

**Student research group on quality control and bioanalysis of drugs
Academic year 2017-2018**

Acronym: QCBA Drugs

Research team:

Group coordinators: Prof. Silvia Imre PhD, Prof. Daniela-Lucia Muntean PhD

Senior lecturer Anca Cârje, PhD

Teaching assistant Alina Balint, PhD

Teaching assistant Valentin Ion, PhD student

Technicians Barabás Hajnalka, Györi Daniela

Contact:

University of Medicine and Pharmacy from Țirgu Mureș

Faculty of Pharmacy, Department of Analytical Chemistry and Drug Analysis

Gheorghe Marinescu street, no 38, Postal Code 540139

Phone: +40.265.215551 ext. 185, 204, 236

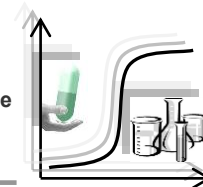
Email: silviamre@umftgm.ro

Students currently involved:

5th Year of study, pharmacy program	4 th Year of study, pharmacy program
Pop Ioana	Toma Camelia
Lazăr Anca	Vajda Diana
Suciu Mădălina	Pogăcean (Câmpean) Adriana Ancuța
Pintea Bianca	Veres Nicoleta
Pop Ioana Maria	Ungur Mădălina
Bîrsan Mădălina Daniela	Feier Octavian
Faur Larisa	Echim Iulia
Simon Salome	
Ciocănaș Cosmin	
Fărcaș Ioana	
Haiduc Roxana	

Research topics:

- chiral separation of drugs by HPLC and EC
- impurities profiling of drugs by HPLC and spectral methods
- drugs stability
- bioanalysis of drugs and biomarkers
- chemometric methods

**Research infrastructure (relevant items):**

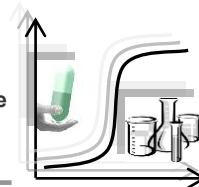
HPLC-UV, LC-MS/MS, FTIR, thermal analysis equipment

Relevant *in extenso* ISI articles of the research team (as main authors: first author, corresponding author and last author) with student's contribution*:

1. Imre S., Ormenișan A.*, Muntean D.-L., Tero-Vescan A., Vari C.-E. - HPLC Enantioseparation of Beta-Blockers on Ovomucoid Stationary Phase, *Journal of Chromatographic Science*, 2016, 54 (9), 1578-1583. ISI journal, IF=0.984.
2. Imre S., Eșianu S., Miklos A., Tiuca I., Dicher I.*, Tero-Vescan A., Muntean D.-L., Oprean R. - Qualitative Assay of Essential Oils of Lavender and Peppermint in Commercial Products Through Spectral and Chromatographic Methods, *Farmacia*, 2016, 64(6), 857-862. ISI journal, IF=1,348.
3. Imre S., Haidu T.*, Ponta O., Vancea S., Vari C.-E., Tero-Vescan A. - Internal Structure Quality Control of Solid Pharmaceuticals. A Comparative Study, *Acta Medica Marisiensis*, 2016, 62(1), 95-100. EBSCO database journal.
4. Farkas Sz.*, Imre S., Muntean D.-L., Tero-Vescan A. - Analysis of drug related impurities by infrared spectrometry in the class of statins, *Farmacia*, 2013, 61(6), 1091-1101. ISI journal, FI 1,251.
5. Imre S., Kacsó K.*, Muntean D.L. - Simultaneous Determination of Atorvastatin and Amlodipine in Industrial Tablets by Apparent Content Curve and HPLC Methods, *Acta Medica Marisiensis*, 2013, 59(1), 44-48. EBSCO database journal.
6. Imre S., Vancea Sz.*, Muntean D.L., Sipos E., Cociș A.*, Avrigeanu V., Mircea E. - Stabilitatea unor soluții orale de captopril, *Revista Medico-Chirurgicală a Societății de Medici și Naturaliști din Iași*, 2008, 112(3):848-855. BDI journal (ex. Pubmed).
7. Muntean D.L., Imre S., Vodă C.* - The influence of some factors on spironolactone stability, *Revista de Chimie*, 2008, 59(7):721-725. ISI journal, IF 0.389.

