# **ASHBi SEMINAR**

### Deciphering heterogeneity in liver diseases using mathematical models and data science

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# Date Friday, 4 March 2022

#### Time 15:00 - 16:00

#### Venue Zoom Online Meeting\*



\*Register via the right QR code

#### Abstract

The elucidation of cellular and individual heterogeneity is a central issue in modern life science and medicine, and various research approaches are attempted. Mathematical models are capable of describing nonlinear phenomena based on molecular mechanisms, while data science is good at deciphering systems with many variables. The combination of mathematical models and data science is an attractive approach to utilize the advantages of both. In this seminar, I will discuss mathematical data analyses that I have been working on recently, especially on the malignant transformation of hepatocellular carcinoma cells and on the determinants of therapeutic effects in chronic hepatitis patients. I will also touch on the importance of domain knowledge in data-driven mathematical medicine.

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