

Mihaela Magdalena MITACHE



O

 [Redacted]
 [Redacted]
 [Redacted]

WORK EXPERIENCE

2020 - present **Associate Professor, PhD**

Faculty of Medicine / Faculty of Dental Medicine, Titu Maiorescu University, Bucharest, Romania
Teaching areas: Bacteriology, Parasitology, Virology, and Oral Microbiology

2014 - 2020 **Lecturer, PhD**

Faculty of Dental Medicine, Titu Maiorescu University, Bucharest, Romania
Teaching area: Oral Microbiology

2018 - 2019 **Head of the Public Health Diagnostic and Research Laboratory**

Bucharest Public Health Directorate, Bucharest, Romania

1999 - present **Laboratory Testing Manager & Quality Manager in Healthcare-Associated Infections Department**

Public Health Diagnostic and Research Laboratory, Bucharest Public Health Directorate, Bucharest, Romania

Main responsibilities: Coordination and supervision of laboratory testing activities; review and validation of test results; supervision of laboratory personnel; and oversight of compliance with applicable quality requirements and laboratory procedures.

- Areas of expertise:
- Bacteriology: clinical microbiology testing and laboratory diagnosis of bacterial infections; antimicrobial susceptibility testing; evaluation of biocidal products; and microbiological testing of food, water, cosmetics, air, environmental surfaces, and surgical instruments used in healthcare facilities.
- Parasitology: laboratory diagnosis of parasitic infections
- Immunoserology: serological and immunological diagnostic testing

- 2020 - 2022 Lecturer, PhD
Faculty of Biology, University of Bucharest, Bucharest, Romania
Course: Standardized Microbiological Testing of Products and the Environment
- 2015 - 2016 Lecturer, PhD
Faculty of Biology, University of Bucharest, Bucharest, Romania
Course: Medical Epidemiology
- 2014 - present Laboratory Assessor (ISO/IEC 17025)
Romanian Accreditation Association (RENAR)
- 2015 - 2019 Quality Manager
JS Hamilton Romania
- EFLM Academy Member
Membership No. 11416/202
- European Specialist in Laboratory Medicine (EuSpLM)
Registration No. 11416/2023

EDUCATION AND TRAINING

- 2001 - 2010 PhD in Biology
University of Bucharest, Faculty of Biology
Bucharest, Romania
- 1998 -2000 Master's Degree in Biology
University of Bucharest, Faculty of Biology
Bucharest, Romania
- 1993 -1997 Bachelor's Degree in Biology
University of Bucharest, Faculty of Biology
Bucharest, Romania
- 2015 sTANDEM Certificate – English for Medical Purposes (General Medicine)
University of Medicine and Pharmacy of Târgu Mureş, Romania
CEFR Level: B2

PERSONAL AND PROFESSIONAL SKILLS

Strong expertise in clinical microbiology and laboratory diagnostics

Leadership and laboratory management skills

Quality management and laboratory accreditation expertise

Excellent communication and teamwork skills developed through extensive experience in national and international projects and academic teaching

Ability to work effectively in multidisciplinary and multicultural environments

Academic teaching and mentoring skills

Good digital and computer skills

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B2

CONTINUING
PROFESSIONAL
DEVELOPMENT

Use of Computer Systems for Method Validation in Testing Laboratories
RENAR, 21–22 April 2003

Business Policies and Mechanisms in the Healthcare System of Central and South-Eastern Europe
Ministry of Public Health, 19–21 September 2006; 25–27 September 2007

Antibiotic Therapy
Romanian National Society of Infectious Diseases, 8–10 June 2006

Laboratory Quality Manual. Accreditation, Contracting of Analyses with the National Health Insurance House (CNAS), and Implementation of Quality Management Systems
CALILAB, 2–3 February 2007

Microbiological Investigation of Drinking Water
SARTORIUS, 27 June 2007

Microscopic Diagnosis of Intestinal Parasitic Diseases
“Carol Davila” University of Medicine and Pharmacy, Bucharest, 19–23 March 2007

Infectious Diseases – Nosocomial Infections
“Carol Davila” University of Medicine and Pharmacy, Bucharest, 7–11 May 2007

Requirements of SR EN ISO 19011:2003 Standard for Internal Auditing in Testing Laboratories
RENAR, 26–28 March 2008

Acute Enterobacterial Infections – Etiological Diagnosis, Modern and Conventional Methodologies
“Carol Davila” University of Medicine and Pharmacy, Bucharest, 9–12 June 2008

Requirements for Accreditation of Medical Laboratories: SR EN ISO 15189 and SR ISO 15190
RENAR, February 2008

Current Topics in Immunology and Microbiology (Symposium)
Cantacuzino Institute, 2009

Real-Time PCR Techniques for the Detection of Pathogens and Other DNA Targets in the Food Industry
Cantacuzino Institute, 2009

ROVER Conference on Occupational Health and Safety Economics
Turkey, 23–26 April 2009 (participation with scientific papers)

Study of Resistance Mechanisms in Community-Acquired and Nosocomial Pathogens Using Automated Identification and Antimicrobial Susceptibility Testing Systems
bioMérieux – “Victor Babeş” Hospital, 27–29 October 2010

EUCAST Workshop
Cantacuzino Institute, 19 November 2010

Professional and Organizational Training of Immunology Laboratory Staff through the Implementation of Advanced Technologies and Quality Management (IMUNOLAB)
Cantacuzino Institute – “Victor Babeș” Institute – University of Gothenburg, December 2010 – November 2013

Hospital Evaluator Course
CONAS, February 2011

Professional Training of Medical Staff in New Molecular Diagnostic Technologies
“Victor Babeș” Institute, March 2011

Proteomics: From Research to Clinical Practice. xMAP Technology – Practical Applications in Multiplexing (Advanced Course)
“Victor Babeș” Institute, 6–12 June 2011

Validation of Testing Methods. Validation Techniques
RENAR, November 2011

Project Management for the Development of Immunology Laboratories
Cantacuzino Institute – “Victor Babeș” Institute, 12–15 May 2011

Management and Quality Assurance in Immunology Laboratories
Cantacuzino Institute – “Victor Babeș” Institute, 2011

Organization of the Immunology Laboratory in the Current Context
Cantacuzino Institute – “Victor Babeș” Institute, February–April 2011

