### **CURRICULUM VITAE**

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#### **Education**

Degree	Discipline	Institution	Year
1. PhD	Plant-Microbe Interaction	University of Ibadan.	2013
2. M. Sc.	Microbiology (Plant-Microbe interaction)	University of Ibadan.	2008
3. B. Sc.	Microbiology	University of Ibadan	2002

# **International Research Experience**

**1. Postdoctoral Research Fellow** (Dec. 5<sup>th</sup>, 2018 to June 2<sup>nd</sup>, 2019): TWAS-DBT, Government of India Postdoctoral Research Fellowship. Undertaken at Translational Crop Research Laboratory, Department of Bioscience and Bioengineering, India Institute of Technology, Guwahati, India.

**Work Experience:** Deciphering the molecular mechanisms of interaction between rhizobacteria and cowpea towards adaptation to abiotic stress.

**2.** Cooperation Visits Research Fellow (Dec. 15<sup>th</sup>, 2014 to March 15<sup>th</sup>, 2015): TWAS-DFG Cooperation Visits Fellowship Award for scientists from sub-Saharan Africa. Undertaken at Molecular Phytopathology and Mycotoxins Research Laboratory, University of Goettingen, Germany.

**Work Experience:** Molecular evidence of patho-toxigenic *Fusarium* species inhibiting seed germination and seedling growth of Tomato (*Lycopersicon esculentum*) in Nigeria.

3. Visiting Research Scholar (Aug 23<sup>rd</sup>, 2011-Oct. 31<sup>st</sup>, 2011): West Africa Research Association Residency Fellowship Award Grant. Undertaken at Molecular Environmental Plant Physiology Laboratory, Department of Biological Sciences, Kent State University, Kent, Ohio, Unites States of America (2011)....http://www.kent.edu/einside/artieledisplay.cfm.

**Work Experience:** Molecular characterization of phytobeneficial rhizobacteria of maize isolated from Southwestern Nigeria.

**4. Research Fellow** (April 1<sup>st</sup> 2007- June, 30<sup>th</sup>, 2008): International Institute of Tropical Agriculture (IITA), Ibadan (CGIAR group), Nigeria Research Fellowship award (2007). Undertaken at Germplasm Seed and Plant Health Unit, IITA, Ibadan, Nigeria.

**Work Experience:** Isolation, identification and in-vitro evaluation of biopesticides as an antagonist to *Mycosphaerella fijiensis* MORELET of Banana and Plantain. M. Sc Dissertation

#### Nigerian Work Experience

**1. 2016 - to date:** Department of Biological Sciences, College of Basic and Applied Sciences, Mountain Top University, Prayer City, Ogun State, Nigeria

**Position (s):** Lecturer1 (2016–2017), Senior Lecturer (2017–2020), Assoc. Professor (2020-till date) **Research Focus:** Molecular mechanisms that drives adaptation of crops to abiotic stress under the influence of pathogenic or beneficial soil microorganisms (fungi and/or bacteria).

Courses Taught: Soil microbiology, Environmental Microbiology and General Microbiology

2. 2012-2016: Department of Biological Sciences, Ajayi Crowther University, Nigeria

**Position (s):** Assistant Lecturer (2012 – 2014), Lecturer II (2014-2016)

**Research Focus:** Effects of soil borne *Fusarium* pathotypes on tomato growth.

Courses Taught: Plant-Microbe Interactions, Soil and Environmental Microbiology

3. 2009-2012: Department of Botany and Microbiology, University of Ibadan, Oyo State, Nigeria.

Positions Held: Research/Teaching Assistant

**Research Focus:** PhD research Project: Phyto-beneficial effects and molecular characterization of phytobeneficial rhizobacteria of maize (*Zea mays* L.).

**Courses Taught:** Demonstration of microbiology practicals to undergraduate students

### **Selected Key Publications**

- **1. Abiala, M. A.**, Kelechi Oleru, Taiwo Balogun, Manalisha Saharia, Bolanle Opere & Lingaraj Sahoo (2020): Soil borne *Fusarium solani* exhibited pathogenic effect on tomato cultivars in Nigeria. **Archives of Phytopathology and Plant Protection**, DOI: 10.1080/03235408.2020.1824338.
- **2.** Akanmu, A. O., Sobowale, A. A., **Abiala, M. A.**, Olawuyi, J. O, Odebode, A. C. 2020. Efficacy of biochar in the management of *Fusarium verticillioides* Sacc. Causing ear rot in *Zea mays* L.**Biotechnology Reports**, 26:1-12
- **3. Abiala, M. A**, Abdelrahman M, Burritt DJ, Tran L -SP. 2018. Salt stress tolerance mechanisms and potential applications of legumes for sustainable reclamation of salt-degraded soils. **Land Degradation and Development,** 1–11. https://doi.org/10.1002/ldr.3095.
- **4.** B.O. Oyewole, O.J. Olawuyi, A.C. Odebode, **M.A. Abiala**. 2017. Influence of Arbuscular mycorrhiza fungi-AMF on drought tolerance and charcoal rot disease of cowpea. **Biotechnology Reports**, 14: 8–15. DOI: 10.1016/j.btre.2017.02.004.
- **5. Abiala, M. A**, John Olayiwola, Oluwatoyin Babatunde, Olapeju Aiyelaagbe and Sunday Akinyemi. 2016. Evaluation of therapeutic potentials of plant extracts against poultry bacteria threatening public health. **BMC Complementary and Alternative Medicine**, 16:1-8. DOI: 10.1186/s12906-016-1399-z
- **6. Abiala**, **M. A**, A. C. Odebode, S. F. Hsu, and C.B. Blackwood. 2015. Phytobeneficial properties of bacteria isolated from the rhizosphere of maize in southwestern Nigerian Soils. **Applied and Environmental Microbiology**, 81: 4736 4743. 3. DOI:10.1128/AEM.00570-15.
- **7. Abiala, M. A** and Adegboyega. C. Odebode. 2015. Rhizospheric Enterobacter enhanced maize seedling health and growth, **Biocontrol Science and Technology**, 25:4, 359-372, DOI: 10.1080/09583157.2014.981248.
- **8. Abiala, M. A.**, Fatima, M. A & Adegboyega C. O. 2015. Antifungal effects of selected botanicals on fungal pathogens of watermelon fruit, **Archives of Phytopathology and Plant Protection.** 48:7, 569-577. DOI: 10.1080/03235408.2015.1075297.

# **Selected Conferences Attended and Paper Presented**

- **Abiala M. A** (Invited Guest), Sanjib Kumar, Richa Srivastava and Lingaraj Sahoo. 2019. Harnessing stress tolerance for sustainable agriculture: Focus on African Cowpea. Assam Botany Congress (ABC-01) and International Conference on Plant Science, February 4-6, 2019, Guwahati, Assam, India
- **Abiala, M. A**, Rollwage, A., Katharina Pfohl, K, Karlovsky P. 2015. Pathogenicity and mycotoxin profiles of *Fusarium* isolated from a tomato field in Nigeria. 37<sup>th</sup> Mycotoxin workshop. June 1-3, 2015. Bratislava, Slovakia.
- **Abiala M. A,** and Adepoju, R. A. 2013. *Fusarium* species inhibited seed germination and seedling growth of tomato. Presented at the 3<sup>rd</sup> Nigerian Young Academy General Assembly/National Conference at Faculty of Science Lecture Theatre, University of Ibadan, Ibadan from 2<sup>nd</sup> 4<sup>th</sup> of July, 2013.

