



**Europass
Curriculum Vitae**



Personal information

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| First name(s) / Surname(s) | Teodora Mocan |
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|-------------------------------|---|
| <p>Work experience</p> | <p>Professional experience, former employers.</p> <ul style="list-style-type: none"> ▶ 2020-present- University of Medicine and Pharmacy “Iuliu Hatieganu” Cluj-Napoca, Physiology Department- Associate Professor (Habil) ▶ 2016-2020 University of Medicine and Pharmacy “Iuliu Hatieganu” Cluj-Napoca, Physiology Department – Habilitated Lecturer ▶ 2018-present Institute of Gastroenterology and Hepatology Cluj-Napoca, Romania, Nanomedicine Department- Senior Researcher ▶ 2007-2018 Institute of Gastroenterology and Hepatology Cluj-Napoca, Romania- Nanomedicine Department, Research Assistant/Researcher, team member in research projects ▶ 2008- 2016-University of Medicine and Pharmacy “Iuliu Hatieganu” Cluj-Napoca, Physiology Department- Assistant Lecturer. ▶ 2007- 2011 University of Medicine and Pharmacy “Iuliu Hatieganu” Cluj-Napoca, Physiology Department- PhD student; ▶ 2005-2008- Adult Clinical Hospital “O. Fodor” Cluj-Napoca (presently: <i>Institute of Gastroenterology and Hepatology Cluj-Napoca</i>) - Resident Doctor; ▶ 2002-2003- Emmergency Hospital, Cluj—Napoca- General Medicine Doctor; |
| <p>Education and training</p> | <p>Education, degrees and diplomas.</p> <ul style="list-style-type: none"> ▶ 2020- Specialst Doctor in Laboratory Medicine ▶ 2018- Habilitation for PhD mentorship –Directeur de Research DR(OMEN 4290/08/08/2018) ▶ 2011- PhD in Medical Sciences (PhD thesis:” Implications of oxidative stress mechanisms in toxicity of nanoparticles). ▶ 2010 -Specialist Doctor Orthopedica and Tramatology ▶ 2003 - MA in Medical Informatics and Biostatistics, University of Medicine and Pharmacy “Iuliu Hatieganu” Cluj-Napoca ▶ 2002 - Doctor-Physician Degree University of Medicine and Pharmacy “Iuliu Hatieganu” Cluj-Napoca,. ▶ 1996 - BSc Degree at “Gh.M.Murgoci” High-School Braila; |
| <p>Other language(s)</p> | <p>English (C2), French (B1/B2)</p> |

Project-based scientific and managerial experience:

► 2 national grant projects- director,

► 16 national grant projects- member of research team

► **Director:** ► VACCINAN 76/2012 PN-II-PT-PCCA-2011 , ► PN-III-P2.1-BG-2016-0446

► **Researcher (Team Member):**

| Nr crt. | Grant/Proiect (date de identificare / tip) | Derulare |
|---------|---|-----------|
| 1 | PN II:Contr.no.41-068 /2007 .Director: Georgescu Carmen | 2007-2010 |
| 2 | PN II:Contr.no.41-009/14.09.2007 Director: Iancu Cornel | 2007-2010 |
| 3 | PN II:Contr.no.42-112/01.10.2008 Director: Clichici Simona | 2008-2011 |
| 4 | PN II:Contr.no.42-110/01.10.2008 Director : Seicean Andrada | 2008-2011 |
| 5 | PN II:Contr.no 42-104/01.10.2008 Director: Filip Gabriela | 2008-2011 |
| 6 | PN II:Contr.no 12-131/2008 Director:Clichici Simona | 2008-2011 |
| 7 | PN II:Contr.no 42-111/2008 Director: Bala Ovidiu | 2008-2011 |
| 8 | PN II:Contr.no 42-115/2008 Director: Iancu Cornel, | 2008-2011 |
| 9 | PN II:Contr.no 99/2011 Director: Mocan Lucian | 2011-2014 |
| 10 | PN-II-ID-PCE- 2011-3-0954 Director: Stiufluic Rares. | 2011-2015 |
| 11 | PN II:Contr.no. 133/2012. (PNII-PT-PCCA-2011-3.2-1289) Director: Mocan Lucian | 2012-2016 |
| 12 | PN II:Contr.no. 83/2012.(PN-II-PT-PCCA-2011-3.1-1551) Director: Iancu Cornel | 2012-2016 |
| 13 | PN II:Contr.no. 56/2013 (PN-II-ID-PCE-2012-4-0241) Director: Iancu Cornel | 2013-2016 |
| 14 | PN II:Contr.no..125/2014 (PN-II-PT-PCCA-2013-4-1553). Director: Zaharie Florin | 2014-2016 |
| 15 | PN II:Contr.no.284/2015. (PN-II-RU-TE-2014-4-2267) Director :: Matea Tudor Cristian | 2015-2017 |
| 16 | PNIII: PN-III-P2-2.1-PED-2016-1742. Director: Matea T Cristian | 2016-2018 |
| 17 | PNIII: PN-III-P1-1.1-TE-2016-2161, ctr 102/2018 Director: Mocan Lucian | 2018-2020 |

