

Susy Echeverría-L

Biodiversity and Public Health
Research Consultant

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Education

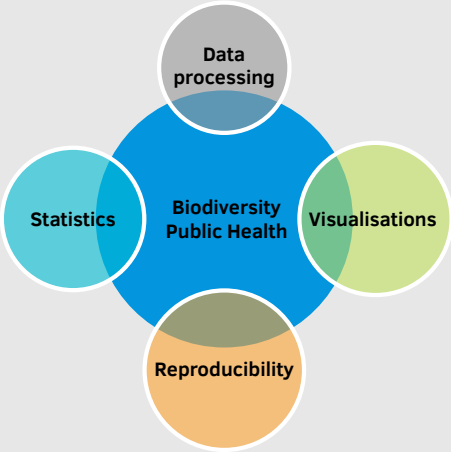
PhD in Life Science
Imperial College London
The Natural History Museum
2013 - 2017 | London, UK.

MRes Biodiversity, Informatics and Genomics (Distinction)
Imperial College London
2012 - 2013 | Silwood Park, Ascot, UK.

BSc in Biology (1st class honours)
Universidad Industrial de Santander
2004 - 2010 | Bucaramanga, Colombia.

Technical Skills

Overview



Programming

R

GIS • Advanced statistics

git • \LaTeX

Python • HPC cluster scripts • Shell

Experience

- 2024

Research Consultant Vaccine Impact Modelling Consortium (VIMC), Imperial College London, UK PI: Prof. Caroline Trotter and Line manager: Dr Katy Gaythorpe

 - Collaborated with the science and policy team at VIMC to analyse and incorporate the impact estimates of various vaccines assessed in GAVI's Vaccine Investment Strategy 2024.
- 2019–2022

Research Consultant and Research Associate Vaccine Impact Modelling Consortium (VIMC), Imperial College London, UK PI: Prof. Neil M. Ferguson and Line manager: Dr Katy Gaythorpe

 - Conducted thorough analysis, organisation, and preparation of vaccine impact estimates for 12 pathogens (Cholera, HepB, Hib, HPV, Japanese encephalitis, Measles, MenA, PCV, Rotavirus, Rubella, Typhoid, Yellow fever) across 112 countries spanning from 2000 to 2030, incorporating multiple estimates from diverse modelling groups for each pathogen.
 - Developed methods for aggregation and analysis of disease burden and vaccine impact estimates derived from various epidemiological models.v
- 2018– 2019

Visitor scholar University of Pittsburgh, PA, USA, PI: Dr. Justin Kitzes

 - Assessed and predicted extinction risks for 300 plant species through comprehensive exploration and analysis of their spatial time-series data using spatial point pattern analysis
- 2017–2019

NSF Postdoctoral Associate Kenyon College, OH, USA, PI: Prof. Andrew Kerkhoff and Prof. Brian J. Enquist

 - Conducted an extensive analysis of functional diversity distributions among plant species across the biomes of North and South America. Used distribution data from approximately 85,000 plant species, comprising around 9 million geographic points, in conjunction with publicly available functional traits.
 - Investigated the influence of habitat stability on current patterns of plant diversity analysing the distribution and phylogenetic relationships among approximately 24,000 plant species.
 - Co-taught the BSc course “Global Ecology and Biogeography”.
- 2013–2017

Lecturer & demonstrator Natural History Museum & Imperial College London, UK

 - Lectured and demonstrated for several quantitative courses in the Taxonomy and Biodiversity MSc and Life Sciences BSc programmes.

Selected publications

2022 **Echeverría-Londoño, S.**, Hartner, A. M., Li, X., Roth, J., Portnoy, A., Sbarra, A. N., ... & Gaythorpe, K. A. Exploring the subnational inequality and heterogeneity of the impact of routine measles immunisation in Africa. *Vaccine*, 40(47), 6806-6817.

2021 **Echeverría-Londoño, S.**, Li, X., Toor, J., de-Villiers, M., Nayagam, S., Hallett, T.B., Abbas, K., Jit, M., Klepac, P., Jean, K. & Garske, T. How can the public health impact of vaccination be estimated? *BMC Public Health*, 21, 2049 (2021).

2020. **Echeverría-Londoño, S.**, Särkinen, T., Fenton, I. S., Knapp, S. and Purvis, A. Dynamism and context dependency in the diversification of the megadiverse plant genus *Solanum* L. (Solanaceae), *Journal of Systematics and Evolution*, 58(6), 767-782.

2018. **Echeverría-Londoño, S.**, Enquist, B. J., Neves, D. M., Violle, C. and Kerkhoff, A. J. Plant functional diversity and the biogeography of biomes in North and South America. *Frontiers in Ecology and Evolution*, 6(DEC), 219.

2016. **Echeverría-Londoño, S.**, Newbold, T., Hudson, L. N., Hill, S. L., Contu, S., Lysenko, I., ...and Purvis, A. Modelling and projecting the response of Colombian biodiversity to land-use change, *Diversity and Distributions*, 22, 1099–1111.