

7. FURTHER REFERENCES

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Machine learning tasks, datasets and software

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- Combined chemical genetics and data-driven bioinformatics approach identifies receptor tyrosine kinase inhibitors as host-directed antimicrobials; Korbee, Cornelis & Heemskerk,

Matthias & Kocev, Dragi & Strijen, Elisabeth & Rabiee, Omid & Franken, Kees & Wilson, G.L. & Savage, Nigel & Džeroski, Sašo & Haks, Marielle & Ottenhoff, Tom. (2018). Nature Communications. 9. 10.1038/s41467-017-02777-6.

<https://www.researchgate.net/publication/322684857> Combined chemical genetics and data driven bioinformatics approach identifies receptor tyrosine kinase inhibitors as host-directed antimicrobials

- Redescription Mining with Multi-target Predictive Clustering Trees. Mihelčič, Matej & Džeroski, Sašo & Lavrac, Nada & Smuc, Tomislav. (2016). 125-143. 10.1007/978-3-319-39315-5_9.

<https://www.researchgate.net/publication/303323639> Redescription Mining with Multi-target Predictive Clustering Trees

Datasets resources

- [CLUS system for predictive clustering](#) - Construction of predictive clustering trees and ensembles thereof for classification, regression and multi-target regression tasks, and to perform feature ranking for those tasks.
- [PubChem database](#) - Searching for protein and gene targets of compounds.
- [ChEMBL database](#) - Structural information for compounds and additional information for drugs.
- [MiRTarBase database](#) - Searching for gene targets of miRNAs.
- [KEGG database](#) - Searching for pathways-gene associations for *Homo sapiens*.

Machine Learning

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- How machine learning helps cancer research" by Evelina Gabasova; Strangeloop 2015;
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- Machine learning for health; Workshop at NeurIPS 2018:
<https://ml4health.github.io/2018/pages/speakers.html>

- m-Health 2.0: New perspectives on mobile health, machine learning and big data analytics, Robert S.H. Istepanian, Turki Al-Anzi, Elsevier, Methods, Volume 151, 1 December 2018, Pages 34-40
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- Big data of Complex Networks. Matthias Dehmer, Frank Emmert-Streib, Stefan Pickl, Andreas Holzinger, Chapman and Hall/CRC Published August 18, 2016
<https://www.crcpress.com/Big-Data-of-Complex-Networks/Dehmer-Emmert-Streib-Pickl-Holzinger/p/book/9781498723619>

Other useful sources & references on Youtube

- [How Machine Learning and Big Data Are Changing the Face of Biological Sciences;](#)
- [How machine learning helps cancer research" by Evelina Gabasova;](#)
- [Deploying Predictive Analytics in Healthcare;](#)
- [»Not What but Why: Machine Learning for Understanding Genomics | Barbara Engelhardt; TEDxBoston«](#)
- [Genomics, Big Data, and Medicine Seminar Series – George Church](#)

Trends in Biotechnology and Bioinformatics

- [Trends in biopharmaceutical industry](#)
- [Issues in Biotechnology](#), Dr. Albert P. Kauch, CMB 190 – Series of lectures on Biology, Biotechnology
- [The Coming of Age of Biotechnology](#), Clara Rodriguez Fernandez, 16.1.2019, Labiotech
- [Integrated services for the innovation support](#); Swiss biotech report 2018
- [Trends in Biotech Investing](#); Yale Innovation Summit YIS 2018; Biotech Panel 2

Technology transfer and validation of technology in Biotech

- Understanding Validation and Technical Transfer, Part I BioPharminternational article Understanding Validation and Technical Transfer, Part I by Russel E.Madsen jr. Volume 31, Issue 4, pg 26-30

<http://www.pharmtech.com/understanding-validation-and-technical-transfer>

Business intelligence Biotechnology

- What is biotechnology: <https://www.lscconnect.com/what-is-biotechnology/>
- European biotechnology network: <http://european-biotechnology.net/>
- Biotech Gate Global: <https://www.biotechgate.com/web/cms/index.php/start.html>
- Innovation potentials of Biotechnology, Acatech National Academy of Sciences and Engineering, acatech IMPULSE Executive Summary, 5. april 2017:
https://www.acatech.de/wpcontent/uploads/2018/03/IMPULS_Biotechnologie_EN_KF_final.pdf