List of publications:

Total number of articles in ISI-indexed journals: 84. Hirsch index : 33(Google Scholar); 21(ISI Web of Knowledge). The following represent articles in ISI journals, as principal author:

| Nr. Crt. | Titlu și autori | Revista, volum, nr. Pagini | Anul | IF |
|----------|--|---|------|------|
| 1 | Studies on antioxidant effects of the red grapes seed extract from Vitis vinifera, Burgund Mare, Receaș in pregnant rats. Mureșan A, Alb C, Suciuc S, Clichici S, Filip A, Login C, Decea N, Mocan T. | Acta Physiologica Hungarica Vol.97 Nr. 2 Pag. 240-246. | 2010 | 1.22 |
| 2 | Implication of oxidative stress mechanisms in toxicity of nanoparticles Mocan T , Clichici S, Agoston-Coldea L, Mocan L, Șimon Ș, Ilie IR, Iancu C, Biriș AR, Mureșan A, | Acta Physiol Hung. Vol.97 Nr.3 Pag.247-255 | 2010 | 1.22 |
| 3 | Cornel Iancu, Lucian Mocan, Enhanced laser thermal ablation for the in vitro treatment of liver cancer by specific delivery of multiwalled carbon nanotubes functionalized with human serum albumin Constantin Bele, Anamaria Ioana Orza, Flaviu Tabaran, Cornel Catoi, Rares Stiufluic, Ariana Stir, Cristian Matea, Dana Iancu, Lucia Agoston-Coldea, Florin Zaharie, Teodora Mocan | International Journal of Nanomedicine, Vol. 6 Pag. 129-141 | 2011 | 3.13 |
| 4 | Left atrium systolic and diastolic function assessment in hypertensive patients with preserved ejection fraction. Agoston-Coldea L, Lupu S, Hicea S, Mocan T | Acta Physiologica Hungarica Vol.100 Nr. 2 Pag. 140-152. | 2013 | 0.74 |
| 5 | Surface plasmon resonance-induced photoactivation of gold nanoparticles as mitochondria-targeted therapeutic agents for pancreatic cancer. Mocan L, Ilie I, Tabaran FA, Dana B, Zaharie F, Zdrehus C, Puia C, Mocan T , Muntean V, Teodora P, Ofelia M, Marcel T, Iancu C. | Expert Opin Ther Targets. Vol.17 Nr.12 Pag.1383-1393 | 2013 | 4.9 |
| 6 | Serum levels of the soluble IL-1 receptor family member ST2 and right ventricular dysfunction. Agoston-Coldea L, Lupu S, Hicea S, Paradis A, Mocan T. | Biomarkers In Medicine Vol.8 Nr. 1 Pag. 95-106 | 2014 | 2.85 |
| 7 | Surface plasmons photoactivated gold nanoparticles as bactericidal agents against Methicilin resistant Staphylococcus Aureus. Lucian Mocan, Ioana Ilie, Flaviu Tabaran, Cristian Matea, Cornel Iancu, | International Journal of Nanomedicine 2014, Vol.9 Pag.1453-1461 | 2014 | 4.38 |

