



8th European Seminar in Virology (EuSeV)
University of Bologna Residential Center in Bertinoro, Italy
October 15-17, 2021

Innate and adaptive immunity to SARS-CoV-2 and other viruses



Abstract book and program



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**Innate and adaptive immunity to SARS-CoV-2 and
other viruses**

Organizers:

Gabriella Campadelli-Fiume,
University of Bologna

Dana Wolf,
Hebrew University Jerusalem

Thomas Mertens and Thomas Stamminger,
Ulm University Medical Centre

on behalf of the European Society
for Virology (ESV)
President Michael Kann



8th European Seminars in Virology 2021: Innate and adaptive immunity to SARS-CoV-2 and other viruses

Program

FRIDAY 15.10.2021	
16:20-16:30	<p>Welcome</p> <p>Gabriella Campadelli-Fiume, Dana Wolf, Thomas Mertens, Thomas Stamminger, Michael Kann</p>
Immune Pathogenesis	
Chair: Dana Wolf, Fausto Baldanti	
16.30–17.00	<p>Paludan, Sören (<i>Department of Biomedicine, Aarhus, Denmark</i>) - VIRTUAL A novel constitutive immune mechanism restricts herpes simplex virus in neurons to prevent development of viral encephalitis</p>
17.00–17.30	<p>Jonjic, Stipan (<i>University of Rijeka, Rijeka, Croatia</i>) Mechanisms of neuroinflammation and brain pathology in congenital cytomegalovirus infections</p>
17.30-18.00	<p>Haagmans, Bart (<i>Erasmus Medical Center, Rotterdam, The Netherlands</i>) Clinical and experimental insights into SARS-CoV-2 pathogenesis</p>
18.00-18.15	<p>Jakob Ankerhold¹, Sebastian Giese¹, Philipp Kolb¹, Andrea Maul-Pavicic² Nathalie Göppert¹, Kevin Ciminski¹, Clemens Kreutz³, Achim Lothar⁴, Ulrich Salzer², Wolfgang Bildl⁵, Daniela Huzly¹, Martin Schwemmler¹, Hartmut Hengel¹, Valeria Falcone¹</p> <p>¹Institute of Virology, Freiburg University Medical Center, Faculty of Medicine, Albert-Ludwigs-University of Freiburg, Freiburg, Germany ²Center for Chronic Immunodeficiency (CCI), Freiburg University Medical Center, Faculty of Medicine, Albert-Ludwigs-University of Freiburg, Freiburg, Germany ³Institute of Medical Biometry and Statistics, Freiburg University Medical Center, Faculty of Medicine, Albert-Ludwigs-University of Freiburg, Freiburg, Germany ⁴Heart Center Freiburg University, Department of Cardiology and Angiology I, Faculty of Medicine, Albert-Ludwigs-University of Freiburg, Freiburg, Germany ⁵Institute of Physiology II, Faculty of Medicine, Albert-Ludwigs-University of Freiburg, Freiburg, Germany</p> <p>Enhanced FcγRIII/CD16 activation by discrete ligands as independent correlates of COVID-19 severity</p>
18.15-18.30	<p>Julius Beer^{1#}, Angele Breithaupt², Benedikt Sachs¹, Annette Ohnemus¹, Stefania Crotta³, Nadine Ebert^{4, 5}, Anna Kraft², Fabien Labrousseau^{5, 6}, Tran Thi Nhu Thao^{4, 5, 7}, Bettina Salome Trueeb^{5, 6}, Joerg Jores^{5, 6}, Martin Beer⁸, Andreas Wack³, Volker Thiel^{4, 5}, Martin Schwemmler^{1, 9*}, Daniel Schnepf^{1*}</p> <p>¹Institute of Virology, Medical Center University of Freiburg, Freiburg, Germany ²Department of Experimental Animal Facilities and Biorisk Management, Friedrich-Loeffler-Institut, Greifswald-Insel Riems, Germany</p> <p>Defects in Interferon Signaling Cause Increased and Prolonged SARS-CoV-2 Replication</p>
18.30-18.45	<p>Alexandra Herrmann, Doris Jungnickl, Arne Cordsmeier, Armin Ensser Institute of Clinical and Molecular Virology, Friedrich Alexander Universität Erlangen-Nürnberg, Erlangen, Germany</p> <p>Recombination-based reverse genetics to study the interplay of SARS-CoV-2 with the innate immune system</p>

