SIMRIK BHANDARI

Phone: 352-745-5752
Email: simrikbhandari@ufl.edu
LinkedIn: linkedin.com/in/simriksb

EDUCATION

University of Florida, Gainesville, US — 2023 - 2025
Master of Science in Geography

Kathmandu University, Dhulikhel, Nepal — December 2019
Bachelor of Science in Environmental Science

PROJECTS

Assessing Spatial Patterns of Dengue Incidence in Nepal in 2022 and 2023 - A Local Indicator of Spatial Association Approach: Using exploratory spatial data analysis, regions with higher or lower than expected disease incidence and peak dengue months, providing a mapped view to guide targeted public health interventions.

Decadal Change in Land-Use Land Cover Pattern and River Dynamics in Indrawati River: Final year thesis: The study was conducted from 1999 to 2018 where LULC pattern and the rate of channel migration have been assessed and variation of Sinuosity index was calculated using GIS and remote sensing techniques.

Green School Campaign in Kathmandu Valley: Worked in a team in the WWF mentorship program project "Green School Campaign in Kathmandu Valley". The program required me to do extensive research, create questionnaires and booklets, interact with different types of people, and organize team bonding activities, among other activities. We performed several activities such as water quality analysis, the formation of an eco-club, promotion of green school activities, plantation, waste management, and segregation, cleanup campaign, training on hygiene and sanitation, and monitoring of green activities in schools.

EXPERIENCE

Graduate Research Assistant — Quantitative Disease Ecology and Conservation Lab
Present — University of Florida

Working under the supervision of Dr. Sadie J Ryan, senior scientist in medical geography. Performed research studying spatiotemporal patterns of dengue incidence in Nepal and how transmission might shift in the future using a mechanistic model.

Trainee — Verena (The Viral Emergence Research Initiative)
Present

Working as a trainee managing data for the COMET database, a comprehensive resource for vector competence experiments that centralizes and standardizes data to advance research on pathogen transmission, supporting Verena's mission to predict and prevent future pandemics.

Creative Educators 2022 Program — Quixote's Cove (QC), Satori Center for the Arts
2022
Participated in multiple training sessions focused on various educational philosophies, classroom pedagogies and practices, and project coordination and implementation. Learned how to lead and facilitate Book Bus programs and workshops (Civil Rights and Liberty, Media Literacy x Climate Change, STEAM). Traveled with Book Bus, one of the nine American spaces run by the American Library, to different schools inside and outside the Kathmandu valley. Performed qualitative research on classroom and safe spaces.

PUBLICATIONS

Pokharel, M., Subba, A., Rai, D., **Bhandari, S.**, Ghimirey Y. (2022) Fine-scale ecological and anthropogenic variables predict the habitat use and detectability of sloth bears in the Churia habitat of east Nepal. *Ecology and Evaluation.*

Paudel, P., Baniya S., Sharma, S., **Bhandari, S.**, Pokharel, M. (2023) Half-Century in Biodiversity and Conservation Research in Nepal. *Biodiversity and Conservation*

Bhandari, S., Blackburn, J.K., and Ryan, S.J. (2024). Spatial Patterns of Dengue Incidence in Nepal During Record Outbreaks in 2022 and 2023: Implications for Public Health Interventions**.** medRxiv. https://doi.org/10.1101/2024.11.06.24316870v1

CONFERENCE PRESENTATIONS

Bhandari, S., Blackburn, J.K., and Ryan, S.J. 2024. "Assessing Spatial Patterns of Dengue Incidence in Nepal in 2022 and 2023: A Local Indicator of Spatial Association (LISA) Approach". International Medical Geography Symposium (IMGS) 2024. July 14-19, 2024, Atlanta, GA.

AWARDS

Evan Coe Travel Award in Medical/Health Geography **February 2024**

Awarded by the UF Department of Geogrpahy to support travel for the International Medical Geography Symposium 2024