



## Ioana-Gabriela Macașoi

**Date of birth:** 18/02/1993 | **Nationality:** Romanian | **Gender:** Female | **E-mail:** [macasoi.ioana@umft.ro](mailto:macasoi.ioana@umft.ro)

**Address:** Piața Eftimie Murgu Nr. 2, 300041, Timișoara, Romania (Work)

### PROFESSIONAL EXPERIENCE

2025 - IN PROGRESS

**ASSOCIATE PROFESSOR** "VICTOR BABES" UNIVERSITY OF MEDICINE AND PHARMACY TIMISOARA

- producing materials undergraduate and master students
- courses in Toxicology, Drug Industry, Management and Legislation
- research activity

2022 - 2025 Timisoara, Romania

**LECTURER** "VICTOR BABES" UNIVERSITY OF MEDICINE AND PHARMACY TIMISOARA

- producing materials undergraduate and master students
- supporting courses and practical laboratory work in Toxicology, Drug Industry, Management and Legislation
- research activity

2017 - IN PROGRESS Timisoara, Romania

**UNIVERSITY ASSISTANT** UNIVERSITY OF MEDICINE AND PHARMACY "VICTOR BABES" TIMISOARA

- realization of materials for students in the undergraduate program of the Faculty of Pharmacy
- seminars and practical laboratory work in Toxicology, Drug Industry, Management and Legislation
- research activity

**Department** Department of Toxicology and Drug Industry

2016 - 06/2018 Timisoara, Romania

**EXTERNAL COLLABORATOR** "VICTOR BABES" UNIVERSITY OF MEDICINE AND PHARMACY

- realization of materials for students in the undergraduate program of the Faculty of Pharmacy
- practical laboratory work in the subject of Toxicology and Drug Industry
- research activity

**Department** Department of Toxicology and Drug Industry

2016 - 2016 Timisoara, Romania

**VOLUNTEER AT** "VICTOR BABES" UNIVERSITY OF MEDICINE AND PHARMACY

- practical laboratory work in the subject of Toxicology and Drug Industry
- research activity

**Department** Department of Toxicology and Drug Industry

2012 - 2013 Romania

**NATIONAL COORDINATOR IMAGE AND PUBLICATIONS DEPARTMENT FEDERATION OF PHARMACIST STUDENTS IN ROMANIA**

2011 - 2013 Timisoara, Romania

**IMAGE AND PUBLICATIONS COORDINATOR OF THE LEAGUE OF PHARMACIST STUDENTS FROM TIMISOARA**

## ● EDUCATION AND TRAINING

---

2016 - 2020 Timisoara, Romania

**PHD DIPLOMA, ORDER OF THE MINISTRY OF EDUCATION NR. 5610 OF 19.11.2021** University of Medicine and Pharmacy "Victor Babes", Timisoara

---

2017 - 2018

**CERTIFICATE OF COMPLETION OF PSYCHO-PEDAGOGICAL STUDIES FOR LEVEL I AND II ATTESTATION FOR THE TEACHING PROFESSION (LEVEL I ATTESTATION - SERIES AE, NO. 0021545, LEVEL II ATTESTATION - SERIES AE, NR. 0021615)** Department for Teacher Training West University Timișoara

---

2011 - 2016 Timisoara, Romania

**PHARMACIST** University of Medicine and Pharmacy "Victor Babes" Timisoara

---

## ● LANGUAGE SKILLS

---

Mother tongue(s): **ROMANIAN**

Other language (Other languages):

	COMPREHENSION		VORBIT		WRITTEN
	Oral	Read	Written expression	Conversation	
<b>ENGLISH</b>	comprehension B2	B2	B2	B2	B2

Levels: A1 and A2 Basic user B1 and B2 Independent user C1 and C2 Experienced user

## ● SKILLS

---

AngioQuant | Microsoft Word | Microsoft Excel | Power Point | Microsoft Office | Adobe Creative Cloud: Acrobat DC, Lightroom, Photoshop | Image processing: ImageJ, Avizo, Inkscape, GIMP. | Discovery Studio | Interactive presentations (Prezi)

## ● CONFERENCES AND SEMINARS

---

### Conferences and seminars

---

- National Congress of Pharmacist Students, Cluj-Napoca, Cluj-Napoca, April 1-5, 2015, The effects of betulin and acid betulin on melanoma on the chorioallantoic membrane, Volume of abstracts, p 28
- National Congress of Pharmacist Students, Bucharest, Bucharest, April 5-9, 2017, The impact of some triterpene compounds on the process of mesenchymal epithelial epithelial transition in vitro, Abstract brochure, p 54
- I.Z. Pavel, O.M. Duicu, I. Macasoi, C. Dehelean, R. Csuk, D.M. Muntean. The Acute and Chronic Effects Of A Benzylamide Derivative Of Maslinic Acid In Liver Mitochondria Isolated from Mice With Chemically Induced Skin Carcinogenesis. WISE3 Conference in Szeged, COST ACTION MitoEAGLE, Action number: CA15203, 26-27.03.2018, Szeged, Hungary
- I. Macaşoi, I.Z. Pavel, A. Mioc, D. Coricovac, R. Csuk, C.A. Dehelean, D. Muntean. Characterization of the Effects of An Oleanolic Acid-Rhodamine B Derivative on Mitochondrial Respiration of Human Keratinocytes. Days of the University of Medicine and Pharmacy "Victor Babeş" Timișoara, December 2018, Timișoara
- Ioana-Gabriela Macaşoi, Iulia Pînzaru, Coricovac Dorina, Madalina Cabuta, Iasmina Marcovici, Octavian Marius Cretu, Cristina Adriana Dehelean. Oleanolic acid encapsulated in liposomes as a potential therapeutic approach for hepatocellular carcinoma. 8th German Pharm-Tox Summit 2023.
- Ioana Macasoi, I. Pinzaru, S. D. Chiriac, D. Radu, C. Dehelean. Oleanolic acid-based liposomes selectively targets human melanoma cells by affecting mitochondrial function. Eurotox 2023.

