

CURRICULUM VITAE

Horățiu Roman

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Education

Ph.D.

Doctoral School of Biology

Faculty of Biology, University of Bucharest

Duration of study: 4 years (2025)

Professional Science Master's Degree

Specialization: Medical Biology and Informatics

Field of Study: Biology

Faculty of Biology, University of Bucharest

Duration of study: 2 years (2021)

Diplôme d'Ingénieur / Master of Science in Engineering (MSc.Eng.)

Specialization: Technical Geology

Field of Study: Technical Geology

Faculty of Geology and Geophysics, University of Bucharest

Duration of study: 5 years (2019)

Research Interests

- Experimental and applied research on medicinal plant extracts and essential oils, focusing on antibacterial and antifungal efficiency
- Biological risk assessment and innovation in natural resource biology
- Analysis of environmental factors influencing biological systems
- Biopolitics, security studies, and applied biological sciences

Publications

Antibacterial efficiency of *Tanacetum vulgare* essential oil against ESKAPE pathogens and synergisms with antibiotics. (2023). *Antibiotics*, 12(11), 1635.

<https://doi.org/10.3390/antibiotics12111635>

ISSN: 2079-6382

Antibacterial activity of hydroethanolic extracts from stems and leaves of *Tanacetum vulgare* L. against clinical isolates of various infections. (2025). *International Journal of Scientific Research and Management*, 13(8), 2300–2307.
<https://doi.org/10.18535/ijstrm/v13i08.mp02>

Antibacterial activity of hydroethanolic extracts of *Tanacetum vulgare* L. against clinical isolates of various infections. (2025). *Romanian Archives of Microbiology and Immunology*. (Accepted, in press)

Conferences and Presentations

Natural treatments for infections caused by parasites that colonize old works of art. (2022). In *Simpozionul Internațional Muzeul Porțile de Fier, Drobeta-Turnu Severin. Seria Restaurare- Conservare* (7th Edition).

***Tanacetum vulgare* L. – A new and promising solution in staphylococcal infections. (2022, May 19–21).** In *15th International Scientific Symposium: Current Trends in Natural Sciences 2022*, University of Pitești.

Transversal Courses

Completed at the University of Bucharest within the six specializations:

Philosophy and Humanities

- Political Realism in Literature and Film – ECTS 8
- Subject and Experience in Postmodernist Hermeneutics – ECTS 8
- Hermeneutics of Philosophical Texts – ECTS 8
- Philosophy of Art Works. Contemporary Applications – ECTS 8
- Bios, Eros and Thanatos I&II – ECTS 6
- Research Methodology and Ethics – ECTS 8

Law and Political Sciences

- The Paradigms of International Human Rights Law – ECTS 6
- Methodology and Deontology of Legal Scientific Research – ECTS 6
- The Legal and Judicial System of the European Union – ECTS 7
- Populist Parties, Leaders and Movements – ECTS 6
- Ethics and Academic Integrity – ECTS 3
- Doctoral Research Funding – ECTS 2

Communication and Cognitive Sciences

- Sciences of Communication and Language – ECTS 7
- Linguistics and Cognition – ECTS 5

- Classification and Learning Algorithms in Computational Linguistics – ECTS 6
- Network Analysis – ECTS 5

Natural and Life Sciences

- Management and Ethics of Research in the Field of Biology – ECTS 10
- Observing and Imaging Through Spectroscopy – ECTS 6
- Scientific Projects Writing – ECTS 4

Socio-Ecological Systems and Governance

- Complexity, Institutions and the Governance of Socio-Ecological Systems – ECTS 7
- Institutions and Institutionalism – ECTS 6

Education and Professional Development

- Professional Development and Didactic Performance in Higher Education – ECTS 5

Academic and Professional Skills

- Extraction, characterization, and evaluation of bioactive compounds from medicinal plants; assessment of antibacterial, antifungal, and antiparasitic properties of plant extracts and essential oils.
- Data analysis in medical bioinformatics, genomic and proteomic profiling, molecular docking and modeling, interpretation of biomedical datasets.
- Experimental design, interdisciplinary analysis, statistical modeling, synthesis of interdisciplinary methodologies in biology and political science.
- Environmental risk assessment, laboratory techniques in natural sciences.
- Proficient in data processing software, bioinformatics platforms, academic databases (Web of Science, Scopus, PubMed), and advanced scientific writing tools.

Languages

- **English:** Advanced (C1)
- **French:** Intermediate (B1)