POSTER SESSION - DISCUSSIONS IN FRONT OF POSTERS

Yotam Bronstein¹, Amos Adler², Haytham Katash³, Ora Halutz², Yair Herishanu⁴, Katya Levytskyi²

¹Department of Internal Medicine D,

²Clinical Microbiology Laboratory,

³Department of Internal Medicine B,

⁴Department of Hematology, Tel Aviv Sourasky Medical Center, Sackler Faculty of Medicine, Tel-Aviv University, Tel-Aviv, Israel

Evolution of spike mutations following antibody treatment in two immunocompromised patients with persistent COVID-19 infection

Sari Maljanen¹, Moona Huttunen¹, Kolehmainen Pekka¹, Krister Melén², Pinja Jalkanen¹, Jemna Heroum¹, Ilkka Julkunen^{1,3} and Sisko Tauriainen¹

¹Institute of Biomedicine, University of Turku, Finland

²Finnish Institute for Health and Welfare, Helsinki, Finland

³Turku University Hospital, Clinical Microbiology, Turku, Finland

Replication of human coronaviruses 229E, OC43 and NL63 in different cell lines

Ana V Antão, Dennis Lapuente, Jana Fuchs, Anna Schmidt, Pascal Irrgang and Matthias Tenbusch

Institute of Clinical and Molecular Virology, University Hospital Erlangen, Friedrich-Alexander University Erlangen-Nürnberg, Erlangen, Germany

Chemokines/cytokines as adjuvant in mucosal adenoviral vector vaccines against Influenza A Virus

Hannah Byren^{a,b}, Angela Holzer^a, Heidi von Berg^c, Hans-Martin Jäck^{b,c} and Frank Neipel^a.

^aInstitute for Clinical and Molecular Virology, Universitätsklinikum Erlangen, 91054 Erlangen, Germany

^bFriedrich-Alexander-Universität Erlangen-Nürnberg, 91054 Erlangen, Germany

^cDivision of Molecular Immunology, Department of Medicine 3, Universitätsklinikum Erlangen, 91054, Germany

Glycoprotein K8.1 as a Target for KSHV Vaccine Development

Ferdyansyah Sechan, Maarten F. Jebbink, Arthur Edridge and Lia van der Hoek

Laboratory of Experimental Virology, Amsterdam Infection and Immunity Institute, Department of Medical Microbiology and Infection Prevention, Amsterdam UMC, University of Amsterdam, Amsterdam, The Netherlands

Antibody dynamics during human coronavirus HKU1 infections

Valentina Eberlein^{1#}, Leila Issmail^{1#}, Nadja Uhlig^{1#}, Anne-Kathrin Donner¹, Antonia Sophia Peter², Edith Roth³, Sebastian Schulz³, Kirsten Fraedrich², Tobit Steinmetz³, Dominik Damm², Manuela Hauke³, Elie Richel², Sandra Müller-Schmucker², Isabell Schulz¹, Katharina Habenicht⁴, Thomas Krey⁵, Stefan Pöhlmann⁶, Paul McKay⁷, Robin Shattock⁷, Roman Wölfel⁸, Jutta Eichler⁹, Wolfgang Schuh³, Frank Neipel², Armin Ensser², Dirk Mielenz³, Matthias Tenbusch², Thomas Winkler⁴, Klaus Überla², Hans-Martin Jäck³, Thomas Grunwald¹

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³Division of Molecular Immunology, Internal Medicine III, Nikolaus-Fiebiger-Center of Molecular Medicine, Friedrich-Alexander University Erlangen-Nürnberg, Erlangen, Germany

⁴Chair of Genetics, Friedrich-Alexander University Erlangen-Nürnberg, Erlangen, Germany

