalola OO	Pass
2012	Motlagomang Khantsi (16162749)	Babalola OO	Pass
			Faculty Prize, Overall 2 nd Best Hons
			Student NWU, 2012, distinction in
			Hons thesis, Best PG student, 2013.
2013	Motsewabangwe KR (21472807)	Babalola OO	Pass
			Overall winner in the national
			FameLab competition, National
			Science Festival (Scifest) Grahamstown
			in 2013.

2013	Gae Neo A (21981183)	Babalola OO	Pass
2013	Kupi T (21508690)	Babalola OO	Pass
2013	Thebe Tumelo (22615865)	Babalola OO	Pass
2013	Rorisang Wendy Mmeno (21986762)	Babalola OO	Pass
2014	Adem Mohomud (21888205)	Babalola OO	Pass
2014	Mongadi Khomotso (21407398)	Babalola OO	Pass
2014	Mokgakane lindiwe (23129840)	Babalola OO	Pass
2014	Motete Tshoganyetso (23145889)	Babalola OO	Pass
2014	Frankel Thabiso (23264748)	Babalola OO	Completed, DST/NRF intern 2014
2014	Serumula Ketshepile Beverly	Babalola OO	Pass
	(23251905)		
2014	Chukwuneme Chinenyenwa Fortune	Babalola OO	Pass
	(25540122)		
2015	Onkemetse Mosetlhe (23789700)	Babalola OO	Pass

Duration	Student	Supervisor	Result
2011-2013	Bumunang Emmanuel M (22048219) Impact of field grown genetically modified corn on indigenous rhizobacteria	Babalola OO	Pass. Published 3 articles, and 1 conference abstract. Faculty 2013 best MSc student award (R40, 000). Another article is under consideration
2011-2013	Sebogodi Keletso M (17099587) Molecular characterization of iron and sulfur oxidizing bacteria from Kalgold mine	Babalola OO	Pass. Nationwide best presenter DST/NRF interns 2012.
2011-2013	Kedibone Masenya (23405805) Determination of microbial community structure of bacteria from Mafikeng and Zeerust townships	Babalola OO	Pass . Published an article.
2012-2013	Ajilogba Caroline F (23703563) Molecular characterization of native <i>Bacillus</i> spp with biocontrol potential for Fusarium wilt of tomato	Babalola OO	Pass. Published 2 articles, 2 articles are under consideration, Faculty Prize, Overall 2 nd Best MSc Student NWU, 2012, SASM 2013 student attendance award
2012-2013	Modise Lorato M (18037852) Analysis of bacterial communities in cultivated plants rhizosphere of Mahikeng in the North-West Province	Babalola OO	Pass. An article is under consideration
2012-2014	Ajoke M Akindolire (22826424)	Ateba CN and	Pass . Published an article

	Detection and Molecular Characterizationof Virulence Genes in Antibiotic ResistantStaphylococcus aureusFrom Milk UsingPCR analysis	Babalola OO	
2012-2016	NdeddyAkaRobison(18022200)Identificationandcharacterizationofheavymetal-tolerantbacteriaisolatedfromminetailingsandtheirforphytoextractionbacteriabacteria	Babalola OO	Publishedanarticle.Submittedanothermanuscript
2013-2016	Motlagomang Khantsi (16162749)	Babalola OO	Ongoing
2014-2016	Motsewabangwe K. Raven (21472807)	Babalola OO	Ongoing, Argentina exchange bilateral project
2014-2016	Thebe Tumelo (22615865)	Babalola OO	Ongoing, Argentina exchange bilateral project
2015-2016	Mokgakane Lindiwe (23129840)	Babalola OO	Ongoing, Protea exchange bilateral project/ Innovation masters scholarship 2015 NRF
2015-2016	Oluseyi Samuel Olanrewaju (26704005)	Babalola OO	Ongoing
2015-2016	Oluwadara Pelumi Alamu (26689189)	Babalola OO/Mwanza M	Ongoing
2015-2016	Olalekan Ayodele Adedayo (27048187)	Babalola OO	Ongoing
2016-2017	Rorisang Wendy Mmeno (21986762)	Babalola OO	Ongoing
2016-2017	Refiloe Octavia Lecogo (22646795)	Babalola OO/Manjoro Munyaradzi	Ongoing
2016-2017	Neo Gae (21981183)	Babalola OO	Ongoing

PhD theses st	tudents			
Duration	Student	Supervisor	Result	
2011-2015	Adegboye Mobolaji	Babalola OO	Pass. Published 7 papers. Faculty Prize, overall	
	Felicia (23229926)		2 nd Best PhD Student NWU, 2012. Faculty	
			2013 best PhD student award (R80, 000).	
			SASM 2013 student attendance award.	
			Recipient H3abionet/sanbio scholarships for	
			short-term training for Phd students.	
2012-2016	Aremu Rhoda	Babalola OO	Pass. Published two articles. Has two	
	Bukola (23925523)		manuscripts accepted. Winner 1 st Prize	
			SASM2016 best PhD student presentation.	
2013-2016	Egbuta Mary	Babalola	Submitted. An article is under consideration.	
	Augustina	OO/Mwanza M	Recipient H3abionet/sanbio scholarships for	

