

Europass Curriculum Vitae

Personal information

Mariana Carmen Chifiriuc (maiden name Balotescu) First name(s) /

Surname(s)

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Nationality Romanian

Date of birth 4 September 1974

> Gender female

Work experience

> Date 2003-present

Occupation or Lecturer (2003-2007), Associate Professor (2007-2013), Full Professor (2013-present), PhD supervisor (since 2014); position held Director of the Doctoral School of Ecology of the University of Bucharest (2017-2020), Coordinator of the Research

Institute of the University of Bucharest (ICUB). Life. Environmental and Earth Sciences Division (2014-2020): Vice-rector

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for Research at University of Bucharest and Coordinator of ICUB (2020-).

University of Bucharest, Faculty of Biology, Ale. Portocalelor 1-3, 60101 Bucharest, Romania Name and address

of employer Main activities and

Courses and practical works: General microbiology, Immunobiology, Medical microbiology (undergraduate students), Medical bacteriology, Medical Mycology, Novel antimicrobial strategies, Immunogenetics, Standardized microbiological responsibilities control of water, food, air and pharmaceutical products, Clinical Immunology

Practical works: Immunobiology, Microbiology, Clinical Immunology, Medical microbiology, Microbiology

Post-universitary courses of medical bacteriology for biologists, biochemists and chemists working in the Romanian Sanitary System in cooperation with OBBCSSR (Romanian Order of Biologists, Biochemists and Chemists Working in the Sanitary System)

Supervisor of graduation, Master, PhD and Postdocs (ca. 20 bachelor and MSc theses/year, 10 doctors, 12 PhD students, 6 postdocs)

1997-2013 (1997-2003 full time) Date

Occupation or Microbiologist

position held Main activities and responsibilities

Microbial diagnosis of Vibrionaceae family, National Data Manager for EARSS (European Antimicrobial Resistance Surveillance System), member in the research team of the laboratory undergoing projects of the laboratory concerning the investigation by phenotypic and genetic tools of the Vibrionaceae family members; implementation of new methods for the investigation of toxigenicity and virulence potential, standardization of antimicrobial susceptibility testing of Vibrio isolates.

Name and address National Institute for Research and Development in Microbiology and Immunology Cantacuzino of employer National Reference Center for Cholera and other Vibrios/Enteric infections

Education and training

> 2011-2012- Sept-May Dates

> > Continuous "Blended Learning" Training for University teaching - MII- Student centered learning - strategies for projecting, implementation and evaluation of educational process. M2.2. Educational strategies centered on students

POSDRU/57/1.3/S/26646

Dates 2000-2005

Title of qualification awarded

PhD degree - Host-parasite relationship. Opportunistic infections in HIV-infected patients

Conventional and complementary techniques used for the bacterial, parasitic, viral, fungal infections diagnosis in HIV Principal subjects/occupatio infected patients, as well as for the investigation of their pathogenic potential. nal skills covered Name and type of University of Bucharest, Faculty of Biology organisation providing education and training Level in national or First place in Class A international classification 1999-2000 Dates Title of PhD fellowship qualification awarded Principal Elucidation of the Blastocystis hominis, Entamoeba sp.: statute as primary or opportunistic pathogens in HIV/AIDS subjects/occupatio patients; Detection of Entamoeba histolytica/dispar complex using Entamoeba and Entamoeba histolytica II ELISA Techlab kits. nal skills covered Name and type of Pasteur Institute of Bangui, Central African Republic organisation providing education and training 2000 (3 months) Dates Certificate Equivalent to DEA (Diplome des Etudes Aproffondis) Title of qualification awarded Principal Medical Bacteriology Advanced Course subjects/occupatio nal skills covered Name and type of Pasteur Institute of Paris, France organisation providing education and training Date 1997-1999 Title of **Master studies** qualification awarded Principal Taxonomy subjects/occupatio nal skills covered University of Bucharest, Faculty of Biology Name and type of organisation providing education and training Date 1992-1997 Title of qualification Diploma in Biology, Specialization Medical Biology awarded Principal Title of graduation work: Microbial adherence to eukaryotic HEp-2 and HeLa cells subjects/occupatio nal skills covered University of Bucharest, Faculty of Biology Name and type of organisation providing education and training

Date 1988-1992

Title of qualification Certificate of Medical Assistant

organisation

providing education and training

courses and trainings

Name and type of Sanitary Secondary School of Pitesti

CEFOR courses (Centre de Formation des Enseignants dans le Domaine de Sciences de la Vie): Microbiology, Immunology, Molecular Biology, Biochemistry, Bucharest, 1997, 2002; CEFOR II-TEMPUS: Microbiology, Statistics in Biology, Bucharest, 1997; International course: Update in Clinical Diagnosis of Infectious Diseases- American Foundation for Medical Education, Bucharest, 1998; Workshop: Antibiotic resisatance in lung and EET infections, Bactro & Augmentin Bis, Budapest 1998; Advanced Course: Specialization Medical Bacteriology - Pasteur Institute, Paris, France, January -April 2000; PhD fellowship: Maladies opportunistes chez des malades immunodeprimes. Pasteur Institute Banqui, Central African Republic, March- December 1999; International Postuniversitary Course: From molecular biology to 21st Century Medicine Bucharest, 2001; 2nd, 3rd Workshops of National Data Managers of EARSS. Bilthoven, 2001; 2004; 18th ESCMID Postgraduation Course: Characterization, Molecular Biology and Epidemiology of beta-lactamases, Italy, 2002; Intensive Course of Bioinformatics: National Excellence Center for Microbiology, Biotechnology and Microbial Genetics, Bucharest, Romania, 2002; 1st ESCMID Summer School of Clinical Microbiology and Infectious Diseases, Lausanne, Switzerland, 2002; Workshop: Mycology without tears: tolls and techniques for demystifying fungal identifications, Bucharest, 2003; Data mining and Data managing workshop, Bilthoven, Holland, 2006; EARSS data managers workshop: data analysis and interpretation with statistic tools, June 2006, RIVM, Bilthoven, Netherlands; International Workshop on Quantitative Biology, 2007 Bucharest, Romania; ROWER Workshops- Izmir, 2008, Sinaia, 2010; Flow cytometry workshops (2013, 2014), Bucharest, Romania, Workshop - Pharmacogenomics and risk management in personalized cancer treatment, 2016, Bucharest, Romania; Workshop - Natural versus anthropogenic causes of climate variability and feedback from bio-geo-chemical processes (NatClimVar), 2017, Bucharest, Romania

