

Curriculum Vitae Jakub Szlęć, PhD

Address:

Medyczna 9 St.
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Education:

MSc, Pharmacy, JUMC, 2008
PhD, Pharmaceutical technology, JUMC, 2017, „Design of microemulsion dosage form through application of data mining techniques”
(<http://dl.cm-uj.krakow.pl:8080/dlibra/publication/4183/edition/4182/content?ref=desc>)

Positions:

Assistant (2008 – 2018)
Adjunct faculty (2018 - present)

Other Positions Held:

Community Pharmacy (2008 - 2010)
Pharmaceutical website e.farmacja.net administrator and supplementary database manager (2007 - 2010)

Grants and Funded Research

Poland-Singapore bilateral cooperation project no 2/3/POL-SIN/2012 „Delivery of Protein and peptide drugs through dry powder inhalation” – team member
Project NCN DEC-2012/07/D/NZ7/01673, Sonata 4, pt.: "Characteristic of hydrophilic matrices consisting of type 5 phosphodiesterase (PDE-5) inhibitors at in vitro/in vivo conditions” – team member

Selected publications:

Mendyk A., Szlęć J., Jachowicz R.: ME_expert 2.0: a heuristic decision support system for microemulsions formulation development, W: Formulation Tools for Pharmaceutical Development, Woodhead Publishing Ltd, Cambridge 2013, 39 – 57. (Book chapter)

Szlęć J., Paćławski A., Lau R., Jachowicz R., Mendyk A.: Heuristic modeling of macromolecules release from PLGA microspheres, Int J Nanomed, 8(1), 2013, 4601 – 4611.

Adam Paćławski, Jakub Szlęć, Raymond Lau, Renata Jachowicz, Aleksander Mendyk. Empirical modeling of fine particle fraction for carrier-based pulmonary delivery formulations. Int. J. Nanomed. 2015 : Vol. 10, no 1, pp. 801-810.

Hossam M. Zawbaa, Jakub Szlęć, Crina Grosan, Renata Jachowicz, Aleksander Mendyk. Computational Intelligence Modeling of the Macromolecules Release from PLGA Microspheres-Focus on Feature Selection. PLoS One 2016 : Vol. 11, nr 6 art. no. e0157610, s. 1-17

Jakub Szlęć, Adam Paćławski, Raymond Lau, Renata Jachowicz, Pezhman Kazemi, Aleksander Mendyk. Empirical search for factors affecting mean particle size of PLGA microspheres containing macromolecular drugs. *Comput. Methods Programs Biomed.* 2016 : Vol. 134, no 2, pp. 137-147.

Pezhman Kazemi, Mohammad Hassan Khalid, Ana Perez Gago, Peter Kleinebudde, Renata Jachowicz, Jakub Szlęć, Aleksander Mendyk. Effect of roll compaction on granule size distribution of microcrystalline cellulose-mannitol mixtures: computational intelligence modeling and parametric analysis. *Drug Des. Dev. Ther.* 2017 : Vol. 11, pp. 241-251.

Sebastian Polak, Barbara Wiśniowska, Aleksander Mendyk, Adam Paćławski, Jakub Szlęć. Quantitative Assessment of the Physiological Parameters Influencing QT Interval Response to Medication: Application of Computational Intelligence Tools. *Comput. Math. Methods Med.* 2018 : Vol. 2018, art. no. 3719703, pp. 1-11.

Zofia Tylutki, Jakub Szlęć, Sebastian Polak, CardiacPBPK: A tool for the prediction and visualization of time-concentration profiles of drugs in heart tissue, *Computers in Biology and Medicine* (2019), doi: <https://doi.org/10.1016/j.combiomed.2019.103484>.

Developer skills:

- R/shiny

<https://cran.r-project.org/web/packages/fscaret/index.html>

https://github.com/jszlek/BEMoDA_shiny

<https://github.com/jszlek/CardiacPBPK>

<https://sourceforge.net/projects/rscriptsmultivariate/files/> (developing some of the modules, like inTrees, MARS, SVM)

- Java

<https://sourceforge.net/projects/medss/>

<https://sourceforge.net/projects/fpfpredict/>

<https://sourceforge.net/projects/sddss/>

<https://sourceforge.net/projects/sd-expert/>