



# FROM VISION 2020 TO FUTURE PERSPECTIVES

## NANOMEDICINE FOR THERAPY AND DIAGNOSTICS

Thursday, June 27, 2019, 17:00 h  
Lecture Hall Y03 G91  
University of Zurich, Irchel Campus  
Ruth Schmid

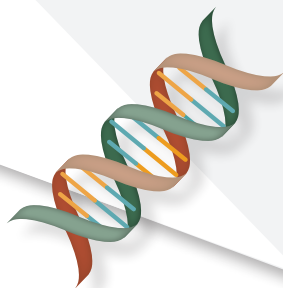
PhD, SINTEF Industry, Biotechnology and Nanomedicine,  
Polymer Particles and Surface Chemistry, Trondheim, Norway



### Ultrasound-enhanced drug delivery using nanoparticle-stabilized microbubbles

Many diseases need site focused treatments, as the most efficient drugs lead to systemic toxicity or experience inferior biodistribution. Using nanoparticles as drug carriers may overcome some of these drawbacks. Such approaches often rely on the EPR effect, which is observed in cancer, but is unpredictable and not an optimal strategy. We developed a technology platform of NP-stabilized gas microbubbles, which together with an external stimulus leads to enhanced drug delivery through biological barriers. Applications of this platform and advantages/limitations of multicomponent products will be discussed.

*The presentation is followed by an aperitif and - for a limited number of students - by a dinner with the speaker. For the dinner, contact [ilaria.orlando@uzh.ch](mailto:ilaria.orlando@uzh.ch) not later than June 26, 2019 by explaining why you would like to meet the speaker.*



#### Organization

The event series From Vision 2020 to Future Perspectives is organized by a committee of PhD students of the PhD Program in Integrative Molecular Medicine (imMed):  
Institute of Physiology UZH: Tobias Hasler (chair) | Amalia Ruiz Serrano (chair)  
Sophie Dahl | Iliaria Orlando  
Institute of Physiology UZH: Elisabetta Biglieri | Merel van Gogh from the PhD Program Cancer Biology  
URPP Global Change and Biodiversity: Maria Parreño  
Supported by the SUK Program "Doktoratsprogramme".