

19-21 September 2023

Makedonia Palace Hotel, Thessaloniki, Greece



International Conference on Crimean-Congo Hemorrhagic Fever

The conference is under the auspices of the Aristotle University of Thessaloniki

Tuesday, September 19, 2023

- 12.00-13.20 Registration, set-up of posters, lunch
- 13.20-13.30 Welcome to Thessaloniki and to the Conference Anna Papa

EPIDEMIOLOGY OF CCHF IN HUMANS

Chairpersons: Anna Papa, Gülay Korukluoğlu

13.00-13.30 EPIDEMIOLOGY OF CRIMEAN-CONGO HEMORRHAGIC FEVER IN AFRICA, ASIA, AND EUROPE

<u>Mohammad Fereidouni</u>¹, Jens H. Kuhn², David Pecor³, Maryam Keshtkar-Jahromi⁴

¹Jahrom University of Medical Sciences, Jahrom, Iran, ²Integrated Research Facility at Fort Detrick, Division of Clinical Research, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Fort Detrick, Frederick, USA, ³One Health Branch, Walter Reed Army Institute of Research, 503 Robert Grant Ave., Silver Spring, USA, ⁴Division of Infectious Diseases, Department of Medicine, Johns Hopkins University School of Medicine, Baltimore, USA

13.30-14.00 CCHF IN TURKEY

 Gülay Korukluoğlu
 University of Health Sciences, MoH, Ankara Bilkent City Hospital, Turkey

 14.00-14.30 EPIDEMIOLOGY OF CCHF IN INDIA DURING 2011-2023

 Pragya Yadav
 ICMR - National Institute of Virology, Pune, India

 14.30-15.00 CCHFV IN SPAIN

 Maria Paz Sanchez-Seco

Laboratorio de arbovirus y enfermedades víricas importadas, Centro Nacional de Microbiología, Instituto de Salud Carlos III, Ministerio de Ciencia, Innovación y Universidades, Spain

15.00-15.15 CCHF IN ΑΛΒΑΝΙΑ

Majlinda Kota¹, Eugena Tomini¹, Enkelejda Velo¹, Elona Kureta¹, Perparim Kadriaj¹, Najada Como², Anna Papa³, <u>Silvia Bino¹</u>



¹Institute of Public Health, Tirana, Albania, ²Infectious Diseases Service, Tirana University Medical Centre, Tirana, Albania, ³Department of Microbiology, Medical School, Aristotle University of Thessaloniki, Greece

15.15-15.30 CCHF IN PAKISTAN Bushra Jamil Aga Khan University, Karachi, Pakistan

- 15.30-15.45 INCIDENCE OF CRIMEAN-CONGO HEMORRHAGIC FEVER IN AN ENDEMIC REGION (SIVAS) AND FACTORS AFFECTING PROGNOSIS IN 2012-2022: A RETROSPECTIVE COHORT STUDY Esma KILIÇ, Nagehan EKİCİ KOŞAROĞLU, Başak Gül YÖRÜK, Emir Külal ÖZGÖZ, İrem AKOVA, <u>İlhan ÇETİN</u> Sivas Provincial Health Directorate, ²Sivas Cumhuriyet University
- 15.45-16.00 PHYLOGENY AND TAXONOMY OF AIGAI VIRUS IN THE CONTEXT OF CCHFV Sofia Paraskevopoulou

Genome Competence Center (MF1), Robert Koch Institute, Berlin, Germany

16.00-16.30 Coffee break and poster viewing

CCHFV IN TICKS

Chairpersons: Agustín Estrada-Peña, Roger Hewson

16.30-17.00 FROM VECTOR COMPETENCE TO VECTORIAL CAPACITY: WHAT PUZZLE PIECES ARE MISSING?

Dennis Bente

Galveston National Laboratory, Institute for Human Infection and Immunity, Department of Microbiology & Immunology, University of Texas Medical Branch, Galveston, TX, USA

17.00-17.30 THE ROLE OF TICKS IN THE MAINTENANCE AND TRANSMISSION OF CCHFV

Agustín Estrada-Peña

Faculty of Veterinary Medicine, Department of Animal Health, University of Zaragoza, Spain

17.30-18.00 CCHFV PREVALANCE IN TICKS IN AN HYPERENDEMIC AREA OF TURKEY Zati Vatansever Kafkas University, Faculty of Veterinary Medicine, Department of Parasitology, Kars, Turkey

