

15th Vaccine Congress

Online live and on-demand

4–6 October 2021



Programme – Online and On-demand Central European Time

Monday 4th October 2021

12:00-12:15	Welcome and opening session <i>Chairs: Greg Poland and Paolo Bonanni</i>		
12:15-13:45	PLENARY SESSION 1 COVID Vaccines – Immunology, Vaccines and Epidemiology Chair: Ivan Hung		
12:15-12:45	KEY01 COVID-19 vaccine impact in different countries: what do the models tell us Mark Jit, LSHTM, UK		
12:45-13:15	KEY02 COVID-19: lessons learned and preparing for the future Mike Whelan, Coalition for Epidemic Preparedness Innovations, UK		
13:15-13:45	KEY03 Comparative immunogenicity, reactogenicity and effectiveness of mRNA and inactivated COVID-19 vaccines Ben Cowling, University of Hong Kong, Hong Kong		
13:45-14:15	Refreshment break		
14:15-15:45	BREAKOUT SESSION 1 Vaccines against Emerging Diseases – Current Progress <i>Chair: Ivan Hung</i>	BREAKOUT SESSION 2 Hot Topics <i>Chairs: Florian Krammer and Rick Kennedy</i>	BREAKOUT SESSION 3 Vaccines against Emerging and other Diseases – Current Progress <i>Chairs: Arthur Reingold and Danny Altmann</i>
14:15-14:45	[INV01] Novel Coronavirus 2019: A Review and Update <i>Greg Poland, Editor in Chief, Vaccine and Mayo Clinic, USA</i>	[INV02] Rapid Development of a SARS-CoV-2 Vaccine: Then and Now <i>Kizzmekia Corbett, Harvard T.H. Chan School of Public Health, USA</i>	[INV03] Safety and Long-Term Immunogenicity of a Chikungunya Virus-Like Particle Vaccine Sean Bennett ¹ , James M. McCarty ² , Roshan Ramanathan ¹ , Jason Mendy ³ , Lisa Bedell ³ , Emily Coates ⁴ , Grace Chen ⁵ , Chris Cabell ³ , Julie E. Ledgerwood ⁴ , <u>Kelly Warfield</u> ³ ¹ Formerly Emergent BioSolutions, Inc., USA. ² Stanford University, Stanford, CA, USA. ³ Emergent BioSolutions Inc, Gaithersburg, MD, USA. ⁴ Vaccine Research Center, Bethesda, MD, USA. ⁵ Formerly Vaccine Research Center, Bethesda, MD, USA
14:45-15:00	[O01.1] Development of a thermostable and easy to produce dual-target Ebola/yellow fever vaccine candidate <i>Viktor Lemmens¹, Lorena Sanchez-Felipe¹, Sarah Debaveye¹, Lara Kelchtermans¹, Robbert Boudewijns¹, Katrien Geerts¹,</i>	[O02.1] The replication-defective Sementis Copenhagen Vector encoding the SARS-CoV-2 spike glycoprotein induces broad and durable cellular and humoral immune responses after vaccination	[O03.1] Vaccine strategy for emerging diseases such as dengue and SARS-CoV-2 <i>Day-Yu Chao, National Chung-Hsing University, Taiwan</i>

	<p>Hendrik Jan Thibaut^{1,2}, Johan Neyts¹, Kai Dallmeier¹ ¹<i>KU Leuven, Belgium.</i> ²<i>TPVC, Belgium</i></p>	<p>Preethi Eldi¹, Natalie Prow¹, Tamara Cooper¹, Liang Liu², Gary Heinemann², Jamie Zhang¹, Leanne Hobbs³, Kerrilyn Diener¹, John Hayball^{1,3} ¹<i>University of South Australia, Australia.</i> ²<i>CSL Ltd, Australia.</i> ³<i>Sementis Ltd, Australia</i></p>	
