

RAVELOMANANTSOA NY ANJARA FIFI

LIFE SCIENCES RESEARCHER

SCIENTIFIC WRITING

SCIENTIFIC REASONING

Antananarivo, Madagascar

+261 32 63 086 78

ravelomanantsoafifi@gmail.com

PROFESSIONAL PROFILE

Life sciences researcher with a Master's degree in Conservation and nearly a decade of research experience across ecology, infectious disease, biodiversity, zoonoses, wildlife health, and genomic characterization. Experienced in developing research questions, interpreting biological evidence, contributing to interdisciplinary studies, and communicating scientific findings through peer-reviewed publications, reports, teaching, and research collaboration. Strong background in connecting experimental and field observations with literature-based interpretation and in evaluating scientific conclusions against available evidence. Particularly well suited to scientific reasoning tasks that require careful synthesis, biological interpretation, precise writing, and attention to assumptions and alternative explanations.

CORE COMPETENCIES

- Scientific reasoning and evidence synthesis
- Interpretation of biological and epidemiological research findings
- Ecology, infectious disease, zoonoses, wildlife health, and biodiversity
- Research question development and hypothesis-oriented analysis
- Scientific literature review and critical interpretation
- Scientific writing, reporting, and peer-reviewed publication
- Experimental and field research in life sciences
- Interdisciplinary research and collaboration
- Graduate-level teaching and practical instruction
- Scientific quality control, accuracy, and attention to detail
- Ecological and epidemiological modelling exposure
- Molecular ecology and genomic research exposure

RESEARCH EXPERIENCE

University of Chicago & University of Antananarivo

Researcher

February 2019 – November 2023

- Conducted research on disease dynamics in Madagascar's fruit bat populations, integrating biological and ecological evidence to investigate infectious disease processes.
- Contributed to research examining the impact of the invasive crayfish *Procambarus virginalis* on human health in Madagascar, linking ecological change with health-related questions.
- Worked within interdisciplinary research settings involving wildlife biology, infectious disease, ecology, and public health.
- Contributed to the interpretation and communication of research findings for scientific outputs and collaborative projects.

Duke Lemur Center

Research Assistant

June – August 2018

- Investigated ecological factors associated with infectious disease transmission in Madagascar.
- Collected and interpreted biological and ecological information within a research framework focused on disease transmission.

Centre ValBio

Research Assistant

June 2017

- Contributed to research using leech-derived environmental DNA (iDNA) to support biodiversity monitoring.
- Investigated leech host preferences as part of a rapid molecular approach to identifying vertebrate biodiversity.

The Peregrine Fund

Master's Researcher

September 2015 – July 2016

- Conducted a Master's research project on the biology and ecology of bats in the Tsimembo-Manambolomaty Complex.
- Developed research questions and interpreted field-based biological and ecological observations.

SCIENTIFIC PUBLICATION

1. Description of a new haemadipsid species of genus *Chtonobdella* from Ranomafana National Park using micro-computed tomography. Madagascar Conservation & Development, 2025.
2. Volant vertebrates have rapid GIT transit times. In Review.
3. Discovery and genomic characterization of a novel henipavirus, Angavokely virus, from fruit bats in Madagascar. Journal of Virology, 2022.
4. Reproduction, seasonal morphology, and juvenile growth in three Malagasy fruit bats. Journal of Mammalogy, 2022.
5. Full genome Nobecovirus sequences from Malagasy fruit bats. Frontiers in Public Health, 2022.
6. Do gastrointestinal microbiomes play a role in bats' unique viral hosting capacity? Trends in Microbiology, 2022.
7. Food insecurity related to agricultural practices and household characteristics in rural communities of northeast Madagascar. Food Security, 2021.
8. The zoonotic potential of bat-borne coronaviruses. Emerging Topics in Life Sciences, 2020.
9. Biodiversity, land use change, and human health in northeastern Madagascar: an interdisciplinary study. The Lancet Planetary Health, 2019.
10. Biological inventory of Ranomafana National Park tetrapods using leech-derived iDNA. European Journal of Wildlife Research, 2019.
11. Diversité et biogéographie des chauves-souris du Paysage Harmonieux Protégé du Complexe Tsimembo Manambolamaty, Région Melaky, Madagascar. Malagasy Nature, 2019.

SCIENTIFIC PROJECT & REPORTING EXPERIENCE

Institut Pasteur of Madagascar

Chargée de mission, USAID RISE Project

September – December 2024

- Supported the organisation of a national symposium on zoonotic diseases.
- Contributed to the preparation and drafting of the symposium report, translating scientific discussions and project information into a structured written output.

RELEVANT TRAINING

- Ecological and Epidemiological Modeling in Madagascar (E2M2), Pivot NGO, Centre ValBio Ranomafana, Institut Pasteur de Madagascar, Mahaliana Lab, 2020.
- Molecular Ecology and R course, Princeton Environmental Institute, Johns Hopkins, Mahaliana Lab, 2019.
- Writing Winning Proposals: a course on fundraising skills, Tropical Biology Association, 2022.
- Scientific ecological monitoring training, COMATSA and WWF MG projects, 2016.

EDUCATION

- Master's Degree in Conservation, Department of Zoology and Animal Biodiversity, Faculty of Sciences, University of Antananarivo, Madagascar, 2016.
- Bachelor's Degree in Natural Sciences, Faculty of Sciences, University of Antananarivo, Madagascar, 2015.
- University Diploma in Natural Science Studies, Faculty of Sciences, University of Antananarivo, Madagascar, 2013.

LANGUAGES

- English: Advanced
- French: Advanced