Practical Course in Clinical Immunology
University of Gothenburg, 21–25 November 2011

Continuing Education in Immunology – From Specialization to Ultra-Specialization
Cantacuzino Institute – “Victor Babeș” Institute, 6–9 September 2012

Hospital Auditor Course
CaPeSaRo, February 2012

Project manager

1. Hidden risks: virulence profiles, antibiotic and disinfectant resistance of bacterial strains isolated from operating room water systems in hospitals in Bucharest, and the potential use of functionalized microporous cellulose bioactive filters for microbiological control. Acronym: AQUA-RISK, contract no. 508/15.07.2025, Internal Competition of Research Projects 2025–2027, Titu Maiorescu University.
2. Antimicrobial Resistance Monitoring Protocol for Managing Nosocomial Infections to Ensure Patient Safety. Acronym: PRORA, Internal competition of research projects 2022-2024, Titu Maiorescu University
3. Mobility Grants for researchers (UEFISCDI), PN-III-P1-1.1-MC-2018-3059, 790/25.10.2018; PN-III-P1.1-PD-2016-1798 (PD 148/2018)
4. Mobility projects for experienced researchers from diaspora (UEFISCDI), competition 2016, code MCD-0069, contract no. 31/2016

Project member

1. FP7-Cooperation (2009- 2011) Occupational Health and Safety economics – ROWER) Health-2007- 4.2-3: Building a knowlwdge repository for occupational well-being economics research (ROWER) (Coord.: Dr. A.Targoutzidis, Greece)
2. ERANET-JPI-EC-AMR –AWARE-WWTP,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, 2017-2020 (coord. Univ.Bucuresti, Prof. Dr.Carmen Chifiriuc)

SCIENTIFIC ACTIVITY**Books - Author of three books and two book chapters.**

Author/co-author of 24 scientific articles indexed in the Web of Science Core Collection.

Author/co-author of 7 scientific articles published in journals indexed in international databases (BDI)

Author/co-author of 2 other scientific articles published in peer-reviewed journals

Scientific conference participations and presentations

- Presented a total of 51 scientific contributions (posters and oral presentations) at national and international conferences and congresses: 16 contributions at national scientific events and 35 at international scientific events.

Web of Science Core Collection metrics

9 H-Index

32 Publications

259 Sum of Times Cited

246 Citing Articles

247 Sum of Times Cited

without self-citations

239 Citing Articles

without self-citations

Awards and Grants

International

Recipient of three conference attendance grants awarded by international scientific societies:

1. **FEMS Congress Attendance Grant** – Federation of European Microbiological Societies (FEMS), 2015.
2. **HIS Conference Attendance Grant** – Healthcare Infection Society (HIS), France, 2014.
3. **HIS Conference Attendance Grant** – Healthcare Infection Society (HIS), Scotland, United Kingdom, 2018.

National Research Awards

Recipient of three awards for scientific research achievements granted by national academic and research institutions:

1. **UEFISCDI Award for Research Results – Articles, 2013 Competition** – Executive Agency for Higher Education, Research, Development and Innovation Funding (UEFISCDI), Romania.

Awarded for the article:

Curutiu C, Chifiriuc MC, Mitache MM. *Pseudomonas aeruginosa–Eukaryotic Cell Crosstalk: Mediators, Mechanisms and Implications for Antimicrobial Therapy*. Current Organic Chemistry. 2013;17(2):149–154.

2. **Award for Scientific Research Achievements** – Titu Maiorescu University, Bucharest, Romania, 2018.

Awarded for the article:

Mitache MM, Curutiu C, Gheorghe I, Lazar V, Bucur M, Bleotu C, Cochior D, Rusu E, Chifiriuc MC. *Phenotypic, biochemical and genotypic characterization of some factors involved in the virulence and survival of bacteria isolated from food and food processing surfaces*. Revista de Chimie.

3. **Award for Scientific Research Achievements** – Titu Maiorescu University, Bucharest, Romania, 2019.

Awarded for the article:

Mitache MM, Banu O, Borcan E, Gheorghe I, Marutescu L, Popa M, Predescu M, Rusu E, Nemes R, Chifiriuc MC. *Resistance and Virulence Patterns in Gram-Negative and Gram-Positive Rods Isolated from the Hospital Environment in Bucharest, Romania*. Revista de Chimie.

Awards for Scientific Research and Student Research Coordination

1. Gold Medal – Festival of Innovation and Technological Transfer 2025, Târgoviște, Romania, 17–20 November 2025, awarded for the scientific work *“Resistance and Virulence Patterns in Gram-Negative and Gram-Positive Rods Isolated from the Hospital Environment.”* Authors: Andra-Denisa Gorecki, Mihaela-Magdalena Mitache.

2. Gold Medal – International Exhibition INVENTCOR, 6th Edition, Deva, Romania, 3–5 April 2025, awarded for the student project *“Resistance and Virulence Patterns in Gram-Negative and Gram-Positive Rods Isolated from the Hospital Environment.”* Student: Andra-Denisa Gorecki; Scientific Coordinator: Assoc. Prof. Mihaela-Magdalena Mitache.

Participation in National Public Health Studies

2020 – National Seroprevalence Study of SARS-CoV-2 Infection in the Regions of Romania

Organized by the Ministry of Health, through the National Institute of Public Health (INSP) and the Bucharest Public Health Directorate (DSP Bucharest).

Role: Coordination of blood sample collection from study participants, management of the study database, and communication of results to enrolled participants.

Academic Supervision and Mentoring

Undergraduate thesis supervision: Scientific supervisor of undergraduate theses completed by students enrolled in the Medicine and Dental Medicine study programmes at Titu Maiorescu University, Bucharest, in the fields of microbiology, clinical microbiology, antimicrobial resistance, and public health.

Doctoral mentoring: Member of doctoral advisory committees for PhD students in Medicine and Biology, providing scientific guidance and academic mentoring throughout their doctoral research.