14:00-15:15	<p>[O01.2] Feasibility of Pan-Filovirus Protection: Progress towards a single-vial thermostabilized recombinant subunit vaccine <u>Axel T Lehrer</u>¹, Teri Ann S Wong¹, Michael M Lieberman¹, Albert To¹, Oreola Donini², Kendall Preston³, Theodore W Randolph³, Thomas W Geisbert⁴ ¹<i>University of Hawaii, USA.</i> ²<i>Soligenix, Inc., USA.</i> ³<i>University of Colorado Boulder, USA.</i> ⁴<i>University of Texas Medical Branch, USA</i></p>	<p>[O02.2] Anti-SARS-CoV-2 antibody responses in the saliva following systemic COVID-19 Vaccination <u>Salma Sheikh-Mohamed</u>¹, Mahya Fazel², Alyson Takaoka³, Keelia Quinn de Launay³, Gary Chao¹, Alainna Jamal², Olga Rojas¹, Allison McGeer², Anne-Claude Gingras², Jennifer Gommerman¹ ¹<i>University of Toronto, Canada.</i> ²<i>Mount Sinai Hospital, Canada.</i> ³<i>St. Michael's Hospital, Canada</i></p>	<p>[O03.2] A chimeric yellow fever-Zika virus vaccine and a thermostable plasmid-launched version thereof protect macaques against Zika virus challenge <u>Mahadesh Prasad Arkalagud Javarappa</u>¹, Bert Melanier-Devlies², Babs E Verstrepen³, Ji Ma¹, Thomas Vercruysse⁴, Sapna Sharma¹, Ernst Verschoor³, Johan Neyts¹, Lotte Coelmont¹, Kai Dallmeier¹ ¹<i>KU Leuven, Rega Institute, Belgium.</i> ²<i>KU Leuven, Department of Microbiology, Immunology and Transplantation, Belgium.</i> ³<i>Department of Virology, Biomedical Primate Research Centre (BPRC), The Netherlands.</i> ⁴<i>KU Leuven, Translational Platform Virology and Chemotherapy (TPVC), Belgium</i></p>
15:15-15:30	<p>[O01.3] Ebola exposure and post-vaccination risk behaviors during the 2018 North Kivu Ebola outbreak in the Democratic Republic of the Congo <u>Anna Bratcher</u>¹, Nicole A Hoff¹, Roch A Nianogo¹, Adva Gadoth¹, Dalau Nkamba Mukadi², Angelica Barrall¹, Patrick Mukadi³, Steve Ahuka³, Jean-Jacques Muyembe-Tamfum³, Anne W. Rimoin¹ ¹<i>University of California, Los Angeles, USA.</i> ²<i>Ecole de Sante Publique, Université de Kinshasa, Democratic Republic of Congo.</i> ³<i>Institut National de Recherche Biomédicale, Democratic Republic of Congo</i></p>	<p>[O02.3] Antibody Responses After a Single Dose of ChAdOx1 nCoV-19 Vaccine in Healthcare Workers Previously Infected with SARS-CoV-2 <u>Sebastian Havervall</u>¹, Ulrika Marking¹, Nina Greilert-Norin¹, Henry Ng², Mia Phillipson², Jonas Klingstrom¹, Mikael Aberg², Sophia Hober³, Peter Nilsson³, Charlotte Thalou¹ ¹<i>Karolinska Institutet, Sweden.</i> ²<i>Uppsala University, Sweden.</i> ³<i>KTH Royal Institute of Technology, Sweden</i></p>	<p>[O03.3] A potent single dose live-attenuated YF17D-vectored SARS-CoV-2 vaccine fully protects against lethal yellow fever virus infection <u>Ji Ma</u>, Dominique Van Looveren, Xin Zhang, Robbert Boudewijns, Lorena Sanchez-Felipe, Thomas Vercruysse, Hendrik Jan Thibaut, Johan Neyts, Kai Dallmeier <i>Rega Institute for Medical Research, KU Leuven, Belgium</i></p>
15:30-15:45		<p>[O02.4] Transient sensory symptoms among first-dose recipients of the BNT162b2 mRNA COVID-19 vaccine: A case-control study <u>Sergio Valdés-Ferrer</u>, Miguel García-Grimshaw</p>	<p>[O03.4] Analyzing the antibody response to a universal influenza virus vaccine candidate with an influenza virus protein microarray <u>Philip Meade</u>^{1,2}, Fatima Amanat^{1,2}, Shirin Strohmeier^{1,2},</p>

		<i>Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico</i>	Andres Javier ¹ , Florian Krammer ¹ ¹ <i>Department of microbiology, Icahn school of medicine at Mount Sinai, USA. ²Graduate school of biomedical sciences, Icahn school of medicine at Mount Sinai, USA</i>
15:45-16:15	Refreshment break		
