



Poster Program

- [P1.001] Proposing a new conceptual syndemic framework for COVID-19 vaccine hesitancy: a narrative review**
Bara' AlShurman^{*}, Zahid Butt, *University of Waterloo, Canada*
- [P1.002] Application of electron beam technology to develop vaccines to control foodborne pathogens in broiler chickens**
Ruvindu Perera¹, Anna Assumpcao¹, Komala Arsi², Annie Donoghue³, Suresh Pillai⁴, Palmy Jesudhasan^{*3}, ¹*University of Arkansas, USA*, ²*United States Department of Agriculture, USA*, ³*United States Department of Agriculture, USA*, ⁴*Texas A&M University System, USA*
- [P1.003] A systematic review of interventions to improve vaccination uptake among adults**
Anelisa Jaca^{*1}, Lindi Mathebula¹, Julie Jacobson Vann², Masibulele Sishuba³, Thobile Malinga¹, Charles Wiysonge¹, Duduzile Ndwandwe¹, ¹*South African Medical Research Council, South Africa*, ²*University of Carolina, USA*, ³*South African Medical Research Council, South Africa*
- [P1.004] A qualitative study exploring motivators and barriers to COVID-19 vaccine uptake among adults in South Africa and Zimbabwe**
Nellie Myburgh¹, Mamakiri Mulaudzi¹, Gugulethu Tshabalala¹, Norest Beta², Kimberley Gutu¹, Stefanie Vermaak¹, Charles Lau³, Lawrence Stanberry^{*4}, Catherine Hill¹, James Wilmot⁴, Shabir Madhi¹, Tariro Makadzange², Janan Dietrich^{5,1}, ¹*University of the Witwatersrand, South Africa*, ²*Charles River Medical Group, Harare, Zimbabwe*, ³*Research Triangle International (RTI), USA*, ⁴*Columbia University, USA*, ⁵*Health Systems Research Unit, South African Medical Research Council, Bellville, South Africa*

- [P1.005] A community-based volunteer service to reduce inequity in COVID-19 vaccine distribution in New York City**
Stasha O'Callaghan*¹, Madalyn Fernbach², Haidee Chen³, Jade Tapia⁴, Charis Ng⁵, Ee Tay^{6,4}, ¹*New York City Health and Hospitals Corporation, USA*,²*Penn State School of Medicine, USA*,³*Columbia University, USA*,⁴*NYU Langone Health, USA*,⁵*SUNY Downstate Health Sciences University, USA*,⁶*Bellevue Hospital Center, USA*
- [P1.007] Promising practices for engaging local faith actors to promote uptake of COVID-19 vaccination: Lessons learned from Ghana, Indonesia, Sierra Leone, and Uganda**
Mona Bormet*¹, Carolyn O'Brien², Sara Melillo³, ¹*Christian Connections for International Health (CCIH), Kenya*,²*Christian Connections for International Health, USA*,³*Independent Global Health Consultant, Uganda*
- [P1.008] Culturally tailored COVID-19 vaccine clinics: a Community Oriented Primary Care (COPC) approach to increase vaccination rates among Latinos in the United States**
Armando De Alba*¹, Reyna L. Reyes-Nunez², ¹*University of Nebraska Medical Center, USA*,²*University of Nebraska Omaha, USA*
- [P1.009] Vaccine development at the biomedical advanced research and development authority (BARDA)**
Rushyannah Killens-Cade*, Adam Clark, Daniel Wolfe, *Biomedical Advanced Research and Development Authority, USA*
- [P1.010] Factors associated with primary and follow-up booster COVID-19 vaccination in a community sample of African American men and women in the United States midwest**
Jeffrey Kelly*, Jennifer Walsh, Katherine Quinn, Yuri Amirkhanian, Monique Plears, Kevin Brown, *Medical College of Wisconsin, USA*

- [P1.011] Interaction and antiviral treatment of coinfection between SARS-CoV-2 and influenza in vitro**
Danlei Liu*, Ka Yi Leung, Hoi Yan Lam, Ruiqi Zhang, Yujing Fan, Xiaochun Xie, Kwok Hung Chan, Ivan Hung, *The University of Hong Kong, Hong Kong*
- [P1.012] The role of immunization information systems in improving equitable vaccine uptake, and the evidence-based policy and technical attributes that enable them to do so**
Alexandra Bhatti^{1,2}, Amanda L. Eiden^{*1}, Luke Cunniff¹, ¹*Merck & Co Inc, USA*, ²*Arizona State University, USA*
- [P1.013] To assess common side effects of -19 vaccine experienced by people in Dedza in Malawi**
Robert Msokwa*, *Mzuzu University, Malawi, University of Malawi, Malawi*
- [P1.014] Epitope-enrichment plus a proper adjuvant-regimen induced potent antigen-specific memory responses in mice**
Hong Ling^{*1}, Yan Li¹, Fu-Ning Liu¹, Xin-Yue Zhao¹, Yong Zhang², Jia-Ye Wang¹, Min Zhuang¹, ¹*Harbin Medical University, China*, ²*Jilin University, China*
- [P1.015] The inclusion of pregnant women in vaccine clinical trials: a 5-year overview of late-stage clinical trials' records**
Maha Salloum^{*1}, Antea Paviotti¹, Hilde Bastiaens², Jean-Pierre Van Geertruyden¹, ¹*University of Antwerp, Belgium*, ²*University of Antwerp, Belgium*
- [P1.016] COVID-19 vaccine intentions among Métis parents of children under 11 years old in Ontario, Canada**
Noel Tsui^{*1,2}, Abigail Simms^{1,2}, Sarah Edwards^{1,2}, Shelley Cripps¹, ¹*Métis Nation of Ontario, Canada*, ²*Institute for Clinical Evaluative Sciences, Canada*

- [P1.017] Ethnic disparities in COVID-19 vaccine mistrust and receipt in British Columbia, Canada**
Bushra Mahmood*¹, Prince Adu², Geoffrey McKee^{2,1}, Aamir Bharmal^{2,1}, James Wilton², Naveed Janjua^{2,1,3}, ¹*The University of British Columbia, Canada,* ²*BC Centre for Disease Control, Canada,* ³*Centre for Health Evaluation and Outcome Sciences, St. Paul's Hospital, Canada*
- [P1.018] COVID-19 vaccine behaviour among citizens of the Métis Nation of Ontario: a qualitative study**
Abigail Simms*^{1,2}, Keith King³, Noel Tsui^{1,2}, Sarah Edwards^{1,2}, Graham Mecredy¹, ¹*Institute for Clinical Evaluative Sciences, Canada,* ²*Métis Nation of Ontario, Canada,* ³*University of Alberta, Canada*
- [P1.019] Effect of revision of the recommended vaccination schedule for preventing vertical transmission of hepatitis B virus on vaccination and infection status of infants in Japan**
Hayato Yamana*¹, Sachiko Ono², Nobuaki Michihata³, Kohei Uemura², Hideo Yasunaga², ¹*Jichi Medical University, Japan,* ²*The University of Tokyo, Japan,* ³*Chiba Cancer Center Research Institute, Japan*
- [P1.020] Understanding and explaining the link between anthroposophy and vaccine hesitancy: A systematic review**
Sibylle Herzig van Wees*¹, Khadija Abunnaja¹, Sandra Mounier-Jack², ¹*Karolinska Institute, Sweden,* ²*London School of Hygiene & Tropical Medicine, UK*
- [P1.021] A rapid risk-benefit assessment system for large-scale vaccine implementation in response to pandemics**
Keun-Young Yoo*^{1,2}, Sun Bean Kim³, Jaehun Jung⁴, ¹*Veterans Health Service Medical Center, Republic of Korea,* ²*Seoul National University College of Medicine, Republic of Korea,* ³*Korea University College of Medicine, Republic of Korea,* ⁴*Department of Preventive Medicine, Gachon University, Republic of Korea*

- [P1.022] Development of a cross-clade pan-sarbecovirus booster vaccine**
Feng Zhu^{*1}, Chee Wah Tan¹, Wan Ni Chia¹, Lin-Fa Wang^{1,2},
¹Duke-NUS Medical School Program in Emerging Infectious Diseases, Singapore,²Singhealth Duke-NUS Global Health Institute, Singapore
- [P1.023] Implementation of an EPI/PEI synergy model for improving immunization in the peri-urban areas of Karachi: A case study**
Rakhshanda Ishaque^{*}, Vital Pakistan Trust, Pakistan
- [P1.024] COVID-19 vaccine hesitancy among unvaccinated or partially vaccinated adults in Ethiopia**
Aderaw Anteneh^{*1}, Anteneh Getachew¹, Amel Hashim¹,
Misael Kenera¹, Erica Felker-Kantor², ¹Population Services International, Ethiopia,²Population Services International, USA
- [P1.025] A shot in the arm, not a shot in the dark! A systems perspective of an apex Indian medical institution's COVID-19 vaccination programme**
Parmeshwar Kumar^{*1}, Vikas Hanumanthappa¹, Naveen Gowda², Rudresh Suddekunthe³, Pallavi Chamoli¹, Varsha Kashyap¹, Kamal Gulati¹, Anju Jain¹, Sunita Dua¹, Nirupam Madaan¹, Karan Madan¹, Aarti Vij¹, Rakesh Kumar¹, Randeep Guleria⁴, ¹All India Institute of Medical Sciences, India,²Apollo Specialty Hospitals Pvt Ltd, India,³SDM College of Medical Sciences, India,⁴Medanta The Medicity, India
- [P1.026] Juxtaposing Pareto's principle over SWOT analysis to determine factors to improve COVID-19 vaccination uptake : A 4C model of vaccine hesitancy**
Parmeshwar Kumar^{*1}, Pallavi Chamoli¹, Varsha Kashyap¹,
Ayesha Choudhary², Randeep Guleria³, ¹All India Institute of Medical Sciences, India,²Stanford University, USA,³Medanta The Medicity, India