Personal skills and competences

Romanian

(*) Mother tongue(s) an Specify, mother tongue (if relevant add other mother tongue(s), see instructions)

Other language(s)

Self-assessment	Understanding		Speaking		Writing
European level (*)	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C2	C1	C1	C2
French	B2	B2	B2	B2	B1

Technical skills and competences

investigation of bacterial virulence and antibiotic resistance at phenotypic and molecular level;

investigation of host-infectious agents relationships by in vitro and experimental pathology assays;

investigation of therapeutic or prophylactic alternatives for fighting resistant bacteria and optimizing the *in vitro* and *in vivo* methodology for their selection (i.e., novel chemical agents, probiotics, prebiotics, vegetal extracts etc.);

study of microbial interactions with the cellular and inert substrata, in order to select biomaterials with potential use in medicine as anti-microbial/anti-biofilm surfaces:

investigation of the role of microbial signaling molecules pheromones in the bacterial cell – eukaryotic cell cross-talk; nanotechnology in microbiology (biological tests for the evaluation of different types of nanoparticles as anti-microbial/anti-biofilm strategies, as drug delivery systems, as stabilizers for unstable antimicrobial compounds, such as the essential oils).

Habilitation thesis: Investigation of microbial virulence and resistance reservoirs and assessment of new anti-infective therapeutic and preventive strategies

PhD thesis: Host-parasite relationship. Opportunistic infections in HIV-infected patients

Research projects obtained as pricipal investigator or member in the research team after obtaining the PhD degree: Coordinator/key person:

- 23 national projects + 6 postdoctoral projects
- 6 international (EARSS, PHARE, 4 ERANET)

Member in the research team:

- 48 national research projects
- 6 international (FP7, COST, 1 M-ERANET, 2 Horizon 2020)

Publications

- 7 monographs, 7 textbooks, 1 national guide, 1 dictionary of specialty terms, >45 chapters in books
- 14 patents
- >400 publications in extenso
- >200 posters and communications with abstracts published in proceedings of national and internaitonal congresses and meetings

Project manager - national projects:

- 1. PN-III-P2-2.1-PTE-2021-0303 -GRACE- Synergic Systems of Active Principles Intended for Regenerative Cosmetics
- 2. PNIII-PCE-TRANSCEND- Transcriptomic Landscape Of Host-Pathogen-Antibiotic Interactions In Drosophila Melanogaster Model Infected With Gram-Negative Escape Bacteria
- CNFIS-FDI-2022-0675-Consolidation of the structural, administrative and logistical framework for the development of new interdisciplinary research programs in priority fields within the University of Bucharest
- 4. CNFIS-FDI-2021-0405- NETWORK- Strengthening and increasing the institutional competitiveness of the University of Bucharest, by developing national and international collaborations and increasing visibility by promoting infrastructure and research results.
- **5. PFE-2021-587- ACCENT-** Cluster of excellence for the interdisciplinary research of tangible and intangible heritage within the University of Bucharest
- **6. CNFIS-FDI-2020-0355 D6- CREATOR**-Research support Consolidation and increase of the institutional competitiveness of the University of Bucharest as a hub for interdisciplinary projects and a host institution for top researchers from the country and abroad
- **7. PDI-PFE-CDI ID 335** 2018 -2020 Interdisciplinary Institutional Platform for Excellence in Research, Development, Innovation and Professional Training in Archaeological Sciences. stages 4 and 5
- 8. PN-III-P3-3.1-PM-RO-CN-2018-0147 In silico and experimental studies of mobile genetic platforms of multiple antibiotic resistance
- **9. PN-III-P4-ID-PCE-2016-0921-** Rapid flow-based cytometry method for detecting microorganisms and testing antibiotic susceptibility directly from clinical samples
- **10.** PN-III-P4-ID-PCCF-2016-0114- Selection and dissemination of antibiotic resistance genes from wastewater treatment plants in the aquatic environment and the clinical sector
- 11. PN III BG- PN-III-P2-2.1-BG-2016-0369- Knowledge transfer on investigation of infectious and antitumor properties of new pharmaceutical formulations and cosmetics based on natural extracts
- 12. PN II PCCA 215 2014-2016 Innovative nanostructured materials and coatings with antimicrobial activity for medical applications.
- **13. Human Resources-** PN-II-RU-TE-2014-4-2037-*Risk assessment of transposon-mediated transfer of some carbapenemase gene*
- 14. Human Resources 135/2010 The correlation of Pseudomonas aeruginosa and Staphylococcus aureus virulence and/or resistance pattern with the clinical outcome of nosocomial infections
- **15.** Ideas 296/2007 (2007-2010) The role of heat shock proteins in bacterial pathogenesis and their potential use in developing new antimicrobial strategies
- **16.** CNCSIS 187 (2007-2009) The role of P. aeruginosa bacterial pheromones in the modulation of host-bacterial cell interaction during the infectious process
- 17. CEEX 1460 (2006-2008) Novel strategy for attenuation of bacterial pathogenicity and virulence based on QS inhibitors
- **18. IDEAS (2011-2014)** Effects of P. aeruginosa quorum sensing molecules on Drosophila genome: a new tool to identify candidate genes involved in host-pathogen crosstalk
- 19. UEFISCDI 2014; 2018 Romanian Biotechnological Letters Financial support for journal publication