16:15-17:15	Prize winner Plenary Session <i>Chair: Greg Poland</i>		
16:15-16:45	KEY04 - Winner of the Schneerson-Robbins Prize Lessons from conjugate vaccines: beyond the Randomized Controlled Trial Claire Broome		
16:45-17:15	KEY05 – Winner of Edward Jenner Vaccine Prize Myths Surrounding COVID-19 Vaccines Paul Offit, The Children's Hospital of Philadelphia, USA		
17:15	End of day		
Tuesday 5th October 2021			
09:00-10:30	BREAKOUT SESSION 4 Enhancing Vaccine Immunogenicity – Adjuvants, Modifiers and Antigen Packaging <i>Chairs: Linda Lua and Danny Altmann</i>	BREAKOUT SESSION 5 Fungal/Bacterial/ AMR/Parasitic /STD Vaccines <i>Chair: Ray Borrow</i>	BREAKOUT SESSION 6 Vaccine Safety and Risk <i>Chair: Ken Ishii</i>
09:00-09:30	[INV04] Complete protection by a single dose skin patch delivered SARS-CoV-2 spike vaccine <u>David Muller</u> , <i>The University of Queensland, Australia</i>	[INV05] Developing a controlled human infection model for tuberculosis <u>Helen McShane</u> <i>University of Oxford, Oxford, UK</i>	[INV06] The Global Vaccine Data Network (GVDN) - a multi national collaboration using big data for post authorisation vaccine safety studies. <u>Helen Petousis-Harris</u> ¹ , Steve Black ² ¹ <i>The University of Auckland, Auckland, New Zealand. ²Global Vaccine Data Network, New Zealand</i>
09:30-09:45	[O04.1] Intranasal vaccine development using probiotic <i>Escherichia coli</i>-derived membrane vesicles carrying pneumococcal capsular polysaccharides <u>Ryoma Nakao</u> ¹ , Yusuke Iwabuchi ^{1,2} , Soichiro Kimura ³ , Satoru Hirayama ⁴ , Saeko Morino ⁵ , Motoi Suzuki ⁵ , Makoto Ohnishi ⁶ ¹ <i>National Institute of Infectious Diseases, Japan. ² Medical and Dental University, Japan. ³ Toho University Graduate School of Medicine, Japan. ⁴Niigata University Graduate School of Medical and Dental Sciences, Japan. ⁵Infectious Diseases Surveillance Center, National Institute of Infectious Diseases, Japan. ⁶National Institute of Infectious Diseases, Japan</i>	[O05.1] A novel therapeutic vaccine against multi-drug resistant tuberculosis by T cell-immunity and phase 1 clinical trial <u>Masaji Okada</u> ¹ , Kazunori Tomono ² , Yoko Kita ¹ , Yasufumi Kaneda ³ , Kazunari Tsuyuguchi ¹ , Takefumi Saito ⁴ , Yoshikazu Inoue ¹ , Akira Yamane ⁵ , Tomoshige Matsumoto ⁶ ¹ <i>National Hospital Organization Kinki-chuo Chest Medical Center, Japan. ²Osaka Institute of Public Health, Japan. ³Osaka University, Japan. ⁴NHO Ibaraki-higashi Hospital, Japan. ⁵NHO Tokyo Hospital, Japan. ⁶JATA Osaka Hospital, Japan</i>	[O06.1] Safety, humoral and cellular response to standard and double dose of hepatitis B vaccine in children after liver transplantation <u>Palittiya Sintusek</u> ¹ , Yong Poovorawan ¹ , Supranee Buranapraditkun ¹ , Piyaporn Wanawongsawad ² ¹ <i>Chulalongkorn University, Thailand. ²King Chulalongkorn Memorial Hospital, Thailand</i>

09:45-10:00	<p>[O04.2] Design of recombinant viral vaccines based on mumps virus <u>Dorotea Pali</u>, Tanja Kosutic Gulija, Anamarija Slovic, Jelena Ivancic Jelecki, Dubravko Forcic <i>University of Zagreb, Croatia</i></p>	<p>[O05.2] Identification of protective antigens of <i>mycoplasma pneumoniae</i> that are engineered to avoid vaccine-enhanced disease Arlind Mara^{1,2}, Tyler Gavitt^{1,2}, Rosemary Ozyck¹, Joseph Pettinelli¹, Edan Tulman^{1,2}, Steven Geary^{1,2}, <u>Steven Szczepanek</u>^{1,2} ¹<i>University of Connecticut, USA.</i> ²<i>Center of Excellence for Vaccine Research, USA</i></p>	<p>[O06.2] Vaccines in times of pandemic. Argumentative time work for vaccine hesitancy <u>Simona - Nicoleta Vulpe</u> <i>University of Bucharest, Romania</i></p>
