

# Koech Andrew

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Masters Student, University of Bremen  
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## RESEARCH INTERESTS

*Design and analysis of dose-response experiments, Quasi-Experimental methods, Statistical methods for clinical trials*

## EDUCATION

*University of Bremen*

*Bremen, Germany*

**M.Sc in Medical Biometry/Biostatistics**

Oct. 2022 - Ongoing

“A spatial analysis of local and temporal associations between area-level socio-economic factors and antibiotic prescription rates in Germany”  
Ongoing

*Jomo Kenyatta University of Agriculture and Technology*

*Nairobi, Kenya*

**B.Sc in Biostatistics**

Sept. 2014 - Aug. 2018

“Spatial Analysis of Child Mortality in Kenya”

## EMPLOYMENT

*DKFZ German Cancer Research Center*

*Heidelberg, Deutschland*

**Internship**

Apr. 2024 - Aug. 2024

Familiarizing with Bayesian dynamic borrowing (BDB) approaches in augmented clinical trials.  
Understanding the use of the robust mixture prior approach.  
Implementing R code for the computation of highest posterior density (HPD) intervals for the robust mixture prior.  
Implementing the computation of highest posterior density (HPD) intervals in R Shiny.

*International Cancer Institute (ICI)*

*Eldoret, Kenya*

**Biostatistician**

Aug. 2019 - Nov. 2020

Designed surveys to assess health issues in non-communicable diseases.  
Wrote statistical analysis plans for surveys to assess health issues in NCDs.  
Prepared five articles for publication and presentation at local and international scientific conferences.  
Wrote three research proposals and grant applications for submission to Pfizer, Roche and Novartis.  
Developed statistical analysis plans and wrote code to analyze data using Stata and R.  
Collated and submitted clinical trial documents for ethical review of two Novartis clinical trials in Sickle Cell Disease.

*AMPATH Oncology Institute*

*Eldoret, Kenya*

**Research Assistant**

Sept. 2018 - Jul. 2019

Oversaw registration of patients for cervical and breast cancer screening.  
Conducted random checks for data completeness and accuracy.  
Coded data as necessary prior to data entry using master coding lists.  
Identified appropriate statistical tests for analyzing and modeling oncology data.  
Compiled reports, charts and graphs that describe and interpret findings of analyses.

## CONFERENCE PRESENTATIONS

1. **Koech, Andrew**, Emma Achieng, Edwin Odoyo, Dennis Munene, and Fredrick Chite Asirwa. 2020.[Virtual Poster](#) “Abstract PO-249: Implementing Community Cervical Mass Screenings in Low-Middle-Income Countries: A Project Implemented by the Blueprint for Success Program, International Cancer Institute in Kenya.” *Cancer Epidemiology, Biomarkers & Prevention* 29 (December): PO–249.
2. Kitur, Gloria, Emmah Achieng, Fredrick Chite Asirwa, Edwin Odoyo, and **Andrew Koech**. 2020.[Virtual Poster](#) “Abstract PO-028: Role of Community Outreach Activities in Cancer Prevention in Kenya.” *Cancer Epidemiology, Biomarkers & Prevention* 29 (December): PO–028.
3. Muchiri, Anthony, Gloria Kitur, Hussein Elias, **Andrew Koech**, and Chite Asirwa. 2020.[Virtual Poster](#) “Abstract PO-047: The Role of Virtual Tumor Boards in Improving Patient Outcomes in Rural Settings of Sub-Saharan Africa.” *Cancer Epidemiology, Biomarkers & Prevention* 29 (December): PO–047.
4. Sigu, Lamech, Fredrick Chite, Emma Achieng, and **Andrew Koech**. 2020.[Virtual Poster](#) “Setting up Telemedicine: Internet of Things to Support Rural Oncology Clinics in a Low- and Middle- Income Country—a Pilot Project in Kenya.” 6 (July):58–58.
5. **Andrew Koech**, Rose Njogu, Emma Achieng, Gloria Kitur, Chizi Kiti, Chite Asirwa. “Abstract : Setting Up Tools for Collecting Quality Data at The International Cancer Institute, Kenya - Learning from other Cancer Institutes, Registries and Cancer Clinics.” 2020.[Conference canceled](#). 11th Annual Consortium of Universities for Global Health Conference. 18–20 (April).
6. Kimani Peter, **Andrew Koech**, Nyambura Sarah. 2018. [Oral] *Spatial Analysis of Child Mortality in Kenya*. 13th JKUAT Scientific, Technological, and Industrialization Conference. 15–16 (November) 2018.

## WORKSHOPS

### Survival Analysis of Cancer Epidemiology.

Nairobi, Kenya

*University of Nairobi* (Facilitators: Prof. Bernard Rachet, Dr. Aurelien Belot)

21 – 22 Oct. 2019

### Advanced Biostatistical Methods: Multivariate models and Cluster Randomized Trials.

Eldoret, Kenya

*Moi University* (Facilitator: Prof. Joseph Hogan)

15 – 18 Jul. 2019

### Bayesian Biostatistics Data Analysis: Theory and Practice.

Nairobi, Kenya

*Jomo Kenyatta University of Agriculture and Technology* (Facilitator: Prof. Emmanuel Lesaffre)  
Nov. 2018

19 – 23

## TECHNICAL SKILLS

### *R for Everything*

Data pre-preparation (cleaning and wrangling) and statistical analysis/exploratory visualization with R Markdown.

Reproducible and replicable presentation and paper generation with R Markdown.

Version control using Git and Github with Rstudio.

### *Other (non-R) Technical Skills*

SAS

Stata

Linux

Windows

## **NON-TECHNICAL SKILLS**

### *Spoken Languages*

Deutsche (A2)  
English (fluent)

## **SERVICE**

### *Memberships*

PSI - Statisticians in the Pharmaceutical Industry

Member