Project manager/Key person--international projects:

- 1. PHARE PROJECT -Strengthening the Institutional and Administrative Capacity of the MoHF to adopt and implement the Acquis Communautaire in the Field of Water and Related Risks" project ID:EuropeAid/115101/D/SV/RO/ -National expert
- 2. JPI-EC-AMR Joint Transnational Call for Proposals 2016 "Transmission Dynamics of Antimicrobial Resistance Antibiotic Resistance in Wastewater: Transmission Risks for Employees and Residents around Waste Water Treatment Plants. Acronym: AWARE-WWTP
- **3. M-ERA.NET Call 2016**. Interfaces between materials and biological hosts for health applications Advanced biodegradable materials based on MgB2 resistant to microbial colonization. Acronym: BIOMB
- EARSS Project-financed by DG-SANGO (European Antimicrobial Resistance Surveillance System) (National Data Manager - 2001-2009)
- 5. COFUND-JPI-EC-AMR-ARMIS / Contract 40 din 01/05/2018 Antimicrobial Resistance Manure Intervention Strategies
- 6. JPI-EC-OCEANS-Aquatic Pollutants Joint Transnational Call 2020- BIOCIDE Antibacterial biocides in the water cycle an integrated approach to assess and manage risks for antibiotic resistance development

Project responsible- national projects:

- 1. PN-III-P1-1.2-PCCDI-2017-0686, PATCULT # RO- Complex multidisciplinary platform for integrative and systematic research of tangible and non-tangible cultural identities and cultural heritage in Romania
- CDI-PFE-CDI ID 335-2018 2020- Interdisciplinary Institutional Platform for Excellence in Research, Development, Innovation and Professional Training in Archaeological Sciences- stages 1, 2 and 3
- 3. PN-III-P1-1.2-PCCDI2017-0629 Innovative bionanomaterials for treatment and diagnosis
- 4. PN-III-PED 234 -Sustainable materials based on zinc oxide for antimicrobial applications

Key / Member in the projects' research team: International:

- 1. **FP7-Cooperation** (2009- 20011) Occupational Health and Safety economics –ROWER) Health-2007- 4.2: Building a knowledge repository for occupational well-being economics research (ROWER
- 2. PROJECT COST B 23 (2004-2006) Oral Facial Development and Regeneration.
- 3. Project M-ERA NET (2013-2015) Ag/Si doped carbon layer for biomedical application (CarLa)
- **4. SwafS Other Action 31- RIS4CIVIS-2021-2023-** RESEARCH AND INNOVATION STRATEGY FOR CIVIS.
- **5. Horizon 2020-ATHENA** Equality Gender Equality to Unlock Research Potential-https://www.athenaequality.eu/
- 6. COST ACTION B 23 (2004-2006) Oral Facial Development and Regeneration

National

- 1. PNCDI III, P2- PED-2022- ARGOS- Innovative, bioactive multifunctional topical formulations for the management of malignant wounds
- 2. PN-III-P1-1.2-PCCDI2017-0782 (2018-2022) Advanced innovative approaches for predictive regenerative medicine
- 3. PN-III-P1-1.2-PCCDI2017-0728 (2018-2022) Integrated project for the development of technologies dedicated to advanced medical treatments
- **4. PDI-PFE-CDI ID 335-2018 2020** Interdisciplinary Institutional Platform for Excellence in Research, Development, Innovation and Professional Training in Archaeological Sciences.
- 5. PN III-P1-1.2-PCCDI-2017-0473 (2018-2022) From classical nutrition to precision nutrition in animal breeding, the scientific basis for ensuring the nutritional security of the population
- 6. PN II 1172/2007 (2007-2010) Partnership for the purpose of synthesis, physico-chemical characterization and testing of biological activity of new thioumids with potential anti-infectious action
- 7. PN-III-P1-1.2-PCCDI-2017-0428 (2018-2022) Innovative nanotechnologies based on polymers for obtaining new advanced materials
- **8.** PN-III-P1-1.2-PCCDI-2017-0743 (2018-2022) Interinstitutional program for the development of advanced solutions based on eco-nanotechnologies for multifunctional treatments of textile and leather materials
- **9.** PN-III-P2-2.1-PED-2016-1008 (2016-2018) Elaboration of a functional model of microbial combustion cells for the production of bioelectricity with the simultaneous treatment of municipal wastewater
- 10. PN-III-P2-2.1-PED-2016-0910 (2016-2018) Innovative surface design for prolonging the use period and the safety of dental and orthopedic implants
- 11. PN-III-P4-ID-PCE2016-0884 Release of antimicrobial peptides mediated by innovative multifunctional nanoparticles for improved performance of medical implants
- 12. PN-III P2-2.1-PTE-2016-0177-Hydrogels based composites of inorganic nanoparticles and collagen prolonged antimicrobial activity of the wound for infection prevention
- 13. PN-III P2-2.1-BG-2016-0142 Increased performance / competitiveness by improving the technology of production of intelligent products with superior biocompatibility and antibacterial properties cosmeto medical applications
- 14. PN-III P2-2.1-BG-2016-0397 –Contributions to improve competitiveness of Sanimed SRL by assimilating knowledge and possible implementation into production of 3D collagen-polymer hybrid matrices with applications in tissue recovery
- 15. TE 372/2015-Magnetite nanoparticles functionalized with natural compounds modulatory effect on Pseudomonas aeruginosa virulence and persistence.
- 16. PCCA 259/2014-Bioceramic composites with local applications in antibacterial therapy.
- 17. PN-II-PT-PCCA-2011-3.1-0621 (2013-2015) Selection of new functional strains of lactic bacteria isolated from plant materials, with applications in food biotechnologies.
- 18. PN-II-PT-PCCA-2013-4-1292 (2013-2015) Innovative nanostructured materials and coatings with antimicrobial activity for medical applications
- 19. PN-II-PT-PCCA-2013-4-2087 (2013-2015) Integrated system for biomolecular modeling, applicable to the study of Gram-negative bacteria
- 20. PN II 3.1-0969 (2012-2014) Innovative Multidisciplinary research to investigated the effects of probiotic lactic acid bacteria strains and new consortia (Prolab)
- 21. 94/PN2/PCCA (2012-2014) New nanostructured prosthetic devices with improved anti-biofilm activity (AntiBioTube)
- 22. PCCA 87/2014-Textile innovative photocatalytic antibacterial and self-cleaning properties