- [P1.027] COVID-19 vaccine confidence and associated factors among adults with hypertension or Diabetes Mellitus in Kilimanjaro region, Tanzania**
Monica Mtei^{*1,2}, Daimon Mwasamila^{3,4}, Caroline Amour¹, Julieth Bilakwate¹, Laura Shirima¹, Amina Farah⁵, Innocent Mboya^{1,6}, Fabio Candotti⁷, Johnston George¹, Sia Msuya^{8,5},
¹*Kilimanjaro Christian Medical University College, Tanzania, United Republic of,* ²*London School of Hygiene and Tropical Medicine, UK,* ³*Kilimanjaro Christian Medical University College, UK,* ⁴*University of Lausanne, Switzerland,* ⁵*Kilimanjaro Christian Medical Centre, Tanzania, United Republic of,* ⁶*Lund University, Sweden,* ⁷*University of Lausanne, Basel, Switzerland,* ⁸*Institute of Public Health, Department of Epidemiology and Biostatistics, Kilimanjaro Christian Medical University College, Moshi, Tanzania, United Republic of*
- [P1.028] Using volunteers to combat vaccine hesitancy online: evaluation of a randomized intervention**
Hinna Hasan¹, Kirsten Cornelson², Janette Wong¹, Madison Fullerton^{1,3}, Theresa Tang^{4,1}, Chelsea D'Silva¹, Jia Hu^{*3,1}, ¹*19 to Zero, Canada,* ²*Western University Ivey Business School, Canada,* ³*University of Calgary, Canada,* ⁴*University of Calgary, Canada*
- [P1.029] Evaluation of animal-origin free peptones to enhance viral vector vaccine production**
Syed Khalil^{*}, Wen-Yang Tsai, Ashwin Gurunathan, Matt Rosecrans, Aaron Robinson, Anna-Barbara Hachmann, Stacy Holdread, James Brooks, *Thermo Fisher Scientific, Hunt Valley, Maryland, USA*
- [P1.030] Analysing vaccine rumours: the r/osi framework**
Sibylle Herzig van Wees^{*}, *Karolinska Institute, Sweden*
- [P1.031] A systematic review of factors that influence parents' views and practices around routine childhood vaccination in Africa: a qualitative evidence synthesis**
Edison Mavundza^{*}, Sara Cooper, Charles Wiysonge, *South African Medical Research Council, South Africa*

- [P1.032] Dual decision-making routes for COVID-19 and influenza vaccines uptake in parents**
Jiehu Yuan^{*1}, Meihong Dong¹, Dennis Kai Ming Ip¹, Hau Chi So¹, Benjamin John Cowling^{1,2}, Wendy Wing Tak Lam¹, Qiuyan Liao¹, ¹*The University of Hong Kong, Hong Kong*,²*Laboratory of Data Discovery for Health, Hong Kong Science and Technology Park, Hong Kong*
- [P1.033] Development of a filamentous bacteriophage-based vaccine displaying the MAGE-A1 tumour peptide for the treatment of malignant melanoma cancer**
Nuša Brišar^{*1,2}, Katja Šuster³, Simona Kranjc Brezar⁴, Andrej Cör^{3,2}, ¹*University of Primorska, Slovenia*,²*University of Ljubljana, Slovenia*,³*Valdoltra Orthopaedic Hospital, Slovenia*,⁴*Institute of Oncology Ljubljana, Slovenia*
- [P1.034] Recombinant group a carbohydrate backbone embedded into outer membrane vesicles is a potent vaccine candidate targeting group a streptococcus from streptococcus pyogenes and streptococcus dysgalactiae subsp. equisimilis**
Sowmya Ajay Castro^{*1}, Sarah Thomson¹, Alexandra H Shaw², Azul Zorzoli³, Benjamin H Meyer¹, Mark Reglinski¹, Helge C Dorfmueller¹, ¹*University of Dundee, UK*,²*The National Institute of Biological Standards and Control, UK*,³*Royal Infirmary of Edinburgh, UK*
- [P1.035] Vaccine hesitancy in adults in the United States: a quantitative survey study**
Anthony DiFranzo¹, deMauri S. Mackie², Alexandra Bhatti¹, Kushal Modi², Amanda L. Eiden^{*1}, ¹*Merck & Co., Inc., Rahway, NJ, USA*,²*Cerner Enviza, an Oracle Company, Malvern, PA, USA*
- [P1.036] Significance of collaborative efforts between NGOs/CSOs and Government in maximizing reach for vaccination of 'Zero-dose 'children: Lessons of CORE Group Partners Project, India**
Jitendra Awale^{*}, Dr Roma Solomon, Manojkumar Choudhary, Rina Dey, *CORE Group Partners Project, India*

- [P1.037] Reactogenicity of third and fourth booster doses of HIPRA PHH-1V, an adjuvanted bivalent recombinant protein vaccine against SARS-CoV-2**
Salomé de Cambra^{*1}, Júlia Corominas², Maria Teresa Prat¹, Irina Güell¹, Laura Ferrer¹, ¹HIPRA HUMAN HEALTH, Spain,²HIPRA HUMAN HEALTH, Spain
- [P1.038] Building vaccine confidence among government frontline workers (Accredited Social Health Activists - ASHAs) to address vaccine hesitancy and accelerate the uptake of childhood immunization: Experience of CORE Group Partners Project Project, India**
Manojkumar Choudhary^{*}, Roma Solomon, Jitendra Awale, Rina Dey, *CORE Group Partners Project, India*
- [P1.039] Recovery of childhood immunization disrupted by COVID-19 pandemic - core group partners project's learnings from four districts of Uttar Pradesh, India**
Parul Ratna^{*1}, Deepti Pant², ¹CORE Group Partners Project's, India,²Catholic Relief Services, India
- [P1.040] Influx of zero-dose children during and post COVID-19 pandemic: How CORE Group Partners Project supported the government mission to overcome the challenge in high priority sub-centers in Uttar Pradesh, India**
Yatender Singh^{*1,2}, Roma Solomon³, Praveen Kaushik⁴, Mohd Javed⁵, ¹Project Concern International/PCI, India,²CORE Group Partners Project (CGPP), India,³CORE Group Partners Project, India,⁴Society For All round Development, India,⁵Jan Kalyan Samiti, India
- [P1.041] Modelling the potential health impact of prospective Strep A vaccines**
Fiona Giannini¹, Jeffrey Cannon^{1,2}, Daniel Cadarette², David Bloom², Hannah Moore^{1,3}, Jonathan Carapetis^{1,4}, Kaja Abbas^{*5}, ¹University of Western Australia, Australia,²Harvard University, USA,³Curtin University, Australia,⁴Perth Children's Hospital, Australia,⁵London School of Hygiene & Tropical Medicine, UK

- [P1.042] Adult respiratory illness attendances to emergency departments: The pinnacle of winter pressures**
Hannah Wright^{*1}, Hamish Graham¹, James Campling², Elizabeth Begier³, Andrew Vyse⁴, Charlie Reynard⁵, Mary Slack^{6,7}, Alethea De Melo⁸, Gillian Ellsbury⁸, ¹*Vaccines Medical Affairs, Pfizer UK, UK*, ²*Vaccines Medical Affairs, Pfizer UK, UK*, ³*Global Medical and Scientific Affairs, Pfizer Inc, Ireland*, ⁴*Vaccines Medical Affairs, Pfizer Vaccines, UK*, ⁵*Vaccines Medical Affairs, Pfizer, UK, UK*, ⁶*School of Medicine and Dentistry, Griffith University - Gold Coast Campus, Australia*, ⁷*Global Scientific Affairs, Pfizer Inc, UK*, ⁸*Vaccines Medical Affairs, Pfizer Vaccines, UK, UK*
- [P1.043] Evaluation of COVID-19 vaccines and infection in HIV patients**
Muhammed Fatih Karasin, Zeynep Bayraktar, Müge Toygar Deniz, Nazlıgül Özgökçe, Mehmet Kağan Özdemir, Sıla Aakhan^{*}, *Kocaeli University School of Medicine, Turkey*
- [P1.044] A systematic scoping review to identify criteria to assess a country's readiness to deploy a new or under utilised vaccine at a national level**
Alexandra Bhatti¹, Amanda L. Eiden^{*1}, Vaneesha Monk², Rachel Mitrovich¹, Lindsay V. Hermany¹, Natasha Hansen¹, Mark Connolly³, Samantha Vanderslott², Luke Baxter², Aomesh Bhatt², ¹*Merck & Co Inc - Rahway, USA*, ²*University of Oxford, UK*, ³*Global Market Access Solutions Sarl, Switzerland*
- [P1.045] COVID-19 vaccination hesitancy in adults with a history of cancer**
Mohamed Elsaid^{*1}, Chloe Hery¹, Xiaochen Zhang², Cecilia DeGraffinreid¹, Electra Paskett^{3,4}, ¹*The Ohio State University, USA*, ²*Fred Hutchinson Cancer Research Center Cancer Prevention Program, Seattle, WA, USA*, ³*Department of Internal Medicine, Division of Cancer Prevention and Control, USA*, ⁴*Cancer Control Continuum in Ohio and Indiana Consortium, USA*

