

# ASHBi SEMINAR

Mapping human fibrotic diseases  
on a single cell level

Lecturer: **Dr Rafael Kramann**

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Date **Friday, 5 November 2021**

Time **18:00 – 19:00**

Venue **Zoom Online Meeting\***

\*Register via the right QR code



## Abstract

Tissue fibrosis occurs in virtually every organ after chronic repetitive injury and destroys the architecture of the tissue leading to organ failure. Fibrosis represents a large and growing healthcare burden. It has been estimated that fibrosis contributes to as much as 45% of deaths in the developed world. However, for fibrosis in most organs, there are currently no approved therapies available. This dire innovation gap can be explained by the lack of deep cellular and molecular understanding of the disease pathophysiology. Novel single cell genomic and spatial transcriptomic technologies allow to map human disease at unprecedented resolution. The seminar will present how these technologies can be utilized in an integrated manner to understand fibrotic disease and identify novel therapeutic targets with a particular focus on the kidney and the heart. Identified mechanisms and targets are validated in novel cell culture systems and organoids.

Organizer : Prof Motoko Yanagita

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Hosted by Institute for the Advanced Study of Human Biology (WPI-ASHBi)