Publications

Books

1. Methods and standards for microbiological control laboratories, Veronica Lazar, Carmen Chifiriuc, Carmen Curutiu, Mihaela Magdalena **Mitache**, Florina Marinescu, Cristina Croitoru, Lorena Mateescu, Luminita Dascalu, publisher University of Bucharest, ISBN 978-606-16-0695, 2015
2. Microbial biofilm from the aquatic ecosystems and water quality, Liliana Neagu, Doina Maria Cristea, Carmen Curutiu, Magda Mihaela **Mitache**, Veronica Lazar, Mariana Carmen Chifiriuc, Water Purification; Nanotechnology in the Agri-Food Industry, vol 9 , Academic Press (is a imprint of Elsevier), ISBN: 978-0-12-804300-4, 2017
3. Manual of Applied Mycology, Irina Gheorghe, Lia Mara Ditu, Mihaela Magdalena **Mitache**, Ionela Avram, ISBN Univ. Titu Maiorescu: 978-606-767-065-3, publisher ISBN Hamangiu : 978-606-27-1307-2
4. Microbiological and Chemical Characterization of Bottled Waters, Mihaela Magdalena **Mitache**, Liliana Neagu, Carmen Curutiu, Alina Holban, Elena-Gabriela Pizamosca Iordache, Mariana Carmen Chifiriuc, 2019/1/1, Book Bottled and Packaged Water, Pages 209-226, Publisher Woodhead Publishing
5. Mihaela Magdalena **Mitache** , Carmen Curutiu, Irina Gheorghe, Lia Mara Ditu, Alina Maria Holban, Stains used in the microbiology laboratory. Practical guide, ISBN Univ. Titu Maiorescu: 978-606-767-066-0, publisher ISBN Hamangiu : 978-606-27-1309-6 2019

Scientific articles indexed in the Web of Science Core Collection

1. Oana Nicolescu†, **Mihaela Magdalena Mitache*†**, Andrei Mitache†, Adelina-Gabriela Niculescu†, Dragoș Garofil, Victor Dan Eugen Strambu, Daniel Cochior, Elena Rusu, Cosmin Moldovan, Sorin Tudorache, Ioana Ruxandra Poiana, Dan Spinu, Alice Elena Munteanu, Marian Necula, Corneliu Ovidiu Vrancianu†, Ana Maria Alexandra Stănescu. Clinical manifestations and mortality predictors of COVID-19 in patients undergoing chronic hemodialysis: A retrospective cohort study from Romania. *Journal of Clinical Medicine*. 2026;15(3):1067. <https://doi.org/10.3390/jcm15031067> *Corresponding author; †Equal contribution
2. Oana Nicolescu†, **Mihaela Magdalena Mitache*†**, Andrei Mitache†, Adelina Gabriela Niculescu†, Dragoș Garofil, Victor Dan Eugen Strambu, Bogdan Oancea, Marian Necula†, Corneliu Ovidiu Vrancianu†, Ioana Ruxandra Poiana, Adrian Radu Petru, Ana Maria Alexandra Stănescu. Inflammatory Biomarkers and Clinical Outcomes in Hospitalized Hemodialysis Patients with COVID-19: A Retrospective Observational Study. *Diagnostics*. 2026;16(10):1498. <https://doi.org/10.3390/diagnostics16101498> *Corresponding author; †Equal contribution
3. Horațiu Roman, Coralia Bleotu, Ileana Paula Ionel, Veronica Lazăr, Adelina Gabriela Niculescu, **Mihaela Magdalena Mitache**, Laura Denisa Dragu, Lilia Matei, Ioana Mădălina Pitică, Otilia Banu, Teodora Deculescu-Ioniță, Marilena Monica Tântu, Roua Gabriela Popescu, Cristina-Elena Găitănar, George Cătălin Marinescu. Exploring the Antioxidant, Antitumor, and Immunomodulatory Potential of Tanacetum vulgare L. Extract: A Biochemical and Pharmacological Perspective. *University Politehnica of Bucharest Scientific Bulletin, Series B: Chemistry and Materials Science*. 2026;88(1):45–60.

4. **Mihaela Magdalena Mitache**, Andreea Pîndaru, Ilda Czobor Barbu, Daniela Talapan, Marius Surleac, Ecaterina Sârbu, Luminița Măruțescu, Mariana Carmen Chifiriuc. Comprehensive evaluation of the bactericidal and anti-pathogenic efficacy of chemical disinfectants against antibiotic-resistant ESKAPE clinical strains. *BMC Microbiology*. 2025. <https://doi.org/10.1186/s12866-025-04273-0>
5. Adelina-Gabriela Niculescu†, **Mihaela Magdalena Mitache†**, Alexandru Mihai Grumezescu, Mariana Carmen Chifiriuc*, Mara Mădălina Mihai, Monica Marilena Tantu, Ana Catalina Tantu, Loredana Gabriela Popa, Georgiana Alexandra Grigore, Roxana-Elena Cristian, Mircea Ioan Popa, Corneliu Ovidiu Vrancianu. From Microbial Ecology to Clinical Challenges: The Respiratory Microbiome's Role in Antibiotic. *Pathogens*. 2025;14(4):355. <https://doi.org/10.3390/pathogens14040355>
*Corresponding author; †Equal contribution
6. Marian Constantin, Mariana Carmen Chifiriuc, Grigore Mihaescu, Nicolae Corcionivoschi, Liliana Burlibasa, Coralia Bleotu, Sorin Tudorache, **Mihaela Magdalena Mitache**, Roxana Filip, Simona-Gloria Munteanu, Gratiela Grădișteanu Pircalabioru. Microbiome and cancer: from mechanistic implications in disease progression and treatment to development of novel antitumoral strategies. *Frontiers in Immunology*. 2024;15:1373504. <https://doi.org/10.3389/fimmu.2024.1373504>
7. Raluca I. Dascălu, Alexandra Bolocan, Dan N. Păduraru, Alexandru Constantinescu, **Mihaela Magdalena Mitache**, Anca D. Stoica, Octavian Andronic. Multidrug resistance in *Helicobacter pylori* infection. *Frontiers in Microbiology*, Section Antimicrobials, Resistance and Chemotherapy. 2023; Manuscript ID: 1128497. DOI not available; <https://www.frontiersin.org/journals/microbiology>
8. Horațiu Roman, Adelina-Gabriela Niculescu, Veronica Lazăr, **Mihaela Magdalena Mitache**. Antibacterial efficiency of *Tanacetum vulgare* essential oil against ESKAPE pathogens and synergisms with antibiotics. *Antibiotics (Basel)*. 2023;12(11):1635. <https://doi.org/10.3390/antibiotics12111635>
9. Marian Constantin, Cristina Mătanie, Livia Petrescu, Alexandra Bolocan*, Octavian Andronic, Coralia Bleotu, **Mihaela Magdalena Mitache**, Sorin Tudorache, Corneliu Ovidiu Vrancianu. Landscape of genetic mutations in appendiceal cancers. *Cancers*. 2023;15:3591. <https://doi.org/10.3390/cancers15143591> *Corresponding author
10. Elena Rusu, Cosmin Alec Moldovan, **Mihaela Magdalena Mitache**, Mirela Niculae, Georgeta Gilda Popescu, Roxana Maria Nemes. Resistance to azole compounds in ENT and genital infections produced by *Candida* species. *Revista de Chimie*. 2019;70(1).; <https://revistadechimie.ro> All authors contributed equally to this study and its publication.
11. **Mihaela Magdalena Mitache**, Otilia Banu, Elvira Borcan, Irina Gheorghe, Luminița Măruțescu, Marcela Popa, Miruna Predescu, Elena Rusu, Roxana Nemes, Mariana Carmen Chifiriuc. Resistance and virulence patterns in Gram-negative and Gram-positive rods isolated from the hospital environment in Bucharest, Romania. *Revista de Chimie*. 2018;69(11). <https://www.researchgate.net/publication/339116897> Resistance and Virulence Patterns in Gram Negative and Gram Positives Rods Isolated from the Hospital Environment in Bucharest Romania;; <https://revistadechimie.ro>
12. **Mihaela Magdalena Mitache**, Carmen Curutiu, Irina Gheorghe, Veronica Lazăr, Marcela Bucur, Coralia Bleotu, Daniel Cochior, Elena Rusu, Carmen Mariana Chifiriuc. Phenotypic, biochemical and genotypic characterization of factors involved in the virulence and survival of bacteria isolated from food and food processing surfaces. *Revista de Chimie*. 2018;69(1). <https://www.researchgate.net/publication/323250388> Phenotypic Biochemical and Genotypic Characterisation of Some Factors Involved in the Virulence and Survival of Bacteria Isolated from Food and