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|-----|--|--|------|------|
| | Teodora Mocan. | | | |
| 8 | Photothermal Treatment of Human Pancreatic Cancer Using PEGylated Multi-Walled Carbon Nanotubes Induces Apoptosis by Triggering Mitochondrial Membrane Depolarization Mechanism. Mocan T , Matea CT, Cojocaru I, Ilie I, Tabaran FA, Zaharie F, Iancu C, Bartos D, Mocan L. | J Cancer. Vol.5 Nr.8 Pag.679-688 | 2014 | 3.27 |
| 9 | Rational design of gold nanocarrier for the delivery of JAG-1 peptide. Matea CT, Mocan T , Tabaran F, Iancu C, Mocan LC. | J Nanobiotechnology. Vol.13 Nr.41 Pag.1-10 | 2015 | 4.11 |
| 10 | Photothermal treatment of liver cancer with albumin-conjugated gold nanoparticles initiates Golgi Apparatus-ER dysfunction and caspase-3 apoptotic pathway activation by selective targeting of Gp60 receptor. Mocan L, Matea C, Tabaran FA, Mosteanu O, Pop T, Mocan T , Iancu C. | Int J Nanomedicine. 2015 Vol.10 Pag.5435-5445 | 2015 | 4.38 |
| 11 | In Vitro Administration of Gold Nanoparticles Functionalized with MUC-1 Protein Fragment Generates Anticancer Vaccine Response via Macrophage Activation and Polarization Mechanism. Mocan T , Matea C, Tabaran F, Iancu C, Orasan R, Mocan L. | J Cancer. Vol.6 Nr.6 Pag.583-592 | 2015 | 3.27 |
| 12 | Selective laser ablation of Methicillin-resistant Staphylococcus aureus with IgG functionalized multi-walled carbon nanotubes. Journal of Biomedical Nanotechnology in press Lucian Mocan, Ioana Ilie, Flaviu A. Tabaran, Cornel Iancu, Matea Cristian, Ofelia Mosteanu, Teodora Pop, Claudiu Zdrehus, Teodora Mocan. | Journal of Biomedical Nanotechnology Vol.12 Pag.1-8 | 2016 | 5.33 |
| 13 | Selective in vitro photothermal nano-therapy of MRSA infections mediated by IgG conjugated gold nanoparticles. Mocan L, Matea C, Tabaran F, Mosteanu O, Pop T, Puia C, Agoston-Coldea L, Gonciar D, Kalman E, Zaharie G, Iancu C, Mocan T. | Scientific Reports Vol 6 Pag 39466, DOI 10.1038/srep39466 | 2016 | 5.52 |
| 14 | Matea TC, Mocan T , Tabaran F, Pop T, Mosteanu O, Puia C, Iancu C, Mocan L. Quantum dots in imaging, drug delivery and sensor applications. | International Journal of Nanomedicine 2017, Nr 12, Pag 5421-5431, ISSN: 1178-2013. | 2017 | 4.32 |
| 15 | Laser thermal ablation of multidrug-resistant bacteria using functionalized gold nanoparticles. Mocan L, Tabaran FA, Mocan T , Pop T, Mosteanu O, Agoston-Coldea L, Matea CT, Gonciar D, Zdrehus C, Iancu C. | Int J Nanomedicine. Vol 23 Nr 12 Pag 2255-2263. | 2017 | 4.32 |
| 16 | Development of nanoparticle-based optical sensors for pathogenic bacterial detection. Mocan T , Matea CT, Pop T, Mosteanu O, Buzoianu AD, Puia C, Iancu C, Mocan L. | J Nanobiotechnology. 2017 Mar 31;15(1):25. | 2017 | 4.2 |
| 17 | Selective ex vivo photothermal nano-therapy of solid liver tumors mediated by albumin conjugated gold nanoparticles. Mocan L, Matea C, Tabaran FA, Mosteanu O, Pop T, Puia C, Agoston-Coldea L, Zaharie G, Mocan T , Buzoianu AD, Iancu C. | Biomaterials. Vol 119 Pag.33-42. | 2017 | 8.40 |
| 18. | Carbon nanotubes as antibacterial agents Mocan T , Matea TC, Pop Teodora, Mosteanu O, Buzoianu AD, Suci S, Puia C, Zdrehus C, Iancu C, Mocan L. | Cell.Mol.Life Sci DOI 10.1007/s00018-017-2532-y | 2017 | 5.78 |
| 19. | Iron, Copper, and Zinc Homeostasis: Physiology, Physiopathology, and Nanomediated Applications. Szabo, R.; Bodolea, C.; Mocan, T. | <i>Nanomaterials</i> 2021 , <i>11</i> , 2958. https://doi.org/10.3390/nano11112958 | 2021 | 5.07 |
| 20 | Titu, S.; Grapa, C.M.; Mocan, T. ; Balacescu, O.; Irimie, A. Tetraspanins: Physiology, Colorectal Cancer Development, and Nanomediated Applications. | <i>Cancers</i> 2021 , <i>13</i> , 5662. https://doi.org/10.3390/cancers13225662 | 2021 | 6.67 |
| 21 | Margin, O.-C.; Dulf, E.-H.; Mocan, T.; Mocan, L. Modelling in Synthesis and Optimization of Active Vaccinal Components. | <i>Nanomaterials</i> 2021 , <i>11</i> , 3001. https://doi.org/10.3390/nano11113001 | 2021 | 5.07 |
| 22 | Nedelcu, A.; Mocan, T.; Grapa, C.; Mocan, L. Recent Advances in Nanoparticle-Mediated Diagnosis and the Treatment of Pancreatic Cancer. <i>Int. J. Mol. Sci.</i> 2021 , <i>22</i> , 8060. https://doi.org/10.3390/ijms22158060 | <i>Int. J. Mol. Sci.</i> 2021 , <i>22</i> , 8060. https://doi.org/10.3390/ijms22158060 | 2021 | 5.92 |