⁵Department of Biochemistry, University of Lübeck, Lübeck, Germany

⁶Infection Biology Unit, German Primate Center, Göttingen, Germany

⁷Department of Infectious Diseases, Imperial College London, Norfolk Place, London, UK

⁸German Center for Infection Research, Partner Site Munich and Associated Partner Site Charité, Berlin, Germany

Bundeswehr Institute of Microbiology, Munich, Germany

⁹Department of Chemistry & Pharmacy, Friedrich-Alexander University Erlangen-Nürnberg, Erlangen, Germany

Efficacy of novel neutralizing antibodies against SARS-CoV-2 infection in ACE2 transgenic mouse model

Alina Ruß and Thomas Gramberg

Institute of Clinical and Molecular Virology, Friedrich-Alexander-University, Erlangen, Germany

SAMHD1 mutants impaired in direct protein interaction abrogate LINE-1 restriction

Malgorzata Graul ⁽¹⁾, Gabriela Pastuch-Gawolek ⁽²⁾, Monika Krawczyk ⁽²⁾, Boguslaw Szewczyk ⁽¹⁾, **Ewelina Krol** ⁽¹⁾

⁽¹⁾ Department of Recombinant Vaccines, Intercollegiate Faculty of Biotechnology, University of Gdansk and Medical University of Gdansk, Abrahama 58, 80-307 Gdansk, Poland

⁽²⁾ Department of Organic Chemistry, Bioorganic Chemistry and Biotechnology, Faculty of Chemistry, Silesian University of Technology, Krzywoustego 4, 44-100 Gliwice, Poland

Anti-coronaviruses activity of uridine glycoconjugates containing 1,2,3-triazole moiety

Shikha Chandel¹, Gloria Griffante¹, Daniela Ferrante¹, Valeria Caneparo^{1,3}, Daniela Capello^{1,2}, Valentina Bettio^{1,2}, Cinzia Borgogna¹, Chiara Aleni¹, Salvatore Esposito¹, Andrea Sarro¹, Alessandra Vasile¹, Marco Comba¹, Tommaso Testa¹, Gianmarco Cotrupi¹, Marco De Andrea^{3,4}, Sara Bortoluzzi¹, Marisa Gariglio^{1,3}

¹University of Piemonte Orientale, Medical School, Novara, Italy

²UPO Biobank, University of Piemonte Orientale, Novara, Italy

³CAAD Center for Translational Research on Autoimmune and Allergic Disease, Novara, Italy

⁴University of Turin, Medical School, Turin, Italy

Persistence of neutralizing antibodies to SARS-CoV-2 in first wave infected individuals at ten months post-infection: The UnIRSA Cohort Study

Giacomo M. Butta^{1,2}, Raffaele De Francesco^{1,2}, Lara Manganaro^{1,3}

¹INGM-Istituto Nazionale di Genetica Molecolare, Milan 20122, Italy

²Department of Pharmacological and Biomolecular Sciences, Università degli Studi di Milano, Italy

³Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico, Infectious Diseases Unit, Department of Internal Medicine, Milan, Italy

HIV2-Vpx modulation of MDDCs-CD4+ T cells HIV-1 Trans Infection

Judith Kannenberg¹, Reinhard Henschler², Raymund Buhmann², Mario Hönemann¹, Henning Trawinski³, Christian Jassoy¹

¹Institute for Medical Microbiology and Virology, University Hospital and Medical Faculty, University of Leipzig, Germany

²Institute of Transfusion Medicine, University Hospital and Medical Faculty, University of Leipzig, Germany

³Division of Infectious Diseases and Tropical Medicine, Department of Medicine II, Interdisciplinary Center for Infectious Diseases, Leipzig University Hospital, Leipzig, Germany

Increase of the SARS-CoV-2 antibody half-life in the first year of infection

20:00

Dinner at outside Restaurant

SATURDAY 16.10.2021

Constitutive/Intrinsic Mechanisms I

Chair: Thomas Stamminger, Michael Weekes

08.30-09.00

Gramberg, Thomas (*University of Erlangen-Nürnberg*)