Food Processing Surfaces; <https://revistadechimie.ro>

13. **Mihaela Magdalena Mitache**, Irina Gheorghe, Georgeta Totea, Coralia Bleotu, Carmen Curutiu, Daniel Cochior, Elena Rusu, Mariana Carmen Chifiriuc. Biochemical, virulence and resistance features in bacterial strains recovered from hospital surfaces after decontamination. *Revista de Chimie*. 2017;68(5).
https://www.researchgate.net/publication/317637392_Biochemical_Virulence_and_Resistance_Features_in_Bacterial_Strains_Recovered_from_Hospital_Surfaces_after_Decontamination_with_Quaternary_Ammonium_Compounds_Triclosan_and_Iodine_Desinfecantnts; <https://revistadechimie.ro>
14. **Mihaela Magdalena Mitache**, Carmen Curutiu, Elena Rusu, Ramona Bahna, Mara Ditu, Horațiu Moldovan, Violeta Hancu, Mariana Carmen Chifiriuc. Urinary tract infections in patients with Type 1 and Type 2 diabetes: Etiology, resistance to antibacterial chemicals and virulence features. *Revista de Chimie*. 2017;68(3).
[https://www.researchgate.net/publication/315760539_Urinary_Tract_Infections_in_Patients_with_Type_1_and_Type_2_Diabetes_Etiology_Resistance_to_Antibacterial_Chemicals_and_Virulence_Features](https://www.researchgate.net/publication/315760539_Urinary_Tract_Infections_in_Patients_with_Type_1_and_Type_2_Diabetes_Etiology_Resistance_to_Antibacterial_Chemicals_and_Virulence_Features;); <https://revistadechimie.ro>
15. **Mihaela Magdalena Mitache***, Mariana Pruna, Paul Covic, Cosmin Spirchez, Liviu Gaceu, Irina Gheorghe, Carmen Mariana Chifiriuc. Influence of microwave sterilization on the lignocellulosic biowaste streams conversion process using *Pleurotus* sp. *Romanian Biotechnological Letters*. 2017;22(6):13053-13059.; <https://www.bioxbio.com/journal/ROM-BIOTECH-LETT>; <https://rombio.unibuc.ro>
*Corresponding author
16. Elena Rusu, Ionela Sârbu, **Mihaela Magdalena Mitache**, Horațiu Moldovan, Carmen Ioana Biris, Tatiana Vassu, Diana Pelinescu. Ultrastructural changes of *Candida albicans* species induced by sodium diclofenac. *Revista de Chimie*. 2017;68(11).; <https://revistadechimie.ro> All authors contributed equally to this study and its publication.
17. Georgeta Totea, Daniela Ioniță, Ioana Demetrescu, **Mihaela Magdalena Mitache**. *In vitro* hemocompatibility and corrosion behavior of new Zr-binary alloys in whole human blood. *Central European Journal of Chemistry*. 2014;12(7):796-803.; <https://cejnm.org/chemistry>
18. Andreea L. Mateescu, **Mihaela Magdalena Mitache**, Mariana Carmen Chifiriuc, Tatiana Vassu Dimov. Antibiotic resistance of food-borne enterobacterial strains isolated in Bucharest, Romania. *Romanian Biotechnological Letters*. 2014;19(3).; <https://rombio.unibuc.ro>
19. Carmen Curuțiu, Mariana Carmen Chifiriuc, **Mihaela Magdalena Mitache**. *Pseudomonas aeruginosa*–eukaryotic cell crosstalk: mediators, mechanisms and implications for the antimicrobial therapy. *Current Organic Chemistry*. 2013;17(2):149-154.; <https://benthamscience.com/journals/current-organic-chemistry/>
20. Emilia Pănus, Coralia Bleotu, Natalia Roșoiu, Veronica Lazăr, **Mihaela Magdalena Mitache**. Comparative study of resistance and virulence markers in *Escherichia coli* strains isolated from hospital surfaces, clinical specimens and drinking/marine waters. *Biointerface Research in Applied Chemistry*. 2011;1(1):24-30.; <https://biointerfaceresearch.com>
21. Anghel A., Chifiriuc MC, **Mihaela Magdalena Mitache**, Maruțescu L., Anghel AG, Popa M., Pelinescu D., Bleotu C., Lazar V. Phenotypic and genotypic assessment of virulence factors in beta-hemolytic streptococci isolated from kindergarten infantile population, with or without clinical symptoms, including scarlet fever. *Farmacia*. 2012;60:21-31. ; <https://farmaciajournal.com>
22. Emilia Pănus, Coralia Bleotu, Natalia Roșoiu, Veronica Lazăr, **Mihaela Magdalena Mitache**. Phenotypic and genetic investigation of virulence and antibioresistance hallmarks in *Escherichia coli*

strains isolated from Black Sea water on the Romanian coast. *Biointerface Research in Applied Chemistry*. 2012;2(2):306-312.; <https://biointerfaceresearch.com>