18.00-18.45 **OPENING CEREMONY**

Chairpersons: Anna Papa, Dimitris Chatzidimitriou, Georgia Gioula

Prof. D. Koveos, Rector of Aristotle University of Thessaloniki Prof. Th. Dardavesis, Dean of the Faculty of Health Sciences Prof. K. Anastasiadis, Head of the Medical School Medical Association of Thessaloniki

SOCIAL LECTURE

19.00 RECEPTION (buffet at Makedonia Palace hotel)



Wednesday, September 20, 2023

WILD AND DOMESTIC ANIMAL HOSTS

Chairpersons: Martin Groschup, Jessica Spengler

08.45-09.15 ORTHONAIROVIRUSES IN ANIMALS: CCHFV AND BEYOND Martin Groschup Institute of Novel and Emerging Infectious Diseases Friedrich-Loeffler-Institut, Federal Research Institute for Animal Health, Greifswald - Insel Riems, Germany

09.15-09.30 SEROEPIDEMIOLOGICAL STUDIES OF CCHFV IN WILDLIFE IN EASTERN SPAIN MEDITERRANEAN ECOREGION

Laura Carrera-Faja¹, Dr. Sebastian Napp², Dr. Oscar Cabezón¹, Mrs. Lola Pailler-García², Dr. Johan Espunyes¹

¹Wildlife Conservation Medicine Research Group (WildCoM), Departament de Medicina i Cirurgia Animals, Universitat Autònoma de Barcelona, 08193 Cerdanyola del Vallès, Spain, ²IRTA, Centre de Recerca en Sanitat Animal (CReSA, IRTA-UAB), Campus de la Universitat Autònoma de Barcelona, 08193 Cerdanyola del Vallès, Spain

09.30-09.45 WIDESPREAD SEROPOSITIVITY TO CCHFV IN DROMEDARIES (CAMELUS DROMEDARIUS) FROM DESERTIC REGIONS (ALGERIA)

> <u>Khaled Azzeddine Guidoum</u>¹, Ms Laura Carrera-Faja², Johan Espunyes², Lola Pailler-García³, Bouabdellah Benallou¹, Sarra Bouabdelli¹, Mustapha Adnane Smadi⁴, Lounis Semara⁵, Oscar Cabezón², Sebastian Napp³

> ¹Farm Animal Reproduction Laboratory, Veterinary Institute, Ibn Khaldoun University, BP P78 Zaaroura, 14000, Tiaret, Algeria, ²Wildlife Conservation Medicine Research Group (WildCoM), Departament de Medicina i Cirurgia Animals, Universitat Autònoma de Barcelona, Spain, ³Unitat mixta d'Investigació IRTA-UAB en Sanitat Animal. Centre de Recerca en Sanitat Animal. IRTA. Programa de Sanitat Animal. Centre de Recerca en Sanitat Animal. Campus de la Universitat Autònoma de Barcelona, Spain, ⁴Biotechnology Research Center. C.R.Bt. Ali Mendjeli, new city UV03, BP E73, 25016 Constantine, Algeria ⁵Department of agricultural sciences, Faculty of natural and life and earth and universe sciences, University Bordj Bou Arreridj, 34030 Bordj Bou Arreridj, Algeria

09.45-10.00 FIRST DETECTION OF ANTIBODIES AGAINST CCHFV IN CATTLE AND WILD UNGULATES FROM SOUTHERN CONTINENTAL FRANCE

Célia Bernard^{1,2,3}, Andréa Apolloni^{1,2}, Armelle Peyrault^{1,2}, Phonsiri Saengram^{1,2}, Ferran Jori^{1,2}, Philippe Holzmuller^{1,2}, Benoit Combes³, Matthieu Bastien³, Raphaëlle Pin⁷, Nicolas Keck⁶, Olivier Ferraris⁴, Loic Comte⁵, Laurence Vial^{1,2}

¹CIRAD, UMR ASTRE, Montpellier, France, ²ASTRE, Univ Montpellier, CIRAD, INRAE, France, ³ELIZ, Nancy, France, ⁴Institut de Recherche Biomédicale des Armées, France, ⁵ID.Vet, Montpellier, France, ⁶Department Veterinary Laboratory of Hérault, Montpellier, France, ⁷Department Veterinary Laboratory of Alpes-Maritimes, Nice, France

