

# Nicole F Dear

Email: nicolef.dear@gmail.com Phone: 616-706-3913

LinkedIn: [www.linkedin.com/in/nicoledear](https://www.linkedin.com/in/nicoledear) GitHub: [nicolefdear](https://github.com/nicolefdear)

## EDUCATION

### Doctor of Philosophy in Geography

Michigan State University, East Lansing, Michigan

Expected 2026

### Master of Public Health in Global Health Epidemiology

University of Michigan School of Public Health, Ann Arbor, Michigan

May 2016

### Bachelor of Science in Microbiology

University of Michigan, Ann Arbor, Michigan

May 2014

## RESEARCH EXPERIENCE

### Research Assistant

2021-present

Michigan State University, East Lansing, Michigan

- Led analysis and writing of a project assessing segregation in the Detroit Metropolitan Area using multi-level modeling techniques within a Bayesian framework

### Research Assistant

2014 – 2016

University of Michigan, Ann Arbor, MI

- Analyzed satellite derived variables and survey data to identify factors associated with increased mosquito abundance and understand patterns of vector distribution in Blantyre, Malawi
- Fostered collaborative working relationships across four institutes in America and Malawi
- Conducted systematic review to inform research direction

## PROFESSIONAL EXPERIENCE

### Research Analyst

2019 – present

Henry Jackson Foundation, Bethesda, Maryland

- Cleaned and analyzed clinical and socio-behavioral data from clinical cohort studies
- Interpreted and communicated findings to scientific audiences and provided data-driven evidence for PEPFAR programming, HIV clinical care, and future vaccine studies
- Led data management and analysis activities for a multi-site study in Kenya and Tanzania
- Provided analytic and scientific writing support to in-country staff for the development of conference presentations and peer-reviewed publications
- Enhanced departmental data management capacity by training eight staff in REDCap

### Monitoring and Evaluation Specialist

2018 – 2019

Peace Corps Response (MRU), Durban, South Africa

- Developed online data collection instrument allowing live capture of participant survey data
- Reduced data errors by 60% by creating an automated tool in R to identify patterns of missing, inaccurate, and inconsistent data in a multi-site study and highlighted areas for staff retraining
- Analyzed clinical and program data and delivered written program evaluation report to funder
- Trained 15 staff members in Microsoft Excel over a six-month period

### GIS Consultant

2018 – 2019

Colorado Haiti Project, Remote

- Built organizational capacity for spatial data capture, management, and visualization
- Designed online interactive map for client facing website

### PHI/CDC Global Health Surveillance Fellow

2016 – 2018

Centers for Disease Control, Port-Au-Prince, Haiti

- Increased local GIS capacity by training 25 in-country staff in GIS software and methods, leading to identification of resource gaps/overlaps and areas of high disease burden

- Mapped new cases of disease, validated spatial data, and maintained online outbreak response dashboards for the Global Polio Eradication Initiative
- Provided technical support to the Ministry of Health to improve timely use of national and program data and make informed decisions about their national HIV strategy
- Coordinated logistics for Haiti's first Population-based HIV Impact Assessment
- Motivated for reallocation of resources to Hurricane Matthew relief by adapting a data collection tool in a post-disaster setting, analyzing and summarizing evidence-based findings

#### **Junior Health Data Analyst**

Summer 2016

JEN Associates, Inc., Ann Arbor, MI

- Quantitatively analyzed a 5% sample of Medicare/Medicaid records and summarized findings in policy memos to provide support for low-cost high-impact health programs in the United States
- Provided technical assistance to government agencies and non-governmental organizations for patient consent, data collection, analyses, and risk profiling of patient cohorts

#### **HONORS AND AWARDS**

---

Dean's Scholarship Award, University of Michigan School of Public Health

Dean's Research Opportunity Award, University of Michigan School of Public Health

Summer Biomedical & Life Sciences Fellowship, University of Michigan

William J. Branstrom Freshman Prize, University of Michigan

#### **PUBLICATIONS**

---

Kibuuka H, Musingye E, Mwesigwa B, Semwogerere M, Iroezindu M, Bahemana E, Maswai J, Owuoth J, Esber A, **Dear N**, Crowell TA, Polyak CS, Ake JA; AFRICOS Study Group. Predictors of All-Cause Mortality among People with HIV in a Prospective Cohort Study in East Africa and Nigeria. *Clin Infect Dis.* 2021 Dec 3:ciab995. doi: 10.1093/cid/ciab995.

