

## Pharmacometabolomics-guided pharmacogenomics in precision medicine

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Inter-individual variability has been a major hurdle to optimize disease management. Precision medicine holds promise for improving health and healthcare via tailor-made therapeutic strategies. Herein, we outline the paradigm of pharmacometabolomics-guided pharmacogenomics. We envisage merging pharmacometabolomic and pharmacogenomic data (to address the interplay of genomic and environmental influences) with information technologies to facilitate data analysis as well as sense and decision-making on the basis of synergy between

artificial and human intelligence. Humans can detect patterns, which computer algorithms may fail to do so, whereas data-intensive and cognitively complex settings and processes limit human ability. We propose that better-informed, rapid and cost-effective multi-omics studies coupled to information technologies allow for data reproducibility and robustness in genotype-to-phenotype correlations.

### Biography

Theodora Katsila currently serves as a Senior Research Fellow and academic scholar. Her research work focuses on "Spans pan-omics strategies coupled to information technologies toward better-informed decision-making and genotype-to-phenotype correlations". Sharing both academic and industrial research experience, she has a multidisciplinary expertise.

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