- [P1.046] Bacterium-like particles as a promising adjuvant for nasal vaccines targeting intestinal infections**
Keita Takahashi*, Haruka Sudo, Ayato Tsujii, Nagisa Tokunoh, Sarana Kawashima, Yuta Hayakawa, Hiroki Fukushima, Naoki Inoue, Tetsuo Koshizuka, *Gifu Pharmaceutical University, Japan*
- [P1.047] The impact of conflict and ISIS occupation on immunization completion for children in Hadeetha, Anbar Iraq from 2014-2020**
Sara Al-Dahir*^{1,2}, Tahseen Hasan³, Alaa Khalil⁴, ¹Xavier University of Louisiana, USA, ²Johns Hopkins University, USA, ³Iraq Ministry of Health, Iraq, ⁴Nunez Community College, USA
- [P1.048] The test-negative design case-control study of the effectiveness of BNT162b2 vaccine against symptomatic SARS-CoV-2 infection in children aged 5–11 years in Japan during Omicron variant predominate periods**
Megumi Hara*¹, Yuko Ohta², Naoki Fusazaki³, Yoshio Hirota⁴, ¹Saga University, Japan, ²Ohta Yuko clinic, Japan, ³Ohta Yuko clinic, Japan, ⁴Clinical Epidemiology Research Center, SOUSEIKAI Medical Group, Japan
- [P1.049] Increasing understanding of the role of engineering in vaccine development and manufacture. A collaborative project between UCL-Oxford Future Vaccine Manufacturing Research Hub (Vax-Hub) and UK secondary schools**
Stephen A Morris*, Ludovica Vaiarelli, Salome De Sa Magalhaes, Martina Micheletti, *University College London, UK*
- [P1.050] Safety of two doses BNT162b2 mRNA vaccine given 21 days apart in children 5 to 11 years old**
Chee Fu Yung*^{1,2,3}, Kai Qian Kam^{1,2,4}, Seyed Ehsan Saffari⁵, Michelle Ren¹, Qing Lin Tan¹, Szu-Tien Thio¹, Chia Yin Chong^{1,2,4}, ¹KK Women's and Children's Hospital, Singapore, ²Duke-NUS Medical School, Singapore, ³Lee Kong Chian School of Medicine, Singapore, ⁴National University of Singapore, Singapore, ⁵Duke-NUS Medical School Centre for Quantitative Medicine, Singapore

- [P1.051] (In)congruities in caregivers' and healthcare providers' vaccine information approaches: Evidence from a mixed methods study in the Philippines**
Jonas Wachinger^{*1}, Mark Donald C Reñosa^{2,3}, Vivienne Endoma³, Jhoys Landicho-Guevarra³, Maria Paz Demonteverde³, Catherine Silvestre³, Jeniffer Landicho³, Mila F Aligato³, Thea Andrea Bravo³, Jerric Rhazel Guevarra³, Rachel P Chase⁴, Shannon A McMahon^{4,5}, ¹Heidelberg University, Germany, ²Heidelberg Institute of Global Health, Heidelberg University, Germany, ³Research Institute for Tropical Medicine, The Philippines, ⁴Heidelberg University, Germany, ⁵Johns Hopkins University, USA
- [P1.052] Humoral immune response against SARS-CoV-2 variants (Omicron BA.1, BA.4/5, Beta and Delta) of PHH-1V booster vaccine in subjects previously vaccinated with a mRNA vaccine. Results of a randomised controlled trial up to 6 months**
Antonio Barreiro^{*}, Antoni Prenafeta, Alexandra Moros, Laia Madrenas, Manuel Cañete, Júlia Corominas, Teresa Prat, Laura Ferrer, *HIPRA, Spain*
- [P1.053] Humoral immunogenicity of COVID-19 mRNA vaccines: a prospective study focusing on blood selenium and vitamin D levels at baseline**
Goki Yamada^{*1}, Akiko Matsumoto², Takuma Furukawa^{3,4}, Chiharu Iwasaka^{3,5}, Takeshi Sawada³, Mikiko Tokiya², M.Said Ashenagar³, Mikako Horita³, Tadayuki Tsujita³, Megumi Hara³, ¹Kagoshima University, Japan, ²Saga University School of Medicine, Japan, ³Saga University, Japan, ⁴Saga University Hospital, Japan, ⁵National Institutes of Biomedical Innovation, Health and Nutrition, Japan
- [P1.054] T cell vaccines against Zika virus**
Branka Grubor-Bauk^{*1}, Zelalem Mekonen¹, Arthur Yeow¹, Wilfred Saron², Dawn Whelan¹, Ryan Santos¹, Makutiro Masavuli¹, Andreas Suhrbier³, Ashley St John², Eric Gowans¹, David O'Connor⁴, ¹The University of Adelaide, Australia, ²Duke-NUS Medical School, Singapore, ³QIMR Berghofer Medical Research Institute, Australia, ⁴University of Wisconsin-Madison, USA

- [P1.055] Descriptive epidemiology of adverse events following immunization (AEFI) with the Japanese encephalitis vaccination using open data in Japan**
 Ai Hayashi^{*1,2}, Fuka kikuchi^{1,3}, Saeko Morino¹, Mai Okuyama¹, Miho Shibamura¹, Sayaka Takanashi¹, Satoru Arai¹, Hajime Kamiya¹, Motoi Suzuki¹, ¹*National institute of infectious diseases Center for surveillance, immunization, and epidemiologic research, Japan*, ²*Tohoku University, Japan*, ³*Tokyo University of Agriculture and Technology, Japan*
- [P1.056] The effect of malaria infection on the immune response to the two-dose Ad26.ZEBOV, MVA-BN-Filo Ebola vaccine regimen in adults and children enrolled in a vaccine trial in Sierra Leone**
 Daniela Manno^{*1}, Philip Ayieko^{1,2}, David Ishola^{1,3}, Muhammed O. Afolabi^{1,3}, Frank Baiden^{1,3}, Daniel Tindanbil^{1,3}, Abu Bakarr Kamara^{4,3}, Osman Mohamed Bah^{4,3}, Baimba Rogers^{4,3}, Kwabena Owusu-Kyei^{1,3}, Abdoulie Drammeh^{1,3}, Catriona Patterson¹, Kevin Tetteh¹, Mattu Tehtor Kroma^{4,3}, Godfrey Tuda Otieno^{1,3}, Bolarinde Joseph Lawal^{1,3}, Auguste Gaddah⁵, Gibrilla Fadlu Deen Deen⁴, Babajide Keshinro⁶, Yusupha Njie^{1,3}, Dickens Kowuor^{1,3}, Brett Lowe^{1,7}, Cynthia Robinson⁶, Bailah Leigh⁴, Chris Drakeley¹, Brian Greenwood¹, Deborah Watson-Jones^{1,2}, ¹*London School of Hygiene & Tropical Medicine, UK*, ²*Mwanza Intervention Trials Unit, Tanzania, United Republic of*, ³*EBOVAC Project, Kambia district, Sierra Leone*, ⁴*University of Sierra Leone, Sierra Leone*, ⁵*Janssen Research and Development, Beerse, Belgium*, ⁶*Janssen Vaccines and Prevention BV, The Netherlands*, ⁷*KEMRI-Wellcome Trust Research Programme, Kilifi, Kenya*
- [P1.057] Modelling the potential impact of 100 days mission and broader investments on the COVID-19 pandemic**
 Gregory Barnsley^{*1,2}, Daniela Olivera Mesa², Damian Walker^{3,4}, Andy Torkelson⁵, Azra Ghani², Oliver J Watson^{2,1}, ¹*London School of Hygiene and Tropical Medicine Department of Infectious Disease Epidemiology, UK*, ²*Imperial College London, UK*, ³*Management Sciences for Health, USA*, ⁴*Center for Global Development, USA*, ⁵*Linksbridge, SPC, USA*

- [P1.058] Expanding vaccination provider types and administration sites can increase vaccination uptake: A systematic literature review of the evidence outside of the United States**
Anna Larson¹, Priya Shanmugam², Rachel Mitrovich¹, Divya Vohra², Aimee Lansdale², Amanda L. Eiden^{*1}, ¹Merck & Co., Inc., Rahway, NJ, USA, ²Mathematica Inc, USA
- [P1.059] Interferon-beta integrated SARS-CoV-2 vaccine prevents co-infection and enhances T-cell immunity in animal model**
Wan-Man Wong^{*1,2}, Chun-Kit Yuen^{1,2}, Long-Fung Mak^{1,2}, Kin-Hang Kok^{1,2}, ¹The University of Hong Kong, Hong Kong, ²Centre for Virology, Vaccinology and Therapeutics, Hong Kong Science and Technology Park, Hong Kong
- [P1.061] Building confidence in mRNA vaccines through targeted education for employers and vulnerable communities**
Chelsea D'Silva¹, Jia Hu^{*1}, Scott Ratzen², Ajit Johal³, Theresa Tang¹, Hinna Hasan¹, ¹19 to Zero, Canada, ²City University of New York, USA, ³Immunize.io, Canada
- [P1.062] Unconjugated peptide vaccine comprising conserved epitopes from both SARS-CoV-2 and influenza virus generates durable and broadly reactive antibodies to multiple coronavirus and influenza virus strains**
Nimisha Rikhi^{*1}, Clara J. Sei¹, Kevin Muema¹, Kellie A. Kroscher¹, Richard F. Schuman², Aba Assiaw-Dufu¹, Gerald W. Fischer¹, ¹Longhorn Vaccines and Diagnostics, LLC, USA, ²Antibody and Immunoassay Consultants, USA
- [P1.063] A custom phage immunoprecipitation sequencing library to monitor and observe epitope-level antibody response to SARS-CoV-2 vaccination or infection**
Charles Kevin Tiu^{*1,2}, Wannan Chia¹, Feng Zhu¹, Lin-Fa Wang^{1,2}, ¹Duke-NUS Medical School, Singapore, ²Singhealth Duke-NUS Global Health Institute, Singapore

