

## Curriculum Vitae for Dr. Annette Obukosia Busula

### Expertise: Entomology, Parasitology & Ecology

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#### Education and qualifications

<b>May 2017</b>	PhD (Medical Entomology and Parasitology) Wageningen University and Research, the Netherlands.
<b>Thesis</b>	Microorganism-mediated behavior of malaria mosquitoes <a href="http://edepot.wur.nl/407874">http://edepot.wur.nl/407874</a>
<b>December 2012</b>	MSc (Applied Parasitology), the University of Nairobi, Kenya
<b>December 2006</b>	BSc. (Hons), Zoology and Botany. Moi University, Kenya.

#### Profile/biography

I am a young scientist (medical entomologist) and a lecturer of Biological and Agricultural sciences with over ten years' experience in malaria and research at Wageningen University, KEMRI and ICIPE, a reviewer of manuscripts at International Journal for Parasitology and at African Health Sciences. I have years of experience as a chairperson of the following departments in KAFU: HIV/AIDs Prevention and Control, Medical advisory, Occupational Safety and Health and Biological and Agricultural Sciences. I am a highly motivated, dynamic, ambitious, creative, hardworking, trustworthy, reliable, results-driven person with laboratory and field-work experience in medical entomology and parasitology, analytical and good writing skills individual, with ability to prioritize multiple assignments. I work independently and as a team player in research and academic institutions notably, the Kenya Medical Research Institute (KEMRI), Kenya, the International Centre of Insects, Physiology and Ecology (*icipe*), Kenya and Wageningen University and Research, the Netherlands. I have the ability to excel in a highly competitive environment, with good supervision skills and practical understanding of medical research. I possess interpersonal and good communication skills with the ability to develop and maintain mutually beneficial internal and external relationships. I successfully managed malaria projects in KEMRI and ICIPE, Kenya, where I gained experience in the following:

- Project planning, coordination, implementation, monitoring, evaluation, capacity and team building as well as progress assessment.
- Supervision of international and national postgraduate and undergraduate students to completion.
- Design and execution of research projects, track research project and academic milestones
- Achieve program deliverables and meet timelines
- Writing standard operating procedures, reports, manuscripts, proposals and preparation of information, education and communication (IEC) materials
- Coordinate community engagement, conduct logistic planning and support product development in education and research programs
- Working with communities in western Kenya
- Organize research and education workshops and seminars
- Manage data collection efforts to include baseline, mid-line surveys, and end line surveys
- Computer proficiency in Microsoft Office and internet usage

## Research and publications

### LINKS:

**Google scholar account:** Annette Busula:

[https://scholar.google.com/scholar?hl=en&as\\_sdt=0%2C5&q=Annette+Busula&btnG=](https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=Annette+Busula&btnG=)

**Research gate:** <https://www.researchgate.net/profile/Annette-Busula-3>

### PUBLICATIONS

1. **Busula, A. O.**, Takken, W., de Boer, J. G., Mukabana, W. R., & Verhulst, N. O. (2017). Variation in host preferences of malaria mosquitoes is mediated by skin bacterial volatiles. *Medical and Veterinary Entomology*, 31(3), 320-326.  
<https://pubmed.ncbi.nlm.nih.gov/28639690/>
2. Busula, A. O., Takken, W., Loy, D. E., Hahn, B. H., Mukabana, W. R., & Verhulst, N. O. (2015). Mosquito host preferences affect their response to synthetic and natural odour blends. *Malaria Journal*, 14, 1-9.  
<https://pubmed.ncbi.nlm.nih.gov/25889954/>
3. Busula, A. O., Bousema, T., Mweresa, C. K., Masiga, D., Logan, J. G., Sauerwein, R. W., ... & de Boer, J. G. (2017). Gametocytemia and attractiveness of Plasmodium falciparum–infected Kenyan children to Anopheles gambiae mosquitoes. *The Journal of infectious diseases*, 216(3), 291-295.  
<https://academic.oup.com/jid/article/216/3/291/3867534>
4. de Boer, J. G., Busula, A. O., Ten Berge, J., van Dijk, T. S., & Takken, W. (2019). Does artemether–lumefantrine administration affect mosquito olfactory behaviour and fitness?. *Malaria Journal*, 18, 1-10.  
<https://link.springer.com/article/10.1186/s12936-019-2646-9>
5. Robinson, A., Busula, A. O., Muwanguzi, J. K., Powers, S. J., Masiga, D. K., Bousema, T., ... & Sutherland, C. J. (2019). Molecular quantification of Plasmodium parasite density from the blood retained in used RDTs. *Scientific reports*, 9(1), 5107.  
<https://www.nature.com/articles/s41598-019-41438-0>
6. Beshir, K. B., Sepúlveda, N., Bharmal, J., Robinson, A., Muwanguzi, J., Busula, A. O., ... & Hopkins, H. (2017). Plasmodium falciparum parasites with histidine-rich protein 2 (pfhrp2) and pfhrp3 gene deletions in two endemic regions of Kenya. *Scientific reports*, 7(1), 14718.  
<https://www.nature.com/articles/s41598-017-15031-2>
7. Robinson, A., **Busula, A. O.**, Voets, M. A., Beshir, K. B., Caulfield, J. C., Powers, S. J., ... & De Boer, J. G. (2018). Plasmodium-associated changes in human odor

attract mosquitoes. *Proceedings of the national academy of sciences*, 115(18), E4209-E4218.

