

STATUS SYMPOSIUM, AUGUST 20-22, 2024

INNOVATIVE APPROACHES TO ANTIVIRAL DRUG DEVELOPMENT

HERRENHAUSEN PALACE, HANOVER, GERMANY

The Volkswagen Foundation cordially invites you to the symposium for the grantees of the funding initiative "INNOVATIVE APPROACHES TO ANTIVIRAL DRUG DEVELOPMENT". This event offers a unique platform to present current research results, promote scientific exchange and strengthen interdisciplinary cooperation in translational research.

The Volkswagen Foundation's funding initiative supports groundbreaking projects that explore new perspectives and innovative methods in antiviral drug development. The grantees are working on a variety of approaches, ranging from research into new molecular mechanisms and target structures to the development of novel drug classes and the application of state-of-the-art technology platforms such as AI and high-throughput screening.

The aim of the conference is to bring together the different approaches and findings of the 22 funded projects and to facilitate a profitable dialogue between the researchers. Through lectures, poster presentations and discussion rounds, participants will have the opportunity to present their research results and receive constructive feedback. In addition, informal networking sessions offer the opportunity to make new contacts, exchange ideas and initiate potential collaborations.

PROGRAM TUESDAY, AUG 20, 2024

11:30 A.M. REGISTRATION & COFFEE

12:30 P.M. LUNCH

1:30 P.M. WELCOME

HENRIKE HARTMANN, PAVEL DUTOW
VolkswagenStiftung

PROGRAM

2:00 P.M. SESSION 1

Optimization of novel Respiratory Syncytial Virus-inhibitors by multi-parametric profiling (OPTIS)

THOMAS PIETSCHMANN, Medizinische Hochschule Hannover

GESINE HANSEN, Medizinische Hochschule Hannover

ANNA K. H. HIRSCH, Helmholtz-Institut für Pharmazeutische Forschung Saarland (HIPS), Saarbrücken

THOMAS KREY, Universität zu Lübeck

Camelid-derived nanobodies to neutralize SARS-CoV-2 and future pandemic coronaviruses for therapy and post-exposure prophylaxis

MATTHIAS DOBBELSTEIN, Universität Göttingen

DIRK GÖRLICH, Max-Planck-Institut für Multidisziplinäre Naturwissenschaften, Göttingen

Programmable RNA nuclease mediated destruction of SARS-CoV-2 RNA to prevent replication and spread ("PRiMeD COVID")

SIMON KROOSS, Medizinische Hochschule Hannover

JENS BOHNE, Medizinische Hochschule Hannover

MICHAEL OTT, Medizinische Hochschule Hannover

ULRICH KALINKE, TWINCORE Zentrum für Experimentelle und Klinische Infektionsforschung GmbH, Hannover

3:00 P.M. COFFEE BREAK

3:30 P.M. SESSION 2

Preclinical development of antiviral protease inhibitors targeting flavi- and coronaviruses

CHRISTIAN KLEIN, Universität Heidelberg

Conserved RNA elements as novel drug targets for antiviral therapy (Target-RNAantiV)

JULIA WEIGAND, Universität Marburg

HARALD SCHWALBE, Universität Frankfurt am Main

MAIKE WINDBERGS, Universität Frankfurt am Main

Discovery of therapeutics for treating neurological complications of Central Nervous System SARS-CoV-2 infection

PHILIPP MERGENTHALER, Charité – Universitätsmedizin Berlin

MARC NAZARE, Leibniz-Institut für Molekulare Pharmakologie (FMP), Berlin

4:30 P.M. POSTER SESSION, NETWORKING & COFFEE

5:30 P.M. DINNER

PROGRAM

WEDNESDAY, AUG 21, 2024

9:30 A.M. ARRIVAL & COFFEE

10:00 A.M. SESSION 3

Synergistically targeting pyrimidine metabolism and RNA integrity for the treatment of respiratory diseases caused by zoonotic influenza A viruses and henipaviruses

MATTHIAS DOBBELSTEIN, Universität Göttingen

ANNE BALKEMA-BUSCHMANN, Friedrich-Loeffler-Institut, Greifswald/Insel Riems

SANDRA DIEDERICH, Friedrich-Loeffler-Institut, Greifswald/Insel Riems

Peptide-based crystallographic fragment screening for fast and efficient discovery of lead structures against zoonotic viral diseases

NORBERT STRÄTER, Universität Leipzig

RALF HOFFMANN, Universität Leipzig

JENS MEILER, Universität Leipzig

A Structure-based Approach to combat Zoonotic Poxviruses

UTZ FISCHER, Universität Würzburg

CLEMENS GRIMM, Universität Würzburg

11:00 A.M. COFFEE BREAK

11:20 A.M. SESSION 4

Sialomimetic Viral Entry Inhibitors – A route towards the first treatments for neglected human and emerging zoonotic viruses

ALEXANDER TITZ, Universität des Saarlandes, Saarbrücken

DOMINIQUE SCHOLS, Catholic University of Leuven, Belgien

Implementation of the PROTAC targeting strategy to generate a mechanistically new type of antiviral drugs

