"AI-based imaging methods for the next-generation biomedical solutions"

Ertürk lab develops and implements AI-based imaging technologies to speed up biomedical research. In particular, we focus on new imaging approaches to visualize intact biological specimens (such as whole mouse organs and bodies, entire human organs, organoids, and engineered tissues) at the cellular and molecular level without sectioning. This enables among others to visualize cancer metastasis, infections, inflammation, neurodegeneration, and drug targeting down to singe cells in intact mice. We combined whole sample imaging with artificial intelligence and engineered tissues of human diseases for personalized drug development.