10:00-10:15	<p>[O04.3] Pulsatile burst-release microneedle patches for single administration vaccines for respiratory pathogens Khanh Tran¹, <u>Tyler Gavitt</u>^{1,2}, Edan Tulman¹, Steven Szczepanek^{1,2}, Thanh Nguyen¹ ¹<i>University of Connecticut, USA.</i> ²<i>Center of Excellence for Vaccine Research, USA</i></p>	<p>[O05.3] In silico evaluation of potential epitopes for the design of a peptide vaccine against Uropathogenic Escherichia Coli infection <u>Andrés Felipe Cuspoqa Orduz</u>, Yardany Rafael Mendez Fandiño, Laura L Diaz Lache, Alvaro F Acosta Costilla <i>Universidad Pedagógica y Tecnológica de Colombia - UPTC Tunja, Colombia</i></p>	<p>[O06.3] A scoping review examining the availability of dialogue-based resources to support healthcare providers engagement with vaccine hesitant individuals <u>Joshua Karras</u> <i>UNSW, Australia</i></p>
10:15-10:30	<p>[O04.4] Characterization of novel CMV-based vaccine vectors against microbial pathogens and tumors <u>Marko Šustić</u>¹, Tina Ružić¹, Maja Cokarić Brdovčak¹, Lea Hiršl¹, Berislav Lisnić¹, Lydija Gačina¹, Luka Čičin-Šain^{2,3}, Ilija Brizić¹, Astrid Krmpotić¹, Stipan Jonjić¹ ¹<i>University of Rijeka, Faculty of Medicine, Croatia.</i> ²<i>Helmholtz Centre for Infection Research, Germany.</i> ³<i>German Center for Infection Research (DZIF), Germany</i></p>	<p>[O05.4] Enhancing pneumococcal vaccination rates through shared decision making in outpatient care – a systematic review and meta-analysis <u>Flora Kuehne</u>¹, Linda Sanftenberg¹, Charlotte Anraad², Caroline Jung-Sievers³, Tobias Dreischulte¹, Jochen Gensichen¹ ¹<i>LMU University Hospital, Germany.</i> ²<i>Maastricht University, The Netherlands,</i> ³<i>Institute for Medical Information Processing, Biometry and Epidemiology (IBE), Ludwig-Maximilians-University Munich, Germany,</i></p>	<p>[O06.4] Guillain-Barré syndrome among recipients of the BNT162b2 mRNA COVID-19 vaccine in Mexico: A Nationwide Descriptive Study <u>Sergio Iván Valdés-Ferrer</u>^{1,2}, Miguel García-Grimshaw¹, Maria del Mar Saniger-Alba¹, Laura Hernández-Vanegas³, Antonio Arauz³, Santa Elizabeth Ceballos-Liceaga⁴ ¹<i>Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico.</i> ²<i>Northwell Health Feinstein Institutes for Medical Research, USA.</i> ³<i>National Institute of Neurology and Neurosurgery Manuel Velasco Suarez, Mexico.</i> ⁴<i>Dirección General de Epidemiología, Secretaría de Salud, Mexico</i></p>
10:30-11:00	Refreshment break		
11:00-12:30	<p>BREAKOUT SESSION 07 Veterinary Vaccinology and Vaccines against Neurological Infections <i>Chairs: Sylvia van den Hurk and Tony Fooks</i></p>	<p>BREAKOUT SESSION 8 Novel and Emerging Influenza Vaccines <i>Chairs: Florian Krammer and Daniel Salmon</i></p>	<p>BREAKOUT SESSION 9 Vaccines against SARS-CoV-2 Chair Ken Ishii</p>