New tricks for old dogs – the intrinsic immune factors SAMHD1 and TRIM5alpha

09.00-09.15

Johan Ringlander¹, Joshua Fingal¹, Hanna Kann², Kasthuri Prakash¹, Gustaf Rydell¹, Maria Andersson¹, Anna Martner¹, Magnus Lindh¹, Peter Horal¹, Kristoffer Hellstrand^{1*} and Michael Kann¹

¹Department of Infectious Diseases, Institute of Biomedicine at the Sahlgrenska Academy, University of Gothenburg, Gothenburg, Sweden

²Department of Microbiology and Immunology, Institute of Biomedicine, University of Gothenburg, Sweden

ADAR-induced editing of RNA may impact replication and transmission of SARS-CoV-2

09.15-09.30

Paola Quaranta^{a,b}, Carmen Piazza^{a,c}, Giulia Lottini^{a,c}, Cristina Di Primio^b, Annalaura Brai^d, Pietro Giorgio Spezia^a, Michele Lai^a, Giulia Freer^a, Mauro Pistello^{a,e}

^aRetrovirus Centre, Department of Translational Research, University of Pisa, Pisa, Italy

^bIstituto di Neuroscienze IN-CNR, Pisa, Italy

^cDepartment of Medical Biotechnologies, University of Siena, Siena, Italy

	<p>^dDepartment of Biotechnology, Chemistry & Pharmacy, University of Siena, Siena, Italy ^eVirology Operative Unit, Pisa University Hospital, Pisa, Italy</p> <p>The role of human DDX3 helicase in HSV2 and CHIKV infections</p>
09.30-09.45	<p>Giulia Lottini^{1,3}, Giulia Chesì¹, Matteo Baggiani², Eleonora Landi¹, Paola Quaranta¹, Michele Lai¹, Laura Pancrazi³, Marco Onorati², Mauro Pistello¹ Mario Costa^{4,5}, Giulia Freer¹</p> <p>¹Centro Retrovirus, Department of Translational Research, University of Pisa, Pisa, 56124, Italy. ²Unit of Cell and Developmental Biology, Department of Biology, University of Pisa, Pisa, 56124, Italy. ³Department of Medical Biotechnologies, University of Siena, Siena, 53100, Italy. ⁴Institute of Neuroscience, Italian National Research Council (CNR), Via Moruzzi, 1, Pisa, 56124, Italy ⁵Laboratory of Biology "Bio@SNS", Scuola Normale Superiore, Piazza dei Cavalieri, Pisa, 56124, Italy</p> <p>Zika virus induces FOXG1 nuclear displacement in human neural progenitors</p>
BREAK	
Constitutive/Intrinsic Mechanisms II	
Chair: Frank Kirchhoff, Michael Kann	
10.15-10.45	<p>Sander, Leif-Erik (<i>Charite Universitätsmedizin, Berlin, Germany</i>) - VIRTUAL Myeloid cell responses in severe COVID-19</p>
10.45-11.15	<p>Stamminger, Thomas (<i>Ulm University Medical Center, Ulm, Germany</i>) Cytomegalovirus IE1 as an antagonist of PML-NB mediated intrinsic immunity</p>
11.15-11.30	<p>Brigitte Scholz, Doris Jungnickl, Anna Großkopf¹, Alexander S. Hahn¹, Florian Full², Alexandra Herrmann, Armin Ensser</p> <p>Institute of Clinical and Molecular Virology, Friedrich Alexander Universität Erlangen-Nürnberg, Erlangen, ¹Deutsches Primatenzentrum, Nachwuchsgruppe Herpesviren, Göttingen; ²Institute for Virology, University Hospital Freiburg; all in Germany</p> <p>Gammaherpesviral tegument proteins sequester SMC proteins and inhibit the DNA damage response</p>
11.30-11.45	<p>Justine Lagisquet, Bianca Volkmann, Sabine Wittmann, Hannah Weissinger, Mattes Zikownia and Thomas Gramberg</p> <p>Institute of Clinical and Molecular Virology, Friedrich-Alexander-University, Erlangen, Germany</p> <p>First in LINE: the role of TRIM5α variant H43Y</p>
11.45-12.00	<p>Janina Deutschmann, Florian Simon, and Thomas Gramberg</p> <p>Institute of Clinical and Molecular Virology, Friedrich-Alexander-University, Erlangen, Germany</p> <p>HCMV coinfection downregulates SAMHD1-mediated restriction of HIV</p>