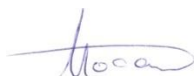
► Internationally published book chapters:11

- Lucia Agoston-Coldea, **T. Mocan**, L. Mocan. Apolipoproteins A-I and B in risk evaluation for coronary heart disease. In JE Rathbond, Handbook of Lipoprotein Research. Nova Science Publishers, New York. 2010. pg. 5-32. ISBN 978-1-61668-186-9.
- Iancu C, Ilie I, Mocan L, Georgescu C, Ilie R, Duncea I, **Mocan T**, Iancu D., Zaharie F. "Human Cord Blood-Derived Stem Cells in transplantation and regenerative medicine". In: "Stem Cells in Clinic and Research", InTech, 2011, pg 21-53 In Press, ISBN: 978-953-307-797-0.
- Lucia Agoston-Coldea, **T. Mocan**, S. Lupu. Non-invasive Imaging in approaching Ischemic Coronary Artery Disease. In Branislav Baskot, Coronary Angiography-Advances in Non-invasive Imaging for Evaluation of Coronary Artery Disease. InTech, sept. 2011, ISBN 978-953-307-675-1.
- Mocan T**, Iancu C, Agoston-Coldea L, Ilie IR, Mocan L, Muresan A., "Genotoxicity of Nanomaterials" In "Nanomaterials and Hazard Assessment", P.V. Mohanan, pag 116-131(total: 324), ISSN: 9788192 334707, ISBN: 9788190362615, 1st Edition Feb. 2012, Educational Book Centre, Mumbai 400080, India
- Ilie I, Ilie R, Mocan L, Georgescu (Pepene) C, Duncea I, **Mocan T**, Ghibu S, Iancu C. Statusul Sindromului de Ovar Polichistic – un Factor de Risc pentru Afecțiuni Cardiovasculare Viitoare. În: Mehnaz Atiq (Ed.) Progrese Recente în Factorii Riscului Cardiovascular, InTech, 2012, 9: 151-198, ISBN 978-953-51-0321-9
- Lucian Mocan , Lucia Agoston-Coldea , **Teodora Mocan** , Cristian Matea, Flaviu A. Tabaran, Teodora Pop, Ofelia Mosteanu, Cornel Iancu. Experimental Nanophotothermolysis of Human pancreatic Cancer Cells Using Gold Nanoparticles. Molecular and Cellular Techniques with Applications in Nanomedicine Science Publishing Group, New York ISBN: 978-1-940366-05-0 pag 1-16
- Teodora Pop , **Teodora Mocan** , Lucia Agoston , Flaviu A. Tabaran , Cristian Matea , Ofelia Mosteanu , Cornel Iancu , Lucian Mocan Nanotherapeutic Strategies for the Selective Ablation of Human Liver Cancer Cells in Molecular and Cellular Techniques with Applications in Nanomedicine Science Publishing Group, New York ISBN: 978-1-940366-05-0 pag 17-40
- Teodora Mocan** , Flaviu A. Tabaran , Cristian Matea , Teodora Pop , Diana Gonciar , Ofelia Mosteanu , Lucian Mocan , Dana Bartos , Lucia Agoston-Coldea , Cornel Iancu Development of an in Vitro Anticancer Vaccine Platform Using Gold Nanoparticles Immunoconjugates in Molecular and Cellular Techniques with Applications in Nanomedicine Science Publishing Group, New York ISBN: 978-1-940366-05-0 pag 41-69
- Diana Gonciar , **Teodora Mocan** , Lucia Agoston. Spectroscopic Techniques Used in Nanomedicine in Molecular and Cellular Techniques with Applications in Nanomedicine Science Publishing Group, New York ISBN: 978-1-940366-05-0 p 93-116
- Diana Gonciar , Lucia Agoston, **Teodora Mocan**. Hybridization Techniques in Nanotechnology Present State and Future Trends in Molecular and Cellular Techniques with Applications in Nanomedicine Science Publishing Group, New York ISBN: 978-1-940366-05-0 p 116-136
- Lucian Mocan , **Teodora Mocan** , Cristian Matea , Flaviu A. Tabaran , Lucia Agoston , Ofelia Mosteanu , Teodora Pop , Dana Bartos , Cornel Iancu Gold Nanoparticles for Multimodal Imaging in Nanomedicine in Molecular and Cellular Techniques with Applications in Nanomedicine Science Publishing Group, New York ISBN: 978-1-940366-05-0 p 136-146

