Computational Biomedicine is a key technology en route to better healthcare and efficient drug research. Computer models linking bench and bedside will make the difference in therapy of complex diseases in aging societies. In order to tear down the barriers of life’s complexity, new methods for Big Data analysis and modeling must be developed to achieve the full potential of computational biomedicine.

At the interdisciplinary Joint Research Center for Computational Biomedicine of RWTH Aachen University, we combine advanced modeling technologies and expertise from both industry and academia in order to provide real benefits for clinics and industry.

We strive to tackle the challenge integrating both data driven modeling and mechanistic modeling methods. At RWTH Aachen we are embedded into the graduate school AICES (Aachen Institute for advanced study in Computational Engineering Sciences), I3MS and the Aachen School of Medicine.