23. Panus E., Chifiriuc CM, Banu O., **Mihaela Magdalena Mitache**, Bleotu C., Roşoiu N., Lazar V. Comparative study of resistance and virulence markers in *Escherichia coli* strains isolated from hospital surfaces, clinical specimens and drinking/marine waters. *Biointerface Research in Applied Chemistry*. 2011;1(1):24-30.; <https://biointerfaceresearch.com>
24. Panus E., Chifiriuc C., Bucur M., Cernat R., **Mihaela Magdalena Mitache**, Nedelcu D., Bleotu C., Valeanu D., Lazar V. Virulence, pathogenicity, antibiotic resistance and plasmid profile of *Escherichia coli* strains isolated from drinking and recreational waters. *Romanian Biotechnological Letters*. 2008;13:3695-3700. ; <https://rombio.unibuc.ro>

Author/co-author of scientific articles published in journals indexed in international databases (BDI).

1. Oana Nicolescu, **Mihaela Magdalena Mitache***, Andrei Mitache, Adelina Gabriela Niculescu, Dragoş Garofil, Victor Dan Eugen Strambu, Bogdan Oancea, Marian Nacula, Corneliu Ovidiu Vrancianu, Ioana Ruxandra Poiana, Adrian Radu Petru, Ana Maria Alexandra Stănescu. Healthcare Costs of COVID-19 Hospitalization in Maintenance Hemodialysis Patients during the First Two Pandemic Waves in Romania: A Retrospective Cohort Study. *Journal of Medicine and Life*. 2026;19(4):259. *Corresponding author
2. Marian Constantin, Corneliu Ovidiu Vrancianu, Grigore Mihaescu, Coralia Bleotu, Sorin Tudorache, Roxana Elena Cristian, Magda Mihaela **Mitache**. Insights into the roles of microbiome in non-sterile cavities cancers. *Romanian Biotechnological Letters*, 2022;27(6):3796-3818 I
3. **Mitache** M, Lazar V, Bleotu C, Cernat R, Chifiriuc MC. Phenotypic And Genetic Virulence And Antibiotic Resistance Markers In *Escherichia Coli* Strains Isolated From Hospital Surfaces. *Romanian Archives of Microbiology and Immunology*, 2009;68(3):28-35
4. **Mitache** M, Chifiriuc C, Badea A, Geana OL, Bucur M, Olar R, Badea M, Panus E, Rosoiu N, Ionescu P, Sesan T, Lazar V. Novel antipathogenic strategies against adherent enterobacterial strains isolated from the hospital environment. *Romanian Archives of Microbiology and Immunology*, 2008;67(1-2):43-48
5. Grigore Mihaescu, Irina-Alina Cucu, Gratiela Gradisteanu, Magda Mihaela **Mitache**, Mariana Carmen Chifiriuc. Anti-SARS-CoV-2 immune response and prevention of COVID-19 pandemic by vaccination. *Romanian Academy. Chemistry, Life Sciences and Geosciences*, 2021
6. Chifiriuc MC, **Mitache** MM, Badea M, Geana L, Bucur M, Olar R, Badea M, Sesan T, Lazar V. Microlevel Study For The Assessment Of The Economic Impact Of Resistance To Disinfectants Used In The Hospital Environment And Evaluation Of New Alternatives. *Ege Academic Review*, 2009;9(3):955-959
7. **Mitache** M, Cernat R, Balotescu C, Lazar V, Tudorache R. Markeri de antibiorezistență și virulență la tulpini de Enterobacteriaceae izolate de pe diverse suprafețe din mediul spitalicesc. *Bacteriologia, Virusologia, Parazitologia, Epidemiologia*, 2006;51(3-4):131-138

Other peer-reviewed scientific articles

1. Adriana Pistol, Oana Nicolescu, Mihaela Leustean, Mariana-Carmen Chifiriuc, IA Cucu, FL Furtunescu, Denisa Janta, Teodora Vremere, Mihaela Magdalena Mitache. The Seroprevalence of SARS-CoV-2 Antibodies in Romania – First Prevalence Survey. *Biomedical Journal of Scientific & Technical Research*, 2021;39(1)

2. Emilia Panus, Mariana Carmen Chifiriuc, Coralia Bleotu, Magda Mitache, Natalia Rosoiu. Impact of different environmental parameters upon the susceptibility to heavy metals salts in Escherichia coli aquatic strains. Letters in Applied NanoBioScience, 2012;1(2):50-55

