

## SNSF NRP 78 «Covid-19»:

Title	Project applicants	Institute / Grant amount	Key words	Project registry
<b>New insights into the COVID-19 pandemic: Genetic polymorphisms, role of SLC6 amino acid transporters, renal aspects and therapeutic perspectives</b>	Hediger Matthias A.; Vogt Bruno;	Abteilung für Nephrologie Medizinische Universitäts-Kinderklinik Inselspital. Grant: 612 620 CHF	TMPRSS2; SARS-CoV-2; ACE2; Amino acid transporter; SLC6 solute carrier; Micro-scale thermophoresis; binding assay; Pseudovirus entry assay	<a href="#">Project ID 198281</a>
<b>Unravelling consequences of SARS-CoV-2 mediated inflammatory immune responses in heart and vasculature</b>	Döring Yvonne; Rieben Robert; Mercader Nadia; Engelhardt Britta;	Universitätsklinik für Angiologie Departement Herz & Gefässe Inselspital und Universität Bern. Grant: 1 951 700 CHF	ACE2; advanced in vitro models; Vascular cells; Zebrafish models; Infection; cardiomyocytes; Cardiovascular disease; Thromboinflammation; (single cell) RNAseq; Mouse models; Blood brain barrier	<a href="#">Project ID 198297</a>
<b>Devils dance: complement, NETs and thrombosis in COVID-19</b>	Zeerleder Sacha	Universitätsklinik für Hämatologie u. Hämatolog. Zentrallabor Inselspital. Grant: 576 881 CHF	Complement activation; Neutrophils; neutrophil extracellular trap; NETs; Thrombosis; Nucleosomes; Complement Regulators; C1-inhibitor	<a href="#">Project ID 198255</a>
<b>AI-multi-omics-based Prognostic Stratification of COVID-19 Patients in Acute and Chronic State</b>	Pöllinger Alexander; Duncan James; Reyes Mauricio; Sverzellati Nicola;	Institut für Diagnostische, Interventionelle u. Pädiatr. Radiologie Inselspital. Grant: 617 665 CHF	Artificial Intelligence; Multi-omics approach; Computed Tomography; Radiology; Patient Stratification; Prediction	<a href="#">Project ID 198388</a>
<b>Neutralizing multivalent antibodies against coronaviruses</b>	Plattet Philippe; Seeger Markus; Fotiadis Dimitrios;	Dept. für klinische Veterinärmedizin Universität Bern Grant: 783 320 CHF	Neutralizing antibodies; Spike protein; Multivalent antibody engineering; Coronavirus	<a href="#">Project ID 198314</a>
<b>A continuously updated meta-ecological study of the effects of the COVID-19 pandemic on mental health, alcohol/substance abuse and violence in the general population.</b>	Salanti Georgia; Leucht Stefan;	Institut für Sozial- und Präventivmedizin Universität Bern. Grant: 266 700 CHF	Mental health ; Lockdown; Ecological study; Violence; Meta-analysis; Alcohol	<a href="#">Project ID 198418</a>

SNSF Special Call on Coronaviruses:

Title	Project applicants	Institute / Grant amount	Key words	Project registry
<b>A multidisciplinary approach to identify vulnerabilities of SARS-CoV-2 for vaccine development</b>	Leidel Sebastian; Pillai Ramesh S.; Thiel Volker;	Departement für Chemie und Biochemie Universität Bern Grant: 449 980 CHF	Ribosome profiling; SARS-CoV-2; Translation; RNA modification; Virus attenuation	<a href="#">Project ID 196387</a>
<b>How to protect healthcare workforce during an epidemic outbreak: Modelling a desynchronization strategy from the COVID-19 pandemic</b>	Beldi Guido; Sanchez Taltavull Daniel;	Universitätsklinik für Viszerale Chirurgie und Medizin Inselspital, Universitätsspital Bern. Grant: 296 250 CHF	Healthcare workers; Mathematical modelling; Infection rates; COVID-19	<a href="#">Project ID 196059</a>
<b>Tracking the COVID-19 epidemic in Switzerland: phylogenetics and epidemiological modelling</b>	Althaus Christian; Neher Richard;	Institut für Sozial- und Präventivmedizin Universität Bern. Grant: 295 487 CHF	COVID-19; Phylogenetic analysis; Emerging infectious diseases; Mathematical modeling	<a href="#">Project ID 196046</a>
<b>Mixed-method evaluation of an online forward triage tool within the COVID-19 pandemic</b>	Sauter Thomas; Hautz Wolf; Ricklin Meret; Jent Philipp;	Universitäres Notfallzentrum Inselspital Universitätsspital Bern Grant: 99 906 CHF	Patient flow; COVID_19; Decision support; Symptom checker; Qualitative methods	<a href="#">Project ID 196615</a>
<b>Longitudinal single B cell studies across the trajectory of COVID-19 to identify SARS-CoV-2 specific monoclonal antibodies and long-term memory formation</b>	Macpherson Andrew; Ganal-Vonarburg Stephanie Christine;	Universitätsklinik für Viszerale Chirurgie und Medizin, Gastroenterologie, Universitätsspital Bern. Grant: 279 989 CHF	Monoclonal antibodies; B cells; B cell memory; Humoral immunity	<a href="#">Project ID 196641</a>
<b>Neutralizing multivalent antibodies against coronaviruses</b>	Plattet Philippe; Seeger Markus;	Abteilung für Klinische Forschung Dept. für klinische Veterinärmedizin Universität Bern. Grant: 301 820 CHF	Multivalent antibody engineering; Neutralizing antibodies; Spike protein; Coronavirus	<a href="#">Project ID 196469</a>

SNSF Special Call on Coronaviruses and NRP 78: Listed as “other” and affiliated to University of Bern, Institute for Virology and Immunology (IVI)

Title	Project applicants	Institute / Grant amount	Key words	Project registry
<b>Real-time pandemic functional characterization of SARS-CoV-2</b>	Thiel Volker; Dijkman Ronald; Eckerle Isabella Anne;	Institut für Virologie und Immunologie Depart. Infektionskrankheiten und Pathologie Universität Bern. Grant: 450 000 CHF	RNA virus; reverse genetics; respiratory virus infection; virus evolution; Coronavirus; clinical virus isolates; pandemic	<a href="#">Projekt ID 196644</a>
<b>Rapid Evaluation and Development of Cellular and Animal Tools to fight SARS-CoV-2</b>	Benarafa Charaf; Dijkman Ronald;	Institut für Virologie und Immunologie Depart. Infektionskrankheiten und Pathologie Universität Bern. Grant: 300 000 CHF	Receptor processing; Host reservoirs; SARS-CoV-2; Mouse models; Airway epithelial cell culture; Novel mouse models; Protease inhibitors; COVID-19; Host proteases	<a href="#">Projekt ID 196062</a>
<b>Recoding the SARS-CoV-2 genome - A multidisciplinary approach to generate live-attenuated coronavirus vaccines</b>	Thiel Volker; Osterrieder Klaus; Leidel Sebastian; Pillai Ramesh S.; Beer Martin;	Institut für Virologie und Immunologie Depart. Infektionskrankheiten und Pathologie Universität Bern. Grant: 1 189 457 CHF	Ribosome profiling; SARS-CoV-2 animal models; Translation; live-attenuated vaccine; Virus attenuation; RNA modification; SARS-CoV-2	<a href="#">Projekt ID 198473</a>