Somi N, **Dear N**, Reed D, Parikh A, Lwillia A, Bahemana E, Khamadi S, Iroezindu M, Kibuuka H, Maswai J, Crowell TA, Owuoth J, Maganga L, Polyak C, Ake J, Esber A; AFRICOS Study Group. Perceived satisfaction with HIV care and its association with adherence to antiretroviral therapy and viral suppression in the African Cohort Study. *AIDS Res Ther.* 2021 Nov 25;18(1):89. doi: 10.1186/s12981-021-00414-3.

**Dear N**, Duff E, Esber A, Parikh A, Iroezindu M, Bahemana E, Kibuuka H, Owuoth J, Maswai J, Crowell TA, Ake JA, Polyak CS; AFRICOS Study Group. Transient Reductions in Human Immunodeficiency Virus (HIV) Clinic Attendance and Food Security During the Coronavirus Disease 2019 (COVID-19) Pandemic for People Living With HIV in 4 African Countries. *Clin Infect Dis.* 2021 Nov 16;73(10):1901-1905. doi: 10.1093/cid/ciab379.

Crowell TA, Daud II, Maswai J, Owuoth J, Sing'oei V, Imbach M, **Dear N**, Sawe F, Eller LA, Polyak CS, Ake JA; AFRICOS Study Group. Severe acute respiratory syndrome coronavirus-2 antibody prevalence in people with and without HIV in rural Western Kenya, January to March 2020. *AIDS.* 2021 Nov 15;35(14):2401-2404. doi: 10.1097/QAD.0000000000003054.

Gilbert L, **Dear N**, Esber A, Iroezindu M, Bahemana E, Kibuuka H, Owuoth J, Maswai J, Crowell TA, Polyak CS, Ake JA; AFRICOS Study Group. Prevalence and risk factors associated with HIV and syphilis co-infection in the African Cohort Study: a cross-sectional study. *BMC Infect Dis.* 2021 Oct 30;21(1):1123. doi: 10.1186/s12879-021-06668-6.

Esber A, **Dear N**, Reed D, Bahemana E, Owouth J, Maswai J, Kibuuka H, Iroezindu M, Crowell TA, Polyak CS, Akom E, Ake JA; AFRICOS Study Group. Temporal trends in self-reported HIV stigma and association with adherence and viral suppression in the African Cohort Study. *AIDS Care.* 2021 Oct 6:1-8. doi: 10.1080/09540121.2021.1984380.

Crowell TA, Danboise B, Parikh A, Esber A, **Dear N**, Coakley P, Kasembeli A, Maswai J, Khamadi S, Bahemana E, Iroezindu M, Kiweewa F, Owuoth J, Freeman J, Jagodzinski LL, Malia JA, Eller LA, Tovanabutra S, Peel SA, Ake JA, Polyak CS; AFRICOS Study Group. Pretreatment and Acquired Antiretroviral Drug Resistance Among Persons Living With HIV in Four African Countries. *Clin Infect Dis.* 2021 Oct 5;73(7):e2311-e2322. doi: 10.1093/cid/ciaa1161.

Onyenakie CC, Nnakwe RU, **Dear N**, Esber A, Bahemana E, Kibuuka H, Maswai J, Owuoth J, Crowell TA, Polyak CS, Ake JA, Iroezindu M; AFRICOS Study Group. Prevalence and predictors of food insecurity among people living with and without HIV in the African Cohort Study. *Public Health Nutr.* 2021 Aug 23:1-14. doi: 10.1017/S136898002100361X.

Jones MU, Esber AL, **Dear N**, Bahemana E, Kibuuka H, Iroezindu M, Maswai J, Owuoth J, Polyak CS, Ake JA, Crowell TA, Hickey PW; African Cohort Study (AFRICOS) Team. The pregnancy factor: the prevalence of depression among women

living with HIV enrolled in the African Cohort Study (AFRICOS) by pregnancy status. *Arch Womens Ment Health.* 2021 Aug;24(4):649-658. doi: 10.1007/s00737-021-01117-4.