	(23703563)		short-term training for Phd students. Faculty 2014 best PhD student award (R80, 000).
2012-2016	Esuola Catherine Oluwakemi (24054887)	Babalola OO/ Schlömann M./ and Tischler D.	Writing up. (DAAD, Germany). An article is under consideration
2013-2016	Fashola M Omotola (24804460)	Babalola OO/Ngole V	Writing up. Published an article. An article is under consideration. Faculty 2015 best PhD student award (R80, 000). Winner SASM 2016 travel award
2014-2016	Ajilogba Caroline F (23703563)	Babalola OO	Ongoing. Faculty 2015 best PhD student award (R80, 000). Winner SASM 2016 travel award
2015-2017	Adeniji Adetomiwa Ayodele (26352842)	Babalola OO	Ongoing
2016-	Adegboyega Taofeek Temitope	Babalola OO	Ongoing
2016-	Ayangbenro Ayansina Segun (28072693)	Babalola OO	Ongoing, 2016 NRF–TWAS African Renaissance Doctoral Fellowships SFH150929143105
2016-	Masowa Manare Maxson	Kutu FR/Babalola OO	Ongoing

Exchange students/scientists hosted and the source of funds				
Duration	Fellow	Institute/Country of origin Source of func		
2 months, 2013	Olorunjuwon Bello	Olabisi Onabanjo University, Nigeria	TETFund	
30 days, August	Ben Guerrero Emiliano	Instituto de Biotecnología CICVyA,	SA/Argentina	
2014		CNIA INTA Castelar, Argentina	bilateral	
30 days, June	Facundo Felix	Instituto de Biotecnología CICVyA, CNIA	SA/Argentina	
2015		INTA Castelar, Argentina	bilateral	
6 months, June -	Adesetan Titilayo	Olabisi Onabanjo University, Nigeria	TETFund	
Nov 2015				

Postdoctoral Fellows				
Duration	Fellow	Host	Status	
Oct 2011 to Sept 2014	Dr Faheem Ahmad (23849843), PhD,	Babalola OO, NWU	Done	
2013-SFP12091512869	AMU, India			
Jan 2012 to May 2014	Dr Lubanza Ngoma (24014028), PhD,	Babalola OO, NWU	Done	

	Wits, SA		
Jan 2012 to July 2014	Dr Hamid Igbal Tak (24037699), PhD	Babalola OO, NWU	Done
2013-SFP12090312175	AMU, India		
Jan 2013 to Jan 2014	Dr Ezekiel Lawal (24870552), PhD UI,	Babalola OO, NWU	Done
	Nig.		
Nov 2013 to Jan 2015	Dr Olajire Michael Dare (25665197),	Babalola OO, NWU	Done
	PhD UI, Nig.		
Jan 2015 to Dec 2015	Dr Elizabeth Temitope Alori	Babalola OO, NWU	Done
	(26940922) PhD Ilorin, Nig.		
Jan 2015 to Jan 2016	Dr Abeer Ahmed Qaed Ahmed	Babalola OO, NWU	Done
	(26923408) PhD, CIB, China		
July 2014 to date	Dr Shivakumar P. Banakar (26426803)	Babalola OO, NWU	Ongoing
	PHD, KU, India		
May 2015 to date	Dr Mobolaji Felicia Adegboye	Babalola OO, NWU	Ongoing
2016-SFP150731133595	(23229926) PhD, NWU, SA		
	Awardee NRF scarce skill postdoctoral		
	fellowship		
2016	Dr Renganathan Seenivasagan Periyar	Babalola OO, NWU	Ongoing
	University, India		

18. Research funds

Funds source/project title	PI	Duration	Status	Amount
Incentive Funding for Rated Researchers 2012	OOB	7 years	2012-2017	R40,000
(IFR1203150666; UID:81192)				PA**
Indigenous Knowledge Systems Call 2013	OOB	1 year	2013-2014	R500,000**
(IKS12102214311; UID 86625) "Studies on the				
resident root-nodule bacteria from landraces of Vigna				
<i>subterranean</i> (Bambara groundnut)				
Knowledge Fields Development (Development	OOB	1 year	2013	R35,000**
Grants) UID: 83109				
South Africa / Argentina Joint Science and Technology	OOB &	3 years	2014-2016	R 450,000 ^{**}
Research "Prospection, identification and	Dr Talia			
characterization of cellulases coding gene for obtaining	Paola			
bioethanol"(Aug 2013) UID: 91990				
http://www.mincyt.gob.ar/convocatoria/programa-de-				
cooperacion-mincyt-dst-sudafrica-2013-8011				
NRF/Protea Joint call 2014. Protection of maize by	OOB &	2 years	2014/2015-	R137,100**
Pseudomonas Plant Growth Promoting Rhizobacteria	Dr Claire		2015/2016	
against Fusarium graminearum (FSTR14070673999;	Prigent-			

UID95111)	Combaret			
Knowledge Interchange and Collaboration (Conference Grants) (KIC150916142751; UID: 98460)	OOB	1 year	2015	R25,000**
UK – South Africa Researcher Links Mobility 2016 160215158213	OOB	1 month	2016	R50,000*

Amount requested

** Amount already granted

Citation indices

	All	Since 2010
<u>Citations</u>	726	567
<u>h-index</u>	14	12
i10-index	18	15

Babalda

Prof BABALOLA Olubukola Oluranti J29/59/71/72/73/74/75/B_Vac