Relevant abstracts with student's contribution*:

1. Aroneasa V.*, Cârje A.G. - A preliminary study of simultaneous chiral separation of amlodipine and indapamide enantiomers using high performance liquid chromatography, *Acta Medica Marisiensis*, 2017, 63(S1):83. EBSCO database journal.
2. Deac A.*, Imre S., Cârje A.G. - Comparison of two chiral stationary phases for the enantioseparation of amlodipine and perindopril using high performance liquid chromatography, *Acta Medica Marisiensis*, 2017, 63(S1):85. EBSCO database journal.
3. Pascu A.*, Gliga L.E.*, Imre S. - Is alkane reversed phase suitable for simultaneous HPLC-UV/VIS separation of high hydrophilic and high hydrophobic analytes?, *Acta Medica Marisiensis*, 2017, 63 (S1) : 97. EBSCO database journal. **Special Prize GEDEON RICHTER ROMANIA, The International Congress for Students, Young Physicians and Pharmacists Marisiensis 2017**
4. Marin I.*, Sabău R.*, Imre S., Pop A. – The importance of forced degradation studies for drug impurities profiling by HPLC. Study case, *Acta Medica Marisiensis*, 2017, 63(S1): 86. EBSCO database journal. **Second Prize, The International Congress for Students, Young Physicians and Pharmacists Marisiensis 2017**
5. Miklos A., Vlase L., Dehelean C., Gliga L.*, Vari C.-E., Imre S. - LC-MS/MS detection in plasma without derivatisation. Comparison of different types of mass spectrometry detection, *Acta Medica Marisiensis*, 2016, 62(supl.8):7. EBSCO database journal.



6. Gliga L.E.*, Imre S. – Optimisation of a LC-MS/MS method for testosterone and estradiol determination in male plasma. Preliminary results, Acta Medica Marisiensis, 2016, 62(S4):92. EBSCO database journal.
7. Oroian M.-V.*, Cârje A.-G., Imre S. - HPLC simultaneous separation of indapamide and perindopril using an ovomucoid chiral stationary phase, Acta Medica Marisiensis, 2016, 62(S4):90. EBSCO database journal.
8. Imre S., Eșianu S., Dicher I.*, Tiuca I, Muntean DL, Tero-Vescan A., Oprean R. – Qualitative analysis of some essential oils used to facilitate the percutaneous absorption of topical preparations in sports medicine, Acta Medica Marisiensis, 2015, 61(S6):4. EBSCO database journal.
9. Imre S, Muntean DL, Baci (Ormenișan) A*, Tero-Vescan A, Vari CE - HPLC Chiral Separation of Some β -Blockers on Ovomucoid Stationary Phase, Romanian National Congress of Pharmacy 2014, Book of Abstracts, 333 (ISBN 978-606-544-252-8).
10. Todoran N., Drașoveanu A., Imre S., Ciurba A., Iștoan R.O.* - Two methods for testing the whitening teeth capacity of hydrogen peroxide in dental gels, Acta Medica Marisiensis, 2012, 58(S3), 70. EBSCO database journal.
11. Imre S., Muntean D.-L., Felecan I., Csabai A.*, Kelemen K., Obreja M. - Impurities profiling of simvastatin, Acta Medica Marisiensis, 2010, 56(S2):21, ISSN 2068-3324. EBSCO database journal.
12. Budău L.A.*, Tofoleanu I., Imre S., Vari C.E. - Cancerul de col uterin. Vaccinul anti-HPV, Revista de Medicină și Farmacie – Orvosi és Gyógyszerészeti Szemle, 2009, 55(S2):108-109, ISSN 1221-2229, cod CNC SIS 103 C.
13. Tiut D.*, Imre S., Dogaru M.T. - Autism – considerații clinice și terapeutice, Revista de Medicină și Farmacie – Orvosi és Gyógyszerészeti Szemle, 2009, 55(S2):108, ISSN 1221-2229, cod CNC SIS 103 C.
14. Vancea Szende*, Imre S., Muntean T. - Sulfametoxazol és trimetoprim mennyiségi meghatározása emberi plazmából HPLC segítségével, a módszer validálása. Revista de Medicină și Farmacie – Orvosi és Gyógyszerészeti Szemle, 2006, 52(S1):62, ISSN 1221-2229, cod CNC SIS 103 C.
15. Vancea Szende*, Imre S. - Ultraibolya fény hatása az oldatban lévő simvastatin. Revista de Medicină și Farmacie – Orvosi és Gyógyszerészeti Szemle, 2005, 51(S1):63, ISSN 1221-2229, cod CNC SIS 103 C.

