

Curriculum Vitae

Personal information

Surname(s) / First name(s) **Calin Adrian Tatu**
Address(es) Splaiul Tudor Vladimirescu nr. 14, 300173 Timisoara, Romania
Telephone(s)/ Fax(es) 0040-256-490 507; 0040-256-220479
E-mail geomed88@gmail.com
Nationality Romanian
Date of birth 29.11.1970
Gender Male

Work experience

Dates 2001 - onward
Occupation or position held Associate Professor ; Lecturer (2001-2007)
Main activities and responsibilities Teaching and research activity
Name and address of employer Victor Babes University of Medicine and Pharmacy Timisoara, Romania
Type of business or sector Higher Education

Dates 2000-onward
Occupation or position held Research Associate
Main activities and responsibilities Research Activity
Name and address of employer US Geological Survey, Reston, VA, USA

Dates 2005 - onward
Occupation or position held Specialist Physician Clinical Laboratory
Main activities and responsibilities Health Assistance and Medical Research – The Regional Transplant Immunology Laboratory
Name and address of employer Clinical Emergency Hospital Timisoara, str. I.Bulbuca, 10, 300736, Timisoara, Romania
Type of business or sector Public Health

Dates 1999 - 2001
Occupation or position held Researcher
Main activities and responsibilities Biomedical research
Name and address of employer Public Health Institute "Leonida Georgescu" Timisoara
Type of business or sector Public Health

Dates 1997-1999
Occupation or position held Postdoctoral fellowship
Main activities and responsibilities Research in immunogenetics
Name and address of employer University of North Carolina – Chapel Hill, USA
Type of business or sector Higher Education

Education and training

Dates 2005
Title of qualification awarded Specialist Physician Clinical Laboratory
Principal subjects/occupational skills covered Clinical Laboratory (biochemistry, hematology, microbiology, parasitology)
Name and type of organisation providing education and training Victor Babes University of Medicine and Pharmacy Timisoara, Romania
Level in national or international classification ISCED 5

Dates 2004
 Title of qualification awarded PhD in Medical Sciences
 Principal subjects/occupational skills covered Medicine
 Name and type of organisation providing education and training Victor Babes University of Medicine and Pharmacy Timisoara, Romania
 Level in national or international classification ISCED 6

Dates 1990-1996
 Title of qualification awarded Physician
 Principal subjects/occupational skills covered General Medicine
 Name and type of organisation providing education and training Victor Babes University of Medicine and Pharmacy Timisoara, Romania
 Level in national or international classification ISCED 5

Personal skills and competences

Mother tongue(s) **Romanian**

Other language(s)

Self-assessment
 European level (*)

English

French

Understanding				Speaking				Writing	
Reading		Spoken interaction		Spoken production		Reading		Spoken interaction	
C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user
B2	Independent user	B1	Independent user	A2	Basic user	B1	Independent user	A2	Basic user

Social skills and competences

Team spirit, good communication skills
 Good ability to adapt to multicultural environments, gained through the training stages and visits abroad

Organisational skills and competences

Experience in project management field, gained through the participation and the co-ordination of national and international projects
 Experience in organizing scientific events

Technical skills and competences

Excellent skills in different laboratory techniques (cell biology, molecular biology, flowcitometry)
 Experience in animal models

Computer skills/competences

Good command of Microsoft Office™ tools
 Various programs for images processing and analyzing
 Various programs for acquisition and / or interpretation of laboratory data (GelDoc, CellQuestPro, etc.)

Additional information

Membership of professional organisations:
 - *International Working Group of Medical Geology*
 - *Romanian National Society of Immunology*
 - *Romanian Society of Genetics and International Society of Genetics*
 - *Romanian Society of Cell Biology*

Annexes

Annex 1, Selected papers published in the last years
Annex 2, List of research projects

Annex 1 – Selected papers

1. Paunescu V, Bojin FM, **Tatu CA**, Gavriluc OI, Rosca A, Gruia AT, Tanasie G, Bunu C, Crisnic D, Gherghiceanu M, Tatu FR, Tatu CS, Vermesan S. Tumor-associated fibroblasts and mesenchymal stem cells: more similarities than differences, *J Cell Mol Med.*, 2011, 15(3):635-46.
2. F. Bojin, V. Ordodi, S. Anghel, A. Gruia, O. Gavriluc, R. Georgescu, A. Galuscanu, R. Vintila, **C. Tatu**, C. Bunu, C. Tatu, G. Tanasie, V. Paunescu. Mesenchymal stem cells admix with biological scaffold heal bone defects in rat model, *Romanian Biotechnological Letters*, 2011, 16 (3):6218-6225
3. G. Tanasie, F. Bojin, V. Ordodi, A. Gruia, O. Gavriluc, M. Cristea, A. Galuscan, C. Dehelean, R. Vintila, **C. Tatu**, C. Bunu Panaitescu, V. Paunescu. Epithelization of skin lesions in animal model treated with mesenchymal stem cells and derivatives, *Romanian Biotechnological Letters*, 2011, 16 (2):6072-6079
4. Belkin HE, Tewalt SJ, Hower JC, Stucker JD, O'Keefe JMK, **Tatu CA**, Buia G Petrography and geochemistry of Oligocene bituminous coal from the Jiu Valley, Petrosani basin (southern Carpathian Mountains), Romania, *International Journal of Coal Geology* 2010; 82(1-2): 68-80
5. Hadaruga DI, Hadaruga NG, Butnaru G, **Tatu C**, Gruia A., Bioactive microparticles (10): thermal and oxidative stability of nicotine and its complex with beta-cyclodextrin. *Journal of Inclusion Phenomena and Macrocyclic Chemistry* 2010; 68(1-2): 155-164
6. Ordodi VL, Paunescu V, Ionac M, Sandesc D, Mic AA, **Tatu CA**, Mic FA. Artificial device for extracorporeal blood oxygenation in rats. *Artif Organs*. 2008 32(1):66-70
7. Pavlovic NM, Orem WH, **Tatu CA**, Lerch HE, Bunnell JE, Feder GL, Kostic EN, Ordodi VL. The role of lecithin cholesterol acyltransferase and organic substances from coal in the etiology of Balkan endemic nephropathy: a new hypothesis. *Food Chem Toxicol*. 2008 46(3):949-54.
8. Paunescu V, Deak E, Herman D, Siska IR, Tănasie G, Bunu C, Anghel S, **Tatu CA**, Oprea TI, Henschler R, Ruster B, Bistriar R, Seifried E. In Vitro Differentiation of Human Mesenchymal Stem Cells to Epithelial Lineage, *Journal of Cellular and Molecular Medicine*. *J Cell Mol Med*, 2007, 11:1-8
9. Bunnell JE, **Tatu CA**, Lerch HE, Orem WH, Pavlovic N Evaluating nephrotoxicity of high-molecular-weight organic compounds in drinking water from lignite aquifers. *J Toxicol Environ Health A*. 2007 70(24):2089-91
10. Mic AA, Mic FA, **Tatu CA**, Ionac M, Ordodi VL, Paunescu V. Indomethacin inhibits thymic involution in mice with streptozotocin-induced diabetes, *Comp Med*. 2007 57(5):476-81
11. Orem W, **Tatu C**, Pavlovic N, Bunnell J, Lerch H, Paunescu V, Ordodi V, Flores D, Corum M, Bates A. Health effects of toxic organic substances from coal: toward "panendemic" nephropathy, *Ambio*. 2007 36(1):98-102
12. William H. Orem, **Calin A. Tatu**, Harry E. Lerch, Cynthia A. Rice, Timothy T. Bartos, Anne L. Bates, Susan Tewalt, Margo D. Corum Organic compounds in produced waters from coalbed natural gas wells in the Powder River Basin, Wyoming, USA, *Applied Geochemistry* 22 (2007) 2240–2256
13. C. Lazau, L. Mocanu, I. Miron, P. Sfirloaga, G. Tanasie, **C. Tatu**, A. Gruia, I. Grozescu. Consideration regarding the use of TiO2 doped nanoparticles in medicine, *Digest Journal of Nanomaterials and Biostructures*, 2007, 2 (3):257 – 263
14. Bunnell JE, **Tatu CA**, Bushon RN, Stoeckel DM, Brady AM, Beck M, Lerch HE, McGee B, Hanson BC, Shi R, Orem WH. Possible linkages between lignite aquifers, pathogenic microbes, and renal pelvic cancer in northwestern Louisiana, USA. *Environ Geochem Health*. 2006 28(6):577-87
15. Hadaruga NG, Hadaruga DI, Paunescu V, **Tatu C**, Ordodi VL, Bandur G, Lupea AX Thermal stability of the linoleic acid/alpha- and beta-cyclodextrin complexes, *Food Chemistry* 2006; 99(3): 500-508
16. Paunescu, V., Suci, E., **Tatu, C.**, Plesa, A., Herman, D, Siska, I. R., Suci, C., Crisnic, D., Nistor, D., Tanasie, G., Bunu C., Raica, M, Endothelial cells obtained from hematopoietic stem cells are functionally different from those obtained from human umbilical vein, *J Cell Mol Med*, 2003, 7(3):455-460
17. Finkelman RB, Orem W, Castranova V, **Tatu CA**, Belkin HE, Zheng BS, Lerch HE, Maharaj SV, Bates AL Health impacts of coal and coal use: possible solutions, *International Journal of Coal Geology* 2002; 50(1-4): 425-443
18. **Tatu C**, Clarke SH Selective maturation of VH12 B cells in the spleen enriches for anti-phosphatidyl choline B cells: evidence for receptor editing. *Curr Top Microbiol Immunol*, 2000, 252:77-86.
19. Arnold, L.W., McCray, S.K., **Tatu, C.**, and Clarke, S.H. Identification of a precursor to phosphatidyl choline-specific B-1 cells suggesting that B-1 cells differentiate from splenic conventional B cells in vivo: cyclosporin A blocks differentiation to B-1. *J. Immunol.*, 2000, 164: 2924-2930.
20. **Tatu, C.**, Ye, J., Arnold, L.W., and Clarke, S.H. Selection at multiple checkpoints focuses V(H)12 B cell differentiation toward a single B-1 cell specificity. *J Exp Med.*, 1999, 190: 903-914
21. **Tatu CA**, Paunescu V, Stanescu DI, Schneider Fr. P-glycoprotein mediated multidrug resistance assessment by flow-cytometry in malignant hemopathies. *Anticancer Res*, 1997, 17:2583-2586.

Annex 2 –RESEARCH PROJECTS

Project / Program	Position held	Period
INTERNATIONAL		
"Investigation of Health Effects Caused by Toxic Substances from Energy Resources" (US Geological Survey award G10PC00005, 15/06/2010-15/06/2012).	Project director	2010-2012
Adult mesenchymal stem cells engineering for connective tissue disorders. From the bench to the bed side , GENOSTEM No. 503161, Integrated Project FP6	Team member	2003-2006
The geochemical background and the etiology of Balkan endemic nephropathy (BEN) . Grant NATO EST-CLG #980104/2003,	Project Co-director	2003
The geochemical background and the etiology of Balkan endemic nephropathy (BEN) . Grant NATO CLG #977806/2000,	Project Co-director	2000
The role of the geochemical environment in Balkan endemic nephropathy (BEN) etiology . Grant NATO CLG #975818/1999	Project Co-director	1999
NATIONAL		
Molecular and cellular mechanisms involved in differentiation of mesenchymal stem cells towards the epithelial lineage , II National Research and Development Plan (PN II), IDEI-No. 198/2007	Team member	2007-2010
Reconstruction of bone segmentary defects through biomimetic matrices colonised with osteogenic cells (RECON-OS) , PN II / Partnerships Module No. 41-091/2007	Team member	2007-2009
Genetic engineering of tumour stem cells for immunomodulation in cancers of non-viral origin , (ONCOSTEM), PN II / Partnerships Module No. 41-019/2007	Team member	2007-2009
Innovative strategies for immune response modulation in aged persons: the impact of telomerase and apoptosis on T lymphocyte immunosenescence (SENTAP) P-CD CEEX Nr. 80/2006	Partner coordinator	2006-2008
Molecular mechanisms involved in cardiac preconditioning induced by volatile anaesthetics: from identification of molecular targets in rat myocardium to protective mechanisms in humans (PRISME) P-CD CEEX Nr. 134/2006	Partner coordinator	2006-2008
Researches regarding isolation, culture and in vitro differentiation of pluripotent cells from internal ear . CEEX Nr 1431/2006	Project director	2006-2008
Development of cell therapies in diabetes mellitus , VIASAN No. 314/2004	Team member	2004 - 2006
Development of a regional bank of stem cells from umbilical cord blood and placenta for autologous and autogenous transplantation , VIASAN No. 308/2004	Team member	2004 - 2006
Development of tissue bioengineering techniques for myocardial reconstruction VIASAN No. 311/2004 (CARDIOSTEM)	Team member	2004 - 2006
Development of biotechnologies for dendritic cell vaccines in solid tumours immunotherapy , 2004-2006, BIOTECH No. 4610/2004	Team member	2004 - 2006