Yale SCHOOL OF MEDICINE
Biomedical Informatics and Data Science

research in progress rising star seminars

Machine Learning for Longitudinal Rheumatic Disease Progression Modeling

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Rheumatic diseases like rheumatoid arthritis and systemic sclerosis are complex, often causing long-term disability. The challenge in predicting disease progression lies in the data's longitudinal, sparse, heterogeneous, and high-dimensional nature. We will explore machine learning methods that interpret and model this complex data effectively, identifying patients with similar disease progression patterns. In particular, we will show how augmenting deep generative models with medical knowledge can help uncover new disease subtypes and model organ involvement in systemic sclerosis.

Thursday April 11 , 2024 • 12 - 1pm

100 College St, 11th Floor, Workshop 1116

Lunch will be provided!