- 23. CNCSIS 134 (2010-2013) Study of molecular mechanisms of the antimicrobial activity of some probiotic bacteria against urogenital pathogenic agents
- 24. PN II- 42150 (2007 -2010) New significant aspects concerning the antibiotic resistance and virulence of bacterial strains isolated from the infectious pathology associated with cardiovascular and gastro-intestinal surgery
- 25. PN II 61-046 (2007-2010) Research on obtaining new classes of antimicrobial agents: synthesis, characterization, physico-chemical and biological screening of new thioureides
- 26. PN II 42095 (2007-2010) Research concerning the synthesis, physico- chemical characterization and anti-infectious activity of new compounds with tricyclic 6.7.6 structure
- 27. PN II 62-071 (2008-2011) Getting a topic phytoproduct efficient in stimulating the healing of skin lesions
- 28. Ideas 295/2007 (2007-2010) Alternative methods for demonstrating in vivo invasive potential of Shigella spp and enteroinvasive Escherichia coli strains
- 29. PN II 71-010/ (2007-2010) Biodegradability study of some composite materials with applications in cars industry
- 30. CNCSIS A 1312 (2007-2009) Evaluation and monitoring of the soluble mediators implicated in the regulation of bacterial cells growth by quorum sensing mechanisms
- 31. CNCSIS 187 (2007-2009) The role of Ps. aeruginosa bacterial pheromones in the modulation of host-bacterial cell interaction during the infectious process
- 32. CNCSIS 1679 (2007-2009) Selecting and monitoring the effectiveness of ecological alternatives to combat opportunistic infections and antibiotic resistant bacteria included in biofilms
- 33. CEEX_86/2006- (2006-2008) Application of accelerated electron beam for the microbial decontamination of nutritive supplements of vegetal origin
- 34. CEEX_85 (2006-2008) Interdisciplinary research for obtaining new antimicrobial agents, physico-chemical characterization and antimicrobial activity
- 35. CEEX (RELANSIN) 199 (2006-2008) Control of human and bacterial cells interaction with nanostructured surfaces to obtain intelligent biosurfaces
- 36. PN II 61-047 (2006-2008) Interdiaciplinary research for obtaining new antimicrobial agents, physoco-chemical characterization and anti-infectious activity
- 37. CEEX (VIASAN) 142 (2006-2008) Setiing up an integrated network for the study of microbial biofilms developed on prosthetic and cellular substrates in order to improve diagnosis and treatment of biofilms associated infections
- 38. CEEX (RELANSIN) 129 (2006-2008) Novel nanostructured materials with biocompatible properties for biomedical applications
- 39. CEEX (VIASAN) (168/2006) Study of antibiotic resistance mechanisms by impermeability in Gram-negative bacteria on natural and reconstituted membranes
- 40. CERES. 4 128 (2004-2006) Bioactive species processed as infectious agents inhibitors
- 41. VIASAN 475- (2004-2006) In vitro study of the bacterial lectins role in the evolution of infectious process and their role in the infraspecific typing"
- 42. MATNANTECH 204 (403) (2004 2006) Complex nanospecies, biomaterials with anti-infectious action
- 43. VIASAN 239 (2004-2006) Virulence and pathogenicity of Aeromonas sp. strains with different sources of isolation
- 44. VIASAN 443 (2004-2006) Local immunisation methods for the management of periodontal disease
- 45. BIOTECH-292- (2004-2006) Setting up a standardized microbial collection laboratory
- **46. AGRAL 212 (2003-2005)** Biotechnological evaluation and demonstration of some ecologic alternatives with potential applications in monogastric animals growing
- 47. VIASAN 224 (2003-2005) Pilot program for the surveillance of antibiotic resistance.
- **48.** VIASAN 065/(2001-2003) Genitypic and Phenotypic characterization of Vibrio cholerae strains isolated in Rep. Moldovia during 1995-2000

Postdoctoral research coordinator

- **1.PN-III-P1-1.1-PD-2016-1798** -Irina Gheorghe Barbu- Pilot study on the evaluation of the role of wastewater in the dissemination of carbapenem ressistant Pseudomonas aeruginosa and Acinetobacter baumannii clinical strains into the aquatic ecosystem
- **2.PN-III-P1-1.1-PD-2016-2137-** Ilda Czobor Barbu- *Mapping the insertions of transposons associated with the phenomenon of anti-resistance.*
- 3. PN-III-P1-1.1-PD-2021-0540 Surleac Marius-Mapping of mobile genetic elements -
- bioinformatics study on the ESKAPE resistome from clinical and environmental samples from Romania
- **4.** PN-III-P1-1.1- PD-2021-0748 Tihauan Bianca-Maria Development of new healing hydrogels with active biomolecules encapsulated in lipid carriers
- **5. PN-III-P1-1.1-PD-2021-0598 -** *Ungureanu Gabriela-Irina-Innovative coatings for increased biocompatibility of implants and prevention of associated infections*
- **6.** PN-III-P1-1.1-PD-2019-0499 Gratiela Gradisteanu Integrative analysis of the multi-omic profile and NADPH oxidases in type II diabetes.

