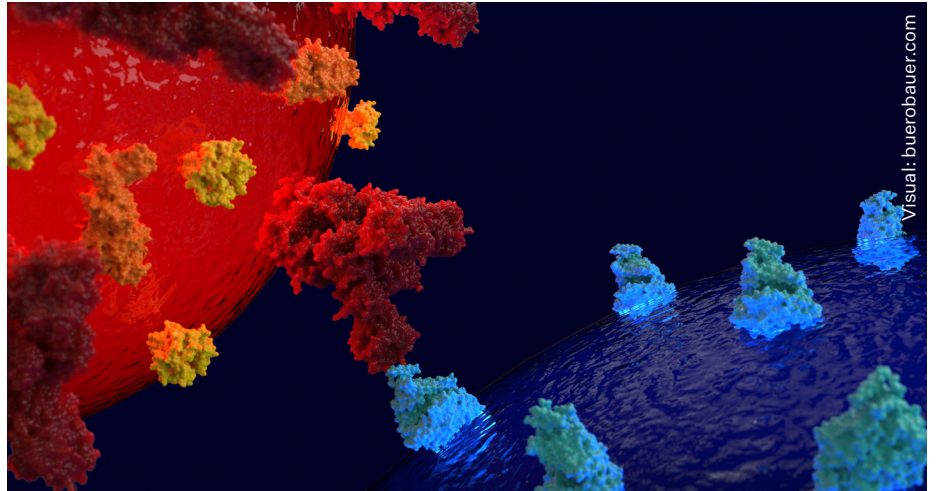


A Broad Alliance of Viennese Scientists



Building a COVID-19 Testing Infrastructure

The COVID-19 pandemic poses an enormous threat for healthcare systems and economies in Austria, Europe and the world. In this time of crisis, scientists in Vienna are responding to the threat. 20 research institutions have joined forces to form the Vienna COVID-19 Diagnostics Initiative (VCDI). This initiative is now putting a new diagnostics pipeline into operation. The VCDI is also developing a range of high-throughput tests to better understand and combat the virus.

Institutional boundaries have been broken at an unprecedented level to establish new testing capacity. Researchers across Vienna, including more than 200 highly-qualified scientists, have been recruited as volunteers in less than two weeks to meet these challenges. Standard laboratory infrastructure was contributed by the partner institutes and repurposed to build an automated pipeline for detection of the virus at the Vienna Biocenter.

To meet the challenges imposed by global shortages of required testing reagents, the initiative has developed several in-house reagents that make it largely independent from external sources. This is very important at a time when COVID-19 is exposing a high-dependency on diagnostics companies and their proprietary testing kits.

Rapid transfer of knowledge is required by communities and governments to respond to the pandemic. The VCDI freely disseminates its operating procedures, know-how about building pipelines and their latest research findings. The goal is to aid other universities and research institutions to efficiently and productively contribute to the national testing capacity for COVID-19.

The VCDI is coordinated by Alwin Köhler, Scientific Director of the Max Perutz Labs:

“Many labs were shut down, the scientists sent home. But more and more came back, building a diagnostics pipeline from nothing. This was not like constructing a plane on the ground — we were building a plane that was flying while the blueprints were still being drawn. I am proud of the creative energy, ingenuity and passion of all the basic researchers involved. They stepped up without a moment’s hesitation!”

The VCDI has received an emergency seed-funding by the Vienna Science and Technology Fund (WWTF) and is supported by the government.

www.vcdi.net

Participating Institutions (April 3rd, 2020)

- 1) Max Perutz Labs
(Joint Venture University of Vienna & Medical University of Vienna)
- 2) IMP, Research Institute of Molecular Pathology
(supported by Boehringer Ingelheim)
- 3) Centre for Microbiology and Environmental Systems Science
(University of Vienna)
- 4) IMBA, Institute of Molecular Biotechnology (ÖAW)
- 5) GMI, Gregor Mendel Institute of Molecular Plant Biology (ÖAW)
- 6) Joint Microbiome Facility
(Medical University of Vienna and University of Vienna)
- 7) Institute of Cancer Research (Medical University of Vienna)
- 8) Center for Physiology and Pharmacology
(Medical University of Vienna)
- 9) Center of Anatomy and Cell Biology (Medical University of Vienna)
- 10) Center for Brain Research (Medical University of Vienna)
- 11) CeMM, Center of Molecular Medicine (ÖAW)
- 12) VBCF, Vienna BioCenter Core Facilities
- 13) Department of Neuroscience and Developmental Biology
(University of Vienna)
- 14) Center for Pathophysiology, Infectiology and Immunology
(Medical University of Vienna)
- 15) Department of Ecogenomics and Systems Biology
(University of Vienna)
- 16) Institute of Bioprocess Science and Engineering, BOKU Vienna
- 17) Institute of Molecular Biotechnology, BOKU Vienna
- 18) Institute of Microbiology and Microbial Biotechnology, BOKU Vienna
- 19) Surgical Research Laboratories (Medical University of Vienna)
- 20) Department of Neurology (Medical University of Vienna)