

Curriculum Vitae

Lucreția Udrescu, PhD

Lecturer – Department I, Drug Analysis, Faculty of Pharmacy, "Victor Babeș" University of Medicine and Pharmacy Timișoara, Romania

Research interests: complex networks, network pharmacology, systems biology, drug interactions, drug repositioning, network medicine, drug-cyclodextrin inclusion complex chemistry, in-silico prediction of host-guest stability constant.

Competences: network science and complex network analysis - Gephi, big data, data mining, Microsoft Office, Microcal Origin 6.0 (software for interactive scientific graphing and data analysis), R, Vision 32 (spectroscopy software for optical spectra).

Relevant Publications:

1. V Groza, M. Udrescu, A. Bozdog, **L. Udrescu**. Drug Repurposing Using Modularity Clustering in Drug-Drug Similarity Networks Based on Drug–Gene Interactions. *Pharmaceutics* 2021, 13(12):2117
2. **L. Udrescu**, P. Bogdan, A. Chiș, I.-O. Sîrbu, A. Topîrceanu, R.-M. Văruț, M. Udrescu. Uncovering new drug properties in target-based drug-drug similarity networks, *Pharmaceutics* 2020, 12(9):879.
3. **L. Udrescu**, L. Sbârcea, A. Topîrceanu, A. Iovanovici, L. Kurunczi, P. Bogdan, M. Udrescu. Clustering drug-drug interaction networks with energy model layouts: community analysis and drug repurposing. *Scientific Reports* 2016, 6:32745
4. M. Udrescu, **L. Udrescu**. A drug repurposing method based on drug-drug interaction networks and using energy model layouts. *Computational Methods for Drug Repurposing (Part of the Methods in Molecular Biology book series)*, 2019, Humana Press, New York, volume 1903, pp 185-201
5. **L. Udrescu**, L. Sbârcea. The new tale of some old drugs. Proceedings of the Romanian National Congress of Pharmacy, 17th Edition, Bucharest, Romania, Sept 26- 29, 2018, pp 234-240
6. **L. Udrescu**, L. Sbârcea, A. Fuliăș, I. Ledeti, G. Vlase, P. Barvinschi, L. Kurunczi. Physicochemical Analysis and Molecular Modeling of the Fosinopril β -Cyclodextrin Inclusion Complex, *Journal of Spectroscopy* 2014, (2014):748468
7. L. Sbârcea, I. Ledeti, L. Drăgan, L. Kurunczi, A. Fuliăș, **L. Udrescu**. Fosinopril sodium–hydroxypropyl- β -cyclodextrin inclusion complex: Thermal decomposition kinetics and compatibility studies, *Journal of Thermal Analysis and Calorimetry* 2015, 120(1):981-990
8. A. Topîrceanu, **L. Udrescu**, M. Udrescu, S. Mihăicuță. Gender Phenotyping of Patients with Obstructive Sleep Apnea Syndrome Using a Network Science Approach, *Journal of Clinical Medicine* 2020, 9(12):4025
9. S. Mihăicuță, M. Udrescu, A. Topîrceanu, **L. Udrescu**. Network science meets respiratory medicine for OSAS phenotyping and severity prediction. *PeerJ* 2017, 5:e3289
10. A. Topîrceanu, M. Udrescu, **L. Udrescu**, C. Ardelean, R. Dan, D. Reisz, S. Mihăicuță. SAS score: Targeting high-specificity for efficient population-wide monitoring of obstructive sleep apnea. *PLoS ONE* 2018, 13(9):e0202042

Research grants:

1. Principal Investigator – *Complexity Science for Precision Pharmacy: Predicting Relevant Drug-Drug Interactions Using Complex Network Analysis* – HYPERION; Funding: Executive Agency for Higher Education, Research, Development and Innovation Funding (UEFISCDI) Romania - PN-III-P2-2.1-PED-2019, 2020-2022, 120000 Euro
2. Assistant manager and researcher – *Revolution of sleep diagnostics and personalized health care based on digital diagnostics and therapeutics with health data integration* – SLEEP REVOLUTION, ID 965417, HORIZON 2020, 2021-2025, 113000 Euro
3. Researcher – Linde Healthcare REALfund R&D Grant *Morpheus: A Screening and Monitoring System for Sleep Apnea Syndrome*, 2014-2016, 70000 Euro
4. Researcher – *The synthesis of new compounds with potential anticancer activity by means of chemical derivatisation and their characterization through hyphenated technique. The evaluation of th antiangiogenic, antitumor and anti-inflammatory activity* – SYNTANTITUM, grant intern UMFVBT within the III-C1_PCFI-2014/2015 competition

Other activities:

- Guest Editor – *Pharmaceutics*, Q1, IF 6.321 (10 published articles until March 1st, 2022)
- Peer-Reviewer – ISI journals:
 - Journal of Inclusion Phenomena and Macrocyclic Chemistry (Springer)
 - Molecular Pharmaceutics (The American Chemical Society Publications)
 - Industrial & Engineering Chemistry Research (The American Chemical Society Publications)
 - ACS Omega (The American Chemical Society Publications)
 - Journal of Materials Chemistry B (The Royal Society of Chemistry Publications)
 - Drug Development and Industrial Pharmacy (Taylor & Francis)
 - Journal of Macromolecular Science, Part A: Pure and Applied Chemistry (Taylor & Francis)
 - Pharmaceutics, Pharmaceutics, Plants, Molecules (MDPI)
 - Scientific Reports (Nature)