Contracts with industry

- 1. 17654 / 13.10.2009
- 2. 21737/2012
- 3. 9489 / 25.06.2008
- 4. GJ208 / 05.12.2008

Participation to scientific congresses, workshops:

Nationa

D. Brandza Botanical Garden Conference, Cantacuzino Institute Days, Balş Institute Days - 2018

OBBCSSR National Conference, UMF Congress -2017

MEDICS, April 14-17, 2016

SIMI, Bucharest, 2016

Diaspora Conference, April 25-28, 2016, Timisoara, Romania

Conference of the Doctoral School of Biology of the Lower Danube University, June, 2016

UNAS National Congress (National Union of Dentists in Romania), 2009Annual participation to the National Meeting of Romanian Society of Microbiology Acad. N. Cajal Symposium, National Flow Cytometry Congress

Romanian Society for Cell Biology at 25 years, Anniversary workshop "From Basic Science to Therapeutic Applications", Bucharest 6-10 June 2007

The 6th Seminar of NanoScience and Nanotechnology, Romanian Academy, 26 March 2007

Workshop PROBIOTICS - An alternative to conventional treatments, 2010

Workshop "Medical significance of microbial biofilms", Bucharest, November, 2008 National Congress UNAS (National Union of Romanian Dentists), 2009 ICDPP Symposium (scientific research and development for plant protection) 2010

Veterinary Medicine Simposium, Bucuresti, 2008

International

- 1. EDAR. 2022
- 2. OncoHub 2021, 2022
- 3. ECCMID- European Congress of Clinical Medicine and Infectious Diseases annual participation during 2002- 2022
- 4. EWMA 2020
- 5. BALKAN FUNGUS, SOMED-2018
- 6. SOMED, ROCAM, FEMS-2017
- 7. FISH, Edinburgh, November, 2016
- 8. EQALM; Barcelona, October, 2016
- 9. ICAAC, California, October, 2016
- 10. Vilnius International Communicable Disease week (26 Iunie-1 Iulie, 2016, Vilnius, Lithuania
- 11. Federation of European Microbiological Societies Congress (FEMS) 2006, 2011
- 12. Meeting of the Three Divisions of the International Union of Microbiological Societies, Bulgaria, 2008
- 13. Microbiologia Balkanica, Bucharest, Romania, 2005
- 14. Genomes 2008. Functional Genomics of Microorganisms, Paris, 8-11 April, 2008
- 15. Federation of European Biochemistry Societies Congress- 2007, 2008
- 16. 31st International Symposium on HPLC and Related Techniques, June, 2007
- 17. VIBRIO 2007 Conference, 25 Nov. 1 Decembrie, Paris, Franta
- 18. Genetics and Mechanisms of Susceptibility to Infectious Diseases 21-24 Nov. 2007, Paris
- 19. International Congress of Nosocomial Infection Prevention, Lednice, 27-29.5.2007
- 20. Data mining and Data managing workshop, Bilthoven, Holland, 2006
- Workshop data analysis and interpretation in Excel- EARSS datamanagers workshop, 2006, RIVM, Bilthoven, The Netherlands
- 22. Ist International Medicinal and Aromatic Plants Conference on Culinary Herbs, 2007, Antalya, Turkey
- 23. International congress on microbial ecology and disease (SOMED) –2007, 2010, 2011, 2012
- 24. Le quatrieme colloque Franco-Roumain de Chimie Apliquee, Clermont-Ferrand, France, 2006
- 25. 7th International Symposium on the Biology of Acinetobacter, Palma de Majorca, 2006
- 26. International Conference on Surgical Infections, 2006, Stockholm, Sweden
- 27. Black Sea basin conference on analytical chemistry, 2005
- 28. ROWER Workshops- 2009, 2010
- 29. International Workshop on Quantitative Biology, 2007, Bucharest, Romania

Member in the organizing committee

- 1. International Conference Poetized Wars and Polemic Writings in the Modern Age, 2020, online
- 1. Joint ESENIAS and DIAS Scientific Conference and 8th ESENIAS Workshop, 2018
- 2. Counteracting Drug-Resistant Fungal Infections: A New Purpose for Ebselen?, 2018
- Romula the Capital of Roman Province of Dacia Inferior (Malvensis)- research program. Potential, Problems, Perspectives, Bucuresti, 2017
- 4. Oceans, Islands and Volcanoes Of The Geologic Past In The Romanian Carpathian Mountains, 2017
- 2. International Summer School and Joint Symposium on Flow Cytometry, Bucuresti, 2017
- 3. Congress of the Romanian Society of Cytometry, 2014, 2015, 2018, 2019, 2021
- 4. Beginners and advanced courses of flow cytometry 2014, 2015, 2018, 2019, 2021
- 5. National Conference of OBBCSSR, 2012

