Barcelona Supercomputing Center BSC-CNS

- Developers of Alya, parallel multi-physics / multi-scale simulation code

- Simulations at tissue / organ level, mostly focused on cardiovascular and respiratory

- Fluid-electro-mechanical computational cardiac model

- Code performance in present and future supercomputing architectures, on the road to Exascale Computing

- Coupling parallel algorithms, code efficiency at all programming layers

- Mesh generation and preprocess

- Visualization and postprocess analysis