10.00-10.30 Coffee break and poster viewing



MOLECULAR VIROLOGY

Chairpersons Ali Mirazimi, Dennis Bente

10.30-11.00 NEW ADVANCED TECHNOLOGIES TO INVESTIGATE VIRUS- HOST CELL INTERACTION

Ali Mirazimi

National Veterinary Institute, Uppsala, Sweden; Clinical Microbiology, LABMED, Karolinska Institute, Sweden

11.00-11.30 DEEP DIVE INTO CCHFV GLYCOPROTEINS STRUCTURE AND FUNCTIONS

Eric Bergeron

Viral Special Pathogens Branch, Division of High-Consequence Pathogens and Pathology, Centers for Disease Control and Prevention, Atlanta, GA, United States

11.30-11.45 ADAPTATION AND GENETIC VARIATIONS OF THE CCHFV RESULTED BY IN VITRO SERIAL PASSAGING ON DIFFERENT CELL LINES Nora Deezsi-Magyar, Gyula Zsidei, Bereniké Novák, Lili Kovanecz-Jármi, Dániel Déri, Bernadett Pályi, Zoltán Kis

¹National Public Health Center Hungary, Budapest, Hungary

- 11.45-12.00 REVERSE GENETICS SYSTEM GIVES INSIGHTS IN CCHF VIRUS LIKE PARTICLE FORMATION AND STRAIN SPECIFICITIES <u>Stephanie Devignot</u>¹, Friedemann Weber², Ali Mirazimi^{1,3} ¹Karolinska Institutet, Stockholm, Sweden, ²Justus-Liebig University, Institute for Virology, Giessen, Germany, ³Public Health Agency of Sweden, Sweden
- 12.00-13.45 Lunch

General Assembly of IS-CCHF

13.45-14.45 Update, Elections, next meeting

PATHOGENESIS AND ANIMAL MODELS

Chairpersons: Christina Spiropoulou, Heinz Feldmann

- 14.45-15.15 ANIMAL MODELS FOR CCHF HUMAN DISEASE

 Aura Garrison
 United States Army Medical Research Institute of Infectious Diseases, Fort
 Detrick, MD, United States

 15.15-15.45 MOUSE-ADAPTED CCHFV: INSIGHTS INTO HOST AND VIRAL
- 15.15-15.45 MOUSE-ADAPTED CCHEV: INSIGHTS INTO HOST AND VIRAL DETERMINANTS OF PATHOGENESIS David Hawman Rocky Mountain Laboratories NIAID/NIH Hamilton MT LISA

Rocky Mountain Laboratories, NIAID/NIH, Hamilton, MT, USA

15.45-16.00 CHARACTERIZING CCHFV INFECTION IN REPRODUCTIVE TISSUE USING MOUSE MODELS OF DISEASE

<u>Stephen R. Welch¹</u>, Teresa E. Sorvillo^{1,2}, Jana M. Ritter³, JoAnn D. Coleman-McCray¹, Katherine A. Davies¹, Scott D. Pegan⁴, Éric Bergeron¹, Christina F. Spiropoulou¹, Jessica R. Spengler¹



¹Viral Special Pathogens Branch, Centers for Disease Control and Prevention, Atlanta, ²Infectious Disease Department, CDC Foundation, Atlanta, ³Infectious Diseases Pathology Branch, Centers for Disease Control and Prevention, Atlanta, ⁴Division of Biomedical Sciences, University of California Riverside, Riverside, United States

16.00-16.15 CCHFV STRAIN-DEPENDENT PATHOGENESIS IN A TRANSIENTLY IMMUNOSUPRESSED MOUSE MODEL

<u>Teresa Sorvillo</u>^{1,2}, Stephen Welch¹, JoAnn Coleman¹, Katherine Davies¹, Jana Ritter³, Heather Hayes³, Scott Pegan⁴, Éric Bergeron¹, Christina Spiropoulou¹, Jessica Spengler¹

¹Viral Special Pathogens Branch, Centers for Disease Control and Prevention, Atlanta, United States, ²Infectious Diseases Department, CDC Foundation, Atlanta, United States, ³Infectious Diseases Pathology Branch, Centers for Disease Control and Prevention, Atlanta, United States, ⁴Division of Biomedical Sciences, University of California Riverside, Riverside, United States

16.15-16.30 CCHFV PERSISTS IN THE TESTES OF NONHUMAN PRIMATE SURVIVORS <u>Xiankun (kevin) Zeng</u>¹, Joseph Golden, Curtis Cline, Christopher Schellhase, Darci Smith, Aura Garrison ¹United States Army Medical Research Institute of Infectious Diseases, Fort