11:00-11:30	<p>[INV07.1] Evolution of rabies vaccines and the concept "Zero by 2030" <u>Noel Tordo</u>, <i>Institut Pasteur de Guinée/Insitut Pasteur, France</i></p>	<p>[INV08] Fighting COVID-19 with a broadly neutralizing monoclonal antibody <u>Davide Corti</u>, <i>Humabs BioMed SA, a subsidiary of Vir Biotechnology, Bellinzona, Switzerland</i></p>	<p>[O09.1] A room temperature-stable, tablet-based SARS-COV-2 oral vaccine candidate induces both antigen-specific mucosal IgA responses and CD8+ T cell responses in humans Mario Cortese, <u>Susan Johnson</u>, Karen Lin, Clarissa Martinez, Sarah Tedjakusuma, Damoun Torabi, Nadine Peinovich, Emery Dora, Sean Tucker <i>Vaxart Inc., USA</i></p> <p>[O09.2] SARS-CoV-2 vaccine design for improved humoral responses in aging mice <u>Dominik Pflumm</u>, Katja Stifter <i>University Hospital Ulm, Germany</i></p>
11:30-11:45	<p>[INV07.2] Multimeric scaffolds and bacterial superglue – modern vaccine development using the Schmallenberg virus model <u>Martin Beer</u>, <i>Friedrich-Loeffler Institute, Reims, Germany</i></p>	<p>[O08.1] Obesity is associated with an altered baseline and post-vaccination influenza antibody repertoire <u>Marwa Abd Alhadi</u>^{1,2}, Lilach Friedman^{1,2}, Erik Karlsson^{3,4}, Liel Cohen-Lavi^{1,5}, Anat Burkovitz^{1,2}, Stacey Schultz-Cherry⁴, Terry Noah⁶, Samuel Weir⁷, Lester Shulman⁸, Melinda Beck⁹ ¹<i>National Center for Biotechnology in the Negev, Ben-Gurion University of the Negev, Israel.</i> ²<i>Department of Microbiology, Immunology and Genetics, Ben-Gurion University of the Negev, Israel.</i> ³<i>Virology Unit, Institute Pasteur du Cambodge, Cambodia.</i> ⁴<i>St. Jude Children’s Research Hospital, USA</i> ⁵<i>Department of Industrial Engineering and Management, Ben-Gurion University of the Negev, Israel.</i> ⁶<i>University of North Carolina at Chapel Hill, USA</i> ⁷<i>Department of Family Medicine, University of North Carolina at Chapel Hill, USA.</i> ⁸<i>Dept. of Epidemiology and Preventive Medicine, School of Public Health, Sackler Faculty of Medicine, Tel Aviv University, Israel.</i> ⁹<i>Gillings School of Global Public Health, UNC, USA</i></p>	<p>[O09.3] Development of epitope nanoparticle-based vaccine for prevention of SARS-CoV2 infection approved by in vivo model <u>Andrey Tchorbanov</u>^{1,2}, Nikolina Mihaylova¹, Iliyan Manoylov¹, Nikola Ralchev¹, Kalina Nikolova-Ganeva¹, Silviya Bradyanova¹, Gabriela Boneva¹, Irini Doytchinova³ ¹<i>Bulgarian Academy of Sciences, Bulgaria.</i> ²<i>National Institute of Immunology, Bulgaria.</i> ³<i>Medical University of Sofia, Bulgaria</i></p>
11:45-12:00		<p>[O08.2] HLA-DRB1*04 associated chronic inflammation and extracellular matrix-specific autoimmunity following inadvertent</p>	<p>[O09.4] In silico characterization of non-synonymous substitutions and immune recognition of SARS-CoV-2: potential vaccine target</p>

		<p>periarticular influenza vaccination Julia Hirsiger¹, Giorgio Tamborrini², Dorothee Harder³, Glenn R. Bantug¹, Gideon Hoenger³, Quan-Zhen Li⁴, Ivan Martin¹, Arnaud Scherberich¹, Thomas Daikeler³, <u>Christoph T. Berger</u>³ ¹University of Basel, Switzerland. ²Ultrasound Center for Rheumatology, Switzerland. ³University Hospital Basel, Switzerland. ⁴University of Texas Southwestern Medical Center, USA</p>	<p>for development in the Americas <u>Andrés Felipe Cuspoca Orduz</u>, Yardany Rafael Mendez Fandiño, Laura L Diaz Lache, Alvaro F Acosta Costilla <i>Universidad Pedagógica y Tecnológica de Colombia - UPTC Tunja, Colombia</i></p>
