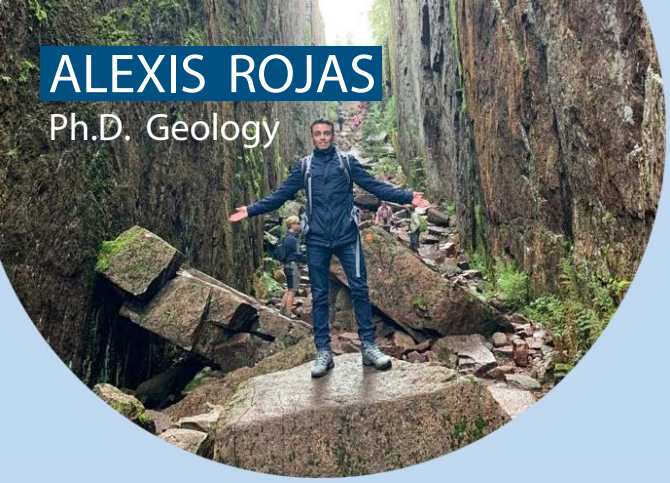

ALEXIS ROJAS

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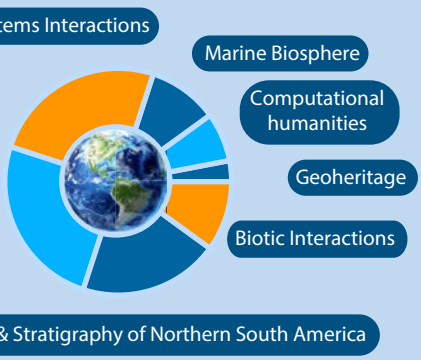
RESEARCH SUMMARY

I am a geoscientist working beyond disciplinary boundaries. My research explores the multiscale interactions among biological, physical, and societal components of natural and built environments. I aim to answer the ultimate question of how the complex nature of life, climate, and society affects each other. Science education is an integral component of my research program and I aim to bridge the gap between research and teaching practices by promoting best practices in data collection, data-driven learning and systems thinking.

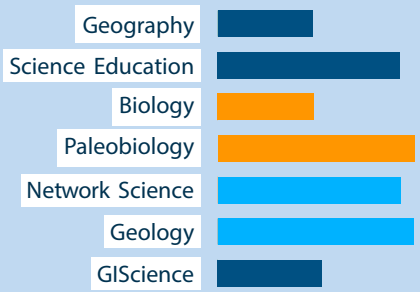
RESEARCH INTEREST AND TECHNICAL SKILLS

Higher-order networks
Learning on graphs (LoG)
Spatial Statistics
Causal Discovery
Programming for Data Science



LANGUAGES

- English (fluid)
- Spanish (native)
- Swedish (beginner)
- Finnish (beginner)
- German (beginner)



SELECTED PROJECTS

-The bivalves as an archive of responses to Pliocene and Holocene warming events. University of Bologna, Italy.

-HAT: Comparing evolutionary processes in nature and society. University of Helsinki.

-The Panama Canal Paleontology/Geology Project. Smithsonian Tropical Institution.

SELECTED PUBLICATIONS

-Rojas et al. (2021). A multiscale view of the Phanerozoic fossil record reveals the three major biotic transitions. Communications Biology 4, 309.

-Pilotto, et al. (2022). Late Holocene anthropogenic landscape change in northwestern Europe impacted insect biodiversity as much as climate change did after the last Ice Age. Proceedings of the Royal Society B: Biological Sciences 289.

-Rojas, et al. (2025). Spatial patterns of trematode-induced pits on bivalve skeletons: Challenges and prospects for research on parasite-host dynamics. The Holocene 35.

-Rojas et al. Learning from the multiple fossil records bridges research and teaching practices and promotes systems thinking in paleontology education. Preprint.

SCIENCE OUTREACH & ACTIVITIES

- La Prensa (Panama)
- Science Daily
- Phys.org
- Informationsdienst Wissenschaft
- Sciencealert
- Earth Day (FLMNH)
- ForskarFredag (Sweden)
- Stratigraphy Research Group (UN)
- Mentoring students (UPN)

EDUCATION AND EXPERIENCE