<https://www.pnas.org/doi/abs/10.1073/pnas.1721610115>

8. Busula, A. O., Verhulst, N. O., Bousema, T., Takken, W., & de Boer, J. G. (2017). Mechanisms of Plasmodium-enhanced attraction of mosquito vectors. *Trends in parasitology*, 33(12), 961-973.  
<https://www.sciencedirect.com/science/article/abs/pii/S1471492217302283>
9. Asenahabi, B. M., Busula, A. O., & Ronoh, R. (2019). A choice dilemma in selecting an appropriate Research Design.  
<http://41.89.205.12/handle/123456789/1314>
10. Busula, A. O. (2012). *Experimental infection of malaria mosquitoes with entomopathogenic fungus, beauveria bassiana under field conditions* (Doctoral dissertation, University of Nairobi, Kenya).  
<http://erepository.uonbi.ac.ke/handle/11295/6993>

#### Workshops/seminars/conferences/courses

<b>23 March 2023</b>	Strategies for successful publication in Open Access
<b>10-12 June 2022</b>	Internal quality auditors training
<b>17-18 May, 2021</b>	Capacity building workshop towards prevention of new HIV/AIDs infections.
<b>23<sup>rd</sup> April, 2021</b>	World Malaria Day webinar: Malaria vector biology and control. Presented a lightning talk on ape-malaria pandemic.
<b>16-17<sup>th</sup> March, 2021</b>	Malaria in the Era of COVID-19: ‘A looming ape-malaria pandemic.’
<b>25<sup>th</sup> Sept. 2020</b>	Falling walls Lab competition, Nairobi: Pitched on malaria control strategy.
<b>3 – 31<sup>st</sup> Aug. 2020</b>	Implementation Research course developed by TDR, the Special Programme for Research and Training in Tropical Diseases.
<b>11<sup>th</sup> July, 2020</b>	HIV/AIDs and COVID-19 webinar by Prof. Edagwa Benson of University of Nebraska Medical Center, USA.
<b>13<sup>th</sup> June, 2020</b>	Once-a-year HIV drug by Prof. Edagwa Benson, founder of the drug, University of Nebraska Medical Center, USA.
<b>24 – 25<sup>th</sup> Sept. 2018</b>	Regional University forum for capacity building in Agriculture (RUFORUM) in Africa (SHAEA).
<b>27<sup>th</sup> Sept. 2017</b>	Academic staff seminar ‘Strategies for enhancement of quality in teaching and learning and assessment, KAFUCO, Kenya.
<b>19-23<sup>rd</sup> Feb. 2017</b>	Keystone symposia conference, Uganda: Malaria, from innovation to eradication.
<b>July - Oct. 2016</b>	ZIKA virus course (online) by the London School hygiene and Tropical medicine.

<b>4 March 2016</b>	Dutch Arboviral Network workshop on ‘one health approach on emerging European arboviruses, the Netherlands.
<b>9 – 11<sup>th</sup> Dec. 2015</b>	Behavioral and chemical ecology course, ICIPE, Nairobi.
<b>20-25<sup>th</sup> April 2015</b>	Vector Biology Course at <i>icipe</i> -Mbita.
<b>6 &amp; 20 Nov &amp; 18 Dec. 2014</b>	Project and time management, Wageningen University & Research
<b>24 – 25 Nov &amp; 1 -2 Dec 2014</b>	The Essentials of scientific writing and presenting, Wageningen University & Research.
<b>14 – 16 &amp; 22 - 23 Oct. 2014</b>	Multivariate analysis
<b>6 Oct. 2014</b>	Data management planning, Wageningen University & research.
<b>26 -27 August 2014</b>	Information literacy including Endnote introduction, Wageningen University & Research.
<b>30 April 2014</b>	Protecting Human Research Participants, by National Institutes of Health (NIH), Office of Extramural Research.
<b>July-August 2013</b>	Writing grant proposals, sponsored by Author AID, INASP
<b>19-21 Feb. 2013</b>	Good laboratory practice and good clinical laboratory practices at <i>icipe</i> , Mbita Point.
<b>11 – 22 July 2011</b>	Drugs & Drug resistance, Morogoro Tanzania

#### Awards

- i. **2014 July - May 2017:** PhD scholarship by Wageningen University and Research, the Netherlands.
- ii. **2010 - 2011:** MSc research scholarship, Adessium Foundation, The Netherlands.
- iii. **2002 - 2006:** Bachelor of Science (BSc) studies, Government of Kenya.
- iv. **March 2021 Scholarship** to participate in the Keystone’s virtual webinar on malaria in the era of Covid-19.
- v. **November 2020**, a certificate of participation in the **innovators’ competitive** falling walls competition, Nairobi.
- vi. **23 November, 2017: Best published paper**, *icipe* scholars  
<http://www.icipe.org/news/awards-and-recognition/icipe-governing-council-awards>.
- vii. **Travel grant to the** British Society of Parasitology conference, by Angus Bell-U.K.
- viii. **Prize for the best talk**, British Society of Parasitology conference at the Imperial College, London, **13, April, 2016**.

#### Project

International Research Linkages Bridge to Boost Research, Innovation and Outreach.  
<https://www.iie.org/en/Programs/Carnegie-African-Diaspora-Fellowship-Program/SelectedProjects/May-2019>, with Prof. Fulbert Namwamba of the USA.

#### Professional membership

- i. Entomological Society of Kenya, 2020 to date
- ii. Pan-African Mosquito Control Association (PAMCA), 2015 to date.
- iii. Netherlands Entomological Society (NEV) (2014 to date).

## Referees

**Dr. Collins Mweresa**, Lecturer and Medical entomologist,  
Jaramogi Oginga Odinga University of Science and Technology  
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