

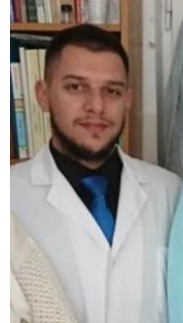
<http://news.doctorat.ubbcluj.ro/>

Doctoral School of Integrative Biology

1. PhD Student

Name: Toma **First name:** Vlad-Alexandru

e-mail: vlad.toma@ubbcluj.ro



2. Doctorate

2.1. PhD thesis title: *Proteins and plant extracts studied with experimental models of oxidative stress*

2.2. PhD coordinator: Prof. dr. Marcel Pârnu

2.3. Date of PhD thesis defense: 29.05.2020

<https://doctorat.ubbcluj.ro/ro/sustinerile-publice-ale-tezelor-de-doctorat/?an=2020&luna=5&facultate=4&domeniu=0>

2.4. Grade: PhD in Biology

3. Scientific articles published in:

3.1. Impact factor journals (IF, AIS):

3.1.1. **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. *PloS ONE*, **11**(4), 2016, 1-16 (<https://www.ncbi.nlm.nih.gov/pubmed/27097326>). **IF = 2.80 (2016) AIS = 1.68**

3.1.2. **Toma, V. A.**, Farcas, 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. *Int. J. Biol.Macromol.*, S0141-8130(17), 2017, 31756-7. (<http://www.sciencedirect.com/science/article/pii/S0141813017317567>). **IF = 3.90 (2017) AIS = 2.49**

3.1.3. **Toma, VA.**, Farcas, 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. *Brain Res Bull.*, 130, 2017, 10-17 (<https://www.ncbi.nlm.nih.gov/pubmed/28013041>). **IF = 3.44 (2017) AIS = 0.79**



3.1.4. **Toma, V. A.**, Tigu, A. B., Farcaș, A. D., Sevastre, B., Taulescu, M., Gherman, A. M. R., ... & Pârvu, M. New aspects towards a molecular understanding of the allicin immunostimulatory mechanism via Colec12, MARCO, and SCARB1 receptors. *Int. J.Mol. Sci.*, 20(15), 2019, 3627 (<https://www.mdpi.com/1422-0067/20/15/3627>). **IF = 4.18 (2019) AIS = 2.24**

3.2. IDB journals:

3.2.1. **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. *Rev. Romana Med. Lab. - Supliment* 24(1), 2016, 88-89 (http://www.rml.ro/articole/2016/2016_1_supliment.pdf).

3.2.2. **Toma, V. A.**, Farcasanu, A., Sevastre-Berghian, A., Barbu-Tudoran L., Tripon, S., Sevastre, B., Farcas, 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, *Brain Disord. Ther.*, 6 (3 Suppl), 56, 2017. DOI: [10.4172/2168-975X-C1-018](https://doi.org/10.4172/2168-975X-C1-018), (<https://www.omicsonline.org/proceedings/behavior-mri-features-and-ultrastructural-bases-of-the-autism-like-disorders-induced-in-rats-by-prenatally-exposed-to-sod-80010.html>).

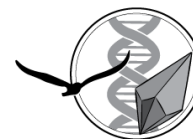
3.2.3. **Toma, V.A.**, Dume, B.R., Farcas, A.D., Roman, I. The antioxidants are not enough. *Malus sylvestris* (L.) Mill. extract enhances the carbon tetrachloride liver toxicity in albino rats. *Ann. RSCB*, **22**(2), 2018, 26-33 (http://www.annalsofrscb.ro/numar%20in%20curs/22%202/vlad4_1.pdf).

3.2.4. **Toma, V. A.**, Bucălie, E., Farcaș, A. D., Ciolpan, P., Roman, I., Mureșan, A., & Grosu, E. F. Dynamics of salivary cortisol and testosterone during competition stress in alpine skiing in adults and children. *Cognition, Brain, Behavior*, 23(1), 2019, 29-41 (<https://search.proquest.com/docview/2227777974?pq-origsite=gscholar>).

4. Scientific conferences/symposia (please mention the author/s, title of the conference/symposium, year, country, link)

4.1. International:

4.1.1. **Toma, V. A.**, Farcasanu, A., Sevastre-Berghian, A., Barbu-Tudoran L., Tripon, S., Sevastre, B., Farcas, A.D., Roman, I., Simon, S., Parvu, M., Valproic acid-induced autism spectrum disorders symptoms: theoretical, clinical and experimental coordinates, *Neuroscience Virtual Conference, Section: Neuron Biology*, 2016, CA-USA.