Oral presentations and poster presentations at conferences and congresses

1. **Mitache** M.M., Mitache A., Popa C., Sorescu G., Cochior D., Rusu E., Tudorache S., Moldovan C., Marinaş I.C., Gheorghe-Barbu I., Gaboreanu D.M., Barbu I., Pecete I., Chifiriuc M.C. Opportunistic bacteria in surgical suite water systems: clinical implications from a virulence-centred analysis. Poster presentation, ASM Microbe 2026, Washington, DC, USA, 5–7 June 2026. Poster Board No. AEM-FRI-717; Abstract Control No. 1077.
2. Gheorghe-Barbu I., Czobor Barbu I., Surleac M., Paraschiv S., Bănică L., Muntean A.A., Pecete I., Măruţescu L., Popa M., **Mitache** M.M., Mitache A., Popa C., Sorescu G., Popa M.I., Oţelea D., Chifiriuc M.C. From ICU to River: A Genomic One Health View of Multidrug-Resistant Acinetobacter baumannii in Romania. Poster presentation, ASM Microbe 2026, Washington, DC, USA, 5–7 June 2026. Poster Board No. HEALTH-FRI-351; Abstract Control No. 1090.
3. **Mitache** M, Marinas III, M., Gaboreanu A., Pîndaru A., Mitache A., Popa C., Sorescu G., Cochior D., Rusu E., Chifiriuc C. “Hidden risks: antibiotic resistance and virulence profiles of bacterial strains isolated from operating room water systems in Romanian hospitals”, Abstract ID 58473, FFEBS 2025, Istanbul, Turkey.
4. **Mitache** M.M., Cornea M., Grigore G., Niculescu A., Cochior D., Rusu E., Tudorache S., Moldovan C., Popa C., Sorescu G., Mitache A., Chifiriuc M.C. “The Contribution of Staphylococcus Genus to Pathogenicity and Virulence in the Hospital Environment”, P-35-081, FEBS 2024, Milan, Italy.
5. **Mitache** M.M., Moldovan C., Rusu E., Cochior D., Palmisano I., Mitache A., Chifiriuc M.C. “Correlations between the clinical profile of nosocomial infections and the resistance and virulence profiles of pathogenic bacteria isolated from the hospital environment”, FIS/HIS International Conference, London, UK, 22–26 September 2022, Poster no. 15.
6. **Mitache** M.M., Cucu I.A., Nicolescu O., Moldovan C., Rusu E., Cochior D., Pistol A., Leustean M., Chifiriuc M.C., Mihaescu G., Gradisteanu Pircalabioru G. “Seroprevalence of SARS-CoV-2 antibodies among the general population in Romania: a cross-sectional study”, Abstract no. 3143, 31st ECCMID, European Congress of Clinical Microbiology and Infectious Diseases, Basel, Switzerland, 9–12 July 2021.
7. **Mitache** M., Marutescu L., Nicolescu O., Gheorghe I., Hassanzadeh E., Rusu E., Curutiu C., Chifiriuc C. “Resistance features in bacterial strains isolated from the hospital environment before and during COVID-19”, Antimicrobial Resistance and Infection Control, 10(Suppl 1), the 6th International Conference on Prevention & Infection Control (ICPIC) Geneva, 2021.
8. Popa L., Negu A., Czobor I., Gheorghe I., Mohsin S., **Mitache** M., Popa M., Marutescu L., Chifiriuc M.C. “Detection of blaKPC-2 in a conjugative IncP-6 plasmid in Escherichia coli isolated from wastewater in Romania”, ECCMID 2020 Online Congress, France; https://www.esccmid.org/esccmid_publications/eccmid_abstract_book/
9. **Mitache** M.M., Curutiu C., Suwarayi A., Chifiriuc M.C. “Virulence and resistance traits in bacterial and fungal strains isolated from air in the hospital environment”, FEMS Congress of European Microbiologists, Valencia, Spain, 2017, Abstract No. 2515.

10. **Mitache** M.M., Popa M., Gheorghe I., Cotar A.I., Lazar V., Bleotu C., Chifiriuc M.C. "Pathogenic features of bacterial strains isolated from surgical rinse water and medical instruments", FEMS Congress of European Microbiologists, Maastricht, Netherlands, 2015.
11. **Mitache** M.M., Popa M., Gheorghe I., Lazar V., Bleotu C., Chifiriuc M.C. "Microbiological investigation of mud volcanoes from Eastern Romania", FEMS Congress of European Microbiologists, Maastricht, Netherlands, 2015.
12. Mateescu A.L., Vassu Dimov T., **Mitache** M., Chifiriuc M.C., Bleotu C., Lazar V. "Virulence and resistance markers in foodborne bacteria isolated in Bucharest, Romania", FEBS Journal, vol. 281 (Suppl.1), 2014, Paris, France.
13. **Mitache** M.M., Marutescu L., Totea G., Ghinescu M., Chifiriuc M.C. "Resistance and virulence markers in different microbial strains isolated from the hospital environment", FEMS Congress of European Microbiologists, Leipzig, Germany, 2013.
14. Totea G., Chifiriuc M.C., Marutescu L., **Mitache** M.M., Ghinescu M., Bleotu C. "Bioevaluation of metallic biomaterials for potential clinical applications", FEMS Congress of European Microbiologists, Leipzig, Germany, 2013.
15. Mateescu A.L., Vassu Dimov T., Chifiriuc M.C., **Mitache** M., Marutescu L., Ghinescu M., Lazar V. "Antimicrobial resistance and virulence phenotypes and genes in food-borne bacterial strains", ECCMID, 23rd European Congress of Clinical Microbiology and Infectious Diseases, Berlin, Germany, 2013.
16. **Mitache** M.M., Nuta N., Calugaru A. "Evaluation of labor conditions – assessment of air particles level in different institutions", 2nd Rower Conference on Occupational Health and Safety Economics, Sinaia, Romania, 27–30 April 2011.
17. 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 exudates", 2nd Rower Conference on Occupational Health and Safety Economics, Sinaia, Romania, 27–30 April 2011.
18. Marutescu L., **Mitache** M., Chifiriuc M.C., Popa M., Bleotu C., Lazar V. "Evaluation of microbiological risk represented by Enterobacterial strains isolated from food and surfaces from food units", 2nd Rower Conference on Occupational Health and Safety Economics, Sinaia, Romania, 27–30 April 2011.
19. **Mitache** M.M., Chifiriuc M.C., Popa M., Lazar V. "Evaluation of labor conditions – assessment of air particles level in different institutions", Conferința internațională „Educație și creativitate pentru o societate bazată pe cunoaștere”, Univ. Titu Maiorescu, București, 11–12 Nov 2011.
20. **Mitache** M.M., Chifiriuc M.C., Popa M., Dascălu L., Burlibasa M., Muntianu L., Lazar V. "Study of microbial adherence to substrates used in dental techniques", Conferința internațională „Educație și creativitate pentru o societate bazată pe cunoaștere”, Univ. Titu Maiorescu, București, 11–12 Nov 2011.
21. **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 kindergarten population, with or without clinical symptoms, including scarlet fever", 2nd Rower Conference on Occupational Health and Safety Economics, Sinaia, Romania, 27–30 April 2011.
20. **Mitache** M.M., Nuta N., Marutescu L., Chifiriuc M.C., Lazar V. "Caracterizarea epidemiologică și microbiologică a unor cazuri de toxiinfecții alimentare sesizate în perioada 2008–2011", Reuniunea Națională de Microbiologie, Iași, Romania, 2011, Poster 22, Abstract publicat în Bact. Virusol. Parasitol. Epidemiol., 2011, Suppl. 56: p.72.

