Ine Lentacker (°1981) obtained her PhD in Pharmaceutical Sciences at Ghent University in 2009, after completing her training as a pharmacist. Her doctoral research focused on ultrasound-guided delivery of genetic medicines, which led to several international collaborations and participation in two FP7 projects: Sonodrugs and Arise. Driven by a growing fascination with the immune system and the potential of nanomedicines, she shifted her research focus in 2015 toward the development of mRNA vaccines and adjuvant formulations. A close collaboration with Prof. Van Calenbergh resulted in the development of the mRNA Galsome vaccination platform. Since 2017, she has been Principal Investigator of the 'Vaccine Delivery Group' within the Laboratory of General Biochemistry and Physical Pharmacy (https://www.drugdelivery.be/). She contributed to the course 'Fysicochemie van Geneesmiddelen' by co-organizing exercises and practical sessions and was involved in the standardization of pharmaceutical enzymes (FIP center). Currently, together with VIB researchers Prof. Impens and Prof. Martens, Ine Lentacker is co-coordinator of the European Horizon2020 project Baxerna2.0, which focuses on the development of bacterial mRNA vaccines (https://www.baxerna.eu/). In addition, she coordinates a CEPI project (Coalition for Epidemic Preparedness Innovations) aimed at understanding the impact of freeze-drying on mRNA vaccines. This work is carried out in close collaboration with the laboratory of Prof. De Beer and the VIB (Prof. Saelens), using advanced analytical methods. These research activities contributed to the establishment of the Nanomedicine Center (https://nanomedicinecentre.com/). Within this center, there is intensive interaction with the GMP unit of UZ Gent (*CelGENTherapies*, led by Prof. Vandekerckhove) and with Prof. Evelien Wynendaele, focusing on GMP production of mRNA vaccines for phase 1 clinical studies. In this context, patient-specific mRNA Galsomes are being investigated for cancer immunotherapy. Recently, Ine Lentacker received an ERC Consolidator Grant '*My-NANO*'. The aim of this project is to better understand the interaction between mRNA therapeutics and the innate immune system, in order to develop a new class of immunotherapies for solid tumors.