Detrick, Frederick, Maryland 21702, USA

16.30-16.45 IDENTIFICATION OF AN IMPORTANT FACTOR INVOLVED IN CCHFV INFECTION

<u>Vanessa Monteil</u>¹, Matheus Dyczynski^{2,3}, S.C. Wright¹, M.J. Kellner⁴, Sofia Appelberg⁵, S.W. Platzer⁴, Hyesoo Kwon⁶, Ioannis Pittarokoilis¹, Mattia Mirandola⁷, Georg Michlits³, Stéphanie Devignot¹, Elizabeth Elder⁶, Samir Abdurahman⁵, Sándor Bereczky⁵, Binnur Bagci⁸, Sonia Youhanna¹, V.M. Lauschke^{1,9,10}, Cristiano Salata⁷, Nazif Elaldi⁸, Friedemann Weber¹¹, Nuria Montserrat^{12,13}, Moritz Horn^{2,3}, J.M. Penninger^{4,14}, Ali Mirazimi^{1,5,6}

¹Karolinska Institutet, Solna, Sweden, ²Acus Laboratories GmbH, Cologne, Germany, ³JLP Health GmbH, Vienna, Austria, ⁴Institute of Molecular Biotechnology of the Austrian Academy of Science, Vienna, Austria, ⁵Public Health Agency of Sweden, Solna, Sweden, ⁶National Veterinary Institute, Uppsala, Sweden, ⁷University of Padova, Padova, Italy, ⁸Sivas Cumhuriyet University, Sivas, Turkey, ⁹University Tübingen, Tübingen, Turkey, ¹⁰Dr. Margarete Fischer-Bosch Institute of Clinical Pharmacology, Stuttgart, Germany, ¹¹Justus-Liebig University, Gießen, Germany, ¹²Institute for Bioengineering of Catalonia , Barcelona, Spain, ¹³Catalan Institution for Research and Advanced Studies, Barcelona, Spain, ¹⁴University of British Columbia, Vancouver, Canada

16.45-17.00 ERINHA'S CONTRIBUTION TO RESEARCH INTO CCHFV AND OTHER HIGH-CONSEQUENCE PATHOGENS

Diana STEPANYAN

Director of External Affairs, European Research Infrastructure on Highly Pathogenic Agents

17.00-17.30 Coffee break and poster viewing



CLINICAL ASPECTS AND DIAGNOSTICS

Chairpersons: Tim Brooks, Felicity Burt

17.30-18.00 CLINICAL COURSE OF CCHF

Nazif Elaldi

Department of Infectious Diseases and Clinical Microbiology, Sivas Cumhuriyet University Faculty of Medicine, Sivas, Turkey

18.00-18.30 DIAGNOSTICS ON CCHFV Felicity Burt Division of Virology, Faculty of Health Sciences, University of the Free State, South Africa

18.30-18.45 CHALLENGES IN SEROLOGICAL DIAGNOSTICS OF CCHFV Kerstin Fischer, Martin Groschup Institute of Novel and Emerging Infectious Diseases Friedrich-Loeffler-Institut, Federal Research Institute for Animal Health, Greifswald - Insel Riems, Germany

18.45-19.00 COMPARISON OF THE CEPHEID OPENACCESS FLEX04 CARTRIDGE WITH COMMERCIAL ASSAYS DURING SEASONAL EPIDEMIC IN SIVAS, TURKEY

Samir Abdurahman¹, Mr Pierre Combe², Nazif Elaldi³, Binnur Bagci⁴, Ayse Nur Pektas⁵, Laurence Thirion², Bruno Bombarde⁶, Philippe Planchon⁶, Ali Mirazimi^{1,7}

¹Public Health Agency Of Sweden, Solna, Sweden, ²Unité des Virus Emergents (Aix Marseille Univ, IRD 190, INSERM U1207), Marseille, France, ³Department of Infectious Diseases and Clinical Microbiology, Medical Faculty, Sivas Cumhuriyet University, Sivas, Turkey, ⁴Department of Nutrition and Dietetics, Faculty of Health Sciences, Sivas Cumhuriyet University, Turkey, ⁵Cumhuriyet University Advanced Technology Application and Research Center (CUTAM), Sivas Cumhuriyet University, Turkey, ⁶Cepheid Europe, Maurens-Scopont, France, ⁷Division of Clinical Microbiology, Department of Laboratory Medicine, Karolinska Institute, ANA Futura, Campus Flemingsberg, Sweden