12:00-12:15	<p>[O07.1] Humoral and Cell-Mediated Immune Response Validation in Calves after a Live Attenuated Vaccine of Babesia bigemina <u>Imran Rashid</u> <i>University of Veterinary and Animal Sciences, Pakistan</i></p>	<p>[O08.3] Cost-effectiveness of quadrivalent adjuvanted influenza vaccine with MF59® versus high and standard-dose quadrivalent influenza vaccines in Germany Michele Kohli¹, Michael Maschio¹, Shannon Cartier¹, <u>Joaquin Mould-Quevedo</u>² ¹Quadrant Health Economics Inc., Canada. ²Seqirus USA Inc., USA</p>	<p>[O09.5] A single-dose live-attenuated YF17D-vectored SARS-CoV-2 vaccine candidate <u>Lorena Sanchez-Felipe</u>^{1,2}, Thomas Vercauteren^{1,3}, Sapna Sharma^{1,2}, Ji Ma^{1,2}, Viktor Lemmens^{1,2}, Dominique Van Looveren^{1,3}, Mahadesh Prasad Arkalagud Javarappa^{1,2}, Johan Neyts^{1,2}, Hendrik Jan Thibaut^{1,3}, Kai Dallmeier^{1,2} ¹KU Leuven Department of Microbiology, Immunology and Transplantation, Rega Institute, Belgium. ²GVN, Global Virus Network, USA. ³KU Leuven Department of Microbiology, Immunology and Transplantation, Rega Institute, (TPVC), Belgium</p>
12:15-12:30	<p>[O07.2] A synthetic peptide CTL vaccine confers protection from SARS-CoV-2 challenge in rhesus macaques Paul Harris¹, Jason Comer², Trevor Brasel², Christopher Massey², <u>Scott Burkholz</u>³, Richard Carback³, Thomas Hodge³, Liu Wang³, C.V. Herst³, Reid Rubsamen³ ¹Columbia University Medical Center, USA. ²University of Texas Medical Branch, USA. ³Flow Pharma Inc, USA</p>	<p>[O08.4] Influenza vaccine effectiveness against hospitalisation in children – experiences from the childhood influenza vaccination programme in England <u>Nicki Boddington</u>^{1,2}, Richard Pebody¹, Punam Mangtani² ¹Public Health England, UK. ²London School of Hygiene and Tropical Medicine, UK</p>	
12:30-13:00	Break		
13:00-14:30	<p>BREAKOUT SESSION 10 Vaccine Durability and Miscellaneous <i>Chairs: Rick Kennedy and Sylvia van den Hurk</i></p>	<p>BREAKOUT 11 Age Based v Risk Based Vaccination –COVID and other Vaccine Prioritisation Chair: Paolo Bonanni</p>	<p>BREAKOUT SESSION 12 Disease/Pathogen X and Preparations for the future <i>Chairs: Art Reingold and Florian Krammer</i></p>
13:00-13.30	<p>[INV10] Vaccine Durability and Immunologic Memory – How Do We Get There?</p>	<p>[INV11] Optimizing COVID-19 vaccine allocation: Who to vaccinate first?</p>	<p>[INV12] <u>Florian Krammer</u>, <i>Icahn School of Medicine, USA</i></p>

	<u>Rick Kennedy</u> , <i>Mayo Clinic, USA</i>	<u>Laura Matrajt</u> ¹ , <u>Julia Eaton</u> ² , <u>Tiffany Leung</u> ¹ , <u>Dobromir Dimitrov</u> ¹ , <u>Joshua Schiffer</u> ¹ , <u>David Swan</u> ¹ , <u>Holly Janes</u> ¹ ¹ <i>Fred Hutchinson Cancer Research Center, USA.</i> ² <i>University of Washington Tacoma, USA</i>	
