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**Academic Education**

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|-------------|--|
| 2013 - 2017 | PhD, Pharmaceutical Biology, Institute of Pharmacy, Johannes Guternberg University, Mainz, Germany |
| 2006 - 2009 | Msc, Biochemistry, Jomo Kenyatta University of Agriculture and Technology, Nairobi, Kenya          |
| 2001 - 2005 | Bsc, Biological Sciences, Jomo Kenyatta University of Agriculture and Technology, Nairobi, Kenya   |

**Employment**

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| 2011 - Currently | Lecturer Biochemistry, Department of Biological Sciences, Masinde Muliro University of Science and Technology, Kakamega, Kenya                                   |
| 2019 - 2022      | Early Research Fellow (Postdoctoral fellow) Antimicrobial Resistance, Department of Biosciences, KEMRI Wellcome Trust Research Programme, CGMRC-C, Kilifi, Kenya |
| 2018 - 2019      | Postdoctoral Fellow Multidrug Resistance group, National Cancer Institute, National Institute of health, Bethesda, Maryland (MD), United States of America       |
| 2008 - 2011      | Lecture Biochemistry, Department of Chemistry, University of Eastern Africa Baraton Eldoret, Kenya   |

**Grants and Fellowships**

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| 2019 | KWTRP Postdoctoral fellowship £90,000                 |
| 2018 | NIH Intramural Fellowship \$50,000                    |
| 2013 | German Academic Exchange Program Scholarship € 60,000 |

**Appointments and Services**

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| 2017 | Co-ordinator ODEL programmes department of biological sciences |
| 2018 | Examiner Msc Thesis  |
| 2019 | Biosciences management team KWTRP Kilifi                       |
| 2020 | Organizer Biannual Biosciences Symposium, KWTRP, Kilifi        |

## Publications (all published with scientific quality assurance)

1. Global burden of bacterial antimicrobial resistance in 2019: a systematic analysis Christopher J L Murray, Kevin Shunji Ikuta, Fablina Sharara, Lucien Swetschinski, Gisela Robles Aguilar, Authia Gray, ..., **Ednah Ooko**, ..., Andy Stergachis, Catrin Moore\*, Christiane Dolecek\*, Mohsen Naghavi. 2022 Feb 12;399(10325):629-655. doi: 10.1016/S0140-6736(21)02724-0 [www.thelancet.com](http://www.thelancet.com)
2. In Silico and In Vitro Screening of 50 Curcumin Compounds as EGFR and NF- $\kappa$ B Inhibitors. Saeed MEM, Yücer R, Dawood M, Hegazy MF, Drif A, **Ooko E**, Kadioglu O, Seo EJ, Kamounah FS, Titinchi SJ, Bachmeier B, Efferth T. *Int J Mol Sci.* 2022 Apr 2;23(7):3966. doi:10.3390/ijms23073966.PMID: 35409325
3. Artemisinin derivatives induce iron-dependent cell death (ferroptosis) in tumor cells. **Ooko E**, Saeed ME, Kadioglu O, Sarvi S, Colak M, Elmasaoudi K, Janah R, Greten HJ, Efferth T. *Phytomedicine.* 2015 Oct 15;22(11):1045-54. doi: 10.1016/j.phymed.2015.08.002. Epub 2015 Aug 18.PMID: 26407947
4. Biopiracy versus One-World Medicine-From colonial relicts to global collaborative concepts. Efferth T, Banerjee M, Abu-Darwish MS, Abdelfatah S, Böckers M, Bhakta-Guha D, Bolzani V, Daak S, Demirezer ÖL, Dawood M, Efferth M, El-Seedi HR, Fischer N, Greten HJ, Hamdoun S, Hong C, Horneber M, Kadioglu O, Khalid HE, Khalid SA, Kuete V, Mahmoud N, Marin J, Mbaveng A, Midiwo J, Nakagawa H, Naß J, Ngassapa O, Ochwang'i D, Omosa LK, **Ooko EA**, Özenver N, Poornima P, Romero MR, Saeed MEM, Salgueiro L, Seo EJ, Yan G, Yasin Z, Saeed EM, Paul NW. *Phytomedicine.* 2019 Feb;53:319-331. doi: 10.1016/j.phymed.2018.06.007. Epub 2018 Jun 11.PMID: 30190231 Review.
5. Biopiracy of natural products and good bioprospecting practice. Efferth T, Banerjee M, Paul NW, Abdelfatah S, Arend J, Elhassan G, Hamdoun S, Hamm R, Hong C, Kadioglu O, Naß J, Ochwangi D, **Ooko E**, Ozenver N, Saeed ME, Schneider M, Seo EJ, Wu CF, Yan G, Zeino M, Zhao Q, Abu-Darwish MS, Andersch K, Alexie G, Bessarab D, Bhakta-Guha D, Bolzani V, Dapat E, Donenko FV, Efferth M, Greten HJ, Gunatilaka L, Hussein AA, Karadeniz A, Khalid HE, Kuete V, Lee IS, Liu L, Midiwo J, Mora R, Nakagawa H, Ngassapa O, Noysang C, Omosa LK, Roland FH, Shahat AA, Saab A, Saeed EM, Shan L, Titinchi SJ. *Phytomedicine.* 2016 Feb 15;23(2):166-73. doi: 10.1016/j.phymed.2015.12.006. Epub 2016 Jan 9.PMID: 26926178 Review.
6. Pharmacogenomic Characterization and Isobologram Analysis of the Combination of Ascorbic Acid and Curcumin-Two Main Metabolites of *Curcuma longa*-in Cancer Cells. **Ooko E**, Kadioglu O, Greten HJ, Efferth T. *Front Pharmacol.* 2017 Feb 2;8:38. doi: 10.3389/fphar.2017.00038. eCollection 2017.PMID: 28210221
7. Collateral Sensitivity of Parthenolide via NF- $\kappa$ B and HIF- $\alpha$  Inhibition and Epigenetic Changes in Drug-Resistant Cancer Cell Lines. Dawood M, **Ooko E**, Efferth T. *Front Pharmacol.* 2019 May 21;10:542. doi: 10.3389/fphar.2019.00542. eCollection 2019.PMID: 31164821

8. Modulation of P-glycoprotein activity by novel synthetic curcumin derivatives in sensitive and multidrug-resistant T-cell acute lymphoblastic leukemia cell lines. **Ooko E**, Alsalim T, Saeed B, Saeed MEM, Kadioglu O, Abbo HS, Titinchi SJJ, Efferth T. *Toxicol Appl Pharmacol.* 2016 Aug 15;305:216-233. doi: 10.1016/j.taap.2016.06.002. Epub 2016 Jun 16. PMID: 27318188

## Referees

Dr. Evan Raballa  
Masinde Muliro University of Science and Technology  
Department of Medical Lab. Sciences

Dr. Philip Ogutu  
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Prof. Philip Bejon  
KEMRI Wellcome Trust Kilifi  
P O Box Kilifi, Kenya

Prof Michael Gottesman  
National Institute of Health, National Cancer Center  
Bethesda USA

Prof Thomas Efferth  
Johannes Gutenberg University  
Mainz, Germany