20.30 Gala dinner with music



Thursday, September 21, 2023

IMMUNE RESPONSE - THERAPEUTICS

Chairpersons: Aura Garrison, David Hawman

- 08.30-09.00 CHARACTERISTICS OF IDEAL THERAPEUTICS FOR CCHF Sina Bavari Tonix Pharmaceuticals, Frederick, MD, USA
- 09.00-09.15 THE HUMAN IMMUNE RESPONSE TO CCHF: A LONGITUDINAL STUDY <u>Emma Kennedy</u>, Stuart Dowall, Nazif Elaldi, Roger Hewson UKHSA, Salisbury, United Kingdom
- 09.15-09.30 COMPARATIVE ANALYSES OF CELLULAR IMMUNE RESPONSES TO NUCLEOPROTEINS OF CCHFV AND HAZARA VIRUS

<u>Merve Kalkan-Yazıcı</u>¹, Nesibe Selma Güler-Çetin^{1,3}, Elif Karaaslan^{2,4}, Mehmet Ziya Doymaz^{1,3}

¹Beykoz Institute of Life Sciences and Biotechnology, Bezmialem Vakıf University, Istanbul, Turkey, ²Viral Special Pathogens Branch, Division of High-Consequence Pathogens and Pathology, Centers for Disease Control and Prevention, Atlanta, USA, ³Department of Medical Microbiology, Faculty of Medicine, Bezmialem Vakıf University, Istanbul, Turkey, ⁴Division of Biomedical Sciences, University of California Riverside, Riverside, USA

09.30-09.45 CHARACTERIZATION OF VIRAL GLYCOPROTEIN GP38-DIRECTED ANTIBODIES ELICITED FROM NATURAL INFECTION WITH CCHFV Christy Hjorth¹, Olivia Shin², Stephanie Monticelli^{3,4}, Vladlena Hornet², Michael Doyle², Dafna Abelson⁵, Ana Kuehne³, Albert Wang⁶, Russell Bakken³, Akaash Mishra¹, Marissa Middlecamp⁵, Elizabeth Champney², Lauran Stuart⁵, Jiannan Li², Jacob Berrigan⁶, Jennifer Barajas⁵, Julius Lutwama⁷, Leslie Lobel⁸, Larry Zeitlin⁵, Laura Walker², John Dye³, Kartik Chandran⁶, Andrew Herbert³, Noel Pauli², Jason McLellan¹ ¹Department of Molecular Biosciences, The University of Texas at Austin,

⁴Department of Molecular Biosciences, The University of Texas at Austin, Austin, United States, ²Adimab, LLC, Lebanon, United States, ³U.S. Army Medical Research Institute of Infectious Diseases, Fort Detrick, United States, ⁴Geneva Foundation, Tacoma, United States, ⁵Mapp Biopharmaceutical, Inc., San Diego, United States, ⁶Department of Microbiology and Immunology, Albert Einstein College of Medicine, Bronx, United States, ⁷Uganda Virus Research Institute, Entebbe, Uganda, ⁸Department of Microbiology, Immunology and Genetics, Faculty of Health Sciences, Ben-Gurion University of the Negev, Beer-Sheva, Israel

09.45-10.00 NUCLEOCAPSID-TARGETING MONOCLONAL ANTIBODIES PROTECT MICE AGAINST CCHFV

<u>Joseph Golden</u>¹, Vanessa Moresco², Xiankun Zeng¹, Curtis Cline¹, Michael Ward¹, Lisa Cazares¹, Elif Karaaslan³, Collin Fitzpatrick¹, Éric Bergeron³, Scott Pegan², Aura Garrison¹

¹USAMRIID, Ft. Detrick, United States, ²Division of Biomedical Sciences, University of California Riverside, Riverside, United States, ³Viral Special Pathogens Branch, CDC, Atlanta, United States



10.00-10.15 INVESTIGATING THE EFFECT OF RIBAVIRIN TREATMENT ON GENETIC MUTATIONS IN CRIMEAN-CONGO HAEMORRHAGIC FEVER VIRUS (CCHFV) THROUGH NEXT-GENERATION SEQUENCING

