Darwin Del Castillo-Fernández

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Education

University of Washington, Seattle, WA

Master in Public Health (MPH), Global Health Expected: 06/2025

Certificates: Global Health on Maternal and Child Health, Applied Biostatistics

Course Highlights: Health Economics, Applied Biostatistics, Longitudinal and Multilevel Analysis, Epidemiological Methods,

Problems in Maternal and Child Health in LMICs.

National University of San Marcos, Lima, Peru

08/2021

Medical Doctor (MD), Medicine

Employment

I. Research Professional Experience

Data Analytics and Management Consultant.

06/2021 - 08/2021

Health Technology Assessment and Research Unit

Social Security Health System, Peru.

- Data analyst for the Institute for Health Technology Assessment and Research of the Peruvian Social Security Health System.
- Managed the data from observational studies and randomized clinical trials using the RedCap platform.
- Conducted data analysis in an observational study of the effectiveness of COVID-19 vaccination in health personnel using Stata and R

Health Technology Assessment Methodological Consultant

01/2023 - Current

Health Technology Assessment and Research Unit

Social Security Health System, Peru.

- Assessed the benefits and drawbacks of purchasing pharmaceutical products by the Social Health Insurance of Peru through a systematic evaluation of the effectiveness and economic impact using the GRADE Approach.
- Conducted systematic reviews of anti-oncological and immunosuppressant drugs in terms of efficacy and economic impact.
- Evaluated the budget impact of introducing new pharmacological products in the Social Security System.

Research Assistant. 06/2023 – 08/2023

CRONICAS Center of Excellence in Chronic Diseases

Peruvian University Cayetano Heredia, Peru

- Conducted semi-structured qualitative interviews as part of the implementation of the project IMPACT-DEMENTIA, supported by the NIHR-UK in collaboration with researchers from Universidad Peruana Cayetano Heredia, Imperial College, and the University of Oxford.
- Organized fieldwork with community health workers in Lima, Iquitos, and Huancayo.

Research Assistant 09/2023 – 12/2023

Department of Health Systems and Population Health

University of Washington, Seattle, WA

- Conducted on-phone interviews for the second post-survey assessment of the ReOpening Schools Safely and Educating Youth Study (ROSSEY Study).
- Supported submission of materials in Spanish for the IRB in the ADRC Clinical Core Study project.
- Conducted preliminary analyses for the Outreach, Engagement, and Recruitment module of the ADRC Clinical Core Study project.

II. Teaching Professional Experience

 Teaching Assistant
 01/2014 – 01/2015

 School of Medicine
 04/2020 – 08/2020

National University of San Marcos, Peru

- Teaching assistant in different courses during medical school
 - Human Embryology (14'-15')
 - Introduction to Biostatistics (20')
- In the Human Embryology course, I guided students in identifying embryological samples in the laboratory.
- During the Introduction to Biostatistics course, I gave review lectures to students in preparation for their final exam.
- Prepared mock exams directed to ace the midterm and final exams in both courses.

Teaching Assistant 01/2018 – 02/2018

Stanford Honors Academies Program

Eduexplora, Peru

- A Stanford University summer camp designed for high school students in Peru.
- Collaborated with the translation of the materials for the Bioscience class.
- Lectured and guided laboratory practices in Neuroscience
- Helped students with their assignments during classes.

Invited Lecturer 06/2021 – 07/2021

General Office of Research and Technologic Transference

Peruvian National Institute of Health, Peru

• Taught in the Descriptive Biostatistics and Sample Design course, organized for the General Office of Research and Technologic Transference personnel.

Skills and Tools

Technical: Highly proficient in STATA, G*Power, SPSS, REDCap, Rayyan, Covidence, EndNote, Zotero, Mendeley, Office 365 Suite.

Proficient in R, Git, GitHub, iMedidata, RevMan, GRADEPro. Working knowledge of Python.

Language: Spanish (native), English (fluent)

Research Training

CRONICAS Center of Excellence in Chronic Diseases

Peruvian University Cayetano Heredia, Peru

 Research trainee
 03/2019 – 05/2023

 Research assistant
 06/2023 – 08/2023

Mentors: J. Jaime Miranda, MD PhD y Antonio Bernabé-Ortiz, MD PhD

Certificates

I. Short Courses

- 2018 Young Lives Study's Methodological Workshop, GRADE Group and Institute for Nutritional Research.
- 2020 Structural Equation Modeling: Introduction and Applications in R and AMOS. Peruvian Society of Psychometrics.
- 2022 Diplomate in Clinical Research. Peruvian University Cayetano Heredia.

