

# Europass Curriculum Vitae

## Personal information

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Nationality: Romanian



25,791

32,309

37,664

41,050

49,770

## Work experience

**2019 – Present** — Vice-Rector (Research) — University of Bucharest (UB), Romania

- Coordination of research activities across UB and the Research Institute of the University of Bucharest (ICUB).

**2016 – 2020** — Director, Doctoral School of Ecology — Faculty of Biology, UB

**2014 – Present** — PhD Supervisor — Doctoral School of Interdisciplinary Studies, Faculty of Interdisciplinary Studies and Doctoral School of Biology, Faculty of Biology, UB

- 11 PhD graduates; 12 PhD candidates; 7 postdoctoral researchers.

Research directions:

- investigation of virulence and antibiotic resistance in the clinical and environmental reservoirs; study of host-infectious agents crosstalk;
- evaluation of the roles of human microbiota in various pathologies and of anti-infective immunity;
- development of rapid microbiological diagnosis methods;
- development and evaluation of new antimicrobial strategies, with applications in the biomedical field and in ecology.

### • External member of the Doctoral School Councils

- “Carol Davila” University of Medicine and Pharmacy, Bucharest
- Doctoral School of Biology Council, Romanian Academy.

**2014 - 2020** — Head of the Life, Environmental & Earth Sciences Section — ICUB (UB Research Institute)

**2013 - 2025** — Full professor (Associate Professor 2007–2013; Lecturer 2003–2007) — Faculty of Biology, UB

*Teaching & practicals:* General Microbiology; Immunobiology; Bacteriology/Medical Microbiology; Immunogenetics & Immunopathology; Clinical Immunology.

-*Supervision* of ~20 BSc/MSc theses per year.

**2022-2025 -International courses (CIVIS Alliance)**

-Antibiotic-resistant bacteria and resistance genes as emerging environmental contaminants (BIP H2O Pollution, SUR – Sapienza University of Rome, 2025; online 2024);

- Microbicidal versus anti-pathogenic strategies in antimicrobial drug discovery (BIP Drug Design & Discovery, University of Bucharest/University of Tübingen/Autonoma de Madrid, 2023/2024/2025);

-Antibiotic resistance in paediatric respiratory infections (CIVIS Summer School, ULB, 2022).

**2025-present-** Full professor, Faculty of Interdisciplinary Studies

*Teaching & practicals:* General Microbiology; Immunobiology; Medical Bacteriology.

*Supervision* – 1 PhD student

**1997 - 2007** — Specialist Biologist — Cantacuzino National R&D Institute for Microbiology & Immunology (National Reference Centre for Vibrio)

- Phenotypic and molecular diagnosis in Vibrionaceae; implementation of toxigenicity assays; standardisation of antimicrobial susceptibility testing; National Data Manager (2000–2009) for Romania in EARSS.

## **Education and training**

**2000 - 2005** — PhD in Biology — University of Bucharest, Faculty of Biology

• Thesis: *Host–parasite interaction: opportunistic parasites. Focus on diagnostics of opportunistic infections and pathogenicity assessment in HIV/AIDS patients.*

**1999 - 2000** — Doctoral stage — Pasteur Institute of Bangui, Central African Republic

• Pathogenic status (primary vs opportunistic) of *Blastocystis hominis*, *Entamoeba* spp. in HIV/AIDS; evaluation of new ELISA kits for the *Entamoeba histolytica/dispar* complex.

**Jan - Mar 2000** — Advanced Medical Microbiology Course (DEA equivalence) — Institut Pasteur, Paris, France

**1997 - 1998** — MSc in Taxonomy — University of Bucharest, Faculty of Biology

**1992 – 1997** — BSc in Biology (Medical Biology) — University of Bucharest

**1988 – 1992** — Sanitary High School, Pitești — Nurse Diploma

## **Personal skills**

**Mother tongue:** Romanian

**Other languages:** English; French (intermediate); German (beginner)

**Communication skills:** Excellent communication gained through teaching, research collaboration, conference lecturing, media interviews, and publications.

**Organizational / managerial skills:** Vice-Rector for Research; ICUB coordinator; doctoral school director; PI/lead or responsible in national & international research and institutional development projects; organizing/scientific committee memberships; ministry expert committees.