4.1.2. **Toma, V.A.**, Farcaș, A.D., Roman, I., Mot, A.C., Parvu, M., Antioxidant activity and phytochemical elements of five *Allium* species, *The 15th International Symposium Prospects for the 3rd Millenium Agriculture*, 2016, Cluj-Napoca, România.

4.1.3. **Toma, V.A.**, Farcasanu, A., Sevastre-Berghian, A., Barbu-Tudoran L., Tripon, S., Sevastre, B., Farcas, A.D., Roman, I., Simon, S., Pârnu, M., Behavior, MRI features and ultrastructural bases of the autism-like disorders induced in rats by prenatally exposed to sodium valproate, *5th International Conference on Brain Disorders and Therapeutics*, 2017, Spania.

4.1.4. **Toma, V.A.**, Moț, A.C., Farcaș, A.D., Neamțu, S., Soran, L., Lung, I., Pârnu, M., Allicin: natural distribution, antioxidant and biological activity profile, *International Conference Processes in Isotopes and Molecules*, 2017, Cluj-Napoca, România.

4.1.4. **Toma, V.A.**, Barbu-Tudoran L., Tripon, S., Sevastre, B., Roman, I., Filip, A., Bâldea, I., Parvu, M., Ultrastructural and molecular features of the embryonic brain and allicin embryoprotective effect after prenatally valproic acid exposure, *The 17th International Symposium Prospects for the 3rd Millenium Agriculture*, 2018, România.

4.1.5. **Toma, V.A.**, Gherman, R., Farcaș, A.D., Parvu, M., Molecular docking and experimental evidences for the allicin immunostimulatory mechanism, *International Conference Processes in Isotopes and Molecules*, 2019, România.

4.2. National:

4.2.1. **Toma, V.A.** Farcas, A., Florea, A., Barbu-Tudoran, L., Tripon, S., Bâldea, I., Filip, A., Sevastre-Berghian, A., Sevastre, B., Țigu, B., Roman, I., Parvu, M., Towards ultrastructural, molecular and behavioral features of autism-like disorders (ASD) induced by valproate exposure and the prophylactic effect of allicin - a probable mechanism for ASD, *12th National Pathology Symposium, „Victor Babeș” Institute*, 2019, România.

4.2.2. **Toma, V.A.** Farcas, A., Florea, A., Barbu-Tudoran, L., Tripon, S., Bâldea, I., Filip, A., Sevastre-Berghian, A., Sevastre, B., Țigu, B., Roman, I., Parvu, M., A possible mechanism for autism-like disorders appearance: ultrastructural and epigenetic aspects, *National Conference of the Romanain Society for Cell Biology*, with international participation, 2019, România.

4.2.3. **Toma, V.A.** Farcas, A., Florea, A., Barbu-Tudoran, L., Tripon, S., Bâldea, I., Filip, A., Sevastre-Berghian, A., Sevastre, B., Țigu, B., Roman, I., Parvu, M., Ultrastructural and biochemical features of the embryonic rat brain and allicin therapeutically properties after prenatally valproate exposure (an experimental model of the Autism Spectrum Disorders),



National Conference of the Romanian Society for Cell Biology, with international participation, 2018, România.

5. Projects/Grants:

5.1. Scientific projects/grants:

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

5.1.2. PN16-30 02 03 "Advanced technologies for production, recycle and store energy" (member).

5.1.3. PN09-440.213 „ Biochemical and biophysical evaluation of several proteins involved in oxidative metabolism" (member).

5.1.4. PN 09-360.202 "Morphological, phytosociological, biochemical and histochemical studies of some current species rich in bioactive compounds in order to obtain pharmaceutical preparations" (member).

5.2. Projects for the community:

5.2.1. College for the Student Advanced Performance Studies, Babes-Bolyai University, coordinator, 2017-2020.

6. Visibility (links):

6.1. Google Scholar: <https://scholar.google.ro/citations?user=kwF4GDUAAAAJ&hl=ro>

6.2. ResearchGate: https://www.researchgate.net/profile/Vlad_Alexandru_Toma

6.3. Twitter (#AcademicTwitter): <https://twitter.com/AlexVToma>

6.4. Other accounts: <https://www.brainmap.ro/vlad-alexandru-toma>

9.02.2021

Dr. Vlad-Alexandru Toma