- [P1.064] Sociodemographic correlates of vaccination uptake for key vaccine preventable diseases among sexual and gender minorities in living in New Jersey and New York**
Kristen Krause^{*1,2}, Anita Karr³, Paul D'Avanzo³, Perry Halkitis^{1,2}, ¹*Rutgers School of Public Health, USA*,²*Rutgers Center for Health, Identity, Behavior and Prevention Studies, USA*,³*Columbia University, USA*
- [P1.065] Assessing concern around MPOX accompanied by acceptability and accessibility of MPOX vaccination among sexual and gender minorities living in New Jersey and New York**
Perry Halkitis^{1,2}, Kristen Krause^{*1,2}, ¹*Rutgers School of Public Health, USA*,²*Rutgers Center for Health, Identity, Behavior and Prevention Studies, USA*
- [P1.066] A rational design of a pneumococcal multi-epitope vaccine: from immunobioinformatics to bench-scale**
Vitor Alves^{*1,2}, Enéas Carvalho², Vinicius Souza², Jose Patane¹, Viviane Gonçalves², ¹*University of São Paulo, Brazil*,²*Butantan Institute, Brazil*
- [P1.067] A roundtable discussion on approaches to measuring and improving vaccine confidence globally**
Jia Hu^{*1}, Scott Ratzan², Ajit Johal³, Theresa Tang¹, Chelsea D'Silva¹, ¹*19 to Zero, Canada*,²*City University of New York, USA*,³*Immunize.io, Canada*
- [P1.068] A recombinant, non-replicating oral rotavirus vaccine for the developing world**
Esmeralda Cuevas Juarez^{*}, Gilad Doitsh, Emery Dora, Laura Showalter, Ermin Zhao, William Sun, Elena Neuhaus, Molly Braun, Samanta Gutierrez, Sarah Tedjakusuma, Becca Flitter, Sean Tucker, *Vaxart Inc, USA*

- [P1.069]** **Development of a next generation 31 valent pneumococcal conjugate vaccine (VAX-31) using site-specific carrier protein conjugation**
Christopher Behrens*¹, Jeff Fairman¹, Paresh Agarwal¹, Shylaja Arulkumar¹, Sandrine Barbanel¹, Leslie Bautista¹, Aym Berges¹, John Burky¹, Peter Davey¹, Chris Grainger¹, Sherry Guo¹, Samantha Iki¹, Mark Iverson¹, Neeraj Kapoor¹, Olivier Marcq², Thi-Sau Migone¹, Lucy Pill-Pepe¹, Mohammed Sardar¹, Paul Sauer¹, James Wassil¹, ¹Vaxcyte Inc., USA, ²Tubulis GmbH, Germany
- [P1.070]** **Immunoglobulin Fc displayed modified Porcine Epidemic Diarhoea Virus (PEDV) enhanced the immune response against PEDV**
Kyoung-Ho Lee*^{1,2}, Mai Wada², Hyun-Jin Shin³, ¹Chungnam National University, Republic of Korea, ²CellEnVax, Republic of Korea, ³Chungnam National University, Republic of Korea
- [P1.071]** **An attenuated vaccinia vaccine encoding the SARS-CoV-2 spike protein elicits broad and durable immune responses, and protects cynomolgus macaques and human ACE2 transgenic mice from SARS-CoV-2 and its variants**
Fumihiko Yasui*¹, Hirohito Ishigaki², Misako Nakayama², Naoki Yamamoto¹, Kenzaburo Yamaji¹, Yusuke Metsumoto¹, Cong Nguyen², Yoshinori Kitagawa², Takahiro Sanada¹, Tomoko Honda¹, Tsubasa Munakata¹, Yasushi Itoh², Michinori Kohara¹, ¹Tokyo Metropolitan Institute of Medical Science, Japan, ²Shiga University of Medical Science, Japan

- [P1.072] Defense mechanisms against MERS-CoV infection and immunological memory in mucosal tissues for developing intranasal vaccines candidates**
Khalid Shrwani^{*1,2}, Waleed Mahallawi³, Eyad Gadour^{4,5}, Jaber Ghazwani⁶, Omar Mashi⁶, Zaki Eisa⁷, Ahmed Albarrag^{8,9}, Abdullah Algwizani⁸, Nigel Cunliffe¹, Qibo Zhang¹⁰, ¹University of Liverpool, UK, ²Department of Virology, Public Health Authority, Jazan, Saudi Arabia, ³Taibah University, Saudi Arabia, ⁴University Hospitals of Morecambe Bay NHS Foundation Trust, UK, ⁵Zamzam University College, Sudan, ⁶Public Health Authority, Jazan, Saudi Arabia, ⁷Saudi Center for Disease Prevention and Control (SCDC), Saudi Arabia, ⁸Public Health Authority, Saudi Arabia, ⁹King Saud university, Saudi Arabia, ¹⁰University of Surrey., UK
- [P1.073] Novel algorithm driven vaccine design framework for optimal population and pathogen variation coverage build for strong cellular and humoral response and memory**
Julia Villarroel^{*}, Federico De Masi, Juliet Frederiksen, Claus Lundegaard, ZS Associates, Copenhagen, Denmark
- [P1.074] Cholera vaccine clinical trials: a cross-sectional analysis of clinical trials registries**
Lindi Mathebula^{*}, Thobile Malinga, Mammekwa Mokgoro, Duduzile Ndwandwe, Charles Wiysonge, Glenda Gray, South African Medical Research Council, South Africa
- [P1.075] Return on investment of a 20-valent pneumococcal conjugate vaccine to directly protect adults against pneumococcal disease in England**
Diana Mendes¹, Mark Atwood², Reiko Sato³, Andrew Vyse¹, James Campling¹, Dhvani Hariharan², Derek Weycker², Tendai Mugwagwa^{*4}, Jeffrey Vietri³, ¹Pfizer UK, UK, ²Policy Analysis Inc, USA, ³Pfizer Inc Pennsylvania, USA, ⁴Pfizer Inc, USA

- [P1.077] Prevalence and impact of persistent symptoms following SARS-CoV-2 infections in UK healthcare workers in the SIREN cohort study**
Sarah Foulkes^{*1}, Josie Evans², Jennifer Bishop², Claire Neill¹, Jameel Khawam¹, Colin Brown¹, Susan Hopkins¹, Victoria Hall¹, Lesley price^{2,3}, ¹UK Health Security Agency, UK, ²Public Health Scotland, UK, ³Glasgow Caledonian University, UK
- [P1.078] Factors associated with COVID-19 vaccine breakthrough infection in vaccinated UK healthcare workers, a cross-sectional analysis from the VIBRANT, PITCH, and SIREN cohorts**
Sarah Foulkes^{*1}, Oliver Galgut², Ana Atti¹, Jameel Khawam¹, jem chalk³, Lizzie Stafford³, Sofia Sampaio³, Jasmin Islam¹, Jean Timeyin¹, Callum Halstead³, Antonia Ho⁴, Kate Templeton⁵, Christopher Duncan⁶, Thushantha de Silva⁷, Lance Turtle⁸, Susan Hopkins¹, Paul Klenerman⁹, Susie Dunachie⁹, Victoria Hall¹, Alex Richter², ¹UK Health Security Agency, UK, ²University of Birmingham, UK, ³University of Oxford, UK, ⁴NHS Greater Glasgow and Clyde, UK, ⁵NHS Lothian, UK, ⁶Newcastle University, UK, ⁷The University of Sheffield, UK, ⁸University of Liverpool, UK, ⁹Oxford University Hospitals NHS Foundation Trust, UK
- [P1.079] Development of Toll-Like Receptor-directed adjuvants and incorporation in innovative vaccine formulations against challenging antimicrobial resistant bacterial infections**
Ana Rita Franco^{*}, Alessio Romerio, Alice Italia, Valentina Artusa, Federico Lami, Mohamed Monsoor Shaik, Francesco Peri, *University of Milan, Italy*
- [P1.080] F1-based LNP-mRNA vaccine affords protection against bubonic and pneumonic plague**
Yinon Levy^{*1}, Uri Elia¹, Edo Kon², Hila Cohen¹, Inbal Hazan-Ha'levy², Moshe Aftalion¹, Assaf Ezra², Erez Bar-Haim¹, Gonna Naidu², Yael Diesendruck², Shahar Rotem¹, Nitay Ad-El², Meir Goldsmith², Emanuelle Mamroud¹, Dan Peer², Ofer Cohen¹, ¹Israel Institute for Biological Research, Israel, ²Tel Aviv University, Israel