**Digital competence:** Microsoft Office; WHONET, EARSS; GraphPad; BioRender.

**Driving licence:** None.

## **Conferences & scientific events (selection)**

- **International / with international participation (as organiser / moderator):** 4th OncoHub Conference (18–22 Nov 2024); One Health International Conference — session co-chair (21–22 Nov 2024); Zoologycon – International Congress of Zoology (6–9 Nov 2024); Chair — Applications of Chemistry in Nanosciences and Biomaterials Engineering (28–30 Jun 2023); SMART DIASPORA workshops; CIVIS Summer School (Drug Design & Discovery, 2023); OncoHub (2021–2022); Flow Cytometry Congresses & Summer Schools (2017–2019); ESENIAS/DIAS (2018).
- **UB / ICUB national events (selection):** Annual Conference for Communicating Research Results at UB — 3rd edition (25–29 Nov 2024) & 2nd edition (Nov 2023); International Day of Microbiology (ZIM) 2019/2021/2023/2024; RADAR PCCF Final Workshop (2022); Doctoral School Conference (2016); multiple workshops and seminars (2016–2019).

## **Plenary lectures (selection)**

**International:** Multidisciplinary Conference on Sustainable Development (2024); OncoHub (2022, 2021); SICHEM (2022); Biodynamics (2022); College of Health and Medical Technology, Baghdad (2020).

**National:** UMFCD Congress XII (2024); Cantacuzino Institute Centenary (2021); Nutrition & Immunity Marathons (2020–2021); Romanian Academy (2016).

## Publications & metrics

16 books; >45 chapters; 14 patents; >400 full-length papers; >200 posters/abstracts.

H-index: 63 (Google Scholar); 51 (Scopus); 47 (Web of Science). Citations: >17,400 (GS); >12,000 (Scopus); >10,000 (WoS).

GS- <https://scholar.google.com/citations?user=4zmThkMAAAA&hl=ro&oi=ao>

WOS-Web of Science ResearcherIDAFP-0825-2022

Orcid-<https://orcid.org/0000-0001-6098-1857>

## Professional recognition

- Corresponding Member, Romanian Academy (Nov 2021).
- Member, Committee for Biology of the National Council for Scientific Research (CNCS) (since 2025)
- Member, National Council for Ethics of Scientific Research, Technological Development and Innovation (Apr–Sep 2023).
- Member, One Health Commission, Section of Medical Sciences, Romanian Academy (decision of 22 Sep 2023).
- Member, MGO commission of the Romanian Academy (since 2024)
- Working groups: University Metaranking Methodology (2021–2024); national research funding methodology (2021–2024).
- Awards: ASFC Outstanding Achievement Award of 2025 for scientific and research activities dedicated to mycology and bacteria in Europe and Romania; 2 Gold Medals (Euroinvent/Proinvent/ 7th International Innovation Competition in Canada, ICAI 2022/ EURO POLITEHNICUS 2025 International Innovation and Invention Show)
- Expert roles: National expert (PHARE EuropeAid/115101/D/SV/RO); invited expert — JPIAMR SRIA Roadmap Workshop (2018, Leiden).
- Public outreach: Capital magazine Top 100 Successful Women (Education & Research, 2022); TEDxYouth invitee (2022).

## Editorial activity

- *Invited Guest Editor* — special issues in: Current Organic Chemistry; Current Topics in Medicinal Chemistry; Molecules; Coatings; Materials; Frontiers in Microbiology; Frontiers in Nutrition; Horticulturae, etc.

- *Editorial boards (international)*: Drug Design, Development and Therapy — Associate Editor-in-Chief.
- *Editorial boards (national)*: Romanian Biotechnological Letters; Romanian Archives of Microbiology and Immunology; Biointerface Research in Applied Chemistry; Letters in Applied NanoBioScience; Annals of West University of Timișoara – Biology.
- *Reviewer* for 100+ journals (including Nature titles).

## Grants & research projects

### As PI / Coordinator (post-PhD):

- **PN-IV-P6-6.1-CoEx-2024-0196- ARES (AntiRESistance) - National Multidisciplinary Research Centre of Excellence for Drug-Resistant Infections – 20, 000 000 Euro.**

PCE TRANSCEND 96/06.06.2022 — Transcriptomic aspects of host–pathogen–antibiotic interactions in *Drosophila melanogaster* infected with ESKAPE pathogens.

- PN-III-P4-ID-PCCF-2016-0114 / Contract 10 (02.07.2018) — Selection and dissemination of antibiotic resistance genes from wastewater treatment plants into the aquatic environment and the clinical sector (RADAR).
- PFE-2021-587 — ACCENT — Excellence Cluster for interdisciplinary research on tangible and intangible heritage at the University of Bucharest.
- PN-III-P4-ID-PCE-2016-0921 / Contract 179 (12.07.2017) — Flow-cytometry-based rapid method for detecting microorganisms and testing antibiotic susceptibility directly from pathological products.
- PN-III-P2-2.1-BG-2016-0369 — Transfer of knowledge regarding the investigation of anti-infective and antitumor properties of new cosmetic and pharmaceutical formulations based on natural extracts.
- PN-II-RU-TE-2014-4-2037 — Risk assessment of the transposon-mediated transfer of certain carbapenemase genes.
- IDEI (2011–2014) — Effects of *Pseudomonas aeruginosa* quorum-sensing molecules on the *Drosophila* genome and host–pathogen interactions.
- CNCSIS TE 135 (2010–2013) — Virulence and antibiotic-resistance profiles in clinically relevant bacteria and correlations with pathogenicity mechanisms.
- IDEAS 296/2007 (2010) — Role of heat-shock proteins in bacterial pathogenesis and host immune response modulation.

