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Mircea LEABU, PhD

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**CURRICULUM VITAE**



**Family name:** LEABU

**Name:** MIRCEA

**Birthdate and birthplace:** 1953, April, 1, Hirsova, Romania

**Sex:** male

**Nationality:** Romanian

**Marital status:** married, one child

**Educational background:**

Institution	Year(s)	Grade sau diplome obținute
High School, Hârșova, Constanța County	1972	Baccalaureate
Faculty of Chemistry and Chemical Technology, Section of Chemistry, "Gh. Asachi" Polytechnical University- Iassy	1976	MS in chemistry (Head of the class @ national level)
"Carol Davila" University of Medicine & Pharmacy, Bucharest	1992-1998	PhD Student
"Carol Davila" University of Medicine & Pharmacy, Bucharest	1999	PhD in Medical Biochemistry

**Professional appointments:**

Years	City	Institution	Position
1976, Aug. – 1980, Apr.	Bucharest	"Dudești" Chemical Enterprise	chemist
1980, Apr. – 1980, Oct.	Bucharest	Institute of Chemical-Pharmaceutical Researchs	chemist
1980, Nov. – 1991, Sept.	Bucharest	Institute of Cellular Biology and Pathology	chemist, researcher
1991, Oct. – present	Bucharest	Department of Cellular and Molecular Medicine, "Carol Davila" University of Medicine & Pharmacy	Assistant Professor, Associate Professor (2003)

2000, Aug. – 2003, Feb.	London, Ontario, Canada	University of Western Ontario, London, ON,	Postdoctoral fellow
2003, Aug. – 2004, Feb.	London, Ontario, Canada	University of Western Ontario, London, ON,	Visiting researcher
2004, Aug. – 2005, Feb.	London, Ontario, Canada	University of Western Ontario, London, ON,	Visiting researcher
2005, May - present	Bucharest	„Victor Babeş” National Institute of Pathology	Head of Cell Biology Laboratory

**Scientific titles and positions:**

***PhD in Medical Biochemistry***

***Principal Investigator, Head of Cell Biology Laboratory***, „Victor Babeş” National Institute of Pathology, Bucharest

***Associate Professor***, Department of Cellular and Molecular Medicine, “Carol Davila” University of Medicine & Pharmacy, Bucharest

**Other positions:**

**President**, Commission 2 – *Life Sciences*, National Council of Scientific Research Ethics, National Authority for Scientific Research, Bucharest

**Executive Assistant Editor** of the „*Journal of Cellular and Molecular Medicine*”

**Peer Reviewer:** „*Journal of Cellular and Molecular Medicine*”, „*Langenbecks Archive of Surgery*”, „*European Journal of Medicinal Chemistry*”, „*Molecules*”

**Current positions:**

„Victor Babeş” National Institute of Pathology, Bucharest, Head of Cell Biology Laboratory  
“Carol Davila” University of Medicine & Pharmacy, Bucharest, Associate Professor in Cellular and Molecular Medicine

**Stages in the current positions:**

- 20 years, “Carol Davila” University of Medicine & Pharmacy, Bucharest;
- 6 years, „Victor Babeş” National Institute of Pathology, Bucharest

**Papers and scientific communications:**

Papers in international journals: **16 (14 appearing in PUBMED)**

Abstracts in international journals: **12**

Papers in Romanian journals: **2**

Abstracts in Romanian journals: **35**

International scientific communications: **18 (2 oral communications)**

National scientific communications: **61 (16 oral communication)**

Citations:

- according to Science Citation Index (ISI Web of Science): **126** (after 1990), **149** (before and after 1990)
- according to Harzing’s Publish or Perish: **182**

Other citations (Out of Science Citation Index statistics): **4**

Index Hirsch (h-index):

- according to Science Citation Index (ISI Web of Science): **7**
- according to Harzing’s Publish or Perish: **8**

**Awards:**

1974 – „Traian Lalescu” National Scientific Competition for Students, organic chemistry field (3<sup>rd</sup> position)  
2009 – Professor Bologna, National Award due to Romanian Student Associations investigation and classification

**Memberships:**

- Romanian Society for Cell Biology, 1984-present;
- Romanian Society for Normal and Pathological Morphology, 1991-present.
- Canadian Society of Immunology, 2002-2004
- Romanian Society for Biochemistry and Molecular Biology, 2008-present

- Romanian Society of Medical Engineering and Biological Technology, 2011
- Romanian Society of Bioethics, 2011

**Languages:** English, French

**Other abilities:**

Computer abilities: Office pack, Windows, Internet (navigation, E-mail, scientific literature investigation), image processing (Adobe Photoshop)

**Courses and professional improving:**

- 1995, 1 – 15 April, Training in **Cellular and Molecular Biology**, l'Universita degli Studi di Padova, Italia (TEMPUS program)
- 1996, 20 – 25 May, CEFOR course, in **Cell Biology**, "Carol Davila" University of Medicine & Pharmacy, Bucharest
- 2000 August –2003 February, postdoctoral training in **Mechanisms of cell morphology and cell motility control and modulation by integrins**, University of Western Ontario, London, Ontario, Canada
- August 2003 – 2005 February, professional abilities improving (7 month/year) in **Mechanisms of cell morphology and cell motility control and modulation by integrins**, University of Western Ontario, London, Ontario, Canada

**Research activity expertise:**

- Involved in **17 scientific research projects**, for **8 of them as project manager**.

**Key positions at scientific meetings:**

- **Chairman**, symposium „**Extracellular matrix, cell adhesion and signaling**” at „*The 2<sup>nd</sup> International Congress of Cellular and Molecular Biology*”, Iași, June 7 – 10, 2006.
- **Keynote Speaker** at „*2<sup>nd</sup> International Conference on Ethics and Professional Culture*”, Cluj-Napoca, 15-16 April, 2011.
- **Chairman**, round table „**Experimental modeling in cell biology**” at „*The 3<sup>rd</sup> International Congress and the 29th Annual Session of RSCB*”, Arad – Szeged, June 8 – 12, 2011.
- **Program Committee Member**, at „*The International Conference on Advancements of Medicine and Health Care through Technology*”, Cluj-Napoca, August 29 – September 2, 2011.
- **Chairman**, workshop „**Molecular Bioengineering**” at „*The International Conference on Advancements of Medicine and Health Care through Technology*”, Cluj-Napoca, August 29 – September 2, 2011.
- **Organizer** of special session „**Ethical Challenges in Medical and Biological Engineering**” at „*The 5<sup>th</sup> European Conference of the International Federation for Medical and Biological Engineering*”, Budapest, 14-18 September, 2011.
- **Program Committee Member** at „*The 5<sup>th</sup> European Conference of the International Federation for Medical and Biological Engineering*”, Budapest, 14-18 September, 2011.
- **Chairman**, symposium „**Medicine and Pharmaceutis II**” at “*Bucharest Conference in Applied Ethics*”, Bucharest, 28-29 October, 2011.

**Areas of expertise:**

**Scientific fields:**

- Blood vessels: cell biology, ultrastructural cytochemistry, biochemistry;
- Myocardial ischemia and reperfusion: ultrastructural and biochemical approach;
- Molecular tracers: preparation, chemical and biological characterization;
- Proteins and glycoproteins: isolation, purification, characterization;
- Membrane transport;
- Cell signaling;
- Cytoskeleton and its dynamics
- Cell movement: integrin involvement in haptotaxis, chemotaxis and chemokinesis, signaling pathways in cell migration;
- Biomedical research ethics.

**Technical expertise:**

- chromatography (classical & high performance liquid chromatography, thin layer chromatography);;

- electrophoresis, electrotransfer of protein on nitrocellulose or PVDF membrane, lectin-, ligand-, immunoblotting, enhanced chemiluminescence;
- chemical modification of proteins, protein radiolabeling;
- cell fractionation;
- enzymatic analysis;
- cell culture, cell transfection;
- spectrophotometrical techniques and methods for cell activity investigation
- physical techniques for cell behavior investigation (by impedance measuring);
- experimental models for the investigation of environmental stress effects on cell behavior and survival;
- light microscopy (phase contrast, fluorescence microscopy, confocal microscopy);
- timelapse videomicroscopy and image analysis;
- real time cell behavior investigation by impedance measurements;
- immunofluorescence;
- electron microscopy;
- lectin ultrastructural cytochemistry;

### SELECTIVE LIST OF PAPERS

#### IN THE FILED OF BIOMEDICINE

1. Niculite C, **Leabu M.** (2011) Timelapse monitoring of cell behavior as a tool in tissue engineering. *IFMBE Proceedings*. 36, 352-357. (DOI: 10.1007/978-3-642-22586-4\_74)
2. Rosu T, Pahontu E, Pasculescu S, Georgescu R, Stanica N, Curaj A, Popescu A, **Leabu M.** (2010) Synthesis and characterization of novel Cu(II) and Pd(II) complexes with 2-hydroxy-8-R-tricyclo[7.3.1.0.<sup>2,7</sup>]tridecane-13-one thiosemicarbazone. Study on biological activity. *Eur J Med Chem*. 45, 1627-1634.
3. Tanase CP, Dima S, Mihai M, Raducan E, Nicolescu MI, Albuiescu L, Voiculescu B, Dumitrascu T, Cruceru LM, **Leabu M**, Popescu I, Hinescu ME. (2009) Caveolin-1 overexpression correlates with tumour progression markers in pancreatic ductal adenocarcinoma. *J Mol Histol*. 40, 23-29.
4. Hadar T, Shvero J, Yaniv E, Shvili I, **Leabu M**, Koren R. (2008) Human topoisomerase II-alpha is highly expressed in sinonasal inverted papilloma, but not in inflammatory polyp. *J Cell Mol Med*. 12, 1551-1558.
5. Min KW, **Leabu M.** (2006) Interstitial cells of Cajal (ICC) and gastrointestinal stromal tumor (GIST): facts, speculations, and myths. *J Cell Mol Med*. 10, 995-1013.
6. **Leabu M.** (2006) Membrane fusion in cells: molecular machinery and mechanisms. *J Cell Mol Med*. 10, 423-427.
7. Rath - Wolfson L, Rosenblat Y, Halpern M, Herbert M, Hammel I, Gal R, **Leabu M**, Koren R. (2006) A new scoring system using multiple immunohistochemical markers for diagnosis of uterine smooth muscle tumors. *J Cell Mol Med*. 10, 197-205.
8. Hutter JL, Chen J, Wan WK, Uniyal S, **Leabu M**, Chan BM. (2005) Atomic force microscopy investigation of the dependence of cellular elastic moduli on glutaraldehyde fixation. *J Microsc*. 219, 61-68.
9. Popescu LM, Hinescu ME, Radu E, Ciontea SM, Cretoiu D, **Leabu M**, Ardeleanu C (2005) CD117/c-kit positive interstitial (Cajal-like) cells in human pancreas. *J Cell Mol Med*. 9, 738-739.
10. Miura K, Uniyal S, **Leabu M**, Oravec T, Chakrabarti S, Morris VL, Chan BM. (2005) Chemokine receptor CXCR4- $\alpha$ 1 integrin axis mediates tumorigenesis of osteosarcoma HOS cells. *Biochem Cell Biol*. 83, 36-48.
11. **Leabu M**, Uniyal S, Xie J, Xu YQ, Vladau C, Morris VL, Chan BM. (2005) Integrin  $\alpha$ 2 $\beta$ 1 modulates EGF stimulation of Rho GTPase-dependent morphological changes in adherent human rhabdomyosarcoma RD cells. *J Cell Physiol*. 202, 754-66.
12. Luong JHT, Xiao C, Lachance B, **Leabu M**, Li X, Uniyal S, Chan BMC. (2004) Extended applications of electric cell-substrate impedance sensing for assessment of the structure-function of  $\alpha$ 2 $\beta$ 1 integrin. *Analytica Chimica Acta* 501, 61-69.
13. **Leabu M**, Hinescu ME, Uniyal S, Chan BMC. (2003) Cell death in cell culture frame by frame. Spontaneous cell demise of a 3T3 fibroblast. *J Cell Mol Med*. 7, 192-193.
14. **Leabu MV**, Bucur EA. (2000) Peroxidatic activity in heart effluent: a biochemical parameter for the assessment of experimental ischemia-reperfusion injury. *J Cell Mol Med*. 4, 176-182.

15. Popescu LM, Musat S, Trifan OC, **Leabu M**, Tigaret CM, Popescu M, Popescu A, Hinescu ME, Moraru II, Das DK. (1994) K(+)-channel openers protect the myocardium against ischemia-reperfusion injury. *Ann N Y Acad Sci.* **723**, 398-400.
16. Ghinea N, **Leabu M**, Hasu M, Muresan V, Colceag J, Simionescu N. Prelesional events in atherogenesis. (1987) Changes induced by hypercholesterolemia in the cell surface chemistry of arterial endothelium and blood monocytes, in rabbit. *J Submicrosc Cytol.* **19**, 209-227.
17. **Leabu M**, Ghinea N, Muresan V, Colceag J, Hasu M, Simionescu N. (1987) Cell surface chemistry of arterial endothelium and blood monocytes in the normolipidemic rabbit. *J Submicrosc Cytol.* **19**, 193-208.

#### **IN THE FIELD OF RESEARCH ETHICS AND BIOETHICS**

1. **Leabu M**. (2011) Tissue engineering: an ethical approach in the perspective of principlism and utilitarianism. *IFMBE Proceedings.* **37**, 1291-1295.
2. **Leabu M**. Principlism versus Utilitarianism in Translational Medicine Ethics. *Studia UBB. Philosophia*, **56**(2), 53-63, 2011.
3. **Leabu M**. Crearea codurilor de etică. Experiența Comisiei 2 a Consiliului Național de Etică a Cercetării Științifice, Dezvoltării Tehnologice și Inovării. În "*Ethics and Compliance Management in Private and Public Organizations*" (Edited by Cristian Ducu), Editura *Pelican*, Giurgiu, 2010 (in press).
4. **Leabu M**. Pregătirea și trimiterea spre publicare a unui manuscris ca temă a eticii profesionale. În "*Etică și cultura profesională*" (Edited by Ion Copoeru and Nicoleta Szabo), Editura *Casa cărții de știință*, Cluj-Napoca, 2008.

2011, November