- [P1.081] Local authorities' schemes to improve the influenza vaccination rate for care home staff**
Faisal Alsaif^{*1}, Michael Twigg¹, David Wright², Amrish Patel¹,
¹University of East Anglia, UK,²University of Leicester, UK
- [P1.082] Humoral and cellular responses to mRNA-1273 vaccination in lung transplant recipients with prior infection**
Siqi Liu^{*1}, Laura van Dijk², Yvette den Hartog², Rogier Hoek³,
Erik Verschuuren¹, Corine Geurtsvankessel², Rory De Vries²,
Debbie Van Baarle^{1,4}, Coretta Van Leer Buter¹, ¹University of
Groningen, The Netherlands,²Erasmus University Medical
Center, The Netherlands,³University Medical Center
Rotterdam, The Netherlands,⁴Center for Infectious Disease
Control, National Institute for Public Health and the
Environment, Bilthoven, The Netherlands
- [P1.083] Hybrid immunity in SARS-CoV-2: the paediatric story**
Youjia Zhong^{*1}, Elizabeth Huiwen Tham², Lynette Pei-Chi
Shek², Eng Eong Ooi¹, ¹Duke-NUS Medical School Program in
Emerging Infectious Diseases, Singapore,²National University
of Singapore Yong Loo Lin School of Medicine, Singapore
- [P1.084] Receipt of the influenza vaccine is the greatest factor associated with pneumococcal vaccine uptake amongst the elderly**
Mncengeli Sibanda^{*}, JC Meyer, Rosemary Burnett, Sefako
Makgatho Health Sciences University, South Africa
- [P1.086] Immunogenicity of a chimeric SARS-CoV-2 virus-like particle in mice**
Bac Tran Le, Jung-Eun Park^{*}, Chungnam National University,
Republic of Korea

- [P1.087] Obesity is a risk factor for symptomatic flaviviral infection**
Ayesa Syenina^{*1,2}, Christine Tham^{1,2}, Danny Tng^{1,3,4}, Valerie Chew^{1,2}, Jia Xin Yee^{1,2}, Yanshan Leong^{1,2}, Eugenia Ong^{1,2}, Jenny Low^{1,2,3}, Eng Eong Ooi^{1,2,3,5}, ¹Duke-NUS Medical School, Singapore, ²Singhealth Duke-NUS Academic Medical Centre, Singapore, ³Singapore General Hospital, Singapore, ⁴Duke-NUS Medical Academic Clinical Programme, Singapore, ⁵National University of Singapore, Singapore
- [P1.088] Identifying priority groups for CMV vaccination in China: A modeling study**
Gang Qin¹, Meng-Zhao Yin¹, Yuan-Yuan Gu², Jun-Tao Shu^{*3}, Bin Zhang¹, Min Su¹, Lu-Ping Zhang¹, Yin-Hua Jiang¹, ¹Affiliated Hospital of Nantong University, China, ²Macquarie University, Australia, ³Nantong University, China
- [P1.089] Pre-clinical evaluation of vaccine efficacy against Tuberculosis**
Rebecca Winsbury^{*}, Simon Clark, Service UK Health Security Agency - Porton, UK
- [P1.090] Humoral immune response against XBB.1.5 and BQ.1.1 SARS-CoV-2 variants of a fourth dose of PHH-1V vaccine in adult subject: Preliminary results of HIPRA-HH-2 extension study**
Salome de Cambra Florensa^{*}, Sandra Moros, Antonio Barreiro, Antonio Prenafeta, Laia Madrenas, Manuel Cañete, Julia Corominas, Irina Güell, Tera Prat, Laura Ferrer, HIPRA HUMAN HEALTH, Spain
- [P1.091] A study on the improvement of *in vivo* potency assay of botulinum toxin products for national lot release system**
Kyung Sik Yoon^{*}, Hanbit Bong, Jiyun Seo, Won Gyo Jang, Jeong Nam Woo, InYeong Hwang, Jongwon Kim, National Institute of Food and Drug Safety Evaluation, Republic of Korea

- [P1.092] Lessons learned from COVID vaccine hesitancy in teenagers during COVID19 pandemic in USA**
Meher Garg¹, Ruchi Gupta^{*2,3,1}, ¹*Springfield School, USA*,²*Springfield Clinic LLP, USA*,³*Southern Illinois University, USA*
- [P1.093] Purification of virus-like particles by liquid chromatography as candidate vaccines.**
Pedro Martín-Reyes^{*1}, Nicola J Stonehouse², David J Rowlands², ¹*University of Leeds, UK*,²*University of Leeds, UK*
- [P1.094] Pneumococcal serotypes associated with invasive pneumococcal disease and carriage in UK children - potential impact of a 20-valent pneumococcal conjugate vaccine**
Carole Czudek^{*}, Andrew Vyse, Gillian Ellsbury, *Pfizer Ltd, Walton Oaks, UK*
- [P1.095] Field monitoring of the implementation of polio supplementary immunization activities following circulating Vaccine-Derived Polio Virus Type 2 (cVDPV2) Outbreak in Aceh, Indonesia**
Sherli Karolina^{*}, Lulu Ariyantheny Dewi, Ratih Oktri Nanda, Prima Yosephine, Gertrudis Tandy, *Ministry of Health of the Republic of Indonesia, Indonesia*
- [P1.096] Effects of freezing media on cell viability for dendritic cell-based immunotherapy**
Alberto José da Silva Duarte^{*}, Bruna Tiaki Tiyo, Telma Miyuki Oshiro, Laís Teodoro da Silva, *Universidade de Sao Paulo, Brazil*
- [P1.097] Genomics advancements in vaccine design and development in low and middle income economies**
Samson Muuo Nzou^{*1}, Robinson Irweka¹, Matthew Munyao¹, Esther Kinyeru², Tonny Nyandwaro¹, Peter Rotich¹, Caroline Njoroge¹, Joanne Yego¹, Eberhard Zeyhle³, Ann Mwangi¹, ¹*Kenya Medical Research Institute, Kenya*,²*Ministry of Health, Nakuru County, Kenya*,³*Meru University of Science and Technology, Kenya*

- [P1.098] Development of a Nipah virus model of disease**
Stephen Findlay-Wilson, Stuart Dowall, Lucy Flett*, Javier Salguero, Roger Hewson, *UKHSA, UK*
- [P1.099] Utility of language model and physics-based approaches in modifying MHC Class-I immune-visibility for the design of vaccines and therapeutics**
Hans-Christof Gasser*, Diego Oyarzun, Ajitha Rajan, Javier Alfaro, *The University of Edinburgh, UK*
- [P1.100] Seasonality of Guillain-Barré Syndrome during vaccination against SARS-CoV-2: A country-wide analysis of vaccines in Mexico**
Yaneth Tapia-Morales¹, Miguel García-Grimshaw¹, Sergio Iván Valdés-Ferrer^{*1,2}, ¹*Salvador Zubiran National Institute of Medical Sciences and Nutrition, Mexico*, ²*Northwell Health Feinstein Institutes for Medical Research, USA*
- [P1.101] Toxicity of aluminum adjuvant in rabies vaccine: a case study**
Subhash Chand*, Jaipal Meena, Harit Kasana, Faraz Sheikh, Gurminder Bindra, Shikha Yadav, Harish Chander, *National Institute of Biologicals, India*
- [P1.102] SARS-CoV2 spike protein expression as an Identification in quality control testing for adenovector based Covid-19 vaccine**
Ade Ajay Kumar¹, Jaipal Meena¹, Harit Kasana¹, Anup Anvikar¹, Harish Chander^{*1}, Faraz Sheikh², ¹*National Institute of Biologicals, India*, ²*National Institute of Biologicals, India*
- [P1.103] Quality testing for vaccines: Need of the hour**
Harit Kasana, Jaipal Meena, Harish Chander*, Archana Syal, Subhash Chand, *National Institute of Biologicals, India*
- [P2.001] The abundance of selected lipopolysaccharide-rich bacteria and Toll-like Receptor 4 expression are significantly associated with rotavirus vaccine shedding**
Lerato Kgosana*, Mapaseka Seheri, Cliff Magwira, *Sefako Makgatho Health Sciences University, South Africa*

- [P2.002] A versatile and powerful dendritic cell-targeting platform to induce sustained protective immunity upon single dose immunization**
Sylvie Alonso^{*1}, Mireille Lahoud², Nicholas Cheang¹, ¹*National University of Singapore, Singapore,*²*Monash University, Australia*
- [P2.003] Predictors of uptake of childhood immunisation by mothers in an urban community in Osun state**
Olapeju Esimai^{*1}, Titilayo Adeyanju², ¹*Obafemi Awolowo University, Nigeria,*²*Obafemi Awolowo University Teaching Hospital, Nigeria*
- [P2.004] Adjuvanted influenza vaccination in the elderly and its impact on public healthcare system resources within the Republic of Ireland - An influenza and SARS-CoV-2 co-circulation approach**
Van Hung Nguyen¹, Mansoor Ashraf², Joaquin Mould-Quevedo³, Timothy Schrire^{*1}, ¹*Seqirus USA Inc, USA,*²*Seqirus, UK,*³*Seqirus USA Inc, USA*
- [P2.005] Association between body mass index (BMI) and safety and immunogenicity to COVID-19 vaccination in different sex**
Yujing Fan^{*1}, Ricky, Ruiqi Zhang¹, Ka-Yi Leung¹, Danlei Liu¹, Ka-Wa Khong², Hoi-Yan Lam², Xiaochun Xie², Kwok-Hung Chan², Ivan, Fan-Ngai Hung², ¹*The University of Hong Kong, Hong Kong,*²*The University of Hong Kong, Hong Kong*
- [P2.006] Novel ways to drive catch-up vaccination of adult migrants in UK primary care: a pilot study**
Alison F Crawshaw¹, Lucy P Goldsmith¹, Anna Deal^{1,2}, Jessica Carter¹, Felicity Knights¹, Farah Seedat¹, Michiyo Iwami¹, Fatima Wurie³, Azeem Majeed⁴, Sally Hargreaves^{*1}, ¹*St George's University of London, UK,*²*London School of Hygiene & Tropical Medicine, UK,*³*Office for Health Improvement and Disparities, UK,*⁴*Imperial College London, UK*

