



Alina-Cristina Barb

Home : Timisoara, Romania

Email: toma.alina@umft.ro

Nationality: Romanian

EDUCATION AND TRAINING

- [30/09/2017 – 02/2023] **PhD Studies - Prognostic Elements from the Tumor Microenvironment in Patients with Breast Cancer: Correlation with the Molecular Profile**
"Victor Babes" University of Medicine and Pharmacy, Timisoara
Country: Romania |
- [2018 – 2019] **Psycho-pedagogical Level I+II training**
West University of Timisoara,
Country: Romania |
- [2011 – 2017] **Medical Doctor Degree**
"Victor Babes" University of Medicine and Pharmacy, Timisoara
Country: Romania |
Medicină Generală
- [2006 – 2010] **High School Diploma (Baccalaureate)**
"Mihai Viteazul" High School, Ineu
City: Timisoara |

WORK EXPERIENCE

- [03/03/2025 – Current] **Lecturer PhD**
"Victor Babes" University of Medicine and Pharmacy, Timisoara
Country: Romania
- [29/09/2024 – 02/03/2025] **Assistant professor, permanent position**
"Victor Babes" University of Medicine and Pharmacy, Timisoara
Country: Romania
- [16/09/2018 – 02/2023] **Assistant professor, fixed-term position**
Pius Brinzeu County Emergency Clinical Hospital, Timisoara
Country: Romania
- [15/12/2021 – Current] **Oncology Resident Physician**
Pius Brinzeu County Emergency Clinical Hospital, Timisoara
Country: Romania

[03/01/2018 – 15/12/2021] **Pathology Resident**

"Victor Babes" University of Medicine and Pharmacy, Timisoara

Country: Romania

[15/10/2017 – 29/06/2018] **Associated Assistant Professor, Histology**

"Victor Babes" University of Medicine and Pharmacy, Timisoara

Country: Romania

[20/09/2015 – 18/05/2017] **Histology Volunteer**

LANGUAGE SKILLS

Mother tongue(s): Romanian

Other language(s):

Engleză

LISTENING B2 READING B2 WRITING B2

SPOKEN PRODUCTION B2 SPOKEN INTERACTION B2

Franceză

LISTENING B2 READING B2 WRITING B2

SPOKEN PRODUCTION B2 SPOKEN INTERACTION B2

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

DRIVING LICENCE

Cars: B

PROFESSIONAL SKILLS GAINED THROUGH WORK EXPERIENCE

Professional Skills Gained through Work Experience

Technical skills specific to the laboratory field: microscopy, histochemistry, immunohistochemistry.

Ability to work in a multidisciplinary team and communicate effectively with patients.

PUBLICATIONS

Publications

1. Sorina E, Novacescu D, **Barb AC**, Ciolofan A, Dumitru CS, Zara F, Patrascu R, Enache A. From Burnout to Resilience: Addressing Moral Injury in Nursing Through Organizational Innovation in the Post-Pandemic Era. Healthcare (Basel). 2025 Nov 6;13(21):2822.
2. Brata RD, Marcu L, **Barb AC**, Manole A, Ciolofan A, Dumitru CS, Zara F, Patrascu R. MicroRNAs as Emerging Therapeutic Targets Modulating the Tumor Microenvironment in Head and Neck Squamous Cell Carcinoma. Int J Mol Sci. 2025 Nov 6;26(21):10794.
3. Rakitovan M, Nicoara A, Closca RM, Ceausu RA, Dumitru CS, **Barb AC**, Novacescu D, Armega Angheliescu A, Cindrea AC, Zara F. The Solitary Fibrous Tumor, the Chameleon of the Head and Neck Region-Clinical, Epidemiological, and Histopathological Aspects. Diagnostics (Basel). 2025 Oct 27;15(21):2721.
4. Vornic I, Caprariu R, Novacescu D, **Barb AC**, Buciu V, Băloi A, Szekely D, Suciu CS, Dumitru C, Patrascu R, Zara F, Dumitru CS. Molecular Insights into Human

Placentation: From Villous Morphogenesis to Pathological Pathways and Translational Biomarkers. *Int J Mol Sci.* 2025 Sep 28;26(19):9483.

5. Ungureanu S, Muresan CO, Enache A, Ciocan V, Stan E, Dumache R, Gavrilita GD, **Barb AC**. Medico-Legal Considerations of Seat Belt Syndrome With Severe Abdominal Trauma: A Case Report and Literature Review. *Cureus.* 2025 Aug 24;17(8):e90902.
6. Novacescu D, Dumitru CS, Zara F, Raica M, Suciuc CS, **Barb AC**, Rakitovan M, Armega Angheliescu A, Cindrea AC, Diana S, Gaje PN. The Morphogenesis, Pathogenesis, and Molecular Regulation of Human Tooth Development-A Histological Review. *Int J Mol Sci.* 2025 Jun 27;26(13):6209.
7. Vornic I, Buciu V, Furau CG, Zara F, Novacescu D, **Barb AC**, Cumpanas AA, Latcu SC, Sas I, Serban D, Cut TG, Dumitru CS. The Interplay of Molecular Factors and Morphology in Human Placental Development and Implantation. *Biomedicines.* 2024 Dec 20;12(12):2908.
8. Vornic I, Buciu V, Furau CG, Gaje PN, Ceausu RA, Dumitru CS, **Barb AC**, Novacescu D, Cumpanas AA, Latcu SC, Cut TG, Zara F. Oxidative Stress and Placental Pathogenesis: A Contemporary Overview of Potential Biomarkers and Emerging Therapeutics. *Int J Mol Sci.* 2024 Nov 13;25(22):12195.
9. Feciche BO, Barbos V, Big A, Porav-Hodade D, Cumpanas AA, Latcu SC, Zara F, **Barb AC**, Dumitru CS, Cut TG, Ismail H, Novacescu D. Posterior Retroperitoneal Laparoscopic Adrenalectomy: An Anatomical Essay and Surgical Update. *Cancers (Basel).* 2024 Nov 15;16(22):3841.
10. Salvante ERG, Popoiu AV, **Barb AC**, Cosma AA, Fenesan MP, Saxena AK, Popoiu TA, Boia ES, Stanculescu MC, Caplar BD, Dorobantu FR, Cimpean AM. Artificial Intelligence (AI) Based Analysis of *In Vivo* Polymers and Collagen Scaffolds Inducing Vascularization. *In Vivo.* 2024 Mar-Apr;38(2):620-629.
11. **Barb AC**, Fenesan MP, Pirtea M, Margan MM, Tomescu L, Ceban E, Cimpean AM, Melnic E. Reassessing Breast Cancer-Associated Fibroblasts (CAFs) Interactions with Other Stromal Components and Clinico-Pathologic Parameters by Using Immunohistochemistry and Digital Image Analysis (DIA). *Cancers (Basel).* 2023 Jul 27;15(15):3823.
12. **Barb AC**, Pasca Fenesan M, Pirtea M, Margan MM, Tomescu L, Melnic E, Cimpean AM. Tertiary Lymphoid Structures (TLSs) and Stromal Blood Vessels Have Significant and Heterogeneous Impact on Recurrence, Lymphovascular and Perineural Invasion amongst Breast Cancer Molecular Subtypes. *Cells.* 2023 Apr 17;12(8):1176.
13. Bordean L, Chis M, Cimpean AM, **Barb AC**, Cosma AA, Fenesan MP, Cotoi OS, Nicolescu L, Nicolescu CM, Avram C. Age, Sex, Metabolic and Pharmacologic Factors May Predict Nonresponse Status to Rheumatoid Arthritis Therapies. *In Vivo.* 2023 Sep-Oct;37(5):2387-2401.
14. Cimpean AM, Tamma R, Ruggieri S, Nico B, **Toma A**, Ribatti D. Mast cells in breast cancer angiogenesis. *Critical Reviews in Oncology/Hematology* 2017 Jul;115:23-26.
15. Cioca A, Cimpean AM, Ceaușu RA, Târlui V, **Toma A**, Marin I, Raica M. Evaluation of Podoplanin Expression in Hepatocellular Carcinoma Using RNAscope and Immunohistochemistry - A Preliminary Report. *Cancer Genomics & Proteomics.* 2017; 14(5):383-387.

CONFERENCE PRESENTATIONS – NATIONAL AND INTERNATIONAL

Conference Presentations – National and International

1. Comparative assessment of CD34 and α SMA-positive CAFs among breast cancer molecular subtypes with special emphasis to age, survival, tumor stroma vessels, TLS, invasion and recurrence. Cimpean AM, **Barb AC**, Cosma AA, Pasca Fenesan M.

2nd edition Tumor Heterogeneity, Plasticity and Therapy. 3-4 october 2023 Leuven, Belgium - poster

2. CHLORIDE INTRACELLULAR CHANNEL PROTEIN 1 (CLIC1) AN UNDERESTIMATE MARKER FOR BLOOD VESSELS ENDOTHELIUM. Anca Maria Cimpean, **Alina Barb**, Patricia Lorena Berzava, Andrei Cosma, Mihaela Pașca Feneșan, Corina Maria Stănciulescu, Borislav Dusan Caplar, and Rodica Elena Heredea. International Conference on VASCULAR ANOMALIES. 31.01-03.02.2023, Brussels, Belgium - poster
3. Preliminary Evidence for VEGF Pathway Gene Expression Profile Heterogeneity in Proliferating versus Involuting Infantile Hemangiomas. Anca Maria Cimpean, **Alina Barb**, Andrei Cosma, Mihaela Pașca Feneșan, Corina Maria Stănciulescu, Rodica Elena Heredea. International Conference on VASCULAR ANOMALIES. 31.01-03.02.2023, Brussels, Belgium - poster.
4. SOX2, E-cadherin, and P-cadherin interplay in breast cancer molecular subtypes. **Barb AC**, Cosma AA, Pașca-Feneșan MM, Cîmpean AM, Raica. XVIIth National Symposium of Microscopic Morphology with international participation. 12-15.10.2022 Craiova, România - prezentare orală.
5. PDGF pathway gene expression heterogeneity in renal cell carcinomas. Cosma A, Cumpănaș A, Barmayoun A, **Toma A**, Țarlui V, Raica M, Cîmpean AM. 3rd edition of MEDICS - Medical International Conference for Students, 19-22 April, Bucharest, Romania - poster.
6. A rare case of multicystic mesenteric lymphangioma. The role of immunohistochemical characterization in developing specific treatment. Heredea R, Cerbu S, Ceausu AR, Cosma A, Cumanas A, **Toma A**, Cimpean AM, Tarlui V. 3rd edition of MEDICS - Medical International Conference for Students, 19-22 April, Bucharest, Romania - poster.
7. Refining the accuracy of primary and metastatic breast cancer diagnosis: an immunohistochemical assessment of myoepithelial cells following tissue microarray (TMA) application. Jitariu AA, **Toma A**, Cîmpean AM, Raica M. The 29th European Congress of Pathology, 2-6 September 2017, Asterdam RAI, The Netherlands - poster.
8. Human epidermal growth factor receptors 1 and 2 (EGFR/HER2) expression in bladder: do they define different molecular subgroups? Țarlui VN, **Toma A**. The 25th International Medical Students Conference, Cracow, 27 – 29th April 2017- prezentare orală.
9. Cerebellum developmental challenges: from morphology to molecular issues. Cosma AA, Jitariu AA, **Toma A**. The 25th International Medical Students Conference, Cracow, 27 – 29th April 2017- prezentare orală.
10. *Study of HER2 Protein Overexpression in Urothelial Carcinomas as a Potential Therapeutic Target: What We Know and What We Don't Know... or Where Are We Wrong?* Țarlui VN, Toma A, Cumpănaș A, Ceaușu RA. 20th Edition of the National Congress for Students and Young Physicians, December 8–11, 2016, Bucharest, Romania.

AWARDED SCIENTIFIC PAPERS

Awarded Scientific Papers

1. Third Prize for the score obtained following the presentation of the paper:

Study of HER2 Protein Overexpression in Urothelial Carcinomas as a Potential Therapeutic Target: What We Know and What We Don't Know... or Where Are We Wrong?

Țarlui VN, Toma A, Cumpănaș A, Ceaușu RA.

20th Edition of the National Congress for Students and Young Physicians, December 8–11, 2016, Bucharest, Romania.

ORGANIZATIONAL SKILLS

Organizational Skills

Teamwork / Team Spirit

Planning and organizing teaching activities

Managing student groups

Organizing assessments in accordance with academic procedures

COMMUNICATION AND INTERPERSONAL SKILLS

Communication and Interpersonal Skills

Clear and audience-adapted communication.

Empathetic relationship-building and effective collaboration.

Providing constructive feedback and managing group interactions.