Mbah P, Iroezindu M, Esber AL, **Dear N**, Reed D, Adamu Y, Tiamiyu AB, Mohammed SS, Kibuuka H, Maswai J, Owuoth J, Bahemana E, Ake JA, Polyak CS, Crowell TA; AFRICOS Study Group. Assessing the impact of HIV support groups on antiretroviral therapy adherence and viral suppression in the African cohort study. *BMC Infect Dis.* 2021 Jul 20;21(1):694. doi: 10.1186/s12879-021-06390-3.

Harvey MM, **Dear N**, Esber A, Iroezindu M, Bahemana E, Kibuuka H, Maswai J, Owuoth J, Crowell TA, Polyak CS, Agan BK, Ake JA, Justin GA; AFRICOS Study Team. Ophthalmic Disease Prevalence and Incidence among People Living with Human Immunodeficiency Virus in the AFRICOS Study. *Ophthalmology.* 2021 Jul;128(7):1104-1107. doi: 10.1016/j.ophtha.2020.12.008. Epub 2020 Dec 11.

Semwogerere M, **Dear N**, Tunnage J, Reed D, Kibuuka H, Kiweewa F, Iroezindu M, Bahemana E, Maswai J, Owuoth J, Crowell TA, Ake JA, Polyak CS, Esber A; AFRICOS Study Group. Factors associated with sexually transmitted infections among care-seeking adults in the African Cohort Study. *BMC Public Health.* 2021 Apr 16;21(1):738. doi: 10.1186/s12889-021-10762-4.

Bahemana E, Esber A, **Dear N**, Ganesan K, Parikh A, Reed D, Maganga L, Khamadi S, Mizinduko M, Lwillia A, Mkondoo D, Mwaisanga G, Somi N, Owouth J, Maswai J, Kiweewa F, Iroezindu M, Ake JA, Crowell TA, Valcour VG, Polyak CS; AFRICOS Study Group. Impact of age on CD4 recovery and viral suppression over time among adults living with HIV who initiated antiretroviral therapy in the African Cohort Study. *AIDS Res Ther.* 2020 Nov 12;17(1):66. doi: 10.1186/s12981-020-00323-x.

Analogbei T, **Dear N**, Reed D, Esber A, Akintunde A, Bahemana E, Adamu Y, Iroezindu M, Maganga L, Kiweewa F, Maswai J, Owuoth J, Ake JA, Polyak CS, Crowell TA; AFRICOS Study Group. Predictors and Barriers to Condom Use in the African Cohort Study. *AIDS Patient Care STDS.* 2020 May;34(5):228-236. doi: 10.1089/apc.2019.0302.

**Dear N**, Kadangwe C, Mzilahowa T, Bauleni A, Mathanga DP, Duster C, Walker ED, Wilson ML. Household-level and surrounding peri-domestic environmental characteristics associated with malaria vectors *Anopheles arabiensis* and *Anopheles funestus* along an urban-rural continuum in Blantyre, Malawi. *Malar J.* 2018 Jun 8;17(1):229. doi: 10.1186/s12936-018-2375-5.

## PRESENTATIONS

---

### Oral Presentations

Dear N, Grady S, Rivera A. Advancing Research on Racial Residential Segregation for Health Studies. AAG EL/WL, Virtual. 2021.

### Poster Presentations

Dear N, Esber A, Parikh A, et al. Impact of COVID-19 among people living with HIV in the African Cohort Study. CROI, Virtual. March 2021.

Dear N, Esber A, Iroezindu M, et al. Factors Associated with Transactional Sex in the African Cohort Study. HIV Research for Prevention, Virtual. January 2021.

Dear N, Esber A, Iroezindu M, et al. Routine HIV Clinic Appointment Adherence in the African Cohort Study. IAS, Virtual. July 2020.

Dear N, Kadangwe C, Mzilahowa T, et al. Spatial Patterning and Fine-Scale Heterogeneity of Malaria Risk Along an Urban-Rural Continuum in Blantyre, Malawi. ASTMH. November 2017.

## TECHNICAL SKILLS

---

Programming languages: Stata, SAS, R

Other: ArcGIS, QGIS, REDCap, ClinPlus, MS Excel

Analytic methods: linear regression, logistic regression, Poisson/negative binomial regression, mixed-effects models, GEE models, survival analysis, Random forests