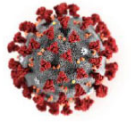


# SARS CoV2 related teaching at the DAGZ



Universität für Bodenkultur Wien  
Department für Angewandte Genetik  
und Zellbiologie

## 940098 Seminars in Molecular Biotechnology (SE) – Herta Steinkellner

- Corona viruses: structure and life cycle
- SARS CoV2 diagnostics (nucleic acid, antigen and antibody tests)
- COVID 19 vaccination program (features of approved candidates)
- Epidemiological and immunological data (infection and mortality rate, virus evolution and immunity)

## 940331 Cell factory plants (UE) – Herta Steinkellner, Richard Strasser, Jennifer Schoberer

A key factor to contain COVID 19 pandemic is the rapid production of SARS CoV2 relevant proteins for both diagnostic (e.g. virus antigens) and therapeutic (protective antibodies) purposes.

The course refers to this need and focuses on the quick expression of:

- a SARS CoV2 spike protein domain (which plays a key role in viral infection)
- a specific antibody that binds to this domain
- Determining the binding properties of the two components for diagnostic purposes (ELISA binding studies).
- Examination of subcellular localization of recombinant proteins using confocal microscopy.

Content will be continuously adapted according to latest findings

## 940003 Emerging Topics in RNA Biology (in Eng.) (SE) – Mariya Kalyna

Topic: RNA vaccines – coming of age

This year seminar topic is motivated by the coronavirus pandemic. What are RNA vaccines? How do they differ from conventional vaccine approaches? What are the disease targets? What are challenges and future directions in developing these new vaccine approaches?