13.30-13.45	[O10.1] Waning immunity of Pertussis, Diphtheria, Tetanus and Polio-related vaccine: a systematic review and meta-analysis <u>Huizhi Gao</u> ¹ , <u>Benjamin J. Cowling</u> ^{1,2} , <u>Eric Ho Yin Lau</u> ^{1,2} ¹ <i>WHO Collaborating Centre for Infectious Disease Epidemiology and Control, The University of Hong Kong, Hong Kong.</i> ² <i>Laboratory of Data Discovery for Health, Hong Kong Science and Technology Park, Hong Kong</i>	[O11.1] The optimal vaccination strategy to control COVID-19: a modeling study based on the transmission scenario in Wuhan City, China <u>Zeyu Zhao</u> <i>State Key Laboratory of Molecular Vaccinology and Molecular Diagnostics, Xiamen University, China. Université de Montpellier, CIRAD, Intertryp, Montpellier, IES, CNRS, France</i>	[O12.1] The next generation of human diploid vaccine development <u>Anna-Barbara Hachmann</u> ¹ , <u>Megan Pajak-Lee</u> ¹ , <u>David Klinkenberg</u> ² , <u>Annette Madsen</u> ² , <u>Andrew Campbell</u> ¹ ¹ <i>Thermo Fisher Scientific, USA.</i> ² <i>Thermo Fisher Scientific, Denmark</i>
13:45-14:00	[O10.2] Immunization Using Male Germ Cells and Gametes as Rich Sources of Cancer/Testis Antigens for Inhibition of 4T1 Breast Tumors' Growth and Metastasis in BALB/c Mice <u>Amirhosein Kefayat</u> ¹ , <u>Fatemeh Ghahremani</u> ² , <u>Parvin Goli</u> ¹ , <u>Ashkan Safavi</u> ³ ¹ <i>Isfahan University of Medical Sciences, Iran.</i> ² <i>Arak University of Medical Sciences, Iran.</i> ³ <i>Islamic Azad University of Tehran, Iran</i>	[O11.2] 1-year impact of COVID-19 on childhood immunizations in Pakistan: analysis of >3.7 million children <u>Subhash Chandir</u> ^{1,2,3} , <u>Danya Arif Siddiqi</u> ¹ , <u>Mariam Mehmood</u> ³ , <u>Sundus Iftikhar</u> ³ , <u>Muhammad Siddique</u> ³ , <u>Sindhika Jai</u> ³ , <u>Vijay Kumar Dharma</u> ³ , <u>Anokhi Ali Khan</u> ³ , <u>Mohammed Adil Akhter</u> ³ , <u>Aamir Javed Khan</u> ¹ ¹ <i>IRD Global, Singapore.</i> ² <i>Harvard Medical School, USA.</i> ³ <i>IRD Pakistan, Pakistan</i>	[O12.2] Modelling the efficacy of a herpesvirus-vectored transmissible vaccine as a long-term control strategy for vampire bat transmitted rabies virus <u>Megan Griffiths</u> ¹ , <u>Dan Haydon</u> ² , <u>Daniel Streicker</u> ^{1,2} ¹ <i>MRC-University of Glasgow Centre for Virus Research, UK.</i> ² <i>IBAHCM, University of Glasgow, UK</i>
14:00-14:15	[O10.3] Individual Preferences for COVID-19 Vaccination in China <u>anli Leng</u> ¹ , <u>Elizabeth Maitland</u> ² , <u>Siyuan Wang</u> ³ , <u>Stephen Nicholas</u> ⁴ , <u>Rugang Liu</u> ⁵ , <u>Jian Wang</u> ⁶ ¹ <i>Shandong University, China.</i> ² <i>University of Liverpool, UK.</i> ³ <i>University of Melbourne, Australia.</i> ⁴ <i>University of Newcastle, Australia.</i> ⁵ <i>Nanjing Medical University, China.</i> ⁶ <i>Wuhan University, China</i>	[O11.3] Systematic review of the ongoing clinical trials dedicated to evaluate the safety and efficacy of COVID-19 vaccines in children <u>Shreya Garg</u> ¹ , <u>Karan Raheja</u> ¹ , <u>Sachin Dubey</u> ¹ , <u>Saurabh Gupta</u> ² ¹ <i>Yashoda Hospital and Research Centre, India.</i> ² <i>Yashoda Hospital and Research, India</i>	[O12.3] The value of public-private partnerships to monitor vaccines effectiveness in Europe: leveraging an existing influenza platform for COVID-19 post-authorization studies <u>Laurence Torcel-Pagnon</u> ¹ , <u>Kaat Bollaerts</u> ² , <u>Antonio Carmona</u> ³ ¹ <i>Sanofi Pasteur, France.</i> ² <i>P95, Belgium.</i> ³ <i>FISABIO, Spain</i>
