



# The 2019 Scheele Symposium: CRISPR-Cas and gene therapy

November 28, 2019, Näringslivets hus, Stockholm



Welcome to the Scheele Symposium in honour of the 2019 Scheele Award Laureate, Professor Emmanuelle Charpentier. The symposium focuses on various aspects of her research, including insights into the CRISPR-Cas technology, which has paved the way for development of new, effective treatments.

Take this opportunity to listen to some of the world's foremost scientists in genetic engineering.

## Preliminary Program

- 08.45 Registration
- 09.15 Introduction and welcome  
*Märিত Johansson*, Chair of the board, Swedish Pharmaceutical Society, Stockholm, Sweden

### Genetic engineering

- Chair:** Prof *Bernt Eric Uhlin*, Umeå University, Sweden
- 09.30 **The RNA biology of microbes – a true treasure trove**  
Prof Dr *Jörg Vogel*, Institute Molecular Infection Biology, University of Würzburg, Germany
- 10.05 **Title to be announced**  
Prof *Anna Cereseto*, University of Trento, CIBIO, Italy
- 10.40 Coffee

### CRISPR in Drug development drug discovery

- Chair:** Prof *Birgitta Henriques Normark*, Karolinska Institutet, Sweden
- 11.10 **Precise Genome Editing to Empower Drug Discovery**  
Dr *Marcello Maresca*, associate director, Discovery Sciences AstraZeneca, Mölndal, Sweden
- 11.45 **Using machine learning to predict mutational outcomes of CRISPR-Cas**  
Dr *Felicity Allen*, Sanger Institute, UK
- 12.20 Lunch

### Application of CRISPR-Cas Technology in Biology

- Chair:** Prof *Birgitta Henriques Normark*, Karolinska Institutet, Sweden
- 13.30 **CRISPR in basic and applied plant biology**  
Prof *Stefan Jansson*, Department of Plant Physiology, Umeå University, Sweden
- 14.05 **Genetically tailored pigs as models for human diseases and organ donors for xenotransplantation**  
Prof Dr *Eckhard Wolf*, Gene Centre and Department of Biochemistry, Ludwig-Maximilian University of Munich, Germany
- 14.40 **CRISPR/Cas9-based therapeutic strategies for beta-hemoglobinopathies**  
Dr *Annarita Miccio*, Imagine Institute of genetic diseases, Sorbonne Paris Cité University, France
- 15.15 Coffee

### Future Perspectives

- Chair:** Prof *Bernt Eric Uhlin*, Umeå University, Sweden
- 15.45 **CRISPR and beyond – the bacterial immune system**  
Prof Dr *Rotem Sorek*, Department of Molecular Genetics, Weizmann Institute of Science, Rehovot, Israel
- 16.20 The Scheele Award Ceremony
- 16.50 **Scheele Award Lecture**  
Prof *Emmanuelle Charpentier*, Max Planck Unit for the Science of Pathogens in Berlin, Germany
- 17.30 End