Invited speaker and/or chair (in) international workshops and conferences

- 1. NanoBioMat2022 winter edition, 2022
- 2. SICHEM, 2022.
- 3. 2nd OncoHub Conference, sept. 2022
- 4. 1st OncoHub Conference, oct. 2021
- Conference in the virtual environment: Socio-Ecological Practice Research for Sustainable Landscape Governance Conference, online. 2020
- 6. First Boehringer Ingelheim National Livestock Conference, Romania, 17-19 May, 2019, Poiana Brasov
- 7. Project closure meeting ERANET HCVCYSPROT Identification of first in class chemical scaffolds against Hepatitis C Virus NS2 cysteine protease (www.hcvcysprot.com), Bucharest, 2018
- 8. 3. ADVANCED OPTICAL MICROSCOPY IN MICROBIOLOGY AND IMMUNOLOGY, IUNIE, VALENCIA, 2017
- 9. 5.The 56th Edition of the Romanian Academy Scientific Session, December, 2016
- 10. ROCAM, Bucharest, 2017
- 11. International Conference of the Doctoral School of Dunarea de Jos Universitu, Galati, 2016
- 12. International Workshop "Natural versus anthropogenic causes of climate variability and feedback from bio-geo-chemical processes (NatClimVar), 18-22 Octombrie, 2016, Bucureşti, Romania
- 13. International Workshop Application of flow cytometry in microbiology- 2014
- 14. European Congress of Cell Analysis (ECCCA), Lisbon, 2014;
- 15. EQALM (European organization for external Quality Assurance providers for Laboratory Medicine) Symposium, Bucharest, 2013:

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- 16. 22nd ECCMID (European Congress for Clinical medicine and Infectious Diseases), London, April 2012;
- 17. Conference -Diaspora in Romanian Scientific Research and Education, Bucharest, September 25-28, 2012;
- 18. 2nd ROWER Conference on Occupational Health and Safety Economics; 2011;
- 19. 1st ROWER Conference on Occupational Health and Safety Economics, 2010;
- 20. ROWER Workshops- 2009, 2010;
- 21. Data mining and Data managing workshop, Netherlands, 2006;

Organisational skills and competences

- 22. Data analysis and interpretation in Excel- EARSS datamanagers workshop, 2006, RIVM, Bilthoven, The Netherlands;
- 23. Follow up QA/QC and reference laboratory, Bucharest, 28-30 Sept. 2005
- 24. Water microbiological control, infectious diseases and public health- Seminar Schleicher and Schuell, 2002, February, Brasov, Romania.
- 25. Management and quality assurance in medical laboratories. Conventional and modern microbiological and immunological methods Bucharest, 2007

Member in the scientific committee

- Closing workshop RADAR project, 2022
- 2. Workshop Aware ERANET project-, Bucharest, Romania, 2019
- 3. Workshop ARMIS ERANET project Bucharest, Romania, 2019
- 4. Weather, climate and society, 2018
- 5. Understanding the cross habitat interactions between aquatic and terrestrial habitats in order to optimize biodiversity, ecosystems services and management, Bucharest , 2018
- 6. BIS Seminars From Cellular to Environmental Sciences, Bucharest, 2016, 2018
- 7. Precision nutrition: Using nutrigenetics in defining individualized nutritional needs, Bucharest, 2017
- 8. Workshop of ICUB SVMP Fellows, Bucharest, 2017
- 9. World Meteorological Day Conference, Bucharest, 2017
- 10. EPA Science in Decision Making to Serve Environmental, Economic, and Social Goals, Bucharest, 2017
- 11. Uncertainties, Severe Weather, and Communication: How Severe Weather Communication is Changing in the United States. Bucharest. 2017
- 12. University botanical gardens from status-quo to development prospects, Bucharest 2017
- **13.** Workshop Pharmacogenomics and risk management in personalized cancer treatment, Bucharest, Romania, 2016
- 14. Workshop- Natural versus anthropogenic causes of climate variability and feedback from bio-geo-chemical processes (NatClimVar), Bucharest, Romania, 2016
- 15. ICUB BIS Workshops I, II -2016
- 16. 2nd ROWER Conference on Occupational Health and Safety Economics, Sinaia, 2011
- 17. Workshop Medical significance of microbial biofilms, Bucharest, Romania 2008
- 18. Coordinator "Quality assurance in antimicrobial susceptibility testings",11-12 October, 2001, Bucharest, Romania, Romanian Society of Microbiology
- 19. Coordinator Atelier pratique- Le diagnostic des diarrhees au cours du SIDA de l' adulte", Bangui, Republique Centrafricaine, 1999, Pasteur Institute of Bangui

Plenary lectures

International conferences

- Chifiriuc M.C. Drosophila melanogaster a Versatile Model for Human Cancer Research, 2nd OncoHub Conference, sept. 2022
- 2. Chifiriuc M.C., Surleac M. -Wastewater treatment plants at the crossroads of the aquatic and clinical reservoirs of antimicrobial resistance the RADAR study, SICHEM, nov. 2022
- 3. Chifiriuc M.C. Antibiotic resistance in pediatric respiratory infections. CIVIS summer school "Infectious Respiratory Diseases and Immunity: focus on early life period".21 23 23.06.2022, ULB
- 4. Marutescu L.G. Chifriuc M.C. Rapid detection of pathogens and resistance contribution of flow cytometry. Biodynamics A Transdisciplinary Approach. 19-21.05. 2022
- Chifiriuc M.C. Mihăescu Gr. Drug resistance: common issues in infectious diseases and cancer 1st OncoHub Conference. 13-15.10.2021
- 6. Chifiriuc M.C. Nanoparticles a promising tool in antimicrobial strategies College of Health and Medical Technology, Baghdad, 26.06.2020 https://drive.google.com/file/d/1XqBnzFlwLmKai3vx9OlO1xKOb8JAlmpj/view?usp=sharing
- Chifiriuc M.C., Lazar, V., Dumitru A., Bradu C. Microbial adherence and biofilms: beneficial and negative consequences The 9th International Conference On Advanced Materials, Rocam 2017&The 2nd International Symposium On Dielectric Materials And Applications, Isydma 2017 11-14 July 2017, Bucharest, Romania. http://rocam.unibuc.ro/rocam2017/invited.php; http://rocam.unibuc.ro/rocam2017/
- 8. Chifiriuc M.C. Antibiotic resistance and antimicrobial strategies. Challenges and perpectives. Conferința Școlii Doctorale a Universității Dunărea de Jos, 4 Iunie, 2016, Galați http://www.cssd-udjg.ugal.ro/files/invitatie/Program detaliat al conferinței 2016.pdf
- New antimicrobial strategies based on the modulation of intercellular signalling mechanisms in bacteria mediated by quorum-sensing-16 International conference on control systems and computer science, "POLITEHNICA" University of Bucharest, Bucharest, Romania, 2007