- CEEEX\_MII 1640 (2005–2008) — Applications of quorum-sensing mechanisms in designing anti-infective strategies and biomaterials.
- CNCSIS 187/2007 (2008) — Role of bacterial pheromones in intercellular communication and anti-biofilm strategy development.

**Institutional performance projects:**

- CNFIS-FDI-2025-F-0364 - UB Research NEXUS: Transforming Research through Innovation, Digitalization, and Exploration at UB.
- CNFIS-FDI-2024-0484 — INOVEX — Increasing innovation and research performance at UB.
- PFE-2021-587 — ACCENT — Excellence Cluster for interdisciplinary research on heritage at UB.
- CNFIS-FDI-2023-F-0690 — SINCRON — Synchronizing research, innovation and networking within UB.
- CNFIS-FDI-2022-0675 — Institutional development for education and research at UB.
- CNFIS-FDI-2021-0405 — NETWORK — Consolidating inter-faculty scientific networks at UB.
- CNFIS-FDI-2020-0355 D6 — CREATOR — Creative interdisciplinary platform for research and technology transfer.
- PDI-PFE-CDI ID 335 (2018–2020) — Interdisciplinary institutional platform for advanced research and innovation at UB.
- UEFISCDI (2014, 2018) — Subsidies for the journal Romanian Biotechnological Letters.

**Responsible Romanian partner in international projects:**

- COFUND-M-ERA.NET II — BIOMB — Bio-based materials for medical applications (Romania partner lead).
- JPI-EC-AMR — AWARE-WWTP — Assessment of risks of antimicrobial resistance transmission from wastewater treatment plants to the environment and humans.
- COFUND-JPI-EC-AMR — ARMIS — Manure interventions to mitigate antimicrobial resistance spread along the farm-to-fork chain.
- JPI Oceans / Aquatic Pollutants — BIOCIDES — Combined effects of biocides and antibiotics on antimicrobial resistance in aquatic ecosystems.
- PN-III-P3-3.1-PM-RO-CN-2018-0147 — 5BM — In silico and experimental studies on mobile genetic platforms for multidrug resistance in clinically relevant bacteria.

**Responsible partner in national projects:**

- PATCULT#RO — Mapping, safeguarding and promoting Romania's cultural heritage.
- PCCDI-2017-0629 — Innovative bionanomaterials for treatment and diagnosis.
- PED 234 — Sustainable ZnO-based materials for antimicrobial applications.
- PN II PCCA 215 (2014–2017) — Innovative nanostructured materials and coatings for medical applications.
- PTE-2021-0303 — GRACE — Graphene-reinforced advanced composites for enhanced biomedical performance.

**Key member in international programmes:**

- SwafS Other Action 31 — RIS4CIVIS (2021–2023) — Research and Innovation Strategy for the CIVIS Alliance.
- M-ERA.NET (2013–2015) — CarLa — Collaborative research on advanced materials.
- PHARE (2002–2006) — Ministry of Health and Family capacity strengthening (national expert, microbiology).
- Horizon 2020 — ATHENA Equality — Gender equality and inclusiveness in research institutions.

**Member of international research teams:**

- FP7 — ROWER (2009–2011) — Occupational health and safety economics research network.
- COST ACTION B23 (2004–2006) — Multi-disciplinary approaches to infectious diseases.

**Coordinator of PD (postdoctoral) projects:**

- Surleac Marius (PD-2021-0540) — Mapping mobile genetic elements in the ESKAPE resistome.
- Tihăuan Bianca-Maria (PD-2021-0748) — Innovative wound-healing hydrogels with antimicrobial activity.
- Ungureanu Gabriela-Irina (PD-2021-0598) — Antimicrobial coatings for medical implants.
- Grădişteanu Grătiella (PD-2019-0499) — Bioactive nanoparticles for anti-biofilm therapies.
- Irina Gheorghe (PD-2016-1798) — Rapid diagnostics for carbapenemase-producing bacteria.
- Ilda Czobor (PD-2016-2137) — Quorum-sensing inhibitors against ESKAPE pathogens.

**Responsible for third-party contracts:**

- 21737/2012; 17654/13.10.2009; 9489/25.06.2008; GJ208/05.12.2008.