21. Chifiriuc M.C., **Mitache** M.M., Badea A., Geana O., Bucur M., Olar R., Badea M., Ionescu P., Sesan T., Lazar V. "Microlevel study for the assessment of economic impact of resistance to disinfectants used in the hospital environment and evaluation of new alternatives", 1st ROWER Conference, Izmir, Turkey, 23–25 April 2009.
22. Balotescu C., **Mitache** M.M., Oprea E., Badea A., Geana O.L., Bucur M., Olar R., Badea M., Smarandache D., Lazar V. "Novel antipathogenic strategies against adherent enterobacterial strains isolated from the hospital environment", Meeting of the Three Divisions of the International Union of Microbiological Societies, Istanbul, Turkey, 5–9 August 2008.
23. **Mitache** M.M., Balotescu C., Oprea E., Geana O.L., Badea A., Bucur M., Olar R., Badea M., Smarandache D., Cotar A., Ionescu P., Panus E., Lazar V. "Investigation of new synthetic compounds and ecological products with antimicrobial activity against E. coli strains isolated from hospital environment", Meeting of the Three Divisions of the International Union of Microbiological Societies, Istanbul, Turkey, 5–9 August 2008.
24. Panus E., Rosoiu N., Balotescu C., **Mitache** M.M., Cotar A., Banu O., Larion C. "Comparative investigation of virulence and pathogenicity hallmarks in Escherichia coli strains isolated from environmental and clinical samples", Meeting of the Three Divisions of the International Union of Microbiological Societies, Istanbul, Turkey, 5–9 August 2008.
25. Cernat R., Balotescu C., Lazar V., Banu O., Ditu M., **Mitache** M. "Metallo-beta lactamases and oxacillinases types in multi-drug resistant Acinetobacter baumannii isolated from cardiovascular prosthetic device-associated infections", 7th International Symposium on the Biology of Acinetobacter, 2006, Poster P21, p. 54.
26. **Mitache** M., Cosmin Moldovan, Elena Rusu, Daniel Cochior, Irene Palmisano, Andrei Mitache, Mariana Carmen Chifiriuc. "Correlations between the clinical profile of nosocomial infections and the resistance and virulence profiles of pathogenic bacteria isolated from the hospital environment", FIS/HIS International Conference, London, UK, 22–26 Sept 2022 (abstract published in conference book).
27. **Mitache** M., Luminița Maruțescu, Oana Nicolescu, Irina Gheorghe, Elham Hassanzadeh, Elena Rusu, Carmen Curuțiu, Carmen Chifiriuc. "Resistance features in bacterial strains isolated from the hospital environment before and during COVID 19", 6th International Conference on Prevention & Infection Control (ICPIC), Geneva, Switzerland, 14–17 Sept 2021 (abstract published 3 Sept 2021).
28. **Mitache** M., Irina Gheorghe, Carmen Curutiu, Corneliu Ovidiu Vrâncianu, Mariana Carmen Chifiriuc. "Resistance and virulence traits of Staphylococcus strains isolated from maternity unit", FIS/HIS International 2020 (online), Scotland, 2020 (abstract book).
29. **Mitache** M., Irina Gheorghe, Cristea Violeta Corina, Elvira Borcan, Mia Camelia Ghiță, Mariana Carmen Chifiriuc. "Resistance and virulence profiles in Acinetobacter baumannii, Staphylococcus sp. and Enterobacteriaceae strains isolated from the hospital environment in Bucharest, Romania", 14th International Conference on Molecular Epidemiology and Evolutionary Genetics of Infectious Diseases, Sitges, Spain, 6–9 Nov 2018.
30. **Mitache** M., Otilia Banu, Elvira Borcan, Irina Gheorghe, Luminița Măruțescu, Marcela Popa, Miruna Predescu, Elena Rusu, Mariana Carmen Chifiriuc. "Resistance and virulence patterns in Gram negative and Gram positive rods isolated from the hospital environment in Bucharest, Romania", 11th Healthcare Infection Society (HIS) International Conference, Liverpool, UK, 26–28 Nov 2018.
31. **Mitache** M., Georgeta Totea, Irina Gheorghe, Coralia Bleotu, Carmen Curutiu, N. Amariei, Mariana Carmen Chifiriuc. "Virulence and resistance features in microbial strains recovered from hospital surfaces after decontamination with quaternary ammonium compounds, triclosan and iodine