Innate Immune Mechanisms I	
Chair: Gabriella Campadelli-Fiume, Stefan Kochanek	
12.00-12.30	<p>Haller, Otto (<i>University of Freiburg, Freiburg, Germany, and Department of Molecular Life Sciences, University of Zurich, Zurich, Switzerland</i>) Innate immunity: Host gene control of influenza virus infection and trans-species transmission</p>
12.30-12.45	<p>Lennart Koepke^{1*}, Maximilian Hirschenberger^{1*}, Manuel Hayn^{1*}, Matthias Thoms², Robert Buschauer², Michael Ameismeier², Rayhane Nchioua¹, Daniel Sauter³, Kei Sato⁴, Frank Kirchhoff¹, Roland Beckmann² and Konstantin Sparrer¹</p> <p>¹Institute of Molecular Virology, Ulm University Medical Center, Ulm ²Gene Center Munich, Department of Biochemistry, University of Munich, Munich, German ³Institute for Medical Virology and Epidemiology of Viral Diseases, University Hospital Tübingen, Tübingen, Germany ⁴Institute of Medical Science, The University of Tokyo, Tokyo, Japan</p>

	<p>Manipulation of innate immunity by SARS-CoV-2 proteins</p>
12.45-13.00	<p>Isabel Pagani¹, Matteo Stravalaci², Daniela Cesana¹, Pierangela Gallina¹, Nicoletta Pedemonte³, Valeria Capurro³ Nicola Clementi¹, Nicasio Mancini¹, Barbara Bottazzi², Alberto Mantovani², Elisa Vicenzi¹ and Cecilia Garlanda²</p> <p>¹San Raffaele Scientific Institute – IRCCS, Milan, Italy ²Humanitas Clinical and Research Center – IRCCS, Milan, Italy ³Giannina Gaslini Institute – IRCCS, Genova, Italy</p> <p>Inhibition of SARS-CoV-2 infection by humoral innate immunity pattern recognition molecules</p>
<p>LUNCH BREAK (Meeting of the ESV EC/AB)</p>	
<p>Innate Immune Mechanisms II Chair: Otto Haller, Thomas Gramberg</p>	
14.30-15.00	<p>Kirchhoff, Frank (<i>Ulm University Medical Center, Ulm, Germany</i>) IFITM proteins are important cofactors of genuine SARS-CoV-2 infection</p>
15.00-15.30	<p>Weekes, Michael (<i>Cambridge Institute for Medical Research, Cambridge, UK</i>) New proteomic approaches to characterize and quantify antiviral immunity</p>
15.30-15.45	<p>Timmy Richardo^{1,2}, Xiaokun Liu⁵, Anna Buch¹, Madeleine de le Roi⁴, Anja Pohlmann^{1,2,3}, Anne Binz^{1,2,3}, Wolfgang Baumgärtner⁴, Reinhold Förster^{2,5}, Rudolf Bauerfeind⁶, Stefan Lienenklaus⁷, Stephan Halle^{*2,5}, Beate Sodeik^{*1,2,3}</p> <p>¹Institute of Virology, Hannover Medical School, 30625 Hannover, Germany ²Cluster of Excellence RESIST (EXC 2155), Hannover Medical School, 30625 Hannover, Germany ³DZIF-German Center for Infection Research, Hannover, Germany ⁴Department of Pathology, University of Veterinary Medicine Hannover, 30559 Hannover, Germany ⁵Institute of Immunology, Hannover Medical School, 30625 Hannover, Germany ⁶Research Core Unit Laser Microscopy, Hannover Medical School, 30625 Hannover, Germany ⁷Institute for Laboratory Animal Science, Hannover Medical School, 30625 Hannover, Germany</p> <p>The deubiquitinase activity of the essential large inner tegument protein pUL36 of herpes simplex virus undermines the innate immune response during skin infection</p>
15.45-16.00	<p>Yongkun Chen^{1†}, Laura Graf^{2,3†}, Tao Chen^{4†}, Qijun Liao^{1†}, Tian Bai⁴, Philipp P. Petric^{2,3,6}, Wenfei Zhu⁴, Lei Yang⁴, Jie Dong⁴, Jian Lu⁴, Ying Chen⁵, Juan Shen⁵, Otto Haller^{2,3,7}, Peter Staeheli^{2,3}, Georg Kochs^{2,3}, Dayan Wang^{4*}, Martin Schwemmle^{2,3*} and Yuelong Shu^{1,4*}</p> <p>¹School of Public Health (Shenzhen), Sun Yat-sen University, Shenzhen, China ²Institute of Virology, Medical Center - University of Freiburg, Freiburg, Germany ³Faculty of Medicine, University of Freiburg, Freiburg, Germany. ⁴Chinese National Influenza Center, National Institute for Viral Disease Control and Prevention, Chinese Center for Disease Control and Prevention, Beijing, China ⁵BGI-Shenzhen, Shenzhen, China ⁶Spemann Graduate School of Biology and Medicine, University of Freiburg, Freiburg, Germany</p> <p>Rare variants of the <i>MX1</i> gene increase human susceptibility to zoonotic H7N9 influenza A virus infections</p>
16.00-16.15	<p>Giulia Unali^{1,2}, Isabel Pagani¹, Giacomo Butta³, Giovanni Crivicich¹, Lorena Donnici³, Anna Maria Sole Giordano¹, Ivan Cuccovillo¹, Raffaele De Francesco³, Carolina Petrillo¹, Lara Manganaro³, Elisa Vicenzi¹, Anna Kajaste-Rudnitski¹</p> <p>¹San Raffaele Telethon Institute for Gene therapy (SR-TIGET), IRCCS Ospedale San Raffaele, Milan, Italy ²Vita-Salute San Raffaele University, Milan, Italy ³INGM, Istituto Nazionale Genetica Molecolare "Romeo ed Enrica Invernizzi", Milan, Italy</p>