► National patent applications : 15

| Title | Publication Number | Publication Date | Inventor(S) | Application Number |
|--|-------------------------|------------------|---|--------------------|
| PROCESS FOR PREPARING BIOCAPSULES APPLICABLE FOR ANTIFUNGAL PROTECTION PURPOSES, IN PATIENTS HAVING ANTIBACTERIAL THERAPY PER OS | <u>RO132632</u> (A2) | 2018-06-29 | MOCAN TEODORA, MATEA CRISTIAN MOSTEANU OFELIA ORĂȘAN REMUS, MOCAN LUCIAN, ORĂȘAN MEDA, CONEAC ANDREI, POP TEODORA | RO2016000951 |
| PROCESS FOR PREPARING BIOCAPSULES MEANT FOR IMMUNOPROPHYLAXIS OF COLON ADENOCARCINOMA | <u>RO132630</u> (A2) | 2018-06-29 | AGOSTON VAS COLDEA LUCIA MOCAN TEODORA, IANCU CORNEL , MOCAN LUCIAN , TABARAN FLAVIU, MATEA CRISTIAN | RO2016000970 |
| PROCESS FOR PREPARING A PRODUCT TO BE APPLIED IN TARGETING NEOPLASTIC CELLS IN COLON CANCER AND RENDERING PHOTO-THERMAL EFFECT SELECTIVE | <u>RO131845</u> (A2) | 2017-05-30 | MOCAN TEODORA , MATEA CRISTIAN, IANCU CORNEL , AGOSTON VAS COLDEA LUCICA TABARAN FLAVIU, MOCAN LUCIAN | RO2015000906 |
| PROCESS FOR PREPARING A PRODUCT TO BE USED IN TARGETED THERAPY OF HEPATIC NEOPLASM | <u>RO131847</u> (A2) | 2017-05-30 | MOCAN LUCIAN, IANCU CORNEL MOCAN TEODORA, MATEA CRISTIAN | RO2015000909 |
| PROCESS FOR PREPARING A PRODUCT WITH REGENERATIVE AND ANTIMICROBIAL APPLICABILITY | <u>RO131849</u> (A2) | 2017-05-30 | MATEA CRISTIAN, MOCAN LUCIAN, IANCU CORNEL , MOCAN TEODORA | RO2015000908 |
| PROCESS FOR PREPARING A PRODUCT TO BE APPLIED IN THE TREATMENT OF ANTIBIOTIC-RESISTANT INFECTIONS | <u>RO131843</u> (A2) | 2017-05-30 | MATEA CRISTIAN , MOCAN LUCIAN, AGOSTON VAS COLDEA LUCICA, GONCIAR ANDREI IANCU CORNEL, ZDREHUS CLAUDIU, MOCAN TEODORA | RO2015000904 |
| PROCESS FOR PREPARING A PRODUCT TO BE APPLIED IN OPTIMIZED CHEMOTHERAPY OF PANCREAS NEOPLASM | <u>RO131848</u> (A2) | 2017-05-30 | MOCAN TEODORA, MATEA CRISTIAN , IANCU CORNEL, POP TEODORA , MOSTEANU OFELIA, MOCAN LUCIAN | RO2015000902 |