II. MOCCS

- 2015 Introduction to R, Data Camp
- 2020 Introduction to Systematic Reviews and Meta-Analysis. Coursera and Johns Hopkins University.
- 2020 The Data Scientist's Toolbox. Coursera and Johns Hopkins University.
- 2020 R Programming. Coursera and Johns Hopkins University.
- 2021 Conducting an Intervention Review. Cochrane Interactive Learning.
- 2021 Causal Diagrams: Draw Your Assumptions Before Your Conclusions. HarvardX and EdX.
- 2021 Getting and Cleaning Data. Coursera and Johns Hopkins University.
- 2022 Economic Evaluation for Global Health. eDGH, University of Washington.
- 2023 Introduction to Epidemiology for Global Health. eDGH, University of Washington.
- 2023 Fundamentals of Global Health Research. eDGH, University of Washington.
- 2023 Fundamentals of Implementation Science, eDGH, University of Washington.

Awards and honors

- 2021 Medical Doctorate. Graduated with Honors (Cum Laude). Thesis Qualification: 17/20
- Scholarship to study the Diplomate in Clinical Research at Universidad Peruana Cayetano Heredia. Funded by the training program NIH/FIC 2D43TW001140-21 "Training in Infectious Disease in Peru Time for Implementation Research". Awarded by the Universidad Peruana Cayetano Heredia with support from the Fogarty International Center.

Scientific production

Reviews, Essays, and Special Articles

1. Del Castillo-Fernández D, Brañez-Condorena A, Villacorta-Landeo P, Saavedra-Garcia L, Bernabé-Ortiz A, Miranda JJ. Avances en la investigación de enfermedades crónicas no transmisibles en el Perú. [Advances in the investigation of chronic noncommunicable An Fac med. 2021 Mar. diseases in Peru]. 14 ;81(4). Available from: https://doi.org/10.15381/anales.v81i4.18798

Preprints and Other Interim Research Products

1. Moscoso MG, Villarreal-Zegarra D, **Del Castillo D**, Zavaleta E, Miranda JJ. Personality profiles and engagement with the augmented reality game Pokémon GO: a cross-sectional study [version 1; peer review: 1 approved with reservations]. Wellcome Open Res 2022, 7:264. Available from: https://doi.org/10.12688/wellcomeopenres.18397.1

Peer-reviewed publications

- 1. Lapidaire W, Proaño A, Blumenberg C, Loret de Mola C, Delgado CA, **Del Castillo D,** et al. Effect of preterm birth on growth and blood pressure in adulthood in the Pelotas 1993 cohort. Int J Epidemiol [Internet]. 2023 Jun 24; Available from: https://doi.org/10.1093/ije/dvad084
- 2. COSMOS Study Group. Core outcome sets for the evaluation of interventions to prevent and treat multimorbidity in low- and middle-income countries: the COSMOS study. BMJ Glob Health, *forthcoming*. Among authors: **Del Castillo D.**
- 3. Bazo-Alvarez JC, **Del Castillo D**, Piza L, Bernabe-Ortiz A, et al. Clustering diseases and people with unsupervised machine learning to study the longitudinal association between multimorbidity and mortality. J Multimorb Comorb. *forthcoming*.

Policy Statements, White Papers, Reports

- 1. IETSI -EsSalud. [Efficacy and safety of ceftazidime-avibactam for treating adult patients with bacteremia due to surgical wound infection by carbapenemase-producing Enterobacteriaceae. Health Technology Assessment − Preliminary Version № 032 DETS-IETSI-2023]. Lima, Peru. 2023. Author: **Del Castillo-Fernández D.**
- 2. IETSI -EsSalud. [Efficacy and Safety of Cladribine for the Treatment of Adult Patients With Relapsing-Remitting Multiple Sclerosis. Health Technology Assessment Short Version № 002 DETS-IETSI-2023]. Lima, Peru. 2023. Author: **Del Castillo-Fernández D.**