	Distinct molecular mechanisms govern IFITM antiviral activity depending on cellular localization
16.15-16.30	Erika Valeri ^{1,2} , Francesco Piras ¹ , Ivan Cuccovillo ¹ , Anna Kajaste-Rudnitski ¹ ¹ San Raffaele Telethon Institute for Gene Therapy, IRCCS San Raffaele Hospital, Milan, Italy ² Vita-Salute San Raffaele University, IRCCS San Raffaele Hospital, Milan, Italy Retroviral cores trigger TBK1-mediated antiviral immunity through a cryptic sensor in human hematopoietic stem cells and primary macrophages
BREAK	
Immune Response and Vaccines I	
Chair: Thomas Mertens, Bart Haagmans	
17.00-17.30	Openshaw, Peter (<i>Imperial College London, London, UK</i>) Protective and inflammatory immunity to COVID-19
17.30-18.00	Moorlag, Simone (<i>Radboud University Medical Centre, Nijmegen, The Netherlands</i>) Trained immunity and its protective effects against viral infections: a tool to combat the COVID-19 outbreak?
18.00-18.15	Huttunen Moona ¹ , Kolehmainen Pekka ¹ , Jalkanen Pinja ¹ , Melen Krister ² , Kakkola Laura ¹ , and Julkunen Ilkka ¹ ¹ Institute of Biomedicine, University of Turku, Finland ² Finnish Institute for Health and Welfare, Helsinki, Finland The effect of repeated immunizations with coronavirus proteins on immunity and cross-reactivity within the human coronavirus family members
18.15-18.30	Dennis Lapuente ¹ , Jana Fuchs ¹ , Jonas Willar ¹ , Ana V Antão ¹ , Valentina Eberlein ^{2,3} , Nadja Uhlig ^{2,3} , Leila Issmail ^{2,3} , Anna Schmidt ¹ , Friederike Oltmanns ¹ , Antonia Sophia Peter ¹ , Sandra Mueller-Schmucker ¹ , Pascal Irrgang ¹ , Kirsten Fraedrich ¹ , Andrea Cara ⁴ , Markus Hoffmann ^{5,6} , Stefan Pöhlmann ^{5,6} , Armin Ensser ¹ , Cordula Pertl ⁷ , Torsten Willert ⁷ , Christian Thirion ⁷ , Thomas Grunwald ^{2,3} , Klaus Überla ¹ , Matthias Tenbusch ¹ ¹ Institute of Clinical and Molecular Virology, University Hospital Erlangen, Friedrich-Alexander University Erlangen-Nürnberg, Erlangen, Germany ² Department of Immunology, Fraunhofer Institute for Cell Therapy and Immunology, IZI, Leipzig, Germany ³ Fraunhofer Cluster of Excellence Immune-mediated Diseases CIMD, Frankfurt am Main, Germany ⁴ National Center for Global Health, Istituto Superiore di Sanità, Rome, Italy ⁵ Infection Biology Unit, German Primate Center-Leibniz Institute for Primate Research, Göttingen, Germany ⁶ Faculty of Biology and Psychology, Georg-August-University Göttingen, Wilhelmsplatz 1, 37073 Göttingen, Germany ⁷ Sirion Biotech, Martinsried, Germany Protective mucosal immunity against SARS-CoV-2 after heterologous systemic RNA-mucosal adenoviral vector immunization
18.30-18.45	Allibardi, Sonia (<i>Corporate Marketing Director Respiratory Diseases - DiaSorin S.p.A., Saluggia, Italy</i>) Anti-SARS-CoV-2 Antibodies Testing in Immunocompromised Recipients of COVID-19 Vaccination
Commemoration of Bernhard Fleckenstein	
Chair: Gabriella Campadelli-Fiume	
Thomas Stamminger and Otto Haller	
20:00	Dinner at outside Restaurant