| PROCESS FOR PREPARING A CARCINOEMBRYONIC PRODUCT TO BE APPLIED IN PANCREATIC AND COLONIC CANCER IMMUNO-PROPHYLAXIS | <u>RO131850</u> (A2) | 2017-05-30 | MOCAN TEODORA, MATEA CRISTIAN, IANCU CORNEL, MOCAN LUCIAN | RO2015000903 |
| PROCESS FOR PREPARATION OF A PRODUCT INTENDED FOR TARGETED CELLULAR INTERNALIZATION, APPLICABLE IN PANCREATIC ADENOCARCINOMA IMMUNOPROPHYLAXIS | <u>RO131853</u> (A2) | 2017-05-30 | MATEA CRISTIAN, IANCU CORNEL MOCAN LUCIAN, MOCAN TEODORA | RO2015000845 |
| PROCESS FOR PREPARING A PRODUCT TO BE APPLIED IN TARGETED PHOTO-THERMAL THERAPY OF PANCREATIC CANCER | <u>RO131846</u> (A2) | 2017-05-30 | MOCAN LUCIAN, MATEA CRISTIAN IANCU CORNEL, MOCAN TEODORA | RO2015000907 |
| PROCESS FOR PREPARING A PRODUCT TO BE APPLIED IN ANTIBACTERIAL-TARGETED PHOTO-THERMAL LASER TREATMENT | <u>RO131844</u> (A2) | 2017-05-30 | MOCAN LUCIAN, MATEA CRISTIAN POP TEODORA, MOSTEANU OFELIA MOCAN TEODORA | RO2015000905 |
| PROCESS FOR PREPARING A NANOSTRUCTURED PRODUCT TO BE APPLIED IN IMMUNOPROPHYLAXIS OF PANCREATIC CANCER | <u>RO130792</u> (A2) | 2015-12-30 | MOCAN LUCIAN-CONSTANTIN, MATEA CRISTIAN-TUDOR, IANCU CORNEL TABARAN ALEXANDRU-FLAVIU, LIE IOANA- RADA, MOCAN TEODORA | RO2014000413 |
| PROCESS FOR PREPARING A PRODUCT TO BE APPLIED IN THE IMMUNOPROPHYLAXIS OF PANCREATIC ADENOCARCINOMA | <u>RO130791</u> (A2) | 2015-12-30 | MOCAN TEODORA, MATEA CRISTIAN-TUDOR IANCU CORNEL, MOCAN LUCIAN-CONSTANTIN | RO2014000408 |
| PROCESS FOR PREPARING A PRODUCT TO BE APPLIED FOR PREVENTING COLON NEOPLASIA | <u>RO130790</u> (A2) | 2015-12-30 | MOCAN TEODORA, MATEA CRISTIAN-TUDOR IANCU CORNEL, GONCIAR ANDREI ZAHARIE VASILE-FLORIN, TABARAN FLAVIU CATOI CORNEL, MOCAN LUCIAN-CONSTANTIN | RO2014000407 |
| PROCESS FOR PREPARING A PRODUCT TO BE APPLIED IN THE OPTIMIZED PHOTOTHERMAL THERAPY OF HEPATIC TUMOURS | <u>RO130737</u> (A2) | 2015-12-30 | MOCAN LUCIAN-CONSTANTIN, IANCU CORNEL, MATEA CRISTIAN-TUDOR ILIE IOANA-RADA, MOCAN TEODORA | RO2014000414 |

Signature



Date

03.07.2023