Abstract:

Data is transforming the scientific method across many domains. In drug safety, data from electronic health records and search logs are now being collected alongside traditional sources like case studies, spontaneous reporting systems, and model systems. These data sources present new opportunities for studying the phenomenological and molecular effects of active small molecules. However, they also present new challenges in data integration, statistical analysis, and the nature of hypothesis generation. I will discuss these opportunities and challenges and their role in the future of drug safety science.