SUNDAY 17.10.2021	
Immune response and vaccines II	
Chair: Peter Openshaw, Stipan Jonjic	
08.00-08.30	Baldanti, Fausto (<i>Department of Clinical, Surgical, Diagnostics and Pediatric Sciences, and Italy Molecular Virology Unit, Fondazione IRCCS Policlinico San Matteo, 27100 Pavia, Italy</i>) B- and T-cell response to SARS-CoV-2 antigens in naturally infected subjects and vaccinated individuals
08.30-09.00	Kochanek, Stefan (<i>Ulm University Medical Center, Ulm, Germany</i>) A detective's look at vectored SARS-CoV-2 vaccines and how to deal with the findings
09.00-09.15	Andrea Lombardi ^{1,2,3*} , Giacomo M. Butta ^{4,5*} , Lorena Donnici ⁴ , Giorgio Bozzi ¹ , Massimo Oggioni ⁶ , Patrizia Bono ⁶ , Malvina Matera ¹ , Dario Consonni ⁶ , Serena Ludovisi ¹ , Antonio Muscatello ¹ , Ferruccio Ceriotti ⁶ , Matteo Conti ⁴ , Susanna Scaglioni ⁵ , Greta Gallo ⁵ , Edoardo Scarpa ^{4,8} , Sergio Abrignani ⁴ , Renata Grifantini ⁴ , Raffaele De Francesco ^{4,5} , Andrea Gori ^{1,2,3} , Lara Manganaro ^{1,4,5§} and Alessandra Bandera ^{1,2} . ¹ Infectious Diseases Unit, Foundation IRCCS Ca' Granda Ospedale Maggiore Policlinico, Milan, Italy ² Department of Pathophysiology and Transplantation, University of Milan, Milan, Italy ³ Centre for Multidisciplinary Research in Health Science (MACH), University of Milan, Milan, Italy ⁴ INGM, National Institute of Molecular Genetics, Romeo ed Enrica Invernizzi, Milan, Italy ⁵ Department of Pharmacological and Biomolecular Sciences, University of Milan, Milan, Italy ⁶ Clinical Laboratory, Foundation IRCCS Ca' Granda Ospedale Maggiore Policlinico, Milan, Italy ⁷ Epidemiology Unit, Foundation IRCCS Ca' Granda Ospedale Maggiore Policlinico, Milan, Italy ⁸ Department of Pharmaceuticals Sciences, University of Milan, Milan, Italy Anti-spike antibodies and neutralising antibody activity in People Living With HIV vaccinated with COVID-19 mRNA-1273 vaccine: a prospective cohort study
09.15-09.30	Jana Fuchs ¹ , Julian Hübner ¹ , Anna Schmidt ¹ , Dennis Lapuente ¹ , Pascal Irrgang ¹ , Ana Antao ¹ , Christian Thirion ² , Matthias Tenbusch ¹ ¹ Institute of Clinical and Molecular Virology, University Hospital Erlangen, Friedrich-Alexander University Erlangen-Nürnberg, Germany ² Sirion Biotech, Am Klopferspitz 19, 82152 Martinsried, Germany A systemic prime followed by a mucosal boost immunization prevent RSV vaccine enhanced respiratory disease
BREAK	