- [P2.007] Adherence to tetanus prophylaxis guidelines among trauma patients in Japan**
Sachiko Ono^{*1}, Mikio Nakajima², Hayato Yamana³, Nobuaki Michihata⁴, Kohei Uemura¹, Yosuke Ono⁵, Hideo Yasunaga¹,
¹The University of Tokyo, Japan,²Tokyo Metropolitan Hiroo Hospital, Japan,³Jichi Medical University, Japan,⁴Chiba Cancer Center Research Institute, Japan,⁵National Defense Medical College, Japan
- [P2.008] Residual toxicity testing of vaccine matrices against neonatal bovine diarrhoea and ovine abortion with the Limulus Amoebocyte Lysate (LAL) test: Preliminary data**
Antonella Di Paolo^{*}, Lucia Anzalone, Claudia Colabella, Rosario Liberti, Andrea Felici, Monica Cagiola, *Istituto Zooprofilattico Sperimentale dell'Umbria e delle Marche "Togo Rosati", Italy*
- [P2.009] Duration of influenza vaccine effectiveness in the elderly in Japan: A retrospective cohort study using large-scale population-based registry data**
Kohei Uemura^{*1}, Sachiko Ono¹, Nobuaki Michihata², Hayato Yamana³, Hideo Yasunaga¹, *¹The University of Tokyo, Japan,²Chiba Cancer Center Research Institute, Japan,³Jichi Medical University, Japan*
- [P2.010] Assessment of the programmatic suitability and user acceptability of delivery devices for the prevention of respiratory syncytial virus in infants**
Manjari Quintanar-Solares^{*1}, Denise Habimana², Collrane Frivold¹, Courtney Jarrahian¹, *¹PATH, USA,²PATH, Switzerland*
- [P2.011] Cellular and humoral immunity against different SARS-CoV-2 variants is detectable but reduced in vaccinated kidney transplant patients**
Laura Thümmeler^{*1}, Anja Gäckler¹, Maren Bormann¹, Sandra Ciesek^{2,3,4}, Marek Widera², Hana Rohn¹, Neslinur Fisenkci¹, Mona Otte¹, Mira Alt¹, Ulf Dittmer¹, Peter Horn¹, Oliver Witzke¹, Adalbert Krawczyk¹, Monika Lindemann¹, *¹University of Duisburg-Essen, Germany,²University Hospital Frankfurt, Germany,³Goethe-University, Germany,⁴Fraunhofer Institute for Molecular Biology and Applied Ecology (IME), Germany*

- [P2.012] Development and characterization of a live attenuated influenza A/H1N1pdm09 virus vaccine master donor virus candidate**
Svetlana Shcherbik*¹, Nicholas Pearce², Maarja Toots^{2,3}, Tatiana Bousse², David Wentworth², John Steel², ¹*Centers for Disease Control and Prevention, USA*, ²*Centers for Disease Control and Prevention, USA*, ³*Battelle Memorial Institute, USA*
- [P2.013] VaxCheck: The development and testing of a clinical decision-making adult vaccine tool for community pharmacists**
Nancy Waite¹, Sherilyn Houle*¹, Molly Yang², Elizabeth Vernon-Wilson¹, Madeleine Rivard¹, Alice Lau², ¹*University of Waterloo, Canada*, ²*WholeHealth Partners, Canada*
- [P2.014] Increasing vaccination service capacity by use of injection-certified pharmacy technicians in community pharmacies: A qualitative analysis of best practices**
Nancy Waite, Mathew DeMarco, Sherilyn Houle*, *University of Waterloo, Canada*
- [P2.015] Mapping of the cold-adapted and temperature sensitive phenotypes of a live attenuated influenza A/H1N1pdm09 virus vaccine candidate**
Brenda M. Calderon*, Svetlana Shcherbik, Nicholas Pearce, David Wentworth, John Steel, *Centers for Disease Control and Prevention, USA*
- [P2.016] Promoter mutations in the novel “OP7” influenza defective interfering particle intended for use as antiviral**
Julita Piasecka*¹, Daniel Rüdiger¹, Sascha Kupke¹, Udo Reichl^{1,2}, ¹*Max Planck Institute for Dynamics of Complex Technical Systems, Germany*, ²*Otto von Guericke University, Germany*

- [P2.017] Establishment of an improved ATP assay method for BCG vaccine potency testing**
Pyong-Gon Moon^{*1}, Donglin Yi², So Jeong Lee¹, TaeHyung Kim¹, Inyoung Lee¹, Joon-Ik Ahn¹, InYeong Hwang¹, Jongwon Kim¹, ¹*National Institute of Food and Drug Safety Evaluation, Republic of Korea*,²*National Institute of Food and Drug Safety Evaluation, Republic of Korea*
- [P2.018] Improving vaccination coverage through community pharmacy services; the COVID-19 experience and implications for policy review in Nigeria**
Yejide Oseni^{1,2}, Ukamaka Okafor¹, Taofik Odukoya^{*3}, Hamidu Oluyedun⁴, Abiodun Ajibade⁵, Yusuff Azeez¹, Abigail Okonu¹, Oladapo Adetunji⁶, ¹*Pharmacy Council of Nigeria, Nigeria*,²*Obafemi Awolowo University, Nigeria*,³*Vanguard Pharmacy Ltd, Nigeria*,⁴*Oyo State Ministry of Health, Nigeria*,⁵*Alvid Nigeria Ltd, Nigeria*,⁶*University of Ibadan, Nigeria*
- [P2.019] Estimating the burden of adult accident and emergency respiratory attendances in England that are due to respiratory syncytial virus**
Andrew Vyse^{*1}, Elizabeth Begier², Hamish Graham¹, Hannah Wright¹, ¹*Pfizer International Ltd (UK), UK*,²*Pfizer Inc, USA*
- [P2.020] Codon pair deoptimization (CPD)-attenuated PRRSV-1 vaccination exhibit immunity to virulent PRRSV challenge in pigs**
Hyang-Sim Lee^{*}, *Animal and Plant Quarantine Agency, Republic of Korea*
- [P2.021] Comparison of immune response in Omicron SARS-CoV-2 breakthrough infection across BNT162b2 and CoronaVac vaccinated adults**
Xiaochun Xie^{*}, Ruiqi Zhang, Danlei Liu, Yujing Fan, Kwok Hung Chan, Ivan Fan-Ngai Hung, *The University of Hong Kong, Hong Kong*

- [P2.022] A One-Year Follow-Up Evaluation of Frontline Healthcare Workers' Knowledge After Adverse Events Following Immunization (AEFI) Surveillance Training in Six Districts in Malawi**
Lapani Ngala¹, Sandra Kiplagat², Christine Kihembo³, Joseph Magoola³, Rhoda Chado⁴, Kondwani Mmanga^{*1}, Anderson Ndalama⁵, Esther Chirwa⁶, Boston Zimba⁶, Donnie Mategula⁷, Mike Chisema⁴, Jane Gidudu², ¹*African Field Epidemiology Network, Malawi*, ²*Centre for Disease Control and Prevention, USA*, ³*African Field Epidemiology Network, Uganda*, ⁴*Expanded Programme on Immunization, Ministry of Health, Malawi*, ⁵*Pharmacy Medicines Regulatory Authority, Malawi*, ⁶*World Health Organization, Malawi*, ⁷*Kamuzu University of Health Sciences, Malawi*
- [P2.023] Estimating costs associated with pediatric Respiratory Syncytial Virus infection managed in the hospital setting in England**
Rebecca Butfield^{*}, Jack Said, *Pfizer Ltd, UK*
- [P2.024] Estimating costs associated with adult Respiratory Syncytial Virus infection managed in the hospital setting in England**
Rebecca Butfield^{*}, Jack Said, *Pfizer Ltd, UK*
- [P2.025] Immunological correlates of Type III Interferon (IFN- λ 3) pre-treatment of chicken cells against Avian Influenza Virus (AIV) infection**
Sucharita Bhowmick^{*}, Amirul Islam Mallick, *Indian Institute of Science Education and Research Kolkata, India*

- [P2.026] Mapping zero-dose children and missed communities identified through school vaccination screening in Zambia**
Megan Powell^{*1}, Webster Mufwambi², Alvira Hasan¹, Aline Dombola², Christine Prosperi¹, Rodgers Sakala², Kelvin Kapungu², Gershom Chongwe², Prachi Singh¹, Qiulin Wang¹, Kennedy Siputuma³, Malalu Mulundika³, Francis Mwansa⁴, Constance Sakala⁴, Elicah Kamiji⁴, Stella Chewe³, Chisanga Mpundu³, Shaun Truelove¹, William Moss¹, Simon Mutembo¹,
¹*Johns Hopkins University, USA*,²*Tropical Diseases Research Centre, Zambia*,³*Zambia Ministry of General Education, Zambia*,⁴*Zambia Ministry of Health, Zambia*
- [P2.027] Immunogenicity of a subunit Nipah virus vaccine adjuvanted with polyphosphazene and administered via the intranasal route**
Dominique Promeneur¹, Glorie Lazaro¹, Becky Nowak¹, Alexander Marin², Nairuti Patel¹, Stefan Hamm¹, Alexander Andrianov², Victor Leyva Grado^{*1},
¹*AuroVaccines LLC, USA*,²*Institute for Bioscience and Biotechnology Research, USA*
- [P2.028] Determinants of COVID-19 vaccine early acceptance and non-acceptance among health care workers based at a tertiary care institution, New Delhi, India**
Sumit Malhotra^{*}, Kalaivani Mani, *All India Institute of Medical Sciences, New Delhi, India*
- [P2.029] Co-administration of OVX836 , NP-based universal influenza vaccine candidate, with conventional ha-based influenza vaccine: results of phase 2a clinical trial**
Paul Willems, Jessika Tourneur, Delphine Guyon-Gellin, Alexandre Le Vert^{*}, Florence Nicolas, *Osivax, France*