National conferences

- Chifiriuc M.C. Immunoglobulin research and production today. Centenary of the Cantacuzino National Institute, April 1-3, 2021.
- 2. Chifiriuc M.C. About antiviral immunity. Marathon of nutrition, nutrients and health 25.03.2021
- 3. Chifiriuc M.C. The role of mucosal immunity in maintaining body health; Nutrition and Immunity Marathon. 2.06.2020. https://www.roaliment.ro/academy/event/maratonul-de-nutritie-si-immunitate/
- 4. Chifiriuc MC. Antibiotic resistance: causes, consequences and coping strategies. December 9, 2016. Romanian Academy. https://www.ibiol.ro/sesiune/2016/Rezumate.pdf. Page 36

Oral communications in international /national conferences

- Chifiriuc M.C. Research in the Context of Romanian Higher Education. Orientation Agenda for 2021-2022 U.S. Fulbright Grantees to Romania, October 7-9, 2021
- 2. Chifiriuc M.C. Heads- up on Romanian Antimicrobial Resistance working group within RoChemBioNet. Project closure meeting ERANET HCVCYSPROT. Identification of first in class chemical scaffolds against Hepatitis C Virus NS2 cysteine protease (www.hcvcysprot.com)https://www.biochim.ro/announcement-4/

- Chifiriuc M.C. Short course of advanced optical microscopy in microbiology and immunology, Valencia, Spain, 2017
- Chifiriuc MC. Impact of climate changes on the epidemiology of infectious diseases, Workshop Natural versus anthropogenic causes of climate variability and feedback from bio-geo-chemical processes (NatClimVar), 18-22 Octombrie, Bucuresti, Romania https://www.docdroid.net/VyWeHxm/program-natvarclim-final-complet-allprint-pdf
- Chifiriuc M.C. PAR-2-03 Selected Oral Presentation: Flow cytometry characterization of gram positive and gram negative bacterial strains exhibiting non-enzymatic and enzymatic resistance mechanisms- ESCCA workshop on microbiology – 16th Sept 2014, Lisbon
- Chifiriuc M.C. pres. author). Marinescu F., Marutescu L, Popa M., Chifiriuc M.C., Gheorghe I., Savin I., Lazar V. Antibiotic-resistance and virulence profiles in bacterial strains isolated from wastewater treatment plants and receiving waters in Romania. O304. 22nd European Congress of Clinical Microbiology and Infectious Diseases (ECCMID), London, 31.03.2012 - 03.04.2012
- 7. Chifiriuc M.C., Marutescu L., Mitache M., Cotar A.I., Popa M., Lazar V. *Phenotypic And Genetic Resistance And Virulence Markers In S. aureus Isolated From Nasal Exsudates*. 2nd Rower Conference On Occupational Health And Safety Economics, 27-30 April, 2011, Sinaia, Romania
- 8. Mitache M., Marutescu L., Chifiriuc M.C., Holban A., Popa M., Pelinescu D., Bleotu C., Lazar V. Resistance, Virulence And Epidemiological Features In Beta-Hemolytic Streptococci Isolated From Kindergarden Infantile Population, With Or Without Clinical Symptoms, Including Scarlet Fever. 2nd Rower Conference On Occupational Health And Safety Economics, 27-30 April, 2011, Sinaia, Romania
- 9. Chifiriuc M.C. Antibioresistance and its impact on current civilization First Boehringer Ingelheim National Livestock Conference, Romania, 2019, Poiana Brasov
- Chifiriuc M.C. RADAR Selection and dissemination of antibiotic resistance genes at wastewater treatment plants in the aquatic environment and the clinical sector - Annual Scientific Session of INCDMM Cantacuzino. 20.11. 2018, Cercul Militar, Bucharesthttps://cantacuzino.mapn.ro/app/webroot/fileslib/upload/files/PROGRAM%20FINAL%20CONFERINTA%20NA TIONALA%20A%20INCDMM%20CANTACUZINO(2).pdf
- 11. Chifiriuc M.C. National Conference of OBBCSSR, Bucharest, March, 2017
- 12. Chifiriuc M.C., Lazar V. Interaction of invasive bacteria with gentamicin encapsulated in polysaccharide microcapsules. Diaspora Conference 2012, Bucharest, RO, 26-28 Sept 2012
- 13. Chifiriuc M.C., Grumezescu, A.M., Lazar V. *Current trends in the development of new antimicrobial strategies*. Diaspora Conference 2012, Bucharest, RO, 26-28 Sept 2012

Member of professional associations/societies

ESCMID (European Society for Clinical Microbiology and Infectious Diseases), EARSS (European Antimicrobial Resistance Surveillance System), SRM (Romanian Society of Microbiology), ESCCA (European Society for Clinical Cell Analysis), ACR (Romanian Association of Cytometry), CALILAB-Asociația pentru calitate în laboratoare, OBBCSSR), SOMED (Society of Medical Ecology and Disease)

Professional visibility

Corresponding member of the Romanian Academy - 2021

Corresponding member of the Academy of Romanian Scientists –2020

Member of the working group for the realization of the metaranking methodology and the national universities metaranking - ed. 2021, ed. 2022.

