Stanford

Juliana Velez-Gomez

Postdoctoral Scholar, Biology

Bio

BIO

Juliana Vélez (she/her) is a postdoctoral researcher with the Natural Capital Project, studying land-use change and vector-borne disease risk. Her research applies quantitative ecological methods to understand interactions among species, their habitat, and anthropogenic disturbance. Juliana's work incorporates ecological experimentation and collaborations with decision makers to assess the effectiveness of conservation actions for improving ecosystems. She conducts her research under open science standards and has contributed to the development of online resources for reproducible research, including the publication of guides, datasets, and code related to statistical modeling and data processing using artificial intelligence. Juliana earned her Ph.D. in Conservation Sciences from the University of Minnesota.

HONORS AND AWARDS

- Predoctoral fellowship, Smithsonian Institution (2021)
- Doctoral scholarship, Fulbright (2017)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Deputy Chair, IUCN SSC Tapir Specialist Group (2024 - present)

STANFORD ADVISORS

- Gretchen Daily, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Modelling individual variability in habitat selection and movement using integrated step-selection analysis** *METHODS IN ECOLOGY AND EVOLUTION*
  Chatterjee, N., Wolfson, D., Kim, D., Velez, J., Freeman, S., Bacheler, N. M., Shertzer, K., Taylor, J., Fieberg, J.
  2024; 15 (6): 1034-1047

- **Implications of the scale of detection for inferring co-occurrence patterns from paired camera traps and acoustic recorders** *CONSERVATION BIOLOGY*
  Velez, J., McShea, W., Pukazhenthi, B., Stevenson, P., Fieberg, J.
  2024; 38 (3): e14218

- **An evaluation of platforms for processing camera-trap data using artificial intelligence** *METHODS IN ECOLOGY AND EVOLUTION*
  Velez, J., McShea, W., Shamon, H., Castiblanco-Camacho, P. J., Tabak, M. A., Chalmers, C., Fergus, P., Fieberg, J.
  2023; 14 (2): 459-477