- [P2.030] Evaluation of two infectious Bovine Rhinotracheitis (IBR) marker vaccines against Bubaline Alphaherpesvirus 1 (BuHV-1) in water buffalo (*Bubalus bubalis*) after challenge infection with wild-type buHV-1**
Giovanna Cappelli¹, Stefano Petrini^{*2}, Carlo Grassi¹, Giovanna De Matteis³, Francesco Grandoni³, Giorgio Galiero¹, Giovanna Fusco¹, Esterina De Carlo¹, Alessandra Martucciello¹, ¹*Istituto Zooprofilattico Sperimentale del Mezzogiorno, Italy*, ²*Istituto Zooprofilattico Sperimentale Umbria-Marche, "Togo Rosati", Italy*, ³*CREA-Council for Agricultural Research and Economics-Research Centre for Animal Production and Aquaculture, Italy*
- [P2.031] Assessing the feasibility of school-based vaccination screening and catch-up vaccination in 2 districts in Zambia**
Alvira Z Hasan^{*1}, Alines M Dombola², Christine Prosper¹, Webster Mufwambi², Rodgers Sakala², Kelvin Kapungu², Gershom Chongwe², Prachi Singh¹, Qiulin Wang¹, Megan P Powell¹, Kennedy Siputuma³, Malalu Mulundika³, Stella Chewe³, Chisanga Mpundu³, Francis Mwansa⁴, Constance Sakala⁴, Elicah Kamiji⁴, Shaun A Truelove¹, William J Moss¹, Simon Mutembo¹, ¹*Johns Hopkins University, USA*, ²*Tropical Diseases Research Centre, Zambia*, ³*Ministry of Education, Government of Republic of Zambia, Zambia*, ⁴*Ministry of Health, Government of Republic of Zambia, Zambia*
- [P2.032] Cross-reactivity of the immune response triggered in a phase 2 study by a novel, broad-spectrum influenza vaccine candidate**
Philippe Moris, Charlotte Primard, Alexandre Le Vert^{*}, Florence Nicolas, *Osivax, France*
- [P2.033] Challenges and communication strategies in COVID-19 vaccination: Insights from vaccinators in Tuscany, Italy**
Vieri Lastrucci^{*1}, Giorgia Alderotti², Martina Corvo¹, Primo Buscemi³, Guglielmo Bonaccorsi³, Chiara Lorini³, Maria José Caldes², ¹*Meyer Children's hospital IRCCS, Italy*, ²*Meyer Children's Hospital IRCCS, Italy*, ³*University of Florence, Italy*

- [P2.034] Rotavirus vaccine product switch: Experience of 4 states of India**
Amanjot Kaur¹, Arindam Ray², Amrita Kumari^{*1}, Syed F. Qaudri¹, Rashmi Mehra¹, Seema Singh Koshal¹, Rhythm Hora¹, Pradeep Haldar¹, Arup Deb Roy¹, ¹*John Snow Inc India, India,*²*Bill & Melinda Gates Foundation India, India*
- [P2.035] Comparative analysis for antibody persistence after OPV, sIPV and cIPV received in Japan**
Fuka Kikuchi^{*1,2}, Ai Hayashi^{1,3}, Satoru Arai¹, Michiya Hasegawa⁴, Yasutaka Yamashita⁵, Masae Itamochi⁶, Miyabi Ito⁷, Emi Hirose⁵, Atsuko Sakurai⁸, Yoko Ikeda⁹, Yuji Hanada¹⁰, Mami Nagashima⁴, Yuka Ootsuka⁵, Noriko Aoki⁵, Hideki Tani⁶, Katsuhiko Sato⁷, Rika Komagome⁸, Yoko Aoki⁹, Hidetaka Yoshizumi¹⁰, Minetaro Arita¹, Hajime Kamiya¹, Motoi Suzuki¹, ¹*National Institute of Infectious Diseases, Japan,*²*Tokyo University of Agriculture and Technology, Japan,*³*Tohoku University School of Medicine, Japan,*⁴*Tokyo Metropolitan Institute of Public Health, Japan,*⁵*Ehime Prefectural Institute of Public Health and Environmental Science, Japan,*⁶*Toyama Institute of Health, Japan,*⁷*Aichi Prefectural Institute of Public Health, Japan,*⁸*Hokkaido Institute of Public Health, Japan,*⁹*Yamagata Prefectural Institute of Public Health, Japan,*¹⁰*Chiba Prefectural Institute of Public Health, Japan*
- [P2.036] Enablers and barriers to rotavirus vaccine coverage in Assam, India- A qualitative study**
Rashmi Mehra¹, Arindam Ray², Sabita Das³, Biman Kusum Chowdhury³, Seema Singh Koshal¹, Rhythm Hora¹, Amrita Kumari^{*1}, Amanjot Kaur¹, Syed F Quadri¹, Arup Deb Roy¹, ¹*John Snow Inc India, India,*²*Bill & Melinda Gates Foundation India, India,*³*Government of Assam, India*
- [P2.037] Influenza vaccine hesitancy among healthcare workers in a tertiary care hospital in India: preliminary results of an ongoing study**
Rakesh Kumar^{*}, Ritvik Amarchand, Prerna Malik, Vijaydeep Siddharth, Anand Krishnan, *All India Institute of Medical Sciences, New Delhi, India*

- [P2.038] Dynamics of lymphocyte subsets during the COVID-19 vaccination process in Japanese general population**
Takuma Furukawa^{*1}, Goki Yamada², Akiko Matsumoto¹, Chiharu Iwasaka^{1,3}, Takeshi Sawada¹, Mikiko Tokiya¹, Mikako Horita¹, Megumi Hara¹, ¹*Saga University, Japan,* ²*Kagoshima University, Japan,* ³*National Institutes of Biomedical Innovation, Health and Nutrition, Japan*
- [P2.039] Study of the ability of passive immunity to induce clinical protection against *Bovine alphaherpesvirus-1* (BoHV-1) after challenge infection with wild-type (wt) BoHV-1**
Cecilia Righi^{*1}, Alessandra Martucciello², Paola Gobbi¹, Giovanna Cappelli², Giulia Costantino¹, Silvia Pirani¹, Michela Pela¹, Carlo Grassi², Monica Giammarioli¹, Giulio Viola³, Esterina De Carlo², Francesco Feliziani¹, Stefano Petrini¹, ¹*National Reference Centre for Infectious Bovine Rhinotracheitis (IBR), Istituto Zooprofilattico Sperimentale Umbria-Marche, "Togo Rosati," Perugia, Italy, Italy,* ²*National Reference Centre for Hygiene and Technology of Breeding and Buffalo Production, Istituto Zooprofilattico Sperimentale del Mezzogiorno, Salerno, Italy, Italy,* ³*Veterinary Practitioner, Macerata, Italy, Italy*
- [P2.040] Comprehensive pictorial holistic packaging of information aided with indigenous tools for behavior change interventions helped in reducing vaccine hesitancy among parents or caretakers in Uttar Pradesh, India**
Rina Dey^{*}, Dr. Roma Solomon, Abhishek Gupta, *CORE Group Partners Project, India*
- [P2.041] Lot quality assurance sampling for field monitoring of a new vaccine: a pilot study**
Rhythm Hora^{*1}, Arindam Ray², Rashmi Mehra¹, Seema Singh Koshal¹, Amrita Kumari¹, Syed F Quadri¹, Amanjot Kaur¹, Pradeep Haldar¹, Arup Deb Roy¹, ¹*John Snow Inc India, India,* ²*Bill & Melinda Gates Foundation India, India*

- [P2.042] Factors associated with not uptake of COVID-19 vaccine and vaccine hesitancy among people with severe mental illness in Bangladesh**
Asiful Chowdhury*¹, Alex Mitchell², Helal Uddin Ahmed³, Amina Khan⁴, A. T. Nizami⁵, Gerardo A. Zavala², Najma Siddiqi^{2,6,7}, Kamran Siddiqi^{2,6}, Rumana Huque¹, ¹ARK Foundation, Dhaka, Bangladesh, Bangladesh, ²Department of Health Sciences, University of York, York UK, UK, ³National Institute of Mental Health & Hospital, Dhaka, Bangladesh, Bangladesh, ⁴The Initiative, Pakistan, Pakistan, ⁵Institute of Psychiatry (IoP), Rawalpindi, Pakistan, Pakistan, ⁶Hull York Medical School, UK, UK, ⁷Bradford District Care NHS Foundation Trust, UK, UK
- [P2.043] Post-vaccine HAI antibody kinetics are driven by pre-existing immune status**
David Hodgson*¹, Annette Fox², Sheena Sullivan², Adam Kucharski¹, ¹London School of Hygiene & Tropical Medicine, UK, ²The University of Melbourne, Australia
- [P2.044] The development and evaluation of theory-based social media intervention using a human-centred design approach to address vaccine hesitancy: a case study of Chinese students in the UK**
Lan Li*, Patty Kostkova, University College London, UK
- [P2.045] Rapid field assessment to understand the low reporting of newly introduced vaccine in the UIP of Gujarat, India**
Seema Singh Koshal¹, Arindam Ray², Divya Rathee¹, Rashmi Mehra¹, Amanjot Kaur¹, Rhythm Hora*¹, Amrita Kumari¹, Syed F. Quadri¹, Pradeep Haldar¹, Arup Deb Roy¹, ¹John Snow Inc India, India, ²Bill & Melinda Gates Foundation India, India
- [P2.046] Post-vaccination clinical safety and immunogenicity of maternal purified Respiratory Syncytial Virus (RSV) of protein vaccine administration in pregnant women: meta-analysis of randomised trials**
Muhammad Pradhika Mapindra*¹, Muhammad Pradhiki Mahindra², Howard Clark², Jens Madsen², ¹University College London Institute for Women's Health, UK, ²University College London Institute for Women's Health, UK

