

DANIEL CARDOSO P. CÂMARA

Born on June 16, 1984. Phone/WhatsApp: +55 21 98285 3138

Email: dcpcamara@gmail.com
https://dcpcamara.github.io/
https://orcid.org/0000-0002-5439-4477

WORK EXPERIENCE

2024-now Data Scientist and Epidemiologist - Scientific Computing Program (Fiocruz)

Activities: code optimization for recurrent analysis of epidemiological data on influenza and respiratory diseases; harmonizing, qualifying, and analyzing data; production of weekly reports and dashboards to increase productivity; implementation of the Pathfinder methodology for process and stakeholder mapping.

2023-2024 **Data Scientist** - Renée Rachou Institute (Fiocruz) / Swiss Tropical and Public Health Institute (Switzerland)

Activities: describing the epidemiological profile of femicides in Minas Gerais and associated factors; harmonizing, qualifying, and analyzing data on the underlying cause of death and violence against women from multiple sources, including health, police department, and Public Prosecutor's Office; identifying gaps in the reporting of violence, hospital admissions, and outpatient procedures before the femicide; identifying the characteristics of violence and differences between epidemiological profiles.

2023-2023 Data Scientist and Epidemiologist - World Health Organization - Regional Office for Africa.

Activities: Establishment of integrated sentinel surveillance for influenza/SARS-CoV-2 in the region; supporting countries in developing National Influenza Pandemic Preparedness Plans; strengthening influenza epidemiological surveillance in countries, including training activities, harmonizing epidemiological and geoprocessing data; developing automated reports for decision-making; re-establishing the weekly epidemiological bulletin for respiratory diseases.

2021-2022 **Data Scientist and Epidemiologist** - World Health Organization - Regional Office for Africa.

Activities: Harmonization and analysis of epidemiological and geoprocessing data; production and documentation of scripts for harmonization and analysis of epidemiological data; development of dashboards for data visualization and decision-making based on Shiny; participation in the responses to COVID-19, Marburg outbreak, and Monkeypox..

2020-2023 Assistant Researcher (Fellow) in Epidemiology of Vector-borne Diseases - Oswaldo Cruz Institute / Fiocruz.

Activities: Implementation of risk stratification models and methods; development of continuing education programs on data analysis and risk stratification; development of a Shiny-based data analysis platform to support health surveillance and vector control in Brazil; management, quality analysis, harmonization, and linkage of health databases..

2020-2022 **Data Scientist and Epidemiologist** - UNIGE (University of Geneva) / GRAPH Network (Global Research and Analysis for Public Health Network).

Activities: Harmonization of epidemiological, demographic, geoprocessing, and remote sensing data; production of automated weekly and monthly reports using applied statistical methods and data visualization for COVID-19; development of various interactive data visualizations in the EPI GRAPH Hub application based on Shiny; development of an R package for epidemiological analysis.

2016-2019 Assistant Researcher (Fellow) in Epidemiology of Vector-borne Diseases - Scientific Computing Program / Fiocruz.

Activities: Development of risk stratification models and methods to support arbovirus surveillance and vector control in Brazil; management, quality analysis, harmonization, and linkage of health databases..

2013-2013 **Assistant Researcher (Fellow) in Infectious Disease Epidemiology** - Scientific Computing Program / Fiocruz.

Activities: Epidemiological studies on the dynamics of influenza in Brazil; time series analysis; spatial analysis; geospatial analysis.

EDUCATION

- 2018 PhD in Epidemiology, Diagnosis, and Control of Communicable Diseases (Tropical Medicine).

 Oswaldo Cruz Foundation, Rio de Janeiro, Brazil, 2018. Rio de Janeiro. Thesis: "Diversity and surveillance of Culicidae with an emphasis on the emergence of arboviruses in an Urban-Rural gradient in the Atlantic Forest of the state of Rio de Janeiro."
- 2015 Specialization in Applied Statistics. Department of Mathematics, Federal Rural University of Rio de Janeiro, Brazil, 2015. Monograph: "Analysis of socioeconomic and urban infrastructure factors associated with the incidence of dengue in the municipality of Itaboraí, Rio de Janeiro."
- 2013 Master's in Epidemiology, Diagnosis, and Control of Communicable Diseases (Tropical Medicine).
 Oswaldo Cruz Foundation, Rio de Janeiro, Brazil. Dissertation: "Pupal productivity and experimental quantification of interspecific competition between dengue vectors *Aedes aegypti* and *Aedes albopictus* (Diptera: Culicidae) under natural conditions in Rio de Janeiro."
- 2010 Specialization in Medical Entomology. Oswaldo Cruz Foundation, Rio de Janeiro, Brazil, 2010. Monograph: "Colonization of dengue vector mosquitoes in natural environments in Rio de Janeiro."
- 2008 Bachelor's Degree in Biological Sciences. Santa Úrsula University, Rio de Janeiro, Brazil.

SKILLS

Academics: statistical modeling, epidemiology, landscape epidemiology, medical entomology, community ecology, health surveillance systems.

Data Science: R, Shiny, Python, Markdown, SQL, prompt engineering.

Geographic Information Systems: QGIS, ArcGIS, ArcMap, Google Earth Engine.

Statistics: exploratory data analysis, statistical modeling (linear and nonlinear modeling), Bayesian modeling (RStan, INLA), multivariate analysis (PCA, Factor Analysis, clustering, CCA, pCCA), spatial analysis (area and point data analysis, spatial epidemiology, scan statistics), machine learning (supervised and unsupervised).

Other software: Microsoft Office, Google Sheets, Google Docs, SaTScan.

LANGUAGES

Portuguese (native), English (advanced), Spanish (advanced).