Member of the working group for the realization of the 2021 research funding methodology (cf. OME no. 5495/2021 and OMEC no. 3747/2021 of April 28, 2021 regarding the financing of university scientific research within state higher education institutions in 2021).

Invited TedXYouth, ed. 2022

Prizes

1.

2 gold medals at Euroinvent/Proinvent

- 1. the award for the best presentation at an international online congress EWMA 2020
- The 3rd prize for the poster presented in The Anniversary Conference of the Institute of Biology – 50 years of Academic Research in Microbiology, 2010
- **3.** The prize of the Romanian Society of Microbiology for 2 posters presented to the Romanian Conference of Microbiology, 2007
- 4. Nominated by Capital in "Top 100 Successful Women", in the "Education and Research" category, 2022 edition

National microbiology expert in the PHARE project - EuropeAid/115101/D/SV/RO.

Invited national expert - Joint Programming Initiative on Antimicrobial Resistance Strategic Research and Innovation Agenda (JPIAMR SRIA) Roadmap Workshop, 2018, Leiden, Netherlands

Evaluator

International projects (ERANET, Missouri competitions, Netherlands, Belgium, Israel, UK, Croatia, Republic of Moldova, USA, L'Oreal-UNESCO for Women in Science Fellowship Programme)

National projects (Bilateral Romania - Republic of Moldova, 2019; Ideas 2008; TE 2018, Bilateral Romania - France, 2018, PED 2019, AOSR 2021)

International doctoral commissions

Referee for national and international publications (over 100 journals, incl. Nature)

Invited quest editor-

- 1. special issue for Current Organic Chemistry (Impact factor 2.9; AIS 2) (Topic: Quorum sensing inhibitors: synthesis, optimization, and emerging biomedical applications-http://www.eurekaselect.com/107468/article)
- 2. *Curr Top Med Chem* (Topic: Micro and Nanoscale Materials for Boosting the Antimicrobial Fight) (*IF 3.4*) http://www.eurekaselect.com/130282/article
- 3. *Curr Top Med Chem* (Thematic Issue: Nanobioactive Structures for Drug Targeting and Delivery) (*IF 3.4*) http://www.eurekaselect.com/130281/article
- Molecules (IF 3) Synthetic Antibiofilm Agents: Design, Synthesis and Applications) https://www.mdpi.com/journal/molecules/special issues/Synthetic Antibiofilm
- 5. Coatings (IF 2.33) Special Issue Antimicrobial/Antibiofilm Surfaces https://www.mdpi.com/journal/coatings/special_issues/Antimicrobial_Antibiofilm_Surf
- 6. Materials (Factor de impact 2.9) Antimicrobial Bio-Nanomaterials: Current Progress and Challenges for Translating Them into the Clinical Practice https://www.mdpi.com/journal/materials/special_issues/adv_bio-nano_curr_prog_chall_trans_clinic_prac
- 7. Frontiers in microbiology (IF 4.2/2021) (Tipic: Current Trends in Exploiting Molecular Signaling in Bacteria-Host Crosstalk) https://www.frontiersin.org/my-frontiers/overview)
- 8. Frontiers in microbiology (IF 2021 = 6/Q1) (Topic: Common Themes in Drug Resistance: from Viruses to Human)(https://www.frontiersin.org/my-frontiers/research-topics)
- Frontiers in nutrition (IF 2021= 6.59/Q1)- Diet-Microbe-Host Interactions in Metabolic Syndrome (https://www.frontiersin.org/my-frontiers/research-topics)
- Horticulturae (IF 2021=2.93)- Antioxidant Activity of Horticultural Plants and Leaves Extracts (https://www.mdpi.com/journal/horticulturae/special_issues/biological_compounds)

Editor of national journals

- 11. Romanian Biotechnological Letters (RBL) http://www.rombio.eu/editorial%20board.pdf
- 12. Rom Arch. Immunol. Microbiol. Din 2008-http://www.roami.ro/index.php?q=board
- 13. Biointerface Research and Applied Chemistry-2011http://biointerfaceresearch.com/editorial-board/)
- 14. Letters in Applied NanoBioScience- 2012-http://nanobioletters.com/
- 15. Annals of West University of Timisoara, Series of Biology. http://www.biologie.uvt.ro/annals.htm

H index - 50 (Google Scholar)/ 40 (Scopus)/39 (Web of Science); >10500 citations (google Scholar); >7000 (Scopus), >6950 (WOS)

PC skills

Microsoft Office (Word, Excel, PowerPoint, Photo Editor, Access), working with databases (Whonet, EARSS), statistical analysis software (GraphPad).

Artistic skills and competences

Archaeological reproductions painting

Other skills and competences

Labeling historical monument buildings from three historical cities of Romania, i.e. Bucharest, Curtea de Arges, Campulung (>500 monuments), Map of historical monuments in Romania, 3D map of monuments in Bucharest (as Board member of APMNIR- Friends of Romanian National History Museum) (www.monumenteromania.ro); organizing exhibitions on cultural themes (Ancient Egypt, Astronomy, Pre-Columbian America, European and Romanian Renaissance, History of Philosophy), bas-relief painting, invited conferences (Global Change, Romanian Renaissance, Geometric principles in the harmony of natural forms, UNESCO Monuments in Romania, Aztecs, Maya, Wood art in the Romanian cultural tradition, Neolithic civilizations in the Romanian geographical space, Ancient India, Ancient Egypt, George Emil Palade- the Nobel Laureate, Perikles of Greece etc. (as Member of the Cultural Association New Akropolis- www.noua-acropola.ro).

Driving licence

No

Prof. Mariana Carmen Chifiriuc