

Igor Cavallini Johansen

Bachelors degree in Sociology, Masters and PhD. in Demography Currently FAPESP postdoctoral fellow at Unicamp (Brazil) E-mail: <u>igorcav@unicamp.br</u>



UNICAMP



Research topics

- * Social and environmental consequences of hydropower dams in the Brazilian Amazon;
- * Energy justice: sustainable energy sources for offgrid populations in the Brazilian Amazon;
- * **Health** as an indicator of the interactions between population and environmental dynamics;
- * Dengue fever, malaria, food insecurity, and energy insecurity;

Some publications

- * BROWN, E.; et al. Feasibility of hybrid in-stream generator-photovoltaic systems for Amazonian offgrid communities. **PNAS Nexus**, v. 1, 2022. * JOHANSEN, I. C.; et al. Cohort profile: the Mâncio Lima cohort study of urban malaria in Amazonian Brazil. **BMJ Open**, v. 11, p. e048073, 2021. *JOHANSEN, I. C.; et al. Human mobility and urban malaria risk in the main transmission hotspot of
- * Geoprocessing, **spatial analysis**, and surveys.

Recent projects

* "After hydropower dams: social and environmental processes that occur after the construction of Belo Monte, Jirau and Santo Antonio in the Brazilian Amazon" (Funder: FAPESP, Brazil. PI: Emilio Moran);

* "Convergence for Innovative Energy Solutions: empowering off-grid communities with sustainable energy technologies" (Funders: National Science Foundation and Mott Foundation, USA. PI: Emilio Moran).

Planned research themes

* Social, environmental and demographic consequences of energy transition in Brazil; * The link between illegal **mining** in the Brazilian Amazon and local **population health**;

* **Public policies** to improve population wellness in the Brazilian Amazon: investing in forest preservation and population development.

Amazonian Brazil. PLoS One, v. 15, p. e0242357, 2020.



Conducting fieldwork in riverine communities in Rondônia state, Brazilian Amazon, November 2021

Questions and challenges related to a sustainable and inclusive Amazon and possible venues for cooperative work

* Brazilian Amazon: worldwide concern in terms of environmental preservation. Needed attention to populations who occupy the region, usually exposed to the most precarious access to health, infrastructure and income in the country; * The Amazon concentrates the highest remaining hydropower potential in Brazil. Will we continue building large dams to send energy to the regions that concentrate economic

Motivations

- * Tackle **social inequalities**;
- * Moving forward the **environmental preservation agenda** side by side with **population development** (health, urban infrastructure, energy, food security, etc.);
- * Contribute do **science development**;
- * Communicate research to broader audiences.

development in the country?

* What is the most **sustainable energy source** to take place in the Amazon for the local populations?