Jake D'Addiego^{1,2}, Nadina Wand¹, Nazif Elaldi³, Karen Osman¹, Binnur Bagci⁴, Emma Kennedy¹, Ayse Pektas⁵, Eilish Hart¹, Gillian Slack¹, Roger Hewson^{1,2}

¹UK Health Security Agency, Salisbury, United Kingdom, ²London School of Hygiene and Tropical Medicine, Faculty of Infectious and Tropical Diseases, London, United Kingdom, ³Sivas Cumhuriyet University, Faculty of Medicine, Department of Infectious Diseases and Clinical Microbiology, Sivas, Turkey, ⁴Sivas Cumhuriyet University, Faculty of Health Sciences, Department of Nutrition and Dietetics, Sivas, Turkey, ⁵Sivas Cumhuriyet University, Advanced Technology Application and Research Centre, Sivas, Turkey

10.15-10.30 FAVIPIRAVIR AND RIBAVIRIN PROTECT IMMUNOCOMPETENT MICE FROM LETHAL CCHFV INFECTION

<u>Thomas Tipih</u>¹, Ms Kimberly Meade-White¹, Dr Deepashri Rao¹, Mr Trenton Bushmaker¹, Dr Mathew Lewis¹, Dr Carl Shaia², Dr Heinz Feldmann¹, Dr David Hawman¹

¹Laboratory of Virology, Division of Intramural Research, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Rocky Mountain Laboratories, Hamilton, MT, USA, Hamilton, United States, ²Rocky Mountain Veterinary Branch, Division of Intramural Research, National Institutes of Allergy and Infectious Diseases, National Institutes of Health, Rocky Mountain Laboratories, Hamilton, MT, USA., Hamilton, United States

10.30-10.45 STRUCTURAL AND MECHANISTIC CHARACTERIZATION OF PROTECTIVE BROAD SPECTRUM NON-NEUTRALIZING ANTIBODIES TARGETING CCHF

<u>Scott Pegan</u>^{1,10}, Vanessa Moresco¹, Ian Durie², Elif Karaaslan^{1,3}, Jessica Spengler³, Teresa Sorvillo³, Joseph Golden⁴, Jack McGuire¹, Christina Spiropouluo³, Jarod Mousa⁵, Zahra Tehrani⁶, Iftihar Koksal⁷, Gürdal Yilmaz⁸, Hanife Karakoc⁹, Sanaz Hamidi⁸, Cansu Albay⁸, Aura Garrison⁴, Mohammad Sajadi⁶, Èric Bergeron^{2,3}

¹Division of Biomedical Sciences, University of California Riverside School Of Medicine, Riverside, United States, ²Pharmaceutical and Biomedical Sciences, University of Georgia, Athens, United States, ³Viral Special Pathogens Branch, Centers for Disease Control and Prevention, Atlanta, United States, ⁴Virology Division, United States Army Medical Research Institute of Infectious Diseases, Fort Detrick, United States, ⁵Department of Infectious Diseases, University of Georgia, Athens, United States, ⁶Division of Clinical Care and Research, University of Maryland School of Medicine, Baltimore, United States, ⁷Department of Infectious Disease and Clinical Microbiology, Acibadem University Atakent Hospital, Istanbul, Turkey, ⁸Department of Infectious Diseases, Karadeniz Technical University School of Medicine, Trabzon, Turkey, ⁹Department of Infectious Disease and Clinical Microbiology, Bitlis State Hospital, Tatvan, Turkey, ¹⁰Department of Chemistry & Life Science, United States Military Academy, West Point, United States

10.45-11.15 Coffee break and poster viewing



PREVENTION IN HUMANS

Chairpersons: Connie Schmaljohn, Matti Sällberg

11.15-11.45 DEVELOPMENT AND EVALUATION OF VIRAL REPLICON PARTICLE VACCINES FOR CCHFV

Jessica Spengler

Viral Special Pathogens Branch, Division of High-Consequence Pathogens and Pathology, Centers for Disease Control and Prevention, Atlanta, GA, USA

11.45-12.00 NUCLEOSIDE-MODIFIED mRNA VACCINES PROTECT IFNAR-/- MICE AGAINST CCHFV INFECTION

<u>Sofia Appelberg</u>¹, LiJo John², Norbert Pardi³, Ákos Végvárid⁴, Sándor Bereczky¹, Gustaf Ahlén⁵, Vanessa Monteil⁵, Samir Abdurahman¹, Flora Mikaeloff⁵, Mitchell Beattie⁶, Ying Tam⁶, Matti Sällberg⁵, Ujjwal Neogi⁵, Drew Weissman³, Ali Mirazimi¹

