

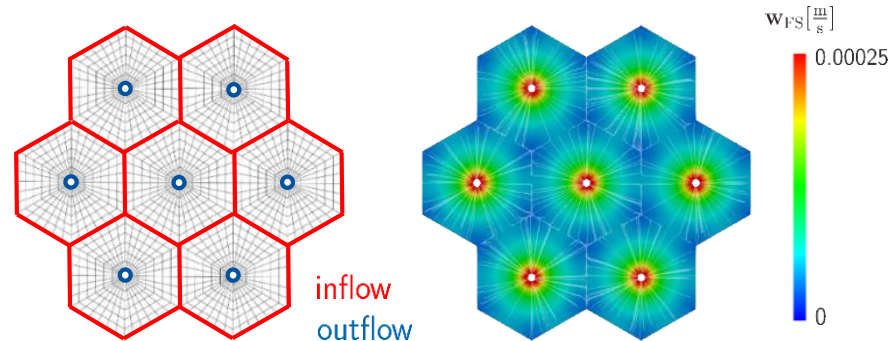
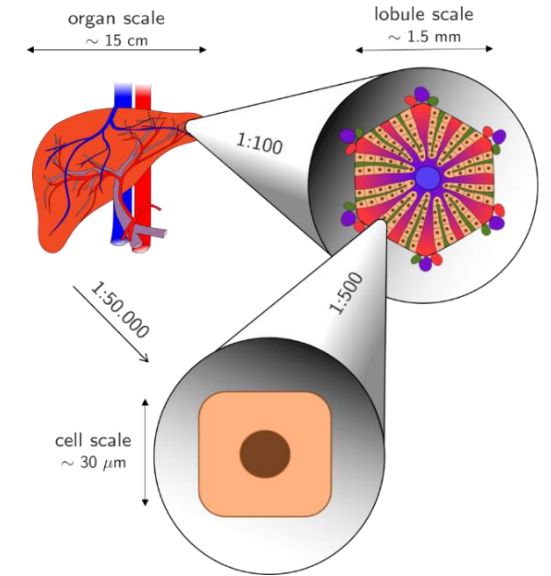
Simulation of Function-Perfusion Processes in the Human Liver

Motivation

- Numerical Multiscale Simulation of function-perfusion processes in the liver using the Theory of Porous Media (TPM)
- Data-driven simulations for clinical application (liver resection/ transplantation)

Possible topics (Bachelor's or Master's thesis)

- Parameter study on function-perfusion relationship
- Integration/Validation of experimental and clinical data
- Coupling of scales and optimization of software



Prior knowledge of the following is of advantage:

- Numerical simulations
- Programming experience



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