## ● PROJECTS

---

**Investigation concerning the mechanism of action of oleanolic acid derivative conjugated with Rhodamine B.**

---

Research grant no. 2DOC / 2020 Project  
Director

2023 - 2024

**Postdoctoral Project. Liposome-incorporated oleanolic acid as a potential mitochondrial target in tumor pathology.**

---

ACRONYM: OA-LIP-MIT

Project Director

**Cooperation to Implement Innovative Methods for the Assessment of Medicinal Plants with central Roles in Pharmaceuticals, Agriculture and Nutrition - ERASMUS 2022-1-RO01-KA220-HED-000088958**

---

Project member

**Implementation of modern techniques for the continuous development of the practice base in the field of medicinal plant products within UMF "Victor Babes" Timisoara - CNFIS-FDI-2022-0484**

---

Project member

● **TECHNICAL SKILLS**

---

**Technical skills**

---

Interdisciplinary scientific research activity - areas of research interest:

- Evaluation of natural compounds with potential therapeutic actions
- In vitro studies on tumor and healthy cell lines: cell viability. Cellular studies (MTT assay, Alamar Blue), immunofluorescence, cellular respiration by high resolution spirometry using Oxygraph-2k Oroboros Ltd
- In ovo angiogenesis studies using the chorioallantoic membrane

● **ORGANIZATIONAL SKILLS**

---

**Organizational skills**

---

- experience of team leadership having been responsible in the past for organizing a team at national level
- ability to work in multidisciplinary national and international teams
- observant, serious

● **COMMUNICATION AND INTERPERSONAL SKILLS**

---

**Communication and interpersonal skills**

---

- Very good communication skills, ability to assimilate new information and practical skills, team spirit, ability to synthesize and analyze
  - Coordination skills, evaluation and improvement spirit, self-development skills, ability to work in a team
- 

● **HONORS AND AWARDS**

---

**Award-winning scientific work**

---

1. PN-IV-P2-2.3-PRECISI-2023-84870 Melanin and Melanin-Functionalized Nanoparticles as Promising Tools in Cancer Research - A Review
2. PN-III-P1-1.1-PRECISI-2021-59308 - Assessment of Betulinic Acid Cytotoxicity and Mitochondrial Metabolism Impairment in a Human Melanoma Cell Line. Int J Mol Sci. 2021 May 4;22(9):4870
3. PN-III-P1-1.1-PRECISI-2020-47247 - Controlled Synthesis and Characterization of Micrometric Single Crystalline Magnetite With Superparamagnetic Behavior and Cytocompatibility/Cytotoxicity Assessments
4. PN-III-P1-1.1-PRECISI-2020-52651 - Targeting Mitochondria through the Use of Mitocans as Emerging Anticancer Agents

5. PN-III-P1-1.1-PRECISI-2021-56880 - High Concentrations of Aspartame Induce Pro-Angiogenic Effects in Ovo and Cytotoxic Effects in HT-29 Human Colorectal Carcinoma Cells
6. PN-III-P1-1.1-PRECISI-2021-60775 - Tetracyclic and Pentacyclic Triterpenes with High Therapeutic Efficacy in Wound Healing Approaches
7. PN-III-P1-1.1-PRECISI-2021-67401 - Oleogel Formulations for the Topical Delivery of Betulin and Lupeol in Skin Injuries-Preparation, Physicochemical Characterization, and Pharmacotoxicological Evaluation
8. PN-III-P1-1.1-PRECISI-2019-35025 - Fe<sub>3</sub>O<sub>4</sub>@C Matrix with Tailorable Adsorption Capacities for Paracetamol and Acetylsalicylic Acid: Synthesis, Characterization, and Kinetic Modeling



## List of Publications

### PhD THESIS

**TITLE - INVESTIGATIONS CONCERNING THE MECHANISMS OF ACTION OF FUNCTIONALIZED TRITERPENOIDS**, 2021, Scientific Coordinator: Prof. Univ. Dr. Victor Dumitrașcu,