¹Public Health Agency of Sweden, Stockholm, Sweden, ²National Veterinary Institute, Uppsala, Sweden, ³Department of Medicine, Perelman School of Medicine, University of Pennsylvania, Philadelphia, USA, ⁴Division of Chemistry I, Department of Medical Biochemistry and Biophysics, Karolinska Institutet, Stockholm, Sweden, ⁵Division of Clinical Microbiology, Department of Laboratory Medicine, Karolinska Institutet, Stockholm, Sweden, ⁶Acuitas Therapeutics, Vancouver, Canada

12.00-12.15 OPTIMIZING A PROTECTIVE RNA VACCINATION AGAINST LETHAL CCHFV INFECTION IN MICE Shanna Leventhal¹ Kimberly Meade-White¹ Deepashri Bao¹ lesse

<u>Shanna Leventhal</u>¹, Kimberly Meade-White¹, Deepashri Rao¹, Jesse Erasmus², Heinz Feldmann¹, David Hawman¹

¹NIH, Hamilton, United States of America, ²HDT Bio, Seattle, USA

12.15-12.30 NUCLEOPROTEIN SUBUNIT VACCINE CONFERS COMPLETE PROTECTION AGAINST CRIMEAN CONGO HEMORRHAGIC FEVER VIRUS IN MICE

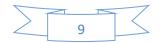
Elif Karaaslan^{1,2}, Teresa Sorvillo¹, Florine EM Scholte¹, Justin O'Neal¹, Stephen R Welch¹, Katherine Davies¹, JoAnn D Coleman-McCray¹, Jessica R Harmon¹, Scott D Pegan², Jessica R Spengler¹, Joel M Montgomery¹, Christina F. Spiropoulou¹, Éric Bergeron¹

¹Viral Special Pathogens Branch, Division of High-Consequence Pathogens and Pathology, National Center for Emerging and Zoonotic Infectious Diseases, Centers for Disease Control and Prevention, Atlanta, United States, ²Division of Biomedical Sciences, University of California, Riverside, Riverside, United States

12.30-12.45 VACCINATION WITH THE CCHFV VIRAL REPLICON VACCINE INDUCES NP-BASED T-CELL ACTIVATION AND ANTIBODIES POSSESSING FC-MEDIATED EFFECTOR FUNCTIONS

<u>Florine Scholte</u>¹, Elif Karaaslan¹, Justin O'Neal¹, Teresa Sorvillo¹, Sarah Genzer¹, Stephen Welch¹, Joann Coleman-McCray¹, Jessica Spengler¹, Markus Kainulainen¹, Joel Montgomery¹, Scott Pegan², Eric Bergeron¹, Christina Spiropoulou¹

¹Viral Special Pathogens Branch, Division of High-Consequence Pathogens & Pathology, Centers for Disease Control & Prevention, Atlanta, USA, ²Division of Biomedical Sciences, School of Medicine, University of California Riverside, Riverside, USA



12.45-13.00 THE ROAD TO A PHASE I CLINICAL TRIAL OF A DNA VACCINE AGAINST CCHF

<u>Matti Sällberg</u>¹, Gustaf Ahlen¹, Sofia Appelberg², Jingyi Yan¹, Friedemann Weber³, Drew Hawman⁴, Heinrich Feldmann⁴, and Ali Mirazimi²

¹Department of Laboratory Medicine, Karolinska Institutet, Sweden; ²Public Health Authority, Sweden; ³Justus Liebing University, Germany; ⁴NIH Rocky Mountain Laboratories, MO, USA

13.00-13.15 PREVENTION AND CONTROL OF CCHF IN HEALTH-CARE FACILITIES Helena Maltezou Directorate of Research, Studies and Documentation, National Public Health

Organization, Athens, Greece

WHO ACTIONS AGAINST CCHF

Chairpersons: Pierre Formenty

13.15-13.30 THE WHO RESEARCH & DEVELOPMENT BLUEPRINT ROADMAP FOR CCHF

Amanda Semper, Tim Brooks

Rare & Imported Pathogens Laboratory, UKHSA, Salisbury, United Kingdom 13.30-14.00 OPEN DISCUSSION OF FUTURE RESEARCH, PRIORITIES, NEEDS

(Snacks will be provided)

14.00 WRAP-UP