14:15-14:30		[O11.4] Cov19VaxKB: A Web-based Integrative COVID-19 Vaccine Knowledge Base <u>Philip Huang</u> ¹ , <u>Rohit Goru</u> ¹ , <u>Anthony Huffman</u> ¹ , <u>Asiyah Yu Lin</u> ² , <u>Yongqun "Oliver" He</u> ¹ ¹ <i>University of Michigan Medical School, Ann Arbor, MI, USA.</i> ² <i>NIH, USA</i>	[O12.4] An immunoinformatics approach for SARS-CoV-2 in Latam populations and multi-epitope vaccine candidate directed towards the world's population <u>Andrés Felipe Cuspoca Orduz</u> ¹ , <u>Yardany Rafael Mendez Fandiño</u> ¹ , <u>Juvenal Yosa Reyes</u> ² ,

			Laura L Diaz Lache ¹ , Alvaro F Acosta Castilla ¹ ¹ Universidad Pedagógica y Tecnológica de Colombia - UPTC Colombia. ² Universidad Simón Bolívar, Colombia
14:30-15:00	Break		
15:00-16:00	A correlate of protection for licensure of COVID-19 vaccines Chair: Greg Poland		
15:00-15:20	Correlates of Vaccine-induced Immunity Stanley Plotkin, <i>University of Pennsylvania, USA</i>		
15:20-15:40	Neutralising antibodies as predictors of immune protection from SARS-CoV-2 infection Miles Davenport, Kirby Institute, UNSW, Australia		
15:40-16:00	Population based thresholds of protection for COVID-19 vaccines David Goldblatt, <i>UCL, UK</i>		
16:00	End of day		
Wednesday 6th October 2021			
09:00-10:10	Spotlight on Europe: COVID-19 Vaccine Immunogenicity, Safety, communication and organizational issues Chair: <i>Paolo Bonanni</i>		
09:00-09:10	Introduction		
09:10-09:25	[Spotlight.1] Post-marketing Cases Reporting Anaphylaxis after Vaccination with COVID-19 Vaccines in Croatia <i>Barbara Kovačić, Nikica Mirošević Skvrce, Morana Pavičić, Željana Margan Koletić, Siniša Tomić</i> <i>Agency for Medicinal Products and Medical Devices of Croatia, Croatia</i>		
09:25-09:40	[Spotlight.2] Assessment of health care resource utilisation for COVID-19 mRNA vaccination programs in Germany J.- Matthias Graf von der Schulenburg ¹ , Alfred Müller ² , Steffen Wahler ³ ¹ <i>Center for Health Economics Research, Hannover, Germany.</i> ² <i>Analytic Services, Munich, Germany.</i> ³ <i>St. Bernward GmbH, Hamburg, Germany</i>		
09:40-09:55	[Spotlight.3] Kinetics of the humoral response after SARS-CoV-2 vaccination with BNT162b2 (Pfizer-BioNTech) in gonesse hospital's healthcare workers <i>Amina Kadi, Habiba Kadi, Didier Troisvallets, Rachid Sehouane, Wacila Berkani</i> <i>Medical biology laboratory, Gonesse Hospital Center, France</i>		
09:55-10:25	Refreshment Break		
10:25-11:55	PLENARY SESSION 3 Vaccine Hesitancy and Population Coverage Rates – The Way Forward Chair: Heidi Larson		
10:25-10:55	[KEY06] The state of vaccine confidence in Europe: what was the impact of the COVID-19 pandemic? <i>Emilie Karafillakis, London School of Hygiene & Tropical Medicine, London, UK</i>		
10:55-11:25	[KEY07] What drives COVID-19 Vaccination Decisions in Quebec, Canada? Findings from repeated cross-sectional surveys across 4 waves <i>Eve Dubé, Institut national de santé publique du Québec, Canada. Université Laval, Canada</i>		
11.25-11:55	[KEY08] Improving vaccine acceptance: the use of human centered design and the empathy tool <i>Caroline Poland, Poland and Associates Consulting, LLC, USA</i>		
11:55-12:15	Closing Plenary and close of conference <i>Greg Poland and Paolo Bonanni</i>		