- [P2.047] SARS-CoV-2 vaccine hesitancy in China: A national cross-sectional survey in community setting**
Tianshuo Zhao^{*1}, Xikun Li², Zhuangye Wang³, Li Wang⁴, Wenguo Jiang⁵, Yu Ha⁶, Hui Li⁷, Linyi Chen¹, Xianming Cai¹, Yaqiong Liu¹, Qingbin Lu¹, Fuqiang Cui¹, ¹*Peking University School of Public Health, China,*²*Harbin First Specialized Hospital, China,*³*Dezhou Center for Disease Control and Prevention, China,*⁴*Suzhou Center for Disease Control and Prevention, China,*⁵*Jining Center for Disease Control and Prevention, China,*⁶*Jiuzhangou Center for Disease Control and Prevention, China,*⁷*Gansu Provincial Center for Disease Prevention and Control, China*
- [P2.048] The Vaccine Training Barometer: An online survey tool for assessing Healthcare providers' training needs and confidence in answering vaccine-related questions**
Greet Hendrickx^{*}, Sara Valckx, Aurélie De Waele, Pierre Van Damme, *University of Antwerp, Belgium*
- [P2.049] Influenza vaccination uptake in the Netherlands: a qualitative study among health care workers and elderly in Amsterdam**
Jantine van Wijlick^{*1,2}, Christopher Pell^{1,3,4}, ¹*Amsterdam Institute for Global Health and Development, The Netherlands,*²*Amsterdam Institute for Social Science Research (University of Amsterdam), The Netherlands,*³*Global Health (Amsterdam UMC Location AMC, The Netherlands,*⁴*Centre for Social Science and Global Health (University of Amsterdam), The Netherlands*
- [P2.050] Impact of statins on Influenza-Like Illness by influenza vaccination status in adults aged 65y and older: a cohort study using the UK Clinical Practice Research Datalink**
Adam Streeter^{*1,2,3}, William Henley², Ian Wellaway⁴, Lauren Rodgers², Andrea Shelly², Sarah Walker⁴, Fergus Hamilton⁵, William Hamilton², ¹*University of Münster, Germany,*²*University of Exeter Medical School, UK,*³*University of Plymouth, UK,*⁴*University of Exeter, UK,*⁵*University of Bristol, UK*

- [P2.051] Real-world effects of statins at the time of influenza vaccination on the risk of acute respiratory infections and pneumonia in older adults: a cohort study using the UK Clinical Practice Research Datalink**
William Henley^{*1}, Adam Streeter^{2,3,1}, Andrea Shelly¹, Ian Wellaway⁴, Lauren Rodgers¹, Sarah Walker¹, Fergus Hamilton⁵, William Hamilton¹, ¹*University of Exeter Medical School, UK,* ²*University of Münster, Germany,* ³*University of Plymouth, UK,* ⁴*University of Exeter, UK,* ⁵*University of Bristol, UK*
- [P2.052] Immunogenicity, safety and tolerability of intradermal COVID-19 vaccination strategy in immunocompromised patients: a prospective, randomized trial**
Ruiqi Zhang^{*}, Ka-Wa Khong, Ka-Yi Leung, Danlei Liu, Yujing Fan, Hoi-Yan Lam, Linlei Chen, Xiaochun Xie, Brian Pui-Chun Chan, Kelvin Kai-Wang To, Kwok-Yung Yuen, Kwok-Hung Chan, Ivan Fan-Ngai Hung, *University of Hong Kong, Hong Kong*
- [P2.053] Building up facilitators, breaking down barriers: a narrative review mapping behavioral factors that impact vaccine trial participation**
Toni Claessens^{*}, Aurélie De Waele, Greet Hendrickx, *University of Antwerp, Belgium*
- [P2.054] Associations between vaccine attitudes and COVID-19 precautionary behaviors: A social network study from the northeastern United States**
Aditya Khanna^{*1}, Mollie Monnig², Tori Davis², Peter Monti¹, ¹*Brown University School of Public Health, USA,* ²*Brown University School of Public Health, USA*
- [P2.055] Exploring vaccine hesitancy towards COVID-19 vaccine among Métis Nation of Ontario citizens using latent class analysis**
Ashok Chaurasia¹, Kim Eliane², Keith King^{*3}, Shelley Gonneville⁴, Sarah Edwards², Ornell Douglas¹, Jeff Kwong^{2,5}, Graham Mecredy², Jennifer Walker^{2,6}, Martin Cooke¹, ¹*University of Waterloo, Canada,* ²*Institute for Clinical Evaluative Sciences, Canada,* ³*University of Alberta, Canada,* ⁴*Métis Nation of Ontario, Canada,* ⁵*University of Toronto, Canada,* ⁶*McMaster University, Canada*

- [P2.056] The vaccination equity education coalition: experiential education on vaccine confidence to advance health and digital equity for all**
Hajar Shirley*^{1,2}, Kaitlyn Camperlino², ¹*Rutgers University, USA*,²*inclusive Health Innovation Together, USA*
- [P2.057] Perspectives on vaccination among Métis Nation of Ontario citizens who remain unvaccinated**
Tasha Shields*¹, Ornell Douglas¹, Keith King², Shelley Gonneville³, Sarah Edwards⁴, Ashok Chaurasia¹, Jeff Kwong^{4,5}, Graham Mecredy⁴, Jennifer Walker^{4,6}, Martin Cooke¹,
¹*University of Waterloo, Canada*,²*University of Alberta, Canada*,³*Métis Nation of Ontario, Canada*,⁴*Institute for Clinical Evaluative Sciences, Canada*,⁵*University of Toronto, Canada*,⁶*McMaster University, Canada*
- [P2.058] Confidence, complacency and collective responsibility were important factors for COVID-19 vaccination among Métis Nation of Ontario Citizens**
Keith King*¹, Hira Khan², Shelley Gonneville³, Sarah Edwards², Ashok Chaurasia⁴, Ornell Douglas⁴, Jeff Kwong^{2,5}, Graham Mecredy², Jennifer Walker^{2,6}, Martin Cooke⁴, ¹*University of Alberta, Canada*,²*Institute for Clinical Evaluative Sciences, Canada*,³*Métis Nation of Ontario, Canada*,⁴*University of Waterloo, Canada*,⁵*University of Toronto, Canada*,⁶*McMaster University, Canada*
- [P2.059] In shots we trust: Vaccination as a tool for American diplomacy then and now**
Sara Jane Samuel*, *Columbia University, USA*
- [P2.060] Assessing community and individual drivers of vaccination- Adapting and applying the BeSD framework to identify enablers and barriers to COVID-19 vaccination in India**
Gopal Krishna Soni¹, Surbhi Seth*¹, Sonal Kakkar¹, Jessica Shearear², Sanjay Kapur¹, Grace Chee³, ¹*John Snow India, India*,²*PATH, USA*,³*John Snow Inc Washington DC, USA*

- [P2.061] Swine Fc-conjugated serotype O foot-and-mouth disease virus-like particles play an important role in host inflammatory responses via PPAR α**
Hye-Mi Lee*, Jae-Yeon Park, Hyun-Jin Shin, *Chungnam National University, Republic of Korea*
- [P2.062] Adenovirus mediated expression of porcine epidemic diarrhea virus (PEDV) s1-ferritin nanoparticles induced significant neutralizing antibody response against PEDV in mouse models**
M. S. B. W. T. M. Nipuna Sudaraka Tennakoon*, Hyun-Jin Shin, *Chungnam National University, Republic of Korea*
- [P2.063] New vaccine development for foot and mouth disease by virus like particles conjugated with swine fc molecule**
Jae-Yeon Park*, Hyun-Jin Shin, *Chungnam National University, Republic of Korea*
- [P2.064] Design and development of a multi-epitope vaccine prototype against SARS-CoV-2**
Iliyan Manoylov¹, Nikolina Mihaylova¹, Nikola Ralchev¹, Silviya Bradyanova¹, Mariyana Atanasova², Ivan Dimitrov², Irini Doytchinova², Vladimir Petkov³, Sonya Tsibranska³, Slavka Tcholakova³, Andrey Tchorbanov*¹, ¹*Bulgarian Academy of Sciences, Bulgaria*,²*Medical University-Sofia, Bulgaria*,³*Sofia University, Bulgaria*
- [P2.065] Addressing vaccine hesitancy: planning for annual COVID-19 vaