


PERSONAL INFORMATION	
	<p>Last name: Toma First name: Vlad-Alexandru</p> <p>Address: Donat Street 67-103, Cluj-Napoca, Cluj, RO</p> <p>Phone: +40264 58 40 37</p> <p>Email: vlad.al.toma@gmail.com</p> <p>Gender: M Birth date: 11/06/1991 Nationality: Romanian</p>

WORK EXPERIENCE	
01.04.2019 - present	<p>Scientific Researcher NIRDIMT Cluj-Napoca, Dep. of Molecular and Biomolecular Physics</p> <ul style="list-style-type: none"> molecular interaction, oxigen-transporters, redox signaling, pharmacological studies on laboratory animals <p>Activity: research</p>
01.2017 – present	<p>Coordinator at the College for Advanced Performance Studies, Babeş-Bolyai University Babeş-Bolyai University Cluj-Napoca, decision nr. 426/12.01.2017</p> <ul style="list-style-type: none"> increasing quality, interdisciplinary research, organizing the intern project competition for funding, evaluation <p>Activity: Didactic, Research, Administration</p>
07. 2016 – present	<p>Member of the PhD Studies Council , Babeş-Bolyai University Babeş-Bolyai University Cluj-Napoca</p> <ul style="list-style-type: none"> PhD Schools acreditation, management of the PhD candidates <p>Activity: Administration</p>
05.2014 - 31.03.2019	<p>Research Assistant NIRDIMT Cluj-Napoca, Dep. of Molecular and Biomolecular Physics</p> <ul style="list-style-type: none"> molecular interaction, oxigen-transporters, redox signaling, pharmacological studies on laboratory animals, phytopharmacology, blood substitutes <p>Activity: research</p>
10. 2013 – 05. 2015	<p>Research Assistant Institute of Biological Research, Cluj-Napoca, Departament of Experimental Biology and Biochemistry</p> <ul style="list-style-type: none"> blood substitutes, histopathology, neurobiology, phytotherapy <p>Activity: Research</p>

EDUCATION AND TRAINING	
2015 - prezent	<p>PhD Student Babeş-Bolyai University, Soctoral School for Integrative Biology</p> <ul style="list-style-type: none"> <i>Multidimensional aspects regarding allicin function in valproate related pathology, an atism-şike disorders inductor</i>
2013 -2015	<p>MSc in Chemistry, Forensic Chemistry Babeş-Bolyai University, Faculty of Chemistry and Chemical Engeneering</p> <ul style="list-style-type: none"> <i>In vivo behavior of some hemoglobin based oxygen carriers. Immunological and functional aspects.</i>
2010 - 2013	<p>BSc in Biology, Biochemistry Babeş-Bolyai University, Faculty of Biology and Geology,</p> <ul style="list-style-type: none"> <i>Hyoscine N-butylbromide effect on muscle contraction in rat</i>
2010 - 2015	<p>Graduate of Didactic Unit Course, level I + II Babeş-Bolyai University</p>

COMPETENŢE PERSONALE

	Mother language: Romanian																														
Linguistic competences	<table border="0"> <tr> <td>Other languages:</td> <td colspan="2">Înțelegere</td> <td colspan="2">Vorbire</td> <td>Sciere</td> </tr> <tr> <td></td> <td>Listening</td> <td>Reading</td> <td>Interaction</td> <td>Speaking</td> <td>Writing</td> </tr> <tr> <td>English</td> <td>C1</td> <td>C1</td> <td>B2</td> <td>B2</td> <td>C1</td> </tr> <tr> <td>French</td> <td>B2</td> <td>C2</td> <td>B2</td> <td>B2</td> <td>B2</td> </tr> <tr> <td>Greek</td> <td>A1</td> <td>A1</td> <td>A1</td> <td>A1</td> <td>A1</td> </tr> </table>	Other languages:	Înțelegere		Vorbire		Sciere		Listening	Reading	Interaction	Speaking	Writing	English	C1	C1	B2	B2	C1	French	B2	C2	B2	B2	B2	Greek	A1	A1	A1	A1	A1
	Other languages:	Înțelegere		Vorbire		Sciere																									
		Listening	Reading	Interaction	Speaking	Writing																									
	English	C1	C1	B2	B2	C1																									
French	B2	C2	B2	B2	B2																										
Greek	A1	A1	A1	A1	A1																										
Communication skills	<ul style="list-style-type: none"> good communication skills obtained when I was coordinator and/or participant in different activities 																														
Organizational skills	<ul style="list-style-type: none"> leadership: coordinator at Student College for Advanced Performance Studies, BBU Cluj-Napoca decision: member of PhD Student Council management: Student College for Advanced Performance Studies 																														

SCIENTIFIC ACTIVITY
Publications
<p>1) Toma, V.A., Filip, A., Farcaș, A., Mirescu, C.Ș., Roșioru, C.L., Effect of hyoscine N-butylbromide on the skeletal muscle contraction in Wistar rat - a few physiological aspects, <i>Ann. Rom. Soc. Cell Biol.</i>, 18(2), 2013, 123-128 (http://www.annalsofscsb.ro/numar%20in%20curs/18%202/18.pdf).</p> <p>2) Roman, I., Puică, C., Toma, V., The effect of <i>Vaccinium vitis-idaea</i> L. extract on kidney structure and function in alcohol intoxicated rats. <i>Studia Universitatis "Vasile Goldiș"</i>, 24(4), 2014, 363-367 (http://www.studiauniversitatis.ro/pdf/24-2014/24-4-2014/2-%20Roman%20I-%20363-367.pdf).</p> <p>3) Roman, I., Toma, V., Farcaș, A., Protective effects of <i>Gallium verum</i> L., extract on the hypothalamic – pituitary – adrenal axis under anakinetic stress conditions, in rats. Histological aspects. <i>Studia Universitatis "Vasile Goldiș"</i>, 25(3), 2015, 207-214 (http://www.studiauniversitatis.ro/pdf/25-2015/25-3-2015/10-25-3-%20I.R.-%20207-%20214.pdf).</p> <p>4) Roman, I., Puica, C., Toma, V., The effect of <i>Lamium album</i> and <i>Lamium purpureum</i> extracts on some blood parameters under anakinetic stress conditions in Wistar rats. <i>Bull. Univ. Agric. Sci. Vet. Med.. Cluj-Napoca-Veterinary Medicine</i>, 73(1), 2016, 18-20 (http://journals.usamvcluj.ro/index.php/veterinary/article/view/10902).</p> <p>5) Vlad Al. Toma, Anca D. Farcaș, Ioana Roman, Florina Scurtu-Deac, Radu Silaghi-Dumitrescu. In vivo tests of cell-free hemoglobin-based blood substitutes candidates: histopathological characterization. <i>Rev Romana Med Lab - Supliment</i> 24(1), 2016, 88-89 (http://www.rrml.ro/articole/2016/2016_1_supliment.pdf).</p> <p>6) Toma, V., Farcaș, A., Roman, I., Sevastre, B., Hathazi, D., Scurtu, F., Damian, G., Silaghi-Dumitrescu, R. Comparative in vivo effects of hemoglobin-based oxygen carriers (HBOC) with varying prooxidant and physiological reactivity. <i>PLoS ONE</i>, 11(4), 2016, 1-16 (https://www.ncbi.nlm.nih.gov/pubmed/27097326).</p> <p>7) Toma, V.A., Farcaș, A., Parvu, M., Silaghi-Dumitrescu, R., Roman, I. CA3 hippocampal field: Cellular changes and its relation with blood nitro-oxidative stress reveal a balancing function of CA3 area in rats exposed to repeated restraint stress. <i>Brain Res Bull.</i>, 130, 2017, 10-17 (https://www.ncbi.nlm.nih.gov/pubmed/28013041).</p> <p>8) Sevastre-Berghian, A. C., Fagarasan, V., Toma, V.A., Baldea I., Olteanu, D., Moldovan, R., Decea, N., Filip, G.A., Clichici, S.V. Curcumin reverses the diazepam-induced cognitive impairment by modulation oxidative stress and ERK 1/2/NF-kB pathway in brain. <i>Oxid. Med. Cell. Longev.</i>, Article ID 3037876, 1-17, 2017, 2017 (https://www.hindawi.com/journals/omcl/2017/3037876/).</p> <p>9) Toma, V. A., Farcaș, A.D., Roman, I., Sevastre, B., Hathazi, D., Scurtu, F., Damian, G., Silaghi-Dumitrescu, R., In vivo evaluation of hemerythrin-based oxygen carriers: similarities with hemoglobin-based counterparts. <i>Int. J. Biol.Macromol.</i>, S0141-8130(17), 2017, 31756-7. (http://www.sciencedirect.com/science/article/pii/S0141813017317567).</p> <p>10) Toma, V. A., Farcașanu, A., Sevastre-Berghian, A., Barbu-Tudoran L., Tripon, S., Sevastre, B., Farcaș, A.D., Roman, I., Simon, S., Parvu, M. Behavior, MRI features and ultrastructural bases of the autism-like disorders induced in rats by prenatally exposed to sodium valproate, <i>Brain Disord. Ther.</i>, 6(3 Suppl), 56, 2017. DOI: 10.4172/2168-975X-C1-018. (https://www.omicsonline.org/proceedings/behavior-mri-features-and-ultrastructural-bases-of-the-autism-likedisorders-induced-in-rats-by-prenatally-exposed-to-sod-80010.html).</p> <p>11) Farcaș, A.D., Mot, A.C., Zagrean-Tuza, C., Toma, V., Cimpoiu, C., Hosu, A., Parvu, M., Roman, I., Silaghi-Dumitrescu, R. Chemo-mapping and biochemical-modulatory and antioxidant/prooxidant effect of Galium verum extract during acute restraint and dark stress in female rats. <i>PLoS one</i>, 13(7), 2018, e0200022</p>

<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0200022>

12) Toma, V.A., Dume, B.R., Farcas, A.D., Roman, I. The antioxidants are not enough. *Malus sylvestris* (L.) Mill. extract enhances the carbon tetrachloride liver toxicity in albino rats. *Ann. RSCB*, **22**(2), 2018, 26-33
http://www.annalsofscb.ro/numar%20in%20curs/22%202/vlad4_1.pdf

13) Farcas, A.D., Toma, V.A., Crisan, F., Dume, B.R., Roman, I. The down-regulation outcome of wild European apple (*Malus sylvestris* (L.) Mill.) extract on a series of biochemical markers during oxidative stress. *Ann. RSCB*, **22**(2), 2018, 34-41
<http://www.annalsofscb.ro/numar%20in%20curs/22%202/farcas5.pdf>

14) Sevastre-Berghian, A., Toma, V.A., Sevastre, B., Hanganu, D., Vlase, L., Benedec, D., Oniga, I., Olteanu, D., Moldovan, R., Decea, N., Filip, G.A., Clichici, S.V. Characterization and biological effects of *Hypericum* extracts on experimentally-induced – anxiety, oxidative stress and inflammation in rats. *J. Physiol. Pharmacol.*, **69**(5), 2018.

15) Opris, R., Toma, V., Olteanu, D., Baldea, I., Baci, A. M., Lucaci, F. I., ... & David, L. Effects of silver nanoparticles functionalized with *Cornus mas* L. extract on architecture and apoptosis in rat testicle. *Nanomedicine*, 2019 (ahead of print)
<https://doi.org/10.2217/nnm-2018-0193>.

Book chapter

Theology and biology. Educational dimensions of the transdisciplinary approach regarding genesis and biological evolution, in: Education, Religion, Family, in contemporary society; Lambert Academic Publishing, pp. 159 - 166, 2017; ISBN: 978-3-659-83439-4; WorldCat, OCLC No. 997417853.

Presentations (selected)

- Biological models of autism spectrum disorders: valproate, oxidative stress and development, Conferința Interdisciplinară a Doctoranzilor UBB, Baia, iunie, 2016.
- Cellular and biochemical coordinates related to CA3 hippocampal field in repeated restraint stress, Conferința Națională Societății Române de Biologie Celulară, Oradea, iunie, 2016.
- Brain Electrophysiological Features of Autism-Spectrum Disorders (ASD): Experimental and Clinical Aspects Related to Valproic Acid Therapy, Conferința Națională de Biofizică, iunie, 2016.
- Coordinates of genetics of autism spectrum disorders. A review studies of the ASD-related genes in humans and lab animals, Conferința Internațională a Studenților Psihologi, mai, 2016.
- Valproic acid-induced autism spectrum disorders symptoms: theoretical, clinical and experimental coordinates, Neuroscience 2016 Virtual Conference, CA-USA, Section: Neuron Biology, martie, 2016.
- Hemoglobin based blood substitutes behavior in hemorrhagic conditions, Conferința Națională a Societății Române de Biologie Celulară, Baia-Mare, iunie, 2015.
- "Artificial Blood"- Newly developed blood substitutes tested on laboratory animals and cell cultures. Preliminary results, Conferința Internațională a Societății Române de Biologie Celulară, Târgu-Mureș România, June, 2014.

Research projects

PN-III-P1.2-PCCDI-2017-0387 "Emerging technologies for the industrial capitalization of 2D structures (graphene and nongraphenic)" (membru).

PN16-30 02 03 "Tehnologii avansate pentru producere, recuperare si stocare de energie (O1. Valorificarea potentialului de piata al rezultatelor CD din INCDTIM prin dezvoltarea de solutii inovative in domeniul energiilor alternative, tehnologiilor izotopice si al ingineriei Hi-Tech)" (membru).

PN09-440.213 „ Evaluarea biochimică și biofizică a unor proteine implicate metabolismul oxidativ, Faza I-2014/Fazele II-III-IV-2015, INCDTIM Cluj-Napoca (membru).

PN 09-360.202 "Studii morfologice, fitocenologice, biochimice și histochimice (histoenzimologice) a unor specii oficinale bogate în principii active, cu scopul obținerii unor produse farmaceutice" Faza III/2013, Faza II/2014 Faza II-2015, INCDSB București, ICB Cluj-Napoca (membru).

World Federation of Scientists, proiect de cercetare intitulat: „Blood substitutes immunohematological approach (coordonator).

Bursă de Performanță Științifică, proiect intitulat: "The action of hyoscine N-butylbromide on the skeletal muscle contraction in Wistar rat", Facultatea de Biologie și Geologie, specializarea Biochimie, Universitatea Babeș-Bolyai, Cluj-Napoca, Romania, 2012-2013 (coordonator).

Research fellowships

SOE Scholarship (DAAD Stipendium), Universitat Leipzig 2015/2016, 6 months.

World Federation of Scientist, Switzerland, 2014/2015, 12 months

Bursă de Performanță Științifică, Universitatea Babeș-Bolyai, 2012/2013, 10 months

Conferences

Transdisciplinaritatea, ntre biologie și teologie - conferință susținută la Colegiul Academic al UBB, n cadrul seriei de conferințe găzduite de Colegiul Studentesc de Performanță Academică, Cluj- napoca, decembrie, 2016.

Honours (selectie)

LabRoots California, USA (2016)

Romanian Association of Laboratory Medicine (2016)

National Conference of the Romanian Association of Pure and Applied Biophysics (2016)

Romanian Association of Psychologist (2016) Romanian Society for Cell Biology (2013, 2014, 2015, 2016) Romanian Society of Chemistry (2014) International Symposium Prospects for the 3 rd Millenium Agriculture (2014) Oncology's days, Institute of Oncology ``Ion Chiricuța`` (2014)
Prizes (the most relevant)
<ul style="list-style-type: none"> ▪ Excellence Prize for Institutional Development , Babeș-Bolyai University, 2018. ▪ Fiest Prize at 9th International Session of Scientific Communications ``The Role of physical education and sport in promoting a healthy lifestyle``, with the paper: An interdisciplinary model for the study of the competition stress in alpine skiing: emotions, perceived stress and salivary stress hormones, 2016. ▪ Excellence Prize for Interdiciplinary Research, Student College for Academic Performance, 2014-2015. ▪ Second Prize for the presentation in 7th National Congress of RSCB, Baia-Mare, 2015. ▪ First Prize at 6th National Congress of RSCB, Tîrgu-Mureș, 2014. ▪ <i>Excellentia</i> Prize, Babes-Bolyai University, 2013. ▪ First Prize in <i>Practice in Biology</i> POSDRU <i>Convergența pregătirii universitare cu viața activă</i>, Cluj-Napoca, Babes-Bolyai Universiuty, 2011.
Afiliations
Romanian Society for Cell Biology, member (2013 - present)
Specialized courses
<p><i>The Teen Brain: Insights from Neuroimaging</i>, Course, CME Consultants in association with LabRoots, Inc, CA, USA (2016)</p> <p><i>Regulation and Function of Neurogenesis in the Adult Hippocampus</i>, Course, CME Consultants in association with LabRoots, Inc, CA, USA (2016)</p> <p><i>The Neurobiology of Temperament and Mood</i>, Course, CME Consultants in association with LabRoots, Inc, CA, USA (2016)</p> <p><i>Workshop în Știința Animalelor de Laborator</i>; organizat de Asociația Română pentru Animale de Laborator și Direcția Națională Sanitar-Veterinară și Siguranță Alimentară.</p>

SUMMARY:

Publications	15
AIS	9.685
IF	23.083
Q1 papers	5
Chapter (international book)	1
RG Score	14.96
h Index	4
Conferences	25
Prizes	12
Projects - member/coordinator	6
Research fellowships	2
Citations	35

Vlad-Alexandru TOMA, PhD student
04.06.2019
Cluj-Napoca