



## **APPLYING ENGINEERING PRINCIPLES TO THE DEVELOPMENT OF NOVEL CANCER THERAPIES**

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Combining quantitative biology and computational modeling provides a powerful toolkit to design novel therapies in a context dependent manner. We will provide multiple examples where we translated the insights gained from modeling and simulation into practice by engineering and testing novel, antibody-based therapeutics in the context of the computer simulations. Through this iterative process between computational modeling and antibody engineering, we gain a deeper understanding of the drug's mechanism of action which allows us to design therapeutics with a specific tumor type in mind. This context specific design can subsequently be translated into the clinic.