

Multi-scale mathematical modeling of human diseases

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Short Description

The focus of this minisymposium will be on the modelling of human diseases, including behavioral epidemiology, infectious and autoimmune diseases, as well the response of the disease to medical treatments, and the impact of control strategies on epidemic or disease dynamics. Different approaches will be presented, based either on partial differential equations and kinetic theory to describe cellular dynamics or on ordinary differential equations, dynamical systems reaction diffusion systems and game theory tools and reaction diffusion systems to describe the disease at a global level.