PN2: In Silico Models of Coupled Biological Systems

PN 2-1 Data-integrated modelling to provide novel solutions for individualizing cancer therapy and predicting treatment success (RQ3, RQ4)

FC1 FC2 FC3 FC4

PN 2-2 Data-integrated multiscale modelling for advection-diffusion-reaction problems in porous media with application to tumour growth (RQ1, RQ2)

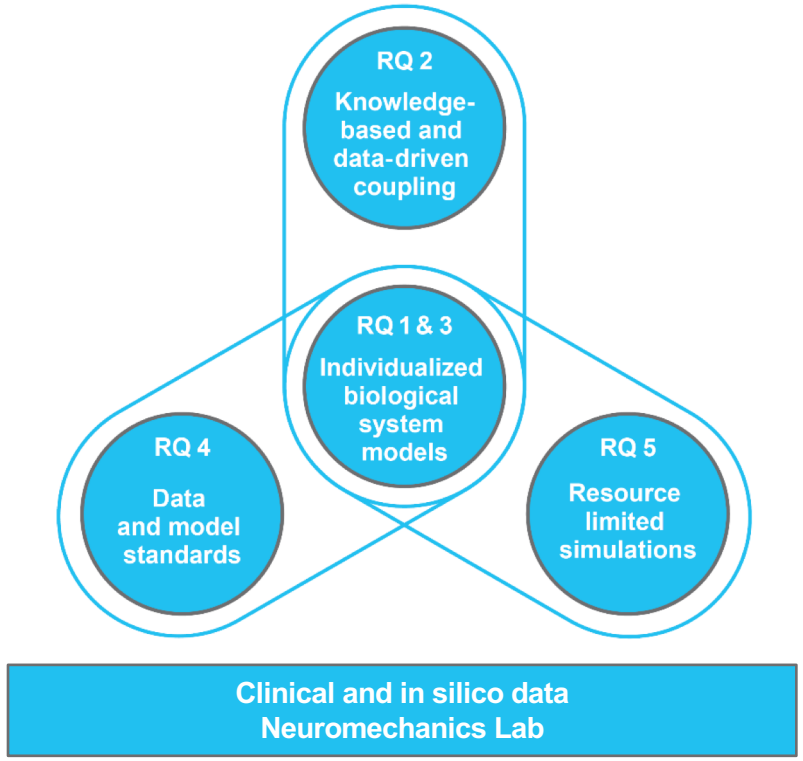
FC1 FC2 FC3 FC4

PN 2-3 From data-based single organ to first-principle biophysical to a data-driven system model of the neuromechanics of a human limb (RQ1, RQ3)

FC1 FC2 FC3 FC6

PN 2-4 Machine learning-based decomposition of the activity of individual motor units from synthetic and experimental data (RQ2, RQ5)

FC2 FC3



FC1 multi-X models
FC2 physics- & data-based
FC3 data-poor & data-rich
FC4 stoch. & uncertainty
FC5 heterogeneous & dynamical
FC6 pervasive