### ARTICLES PUBLISHED IN EXTENSO

### ARTICLES IN ISI QUOTED JOURNALS

1. Flavia Bociort†, **Ioana Gabriela Macasoï†**, Iasmina Marcovici\*, Andrei Motoc, Cristina Grosu, Iulia Pinzaru, Crina Petean, Stefana Avram and Cristina Adriana Dehelean. *Investigation of Lupeol as Anti-Melanoma Agent: An In Vitro-In Ovo Perspective*. Curr. Oncol. 2021, 28, 5054–5066. <https://doi.org/10.3390/curroncol28060425>
2. Stefania Dinu†, Roxana Buzatu†, **Ioana Macasoï\***, Malina Popa\*, Cristian Sebastian Vlad, Iasmina Marcovici, Iulia Pinzaru, Cristina Adriana Dehelean, Elena-Alina Moaca, Lucian Barbu-Tudoran and Marius Pricop. *Toxicological Profile of Biological Environment of Two Elastodontic Devices*. Processes 2021, 9, 2116. <https://doi.org/10.3390/pr9122116>
3. Kazakova Oxana, Codruța Șoica, Marat Babaev, Anastasiya Petrova, Elmira Khusnutdinova, Alexander Poptsov, **Ioana Macașoï**, George Drăghici, Ștefana Avram, Lavinia Vlaia, Alexandra Mioc, Marius Mioc, Cristina Dehelean, and Adrian Voicu. 2021. *3-Pyridinylidene Derivatives of Chemically Modified Lupane and Ursane Triterpenes as Promising Anticancer Agents by Targeting Apoptosis*. International Journal of Molecular Sciences 22, no. 19: 10695. <https://doi.org/10.3390/ijms221910695>
4. Milutinovici Raluca-Adriana, Doina Chioran, Roxana Buzatu, **Ioana Macasoï\***, Susan Razvan, Raul Chioibas, Ion V. Corlan, Alina Tanase, Calniceanu Horia, Ramona A. Popovici, Stefania Dinu, Cristina Dehelean, Alexandra Scurtu, Iulia Pinzaru, and Codruta Soica. 2021. *Vegetal Compounds as Sources of Prophylactic and Therapeutic Agents in Dentistry*. Plants 10, no. 10: 2148. <https://doi.org/10.3390/plants10102148>
5. Kazakova Oxana, Alexandra Mioc, Irina Smirnova, Irina Baikova, Adrian Voicu, Lavinia Vlaia, **Ioana Macașoï**, Marius Mioc, George Drăghici, Ștefana Avram, Cristina Dehelean, and Codruța Șoica. 2021. *Novel Synthesized N-Ethyl-Piperazinyl-Amides of C2-Substituted Oleanonic and Ursonic Acids Exhibit Cytotoxic Effects through Apoptotic Cell Death Regulation*. International Journal of Molecular Sciences 22, no. 20: 10967. <https://doi.org/10.3390/ijms222010967>
6. Ramona Daniela Pârvănescu (Pană), Claudia-Geanina Watz, Elena-Alina Moacă, Lavinia Vlaia, Iasmina Marcovici, **Ioana Gabriela Macasoï**, Florin Borcan, Ioana Olariu, Coneac, George-Andrei Drăghici, Zorin Crăiniceanu, Daniela Flondor (Ionescu), Alexandra

- Enache and Cristina Adriana Dehelean. *Oleogel Formulations for the Topical Delivery of Betulin and Lupeol in Skin Injuries—Preparation, Physicochemical Characterization, and Pharmacotoxicological Evaluation*. *Molecules*. 2021;26(14): 4174. doi: 10.3390/molecules26144174
7. Emil-Florin Hut, Matilda Radulescu<sup>1</sup>, Nicolae Pilut, **Ioana Macasoi\***, Delia Berceanu, Dorina Coricovac, Iulia Pinzaru, Octavian Cretu and Cristina Dehelean. *Two Antibiotics, Ampicillin and Tetracycline, Exert Different Effects in HT-29 Colorectal Adenocarcinoma Cells in Terms of Cell Viability and Migration Capacity*. *Curr. Oncol*. 2021; 28(4):2466-2480. <https://doi.org/10.3390/curroncol28040225>
  8. Coricovac, Dorina, Cristina A. Dehelean, Iulia Pinzaru, Alexandra Mioc, Oana-Maria Aburel, **Ioana Macasoi**, George A. Draghici, Crina Petean, Codruta Soica, Madalina Boruga, Brigitha Vlaicu, and Mirela D. Muntean. *Assessment of Betulinic Acid Cytotoxicity and Mitochondrial Metabolism Impairment in a Human Melanoma Cell Line*. *Int. J. Mol. Sci*. 2021; 22(9):4870. <https://doi.org/10.3390/ijms22094870>
  9. Pancu Daniel F., Alexandra Scurtu, **Ioana G. Macasoi**, Daniela Marti, Marius Mioc, Codruta Soica, Dorina Coricovac, Delia Horhat, Marioara Poenaru, and Cristina Dehelean. *Antibiotics: Conventional Therapy and Natural Compounds with Antibacterial Activity—A Pharmacotoxicological Screening*. *Antibiotics*. 2021; 10(4):401. <https://doi.org/10.3390/antibiotics10040401>
  10. Ghiulai, R., Roșca, O. J., Antal, D. S., Mioc, M., Mioc, A., Racoviceanu, R., **Macașoi, I.**, Olariu, T., Dehelean, C., Crețu, O. M., Voicu, M., & Șoica, C. (2020). *Tetracyclic and Pentacyclic Triterpenes with High Therapeutic Efficiency in Wound Healing Approaches*. *Molecules* (Basel, Switzerland), 25(23), 5557. <https://doi.org/10.3390/molecules25235557>
  11. Iftode, A., Drăghici, G. A., **Macașoi, I.**, Marcovici, I., Coricovac, D. E., Dragoi, R., Tischer, A., Kovatsi, L., Tsatsakis, A. M., Cretu, O., & Dehelean, C. (2021). *Exposure to cadmium and copper triggers cytotoxic effects and epigenetic changes in human colorectal carcinoma HT-29 cells*. *Experimental and therapeutic medicine*, 21(1), 100. <https://doi.org/10.3892/etm.2020.9532>
  12. Maghiari, A. L., Coricovac, D., Pinzaru, I. A., **Macașoi, I. G.**, Marcovici, I., Simu, S., Navolan, D., & Dehelean, C. (2020). *High Concentrations of Aspartame Induce Pro-Angiogenic Effects in Ovo and Cytotoxic Effects in HT-29 Human Colorectal Carcinoma Cells*. *Nutrients*, 12(12), 3600. <https://doi.org/10.3390/nu12123600>
  13. Coricovac, D., Pinzaru, I., Avram, Ș., **Macașoi, I.**, Șoica, C., & Dehelean, C. (2020). *In Vitro and In Ovo Assessment of Betulinic Acid Antimelanoma Effect*. *Timisoara Med*, 2020(1), 0-0.
  14. **Macașoi Ioana**, Pavel Ioana Zinuca, Moacă Alina Elena, Avram Ștefana, David Vlad Laurențiu, Coricovac Dorina, Mioc Alexandra, Spandidos Demetrios A., Tsatsakis Aristidis, Șoica Codruța, Dumitrașcu Victor, Dehelean Cristina. *Mechanistic investigations of antitumor activity of a Rhodamine B-oleanolic acid derivative bioconjugate*. *Oncol Rep*. 2020;44(3):1169-1183.
  15. Farcas Claudia Geanina, **Macasoi Ioana**, Pinzaru Iulia, Marius Chirita, Marius Constantin Chirita Mihaila, Dehelean Cristina, Avram Ștefana, Loghin Felicia, Mocanu Liviu, Rotaru Virgil, Ieta Adrian, Ercuta Aurel, Coricovac Dorina. *Controlled Synthesis and Characterization of Micrometric Single Crystalline Magnetite With Superparamagnetic Behavior and Cytocompatibility/Cytotoxicity Assessments*. *Front Pharmacol*. 2020;11:410. Published 2020 Apr 3. doi:10.3389/fphar.2020.00410

