Current Drug Metabolism

The application of machine learning techniques in protein drugs and drug targets recognition

With the development of high-throughput sequencing techniques, more and more sequencing data is available, including genomics reads, transcriptomes data, and proteomics sequences, which provide us an opportunity for disease treatment and prevention that takes into account individual variability in environment, lifestyle and genes for each person. Thus, it is critical to develop protein drugs and identify protein drug targets. Application of machine learning techniques in protein drugs and drugs targets discovery is more and more popular because these techniques can extract the essential characteristics of research object and improve accuracies of models, which is needed by all biological scholars. This special issue will focus on various aspects of the development and application of machine learning techniques in protein drugs and drug targets data analysis. The subtopics include, but are not limited to:

- The development of machine learning techniques in protein drug data analysis
- The application of machine learning techniques in Cytochrome P450 analysis
- Enzyme function, Enzyme inhibitor prediction using machine learning techniques
- The prediction of drug-drug, drug-target interaction
- The comparison of prediction performance among machine learning techniques on protein drugs identification
- Sequence and structure features extracted from protein drug targets
- The application of novel machine learning techniques for the identification of drug metabolites
- The development of novel machine learning techniques for protein drug target identification

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Paper 1
Title:
Modeling, interpretation and prediction for drug metabolism by machine learning methods: A Review
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Paper 5
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Machine learning in protein-peptide affinity prediction: implications for therapeutic peptide design
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Paper 6
Title:
A survey of computational approaches for prediction of cytochrome P450-mediated drug metabolism

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Paper 7
Title:
Molecular Design of Peptide-Fc fusion Drugs

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Paper 8
Title:
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