MANFRED MARSCHALL, Universitätsklinikum Erlangen

SVETLANA TSOGOEVA, Universität Erlangen-Nürnberg

Antivirals for preemptive therapy of BK polyomavirus infection in transplant recipients and interference with in-host virus evolution - ANTIPOLE

SIGRUN SMOLA, Universität des Saarlandes, Homburg/Saar

JÖRN WALTER, Universität des Saarlandes, Homburg/Saar

ROLF MÜLLER, Helmholtz-Institut für Pharmazeutische Forschung Saarland (HIPS), Saarbrücken

12:20 P.M. POSTER SESSION, NETWORKING & COFFEE

1:10 P.M. LUNCH

GARDEN WALK

PROGRAM

2:40 P.M. SESSION 5

Cas13d based antiviral platform to treat acute Bunyavirus infections

GREGOR EBERT, Technische Universität München

ANDREAS PICHLMAIR, Technische Universität München

LARA RHEINEMANN, Technische Universität München

FLORIAN GIESERT, Helmholtz-Zentrum München Deutsches Forschungszentrum für Gesundheit und Umwelt GmbH, München

Changing the game: Next-generation DNazymes for antiviral therapies

MANUEL ETZKORN, Universität Düsseldorf

HOLGER GOHLKE, Universität Düsseldorf

PHILIPP LANG, Universitätsklinikum Düsseldorf

STEPHANIE KATH-SCHORR, Universität zu Köln

Development of an inhalable small interfering RNA therapy for betacoronaviruses with potential for human transmission

OLIVIA MERKEL, Universität München

GERALD BURGSTALLER, Helmholtz Zentrum München Deutsches Forschungszentrum für Gesundheit und Umwelt GmbH, München

THOMAS MICHLER, Klinikum der Universität München

SARS-CoV-2 non-structural protein nsP3 macrodomain and viral replication: functional characterization and inhibitor screening

GIULIA ROSSETTI, Forschungszentrum Jülich GmbH

PATRICIA KORN, RWTH Aachen

BERNHARD LÜSCHER, RWTH Aachen

STEFAN KNAPP, Universitätsklinikum Frankfurt

ANDREAS LADURNER, Universität München

4:00 P.M. POSTER SESSION, NETWORKING & COFFEE

5:00 P.M. PODIUM DISCUSSION

ANGELIKA VLACHOU

High-Tech Gründerfonds Management GmbH, Berlin

OLIVER CORNELLY

Universität Köln, Institut für Translationale Forschung
Uniklinik Köln, Klinische Infektiologie

THOMAS HESTERKAMP

Deutsches Zentrum für Infektionsforschung, Braunschweig

MODERATION: TOBIAS SCHÖNWITZ-PALM

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6:00 P.M. DINNER

PROGRAM

THURSDAY, AUG 22, 2024

9:30 A.M. ARRIVAL & COFFEE

10:00 SESSION 6

Inhibitors of viral macrodomains as new broad-spectrum antiviral drugs (MACROVIR)

SANDRA CIESEK, Universität Frankfurt am Main

EUGEN PROSCHAK, Universität Frankfurt am Main

PHILIP GRIBBON, Fraunhofer Institut für Translationale Medizin und Pharmakologie (ITMP), Hamburg

AIMO KANNT, Fraunhofer Institut für Translationale Medizin und Pharmakologie (ITMP), Frankfurt am Main

PROTACs targeting Mpro: Chemical knockout of SARS-CoV-2 main protease and proteases of related viruses as efficient virustatic therapy (COOP)

CHRISTA MÜLLER, Universität Bonn

MICHAEL GÜTSCHOW, Universität Bonn

Prophylactic autophagy-inducing therapies to tackle coronaviruses (ProATTaC)

NILS GASSEN, Universitätsklinikum Bonn

MARCEL MÜLLER, Charité – Universitätsmedizin Berlin

11:00 A.M. COFFEE BREAK

11:10 A.M. SESSION 7

Novel strategies for treatment of hantavirus-associated human diseases

GÜNTHER SCHÖNRICH, Charité – Universitätsmedizin Berlin

STEFAN DÜBEL, Technische Universität Braunschweig

Inhibition of CYP19A1 mediated sex-specific lung inflammation in avian influenza virus infection (FLU-FLAME)

FRANZISKA RICHTER ASSENCIO, Stiftung Tierärztliche Hochschule Hannover

GÜLSAH GABRIEL, Leibniz-Institut für Virologie (LIV), Hamburg

Pan-genotypic neutralizing human monoclonal antibodies with enhanced effector function as therapeutic option for Hepatitis E virus infection

PATRICK BEHRENDT, TWINCORE Zentrum für Experimentelle und Klinische Infektionsforschung GmbH, Hannover

HEINER WEDEMEYER, Medizinische Hochschule Hannover

THOMAS KREY, Universität zu Lübeck

12:10 P.M. CLOSING

PAVEL DUTOW

VolkswagenStiftung

12:20 P.M. POSTER SESSION & NETWORKING LUNCH

1:30 P.M. DEPARTURE