Viral Variants and Immune Escape	
Chair: Simone Moorlag, Dana Wolf	
10.00-10.30	Sigal, Alex (<i>Nelson Mandela School of Medicine, Durban, South Africa</i>) - VIRTUAL Moving targets: interactions of HIV co-infection and SARS-CoV-2 variants of concern
10.30-10.45	Tamara Kaleta ^{1#} , Lisa Kern ^{1#} , Martin Hölzer ² , Georg Kochs ¹ , Julius Beer ¹ , Daniel Schnepf ¹ , Philipp Kolb ¹ , Magdalena Huber ¹ , Svenja Ulferts ³ , Sebastian Weigang ¹ , Alice Wittig ^{4,5} , Lena Jaki ¹ , Stefan Kröger ⁶ , Sébastien Calvignac-Spencer ⁷ , Marcus Panning ^{1*} , Jonas Fuchs ^{1*}

	<p>¹Institute of Virology, Freiburg University Medical Center, Faculty of Medicine, University of Freiburg, Freiburg, Germany</p> <p>²Methodology and Research Infrastructure, Bioinformatics, Robert Koch Institute, Berlin</p> <p>³Institute of Experimental and Clinical Pharmacology and Toxicology, Freiburg University Medical Center, Faculty of Medicine, University of Freiburg, Freiburg, Germany</p> <p>⁴Hasso-Plattner-Institut, Campus Griebnitzsee, Universität Potsdam, Potsdam</p> <p>⁵Hasso Plattner Institute, Digital Engineering Faculty, University of Potsdam, 14482 Potsdam, Germany</p> <p>⁶Infectious Disease Epidemiology, Robert Koch Institute, 13353 Berlin, Germany</p> <p>⁷Epidemiology of Highly Pathogenic Microorganisms, Robert Koch Institute, 13353 Berlin, Germany</p> <p>Antibody escape and global spread of SARS-CoV-2 lineage A.27</p>
10.45-11.00	<p>Samuel Osanyinlusi¹, Roland Jacobs², Eva Mischak Weissinger^{3,4}, Thomas F. Schulz^{1,3}, Penelope C. Kay-Fedorov^{1,3}</p> <p>¹Institute of Virology, Hannover Medical School, Hannover, Germany</p> <p>²Department of Clinical Immunology and Rheumatology, Hannover Medical School, Hannover, Germany</p> <p>³German Center for Infection Research (DZIF, TTU-IIICH), Hannover-Braunschweig Site, Hannover, Germany</p> <p>⁴Department of Hematology, Hemostasis, Oncology and Stem Cell Transplantation, Hannover Medical School, Hannover, Germany</p> <p>Human Cytomegalovirus glycoprotein pUL11 induces mTOR and c-Maf dependent T cell IL-10 secretion and reduces T cell control of virus spread in RPE</p>
BRUNCH	
12.00	Bus leaves for Bologna Airport

Supporter Recognition

The Organizers of the 8th European Seminar in Virology would like to express their sincere gratitude to the following sponsors for their financial support:



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