- disinfectants”, 10th Healthcare Infection Society International Conference, Edinburgh, UK, Nov 2016 (abstract published in HIS Journal).
32. **Mitache** M., Georgeta Totea, Irina Gheorghe, Coralia Bleotu, Carmen Curutiu, Mariana Carmen Chifiriuc. “Virulence factors and antibiotic susceptibility patterns of coagulase negative staphylococci strains isolated from intensive care and cardiology units”, 10th Healthcare Infection Society International Conference, Edinburgh, UK, Nov 2016 (abstract published in HIS Journal).
 33. **Mitache** M., Carmen Curutiu, Carmen Chifiriuc, Irina Gheorghe, L. Mateescu, A. Neagu, L. Ditu, A. M. Holban, Veronica Lazar. “Phenotypic and genotypic characterisation of some factors involved in the virulence and survival of bacteria isolated from food and food processing surfaces”, 3rd North and East European Congress on Food, Braşov, Romania, 20–23 May 2015.
 34. Luminita Maruţescu, **Mitache** M., Carmen Chifiriuc, M. Leventer, Veronica Lazar. “Virulence factors and antibiotic susceptibility patterns of Staphylococcus sp strains isolated from skin swabs in patients with inflammatory skin disorders”, Biospektrum – Joint Annual Meeting of the German Society for Hygiene and Microbiology (DGHM) and the Association for General and Applied Microbiology (VAAM), Dresden, Germany, 5–8 Oct 2014.
 35. Carmen Chifiriuc, Luminita Maruţescu, **Mitache** M., Veronica Lazar. “PCR characterization of the mec element and identification of SCCmec structural types and variants in methicillin resistant Staphylococcus aureus clinical strains”, Biospektrum – DGHM/VAAM Joint Meeting, Dresden, Germany, 5–8 Oct 2014.
 36. Georgeta Totea, Daniela Ioniţă, Ioana Demetrescu, **Mitache** M. “Elaboration, characterization and antibacterial effect of doped phosphates masses electrodeposited on CoCrMo biomedical alloy”, 9th Healthcare Infection Society International Conference with the French Society for Hospital Hygiene, Lyon, France, 2014.
 37. Daniela Lorin, Olguţa Drăcea, Luminita Măruţescu, Carmen Chifiriuc, **Mitache** M. “Efficacy of veterinary disinfectants against fungal strains isolated from feed”, 8th Balkan Congress of Microbiology – Microbiologia Balkanica, 2013.
 38. Georgeta Totea, Ioan Viorel Brânzoi, **Mitache** M., Mariana Carmen Chifiriuc, Mihaela Iordache, Nicoleta Dobre, Marius Duţă. “In vitro haemocompatibility evaluation of new Zr alloys using whole human blood”, 18th Romanian International Conference on Chemistry and Chemical Engineering, 2013.
 39. Mariana Carmen Chifiriuc, Luminita Maruţescu, **Mitache** M., Marcela Popa, Veronica Lazar. “Diversity of superantigen genes in group A streptococcus strains isolated from kindergarten infantile population”, 35th International Congress of the Society for Microbial Ecology and Disease (SOMED), (year not specified).
 40. **Mitache** M., Nuta N., Calugaru A. “Evaluation of labor conditions – assessment of air particle levels in different institutions”, 2nd ROWER Conference on Occupational Health and Safety Economics, Sinaia, Romania, 27–30 Apr 2011.
 41. Carmen Chifiriuc, Luminita Măruţescu, **Mitache** M. “Phenotypic and genetic resistance and virulence markers in Staphylococcus aureus isolated from nasal exudates”, 2nd ROWER Conference on Occupational Health and Safety Economics, Sinaia, Romania, 27–30 Apr 2011.
 42. Luminita Maruţescu, **Mitache** M., Carmen Chifiriuc, M. Popa, Coralia Bleotu, Veronica Lazar. “Evaluation of microbiological risk represented by enterobacterial strains isolated from food and surfaces from food units”, 2nd ROWER Conference on Occupational Health and Safety Economics, Sinaia, Romania, 27–30 Apr 2011.

43. **Mitache M.**, Mariana Carmen Chifiriuc, Marcela Popa, Veronica Lazar. "Evaluation of labor conditions – assessment of air particle levels in different institutions", Conferința Internațională "Educație și creativitate pentru o societate bazată pe cunoaștere," Univ. Titu Maiorescu, Bucharest, Romania, 11–12 Nov 2011.
44. **Mitache M.**, Mariana Carmen Chifiriuc, Marcela Popa, Luminita Dascălu, Mihai Burlibasa, Ligia Muntianu, Veronica Lazar. "Study of microbial adhesion to substrates used in dental technique", Conferința Internațională "Educație și creativitate pentru o societate bazată pe cunoaștere," Univ. Titu Maiorescu, Bucharest, Romania, 11–12 Nov 2011.
45. **Mitache M.**, Luminita Maruțescu, Carmen Chifiriuc, A. Holban, M. Popa, D. Pelinescu, Coralia Bleotu, Veronica Lazar. "Resistance, virulence and epidemiological features in beta hemolytic streptococci isolated from kindergarten infantile population with or without clinical symptoms, including scarlet fever", 2nd ROWER Conference on Occupational Health and Safety Economics, Sinaia, Romania, 27–30 Apr 2011.
46. **Mitache M.**, Nuta N., Luminita Maruțescu, Carmen Chifiriuc, Veronica Lazar. "Caracterizarea epidemiologică și microbiologică a unor cazuri de toxiinfecții alimentare sesizate în perioada 2008–2011", Reuniunea Națională de Microbiologie, Iași, Romania, 2011 (Poster 22).
47. Carmen Chifiriuc, **Mitache M.**, A. Badea, O. Geana, M. Bucur, R. Olar, M. Badea, P. Ionescu, T. Sesan, Veronica Lazar. "Microlevel study for the assessment of economic impact of resistance to disinfectants used in the hospital environment and evaluation of new alternatives", 1st ROWER Conference, Izmir, Turkey, 23–25 Apr 2009.
48. C. Balotescu, **Mitache M.**, E. Oprea, A. Badea, O.L. Geana, M. Bucur, R. Olar, M. Badea, D. Smarandache, V. Lazar. "Novel antipathogenic strategies against adherent enterobacterial strains isolated from the hospital environment", Meeting of the Three Divisions of the International Union of Microbiological Societies, Istanbul, Turkey, 5–9 Aug 2008.
49. **Mitache M.**, C. Balotescu, E. Oprea, O.L. Geana, A. Badea, M. Bucur, R. Olar, M. Badea, D. Smarandache, A. Cotar, P. Ionescu, E. Panus, V. Lazar. "Investigation of new synthetic compounds and ecological products with antimicrobial activity against E. coli strains isolated from hospital environment", Meeting of the Three Divisions of the International Union of Microbiological Societies, Istanbul, Turkey, 5–9 Aug 2008.
50. Panus E., Rosoiu N., Balotescu C., **Mitache M.**, Cotar A., Banu O., Larion C. "Comparative investigation of virulence and pathogenicity hallmarks in Escherichia coli strains isolated from environmental and clinical samples", Meeting of the Three Divisions of the International Union of Microbiological Societies, Istanbul, Turkey, 5–9 Aug 2008.
51. Cernat R., Balotescu C., Lazar V., Banu O., Ditu M., **Mitache M.** "Metallo beta lactamases and oxacillinases types in multi drug resistant Acinetobacter bowmanii isolated from cardiovascular prosthetic device associated infections", 7th International Symposium on the Biology of Acinetobacter, Poster P21, 2006.

I hereby declare that the information provided herein is true and accurate.

Mihaela Magdalena Mitache, Assoc. Prof., PhD



20.07.2026