

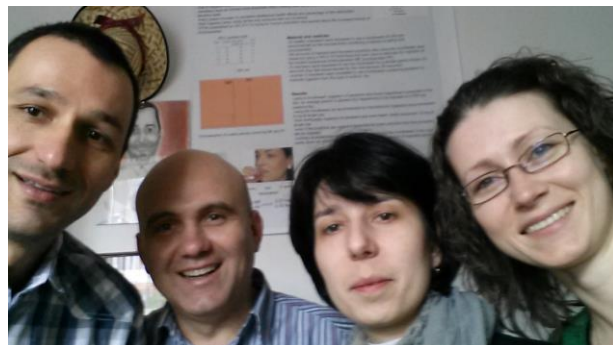
**Student research group on nitric oxide, antioxidants, food and other toxicological  
and biopharmaceutical issues  
Academic year 2021-2022**

**Acronym: NOAFTB**

**Permanent members:**

Head of the group:  
Associate professor dr. Croitoru Mircea Dumitru

Associate professor dr. Fülöp Ibolya  
Lecturer dr. Fogarasi Erzsébet  
Technician Gábor Levente



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**Students currently involved:**

PhD student:

Bucur Pálma

Bachelor students:

Ciorba Maria

Fónyad Erika-Brigitta

Szócs-Kurkó Sebestyén

Nagy Miklós

High-school student:

Kacsó Chris Sándor

**Research topics:**

- measurement of malondialdehyde from raw and processed meat
- determination of amitraze from biological matrice: bees, honey.
- establishing the toxicity differences between old and new ways to smoke a cigarete
- development of new methods in measuring biomarkers of the oxidative stress
- study of the scientific reality of the claims made by several "food supplement producing companies" on the "antioxidant properties" of several products that are nowadays on the market - difference between a postulated effect and the scientifically-proved one
- content of highly lipophilic compounds in cosmetic products
- researching ways to improve the  $\omega$ -3 fatty acid content in products derived from plants

- other ideas brought by the students, because their scientific interest is also considered when a student research program is started

**Research infrastructure (relevant items):** HPLC-UV, GC-FID, biofacilities (for experiments on animals)

**Relevant *in extenso* ISI articles of the research team (as main authors: first author, corresponding author and last author; \*students):**

1. Mircea Dumitru Croitoru, Ibolya Fülöp, Maria-Raluca Irimia-Constantin, Erzsébet Varga, Hajnal Kelemen, Erzsébet Fogarasi, Luana-Maria Faliboga, The Risk of Using Poppy Seed Tea Made from Several Varieties Available on the Romanian Market, *Acta Medica Marisiensis* 2017, 63(2):62-65
2. Mircea Dumitru Croitoru, Amalia Miklos\*, Erzsébet Fogarasi, Maria Margareta Coman, Ibolya Fülöp, Evaluation Of The Ingestion Of Parabens During The Use Of Dental Care Products By Healthy Human Volunteers, *Farmacia* 2016(4):594-598
3. Croitoru M.D. Fülöp I. Miklos A.\* Hosszu B. Tătar V.L. Muntean D.L. Presence of nitrate and nitrite in vegetables grown for self-consumption, *Farmacia* 2015, 63(4): 530-533, FI 1,251 (2013)
4. Fülöp I. Gyéresi A. Deli M.A. Kiss L. Croitoru M.D. Szabó-Révész P.\* Aigner Z. Ternary solid dispersions of oxicams: dissolution and permeability study, *Farmacia* 2015, 63(2):286-295, FI 1,251 (2013), corresponding author
5. Croitoru M.D. Szénási D.A.\* Fülöp I. Presence of nitrate and nitrite in cow forage, plasma and milk. *Acta Aliment Hung* 2015, DOI: 10.1556/AAlim.44.2015.1.6, ISSN 1588-2535, FI: 0,427 (2013/2014)
6. Croitoru M.D. Muntean D.L. Fülöp I. Modroiu A.\* Growing patterns to produce 'nitrate-free' lettuce (*Lactuca sativa*). *Food Addit Contam A* 2015, 32(1): 80-86, ISSN: 1944-0057, FI: 2,341 (2013/2014)
7. Fülöp I. Bobeş D.\* Croitoru M.D. Barbu C.G. Influence of sugar and sweeteners on mouse body weight, stress-induced body weight changes and life expectancy. *Farmacia* 2014, 62(2): 376-389, ISSN 2065-0019, FI: 1,251 (2013)
8. Croitoru M.D. Fülöp I. Pop M.C.\* Dergez T. Mitroi B. Dogaru M.T. Tőkés B. Nitrones are able to release nitric oxide in aqueous environment under hydroxyl free radical attack. *Nitric Oxide - Biol Ch* 2011, 25: 309-315, ISSN 1089-8603, FI: 3,548
9. Croitoru M.D. Fülöp I. Kincses Ajtay M. Balogh C.\* Dogaru M.T. Direct HPLC-UV determination of cyclamate, saccharine and aspartame from soft drinks. *Acta Aliment Hung* 2011, 40(4): 459-465, ISSN 1588-2535, FI: 0,444
10. Croitoru M.D. Fülöp I. Kincses Ajtay M. Dudutz G. Crăciun O.\* Dogaru M.T. Glutamate determination in foodstuffs with a very simple HPLC-UV method. *Acta Aliment Hung* 2010, 39(2): 239-247, ISSN 1588-2535, FI: 0,379

**Student's participation at scientific meetings (<http://marisiensis.ro/>)**

1. Faliboga L, Why oxidative stress is not considered a disease?, *Marisiensis* 2015.

2. Căliman M, Preventing the recreational use of OTC containing analgesic products, International Scientific Congress for Students, Young Physicians and Pharmacists Marisiensis 2015.
3. Zecheru L, Method for screening organic estrogens in biological samples from pregnant women, International Scientific Congress for Students, Young Physicians and Pharmacists Marisiensis 2014.
4. Santa DF, Toxicologically important byproducts of nitrate formed in fermented cheese, International Scientific Congress for Students, Young Physicians and Pharmacists Marisiensis 2014.
5. Cotârlan R, Nitrones have the potential to become the next generation of anti-ischemic agents, Marisiensis 2013.
6. Modroiu A, Is it really necessary for nitrate to be present in high amounts in lettuce?, International Scientific Congress for Students, Young Physicians and Pharmacists Marisiensis 2013.
7. Zaharia M, Content of ephedrine and caffeine of some natural herbal supplement recommended for a weight loss program, International Scientific Congress for Students, Young Physicians and Pharmacists, Marisiensis 2012.
8. Milan Andreea Maria, Mirica Anca-Maria - Toxicological risks brought by the fashion and clothing materials, Marisiensis, 27-31 march, 2019, Târgu Mureș, Romania
9. Iustina-Elena Ionică - Evaluation of the risk of using Cr(III) food supplements contaminated with Cr(VI), 27-31 march, 2019, Târgu Mureș, Romania
10. Nistorescu Nicoleta, Pop Ananda Diana, Difficulties in measuring the amount of cyanide by various methods and their application in the toxicological risk assesment of classic cigarettes versus IQOS system, 27-31 march, 2019, Târgu Mureș, Romania