16. **Ioana Macașoi**, M. Mioc, A. Cheveresan, R. Ghiulai, A. Mioc, C. Dehelean, C. Șoica, D. Muntean, V. Dumitrașcu. *In silico evaluation of the antiproliferative mitochondrial targeted mechanism of action of some pentacyclic triterpene derivatives*. Revista de Chimie. 2018 Dec; 12, p 3361-3363
17. **Ioana Macasoi**, Alexandra Mioc, Marius Mioc, Irina Soica, Adelina Chevereșan, Cristina Dehelean, Victor Dumitrașcu. *Targeting Mitochondria Through the Use of Mitocans as Emerging Anticancer Agents*. Current medicinal chemistry. 2019
18. Elena-Alina Moacă, Ciprian-Valentin Mihali, **Ioana-Gabriela Macașoi**, Codruța Șoica, Cristina-Adriana Dehelean, Cornelia Păcurariu, Sorin Florescu. *Fe<sub>3</sub>O<sub>4</sub>@C Matrix with Tailorable Adsorption Capacities for Paracetamol and Acetylsalicylic Acid: Synthesis, Characterization, and Kinetic Modeling*. Molecules 2019, 24, 1727.
19. Andreea M. Kis†, **Ioana Macasoi**†, Corina Paul†, Matilda Radulescu, Roxana Buzatu, Claudia G. Watz, Adelina Cheveresan, Delia Berceanu, Iulia Pinzaru, Stefania Dinu, Aniko Manea, Marioara Poenaru, Claudia Borza and Cristina A. Dehelean. *Methotrexate and Cetuximab—Biological Impact on Non-Tumorigenic Models: In Vitro and In Ovo Assessments*. MEDICINA 2022, 58(2): 167; <https://doi.org/10.3390/medicina58020167>.
20. Minda Daliana, Alexandra Mioc, Christian Banciu, Codruța Soica, Roxana Racoviceanu, Marius Mioc, **Ioana Macasoi**, Stefana Avram, Adrian Voicu, Andrei Motoc, and Cristina Trandafirescu, *Cyclodextrin Dispersion of Mebendazole and Flubendazole Improves In Vitro Antiproliferative Activity*. PROCESSES 2021, 9(12): 2185, DOI: 10.3390/pr9122185
21. Pilut, Ciprian N., Aniko Manea, **Ioana Macasoi**, Amadeus Dobrescu, Doina Georgescu, Roxana Buzatu, Alin Faur, Stefania Dinu, Doina Chioran, Iulia Pinzaru, Monica Hancianu, Cristina Dehelean, and Daniel Malița. *Comparative Evaluation of the Potential Antitumor of Helleborus purpurascens in Skin and Breast Cancer*. PLANTS 2022, 11(2): 194, DOI: <https://doi.org/10.3390/plants11020194>
22. Bratu Lavinia Melania, Marcovici Iasmina, **Macasoi Ioana**, Manea Aniko, Niculescu Bogdan, Olaru Flavius, Heghes Alina, Dehelean Cristina, Coricovac Dorina. *In Vitro Insights Regarding The Role Of Melanin In Melanoma Cells' response To Betulinic Acid Treatment*. Farmacia. 2022;70:1.
23. Smirnova Irina, Drăghici George, Kazakova Oxana, Vlaia Lavinia, Avram Stefana, Mioc Alexandra, Mioc Marius, **Macașoi Ioana**, Dehelean Cristina, Voicu Adrian, Șoica Codruța. *Hollongdione arylidene derivatives induce antiproliferative activity against melanoma and breast cancer through pro-apoptotic and antiangiogenic mechanisms*. Bioorganic Chemistry. 2022 Feb 1;119:105535.
24. Dinu, Stefania, Emanuela Lidia Craciunescu, **Ioana Macasoi**, Doina Chioran, Mircea Rivis, Daliborca Vlad, Raluca Adriana Milutinovici, Iasmina Marcovici, Alina Dolghi, Alina Moaca, Dorin Cristian Dinu, Cristina Dehelean, and Malina Popa. 2022. "Toxicological Assessment of an Acrylic Removable Orthodontic Appliance Using 2D and 3D In Vitro Methods" Materials 15, no. 3: 1193. <https://doi.org/10.3390/ma15031193>
25. Marcovici, Iasmina, Dorina Coricovac, Iulia Pinzaru, **Ioana Gabriela Macasoi**, Roxana Popescu, Raul Chioibas, Istvan Zupko, and Cristina Adriana Dehelean. 2022. "Melanin and Melanin-Functionalized Nanoparticles as Promising Tools in Cancer Research—A Review" Cancers 14, no. 7: 1838. <https://doi.org/10.3390/cancers14071838>
26. Dumache, Raluca, Alexandra Enache, **Ioana Macasoi**, Cristina Adriana Dehelean, Victor Dumitrascu, Alexandra Mihailescu, Roxana Popescu, Daliborca Vlad, Cristian Sebastian Vlad, and Camelia Muresan. 2022. "SARS-CoV-2: An Overview of the Genetic Profile

- and Vaccine Effectiveness of the Five Variants of Concern" *Pathogens* 11, no. 5: 516. <https://doi.org/10.3390/pathogens11050516>
27. Cozma, Gabriel Veniamin, Alexandru Apostu, **Ioana Macasoi**, Cristina Adriana Dehelean, Octavian Marius Cretu, Stefania Dinu, Dan Gaiță, and Aniko Manea. 2022. "In Vitro and In Ovo Evaluation of the Potential Hepatoprotective Effect of Metformin" *Medicina* 58, no. 6: 705. <https://doi.org/10.3390/medicina58060705>
  28. Alina Anton, Elena Alina Moacă, Cristian Andrei Sarau, Ștefania Dinu, Alexandra Denisa Semenescu, **Ioana Gabriela Macașoi**, Cristina Adriana Dehelean. Antioxidant And In Vitro Cytotoxic Activity Of Commercial Lemongrass, Sea Buckthorn And Basil Essential Oils, Against Colorectal Cancer Cell Line Hct 116. *Farmacia*. 2022; 22.
  29. Chioran, Doina, Adrian Sitaru, **Ioana Macasoi**, Iulia Pinzaru, Cristian Andrei Sarau, Cristina Dehelean, Stefania Dinu, Camelia Szuhanek, Irina Nicoleta Zetu, Andra Cristine Serafin, Mircea Rivis, Marioara Poenaru, and Razvan Dragoi. 2022. "Nicotine Exerts Cytotoxic Effects in a Panel of Healthy Cell Lines and Strong Irritating Potential on Blood Vessels" *International Journal of Environmental Research and Public Health* 19, no. 14: 8881. <https://doi.org/10.3390/ijerph19148881>
  30. Fabricky, Mihai M. C., Robert Cosmin Racea, **Ioana Macasoi**, Iulia Pinzaru, Cosmin Sinescu, Horatiu Cristian Manea, Laura-Cristina Rusu, Dana Stoian, Roxana Buzatu, and Stefania Dinu. 2022. "The In Vitro Impact of Two Scaffold-Type Structure Dental Ceramics on the Viability, Morphology, and Cellular Migration of Pharyngeal Cancer Cells" *Coatings* 12, no. 8: 1212. <https://doi.org/10.3390/coatings12081212>
  31. Surducian, Dan-Alexandru, Robert Cosmin Racea, Madalina Cabuta, Iustin Olariu, **Ioana Macasoi**, Laura Cristina Rusu, Sorin Dan Chiriac, Doina Chioran, Stefania Dinu, and Marius Octavian Pricop. Eugenol Induces Apoptosis in Tongue Squamous Carcinoma Cells by Mediating the Expression of Bcl-2 Family. *Life*. 2023; 13(1):22. <https://doi.org/10.3390/life13010022>
  32. Cristina Adriana Dehelean, Dorina Coricovac, Iulia Pinzaru, Iasmina Marcovici, **Ioana Gabriela Macasoi**, Alexandra Semenescu, Geza Lazar, Simona Cinta Pinzaru, Isidora Radulov, Ersilia Alexa, Octavian Cretu. Rutin bioconjugates as potential nutraceutical prodrugs: An in vitro and in ovo toxicological screening. *Frontiers in Pharmacology*. 2022; 13: 1000608. <https://doi.org/10.3389/fphar.2022.1000608>
  33. Pancu, Daniel Florin, Robert Cosmin Racea, **Ioana Macasoi**, Cristian Andrei Sarau, Iulia Pinzaru, Marioara Poenaru, Laura-Cristina Rusu, Cristina Adriana Dehelean, and Stefania Dinu. Assessment of the In Vitro Cytotoxic Profile of Two Broad-Spectrum Antibiotics—Tetracycline and Ampicillin—On Pharyngeal Carcinoma Cells. *Medicina*. 2022; 58(9):1289. <https://doi.org/10.3390/medicina58091289>
  34. Mioc, Marius, Alexandra Mioc, Alexandra Prodea, Andreea Milan, Mihaela Balan-Porcarasu, Roxana Racoviceanu, Roxana Ghiulai, Gheorghe Iovanescu, **Ioana Macasoi**, George Draghici, and et al. Novel Triterpenic Acid—Benzotriazole Esters Act as Pro-Apoptotic Antimelanoma Agents. *International Journal of Molecular Sciences*. 2022; 23(17):9992. <https://doi.org/10.3390/ijms23179992>
  35. Rednic Robert, **Ioana Macasoi**, Iulia Pinzaru, Cristina Adriana Dehelean, Mirela-Cleopatra Tomescu, Monica Susan, and Horea Feier. Pharmaco-Toxicological Assessment of the Combined Cytotoxic Effects of Digoxin and Betulinic Acid in Melanoma Cells. *Life*. 2022; 12(11):1855. <https://doi.org/10.3390/life12111855>

36. Racea Robert-Cosmin, **Ioana-Gabriela Macasoï**, Stefania Dinu, Iulia Pinzaru, Iasmina Marcovici, Cristina Dehelean, Laura-Cristina Rusu, Doina Chioran, Mircea Rivis, and Roxana Buzatu. Eugenol: In Vitro and In Ovo Assessment to Explore Cytotoxic Effects on Osteosarcoma and Oropharyngeal Cancer Cells. *Plants*. 2023; 12(20):3549. <https://doi.org/10.3390/plants12203549>
37. Susan Monica, **Ioana Macasoï**, Iulia Pinzaru, Cristina Dehelean, Iosif Ilia, Razvan Susan, and Ioana Ionita. In Vitro Assessment of the Synergistic Effect of Aspirin and 5-Fluorouracil in Colorectal Adenocarcinoma Cells. *Current Oncology*. 2023; 30(7):6197-6219. <https://doi.org/10.3390/curroncol30070460>
38. Gag Otilia, **Ioana Macasoï**, Iulia Pinzaru, Stefania Dinu, Ramona Popovici, Mioara-Raluca Cosoroaba, Roxana Buzatu, Madalina Cabuta, and Sorin Dan Chiriac. In Vitro Assessment of the Impact of Ultraviolet B Radiation on Oral Healthy and Tumor Cells. *Photonics*. 2023; 10(4):464. <https://doi.org/10.3390/photonics10040464>
39. Robert Cosmin Racea, Petru Eugen Merghes, Daniela Gurgus, **Ioana Macasoï**, Laura Cristina Rusu, Doina Chioran, Stefania Dinu, Daniel Breban-Schwarzkopf, Camelia Szuhaneck, Mircea Rivis. Eugenol: In Vitro Characterization Of The Cytotoxic Profile At The Level Of Colorectal Carcinoma Cells. *Farmacia*. 2023; 71(2):288-295. <https://doi.org/10.31925/farmacia.2023.2.8>
40. Alexandru Apostu, Roxana Buzatu, Madalina Cabuta, **Ioana Macasoï**, Stefania Dinu, Andrada Iftode, Horațiu Cristian Mânea, Danion Gaita, Sorin Dan Chiriac. In vitro assessment of the potential cytotoxic effect of metformin on colorectal cancer cells. *Farmacia* 2023; 71(1):50-57. <https://doi.org/10.31925/farmacia.2023.1.7>

## ARTICLES PUBLISHED IN ABSTRACT

1. Stefana Avram, Corina Danciu, Ioana Zinuca Pavel, Daliana Minda, Roxana Ghiulai, **Ioana Macasoï**, Dorina Coricovac, Iulia Pinzaru, Alina Elena Moaca, Denisa Carcioban, Codruta Soica, Cristina Dehelean. Safety and wound healing effects of three Artemisia species, pag 47, Rezumate manifestari in cadrul proiectului CNFIS-FDI-2018-0159, Safety of medicinal plants products, Editura Victor Babes, 2018, ISBN 978-606-786-104-4.
2. Stefana Avram, Corina Danciu, Ioana Zinuca Pavel, Daliana Minda, Roxana Ghiulai, Iulia Pinzaru, **Ioana Macasoï**, Dorina Coricovac, Alina Elena Moaca, Marius Mioc, Codruta Soica, Cristina Dehelean. The effect of lemon balm extracts on MCF-7 and MDA-MB-231 breast cancer cells, pag 49, Rezumate manifestari in cadrul proiectului CNFIS-FDI-2018-0159, Safety of medicinal plants products, Editura Victor Babes, 2018, ISBN 978-606-786-104-4.
3. **Ioana-Gabriela Macasoï**, Danina Muntean, Ioana-Zinuca Pavel, Cristina Adriana Dehelean. Rhodamine B conjugated maslinic acid as selective cytotoxic mitocans. pag 52, Rezumate manifestari in cadrul proiectului CNFIS-FDI-2018-0159, Safety of medicinal plants products, edited by: C. Dehelean, I. Pinzaru, D. Coricovac, Editura Victor Babes, 2018, ISBN 978-606-786-104-4.

4. Stefana Avram, Corina Danciu, Ioana Zinuca Pavel, Daliana Minda, Roxana Ghiulai, **Ioana Macasoï**, Dorina Coricovac, Iulia Pinzaru, Codruta Soica, Cristina Dehelean. Traditional anti-allergic remedies targeting angiogenesis in atopic dermatitis. pag 13, Volum de rezumate editat în cadrul manifestărilor științifice derulate în baza proiectului CNFIS-FDI-2019-0393, Produsele dermo-cosmetice ca formulare. Testarea siguranței produselor cosmetice (Dermo-cosmetic products as formulations. Safety testing of cosmetic products), Editura Victor Babes, Timisoara, 2020, ISBN 978-606-786-155-6.
5. Sebastian Simu, Dorina Coricovac, Iulia Pinzaru, Alina Moacă, **Ioana Macașoi**, George Drăghici, Dan Navolan. Ultraviolet radiation amplifies the noxious effects of sodium lauryl sulfate at skin level. pag. 42, Rezumate manifestari in cadrul proiectului CNFIS-FDI-2018-0159, Safety of medicinal plants products, edited by: C. Dehelean, I. Pinzaru, D. Coricovac, Editura Victor Babes, 2018, ISBN 978-606-786-104-4
6. Stefana Avram, Corina Danciu, Ioana Zinuca Pavel, Daliana Minda, Roxana Ghiulai, **Ioana Macasoï**, Dorina Coricovac, Iulia Pinzaru, Alina-Elena Moaca, Denisa Circioban, Codruta, Soica, Cristina Dehelean. Safety and wound healing effects of three Artemisia species. pag. 47. Rezumate manifestari in cadrul proiectului CNFIS-FDI-2018-0159, Safety of medicinal plants products, edited by: C. Dehelean, I. Pinzaru, D. Coricovac, Editura Victor Babes, 2018, ISBN 978-606-786-104-4.
7. Stefana Avram, Corina Danciu, Ioana Zinuca Pavel, Daliana Minda, Roxana Ghiulai, Iulia Pinzaru, **Ioana Macasoï**, Dorina Coricovac, Alina-Elena Moaca, Marius Mioc, Codruta Soica, Cristina Dehelean. The effect of lemon balm extracts on MCF-7 and MDA-MB-231 breast cancer cells. pag. 49. Rezumate manifestari in cadrul proiectului CNFIS-FDI-2018-0159, Safety of medicinal plants products, edited by: C. Dehelean, I. Pinzaru, D. Coricovac, Editura Victor Babes, 2018, ISBN 978-606-786-104-4.
8. **Ioana-Gabriela Macașoi**, Danina Muntean, Cristina Adriana Dehelean. Phytochemicals targeting mitochondrial functions in cancer. pag. 54. Rezumate manifestari in cadrul proiectului CNFIS-FDI-2018-0159, Safety of medicinal plants products, edited by: C. Dehelean, I. Pinzaru, D. Coricovac, Editura Victor Babes, 2018, ISBN 978-606-786-104-4.
9. **Macasoï Ioana-Gabriela**, Dehelean Cristina, Dumitrascu Victor. The effect of a Rhodamine B-conjugated oleanolic acid derivative on human melanoma cell line A375. pag. 21. Volum de rezumate editat în cadrul manifestărilor științifice derulate în baza proiectului CNFIS-FDI-2019-0393, Produsele dermo-cosmetice ca formulare. Testarea siguranței produselor cosmetice (Dermo-cosmetic products as formulations. Safety testing of cosmetic products), Editura Victor Babes, Timisoara, 2020, ISBN 978-606-786-155-6.
10. **Macasoï Ioana-Gabriela**, Dehelean Cristina, Dumitrascu Victor. Topical effect of oleanolic acid for dermal use. pag. 9. Volum de rezumate editat în cadrul manifestărilor științifice derulate în baza proiectului CNFIS-FDI-2019-0393, Produsele dermo-cosmetice ca formulare. Testarea siguranței produselor cosmetice (Dermo-cosmetic products as formulations. Safety testing of cosmetic products), Editura Victor Babes, Timisoara, 2020, ISBN 978-606-786-155-6.
11. Stefana Avram, Corina Danciu, Ioana Zinuca Pavel, Daliana Minda, Roxana Ghiulai, **Ioana Macasoï**, Dorina Coricovac, Iulia Pinzaru, Codruta Soica, Cristina Dehelean. Traditional anti-allergic remedies targeting angiogenesis in atopic dermatitis. pag. 13. Volum de rezumate editat în cadrul manifestărilor științifice derulate în baza proiectului CNFIS-FDI-2019-0393, Produsele dermo-cosmetice ca formulare. Testarea siguranței

- produselor cosmetice (Dermo-cosmetic products as formulations. Safety testing of cosmetic products), Editura Victor Babes, Timisoara, 2020, ISBN 978-606-786-155-6.
12. Dorina Coricovac, Aymen Barkaoui, Iasmina Marcovici, Ramona Gurila, **Ioana Macasoï**, Iulia Pinzaru, Cristina Dehelean. An overview on skin lightening agents' noxious effects. pag. 61. Volum de rezumate editat în cadrul manifestărilor științifice derulate în baza proiectului CNFIS-FDI-2019-0393, Produsele dermo-cosmetice ca formulare. Testarea siguranței produselor cosmetice (Dermo-cosmetic products as formulations. Safety testing of cosmetic products), Editura Victor Babes, Timisoara, 2020, ISBN 978-606-786-155-6.
  13. Iasmina Marcovici, Iulia Pinzaru, **Ioana Macasoï**, Dorina Coricovac, Cristina Dehelean. Methods for Assessing the Photoprotective Activity of Sunscreen Products Containing Plant-Derived Molecules as Active Ingredients. pag. 11. Volum de rezumate editat în cadrul manifestărilor științifice derulate în baza proiectului CNFIS-FDI-2019-0393, Aplicații ale metodelor experimentale în analiza produselor cosmetice cu principii active / (Applications of experimental methods in the analysis of cosmetics based on active ingredients), editura Victor Babes, Timisoara, 2020, ISBN 978-606-786-156-3.
  14. **Ioana Macasoï**, Dorina Coricovac, Iulia Pinzaru, Iasmina Marcovici, Cristina Adriana Dehelean, Victor Dumitrașcu. Methods for determining the biological and toxicological activity of a compound by high-resolution respiration assay. pag. 24. Volum de rezumate editat în cadrul manifestărilor științifice derulate în baza proiectului CNFIS-FDI-2019-0393, Aplicații ale metodelor experimentale în analiza produselor cosmetice cu principii active / (Applications of experimental methods in the analysis of cosmetics based on active ingredients), editura Victor Babes, Timisoara, 2020, ISBN 978-606-786-156-3.
  15. Iasmina Marcovici, Dorina Coricovac, Iulia Pinzaru, **Ioana Macasoï**, Cristina Dehelean. In Vitro Methods for Assessing the Toxicity of Melanin Nanoparticles as Drug Delivery Systems for Natural Compounds in Cancer Therapy. pag. 26. Volum de rezumate editat în cadrul manifestărilor științifice derulate în baza proiectului CNFIS-FDI-2019-0393, Aplicații ale metodelor experimentale în analiza produselor cosmetice cu principii active / (Applications of experimental methods in the analysis of cosmetics based on active ingredients), editura Victor Babes, Timisoara, 2020, ISBN 978-606-786-156-3.
  16. **Ioana Macasoï**, Dorina Coricovac, Iulia Pinzaru, Iasmina Marcovici, Cristina Adriana Dehelean, Victor Dumitrașcu. Structural changes of pentacyclic triterpenes to increase biological activity. pag. 36. Volum de rezumate editat în cadrul manifestărilor științifice derulate în baza proiectului CNFIS-FDI-2019-0393, Aplicații ale metodelor experimentale în analiza produselor cosmetice cu principii active / (Applications of experimental methods in the analysis of cosmetics based on active ingredients), editura Victor Babes, Timisoara, 2020, ISBN 978-606-786-156-3.
  17. Andreea Silvia Paducel, Ioana Zinuca Pavel, Daliana Minda, **Ioana Macasoï**, Iulia Pinzaru, Alina Moaca, Roxana Ghiulai, Codruta Soica, Cristina Dehelean, Corina Danciu, Stefana Avram. Sweet basil extracts with antioxidant potential show in vivo anti-irritative and wound healing effects. pag. 42. Volum de rezumate editat în cadrul manifestărilor științifice derulate în baza proiectului CNFIS-FDI-2019-0393, Aplicații ale metodelor experimentale în analiza produselor cosmetice cu principii active / (Applications of experimental methods in the analysis of cosmetics based on active ingredients), editura Victor Babes, Timisoara, 2020, ISBN 978-606-786-156-3.
  18. Dorina Coricovac, Iulia Pinzaru, **Ioana Macasoï**, Iasmina Marcovici, Cristina Dehelean. Medicinal plants active in skin pathologies. pag. 59. Volum de rezumate editat în cadrul

manifestărilor științifice derulate în baza proiectului CNFIS-FDI-2019-0393, Aplicații ale metodelor experimentale în analiza produselor cosmetice cu principii active / (Applications of experimental methods in the analysis of cosmetics based on active ingredients), editura Victor Babes, Timisoara, 2020, ISBN 978-606-786-156-3.

19. Daliana Minda, Ioana Zinuca Pavel, Corina Danciu, Roxana Ghiulai, **Ioana Macasoï**, Dorina Coricovac, Iulia Pinzaru, Alina-Elena Moaca, Codruta Soica, Cristina Dehelean, Stefana Avram. Sweet wormwood phytochemical analysis and bioactive effects on CAM assay. Volum de rezumate editat în cadrul manifestărilor științifice derulate în baza proiectului CNFIS-FDI-2021-0498, PLANTE MEDICINALE ÎNTRE NATURĂ ȘI SĂNĂTATE/PLANTS BETWEEN NATURE AND HEALTH, editura Victor Babes, Timisoara, 2021, ISBN 978-606-786-253-9
20. **Ioana Macasoï**, Dorina Coricovac, Iasmina Marcovici, Iulia Pinzaru, Cristina Dehelean. Oleanolic acid derivatives as pharmacological importance in the treatment of cancer. Volum de rezumate editat în cadrul manifestărilor științifice derulate în baza proiectului CNFIS-FDI-2021-0498, PLANTE MEDICINALE ÎNTRE NATURĂ ȘI SĂNĂTATE/PLANTS BETWEEN NATURE AND HEALTH, editura Victor Babes, Timisoara, 2021, ISBN 978-606-786-253-9
21. **Ioana Macasoï**, Dorina Coricovac, Iasmina Marcovici, Iulia Pinzaru, Cristina Dehelean. Supernatural: a new approach to natural compounds to target mitochondria in antitumor therapy. Volum de rezumate editat în cadrul manifestărilor științifice derulate în baza proiectului CNFIS-FDI-2021-0498, PLANTE MEDICINALE ÎNTRE NATURĂ ȘI SĂNĂTATE/PLANTS BETWEEN NATURE AND HEALTH, editura Victor Babes, Timisoara, 2021, ISBN 978-606-786-253-9
22. Crstina Grosu, **Ioana Macasoï**, Cristina Dehelean. Pharmaco-toxicological evaluation of the antitumor effect of Helleborus purpurascens. Volum de rezumate editat în cadrul manifestărilor științifice derulate în baza proiectului CNFIS-FDI-2021-0498, PLANTE MEDICINALE ÎNTRE NATURĂ ȘI SĂNĂTATE/PLANTS BETWEEN NATURE AND HEALTH, editura Victor Babes, Timisoara, 2021, ISBN 978-606-786-253-9

#### PRESENTATIONS AT NATIONAL CONFERENCES

1. **Macasoï I.**, Pavel I.Z., Mioc A., Coricovac D., Csuk R., Dehelean C.A., Muntean D. Characterization of the effects of an Oleanolic Acid-Rhodamine B derivative on mitochondrial respiration of human keratinocytes. Sesiunea Științifică a Școlii Doctorale, Timișoara, România, decembrie 2018 – poster presentation.
2. **Ioana-Gabriela Macașoi**, Iulia Pinzaru, George Drăghici, Cristina Dehelean. Evaluarea in vitro a profilului de siguranță al acidului oleanolic încapsulat în lipozomi la nivelul hepatocitelor și cardiomiocitelor. Congresul Național de Farmacie, 27 - 28 - 29 Septembrie 2023, Volum rezumate „Farmacia azi: de la tradiție la interdisciplinaritate și inteligență artificială”, pag. 277
3. **Ioana Macasoï**, Iulia Pinzaru, Dehelean Cristina. Oleanolic Acid Elicits A Dose-Dependent Cytotoxic Effect And Induces An Apoptotic-Like Effect On Osteosarcoma Cells. Simpozion: De la Etnofarmacologie la Fitomedicină. 23-25 iunie 2023.

#### PRESENTATIONS AT INTERNATIONAL CONFERENCES

1. **Ioana-Gabriela Macașoi**, Iulia Pînzaru, Coricovac Dorina, Madalina Cabuta, Iasmina Marcovici, Octavian Marius Cretu, Cristina Adriana Dehelean. Oleanolic acid encapsulated in liposomes as a potential therapeutic approach for hepatocellular carcinoma. 8th German Pharm-Tox Summit 2023.
2. Iasmina Marcovici, Iulia Pinzaru, Dorina Coricovac, **Ioana Macasoi**, Cristina Dehelean. Melanin Nanoparticles as Novel Approach in Malignant Melanoma Treatment – An In Vitro Assessment. 8th German Pharm-Tox Summit 2023.
3. **Ioana Macasoi**, I. Pinzaru , S. D. Chiriac , D. Radu , C. Dehelean. Oleanolic acid-based liposomes selectively targets human melanoma cells by affecting mitochondrial function. Eurotox 2023.
4. Coricovac D, Pinzaru IA, Marcovici I, Iftode AO, Moaca A, **Macasoi Ioana**, Vlaia L, Dehelean C. P12-51 Betulinic acid formulated as proniosomal gel—a promising candidate for skin cancer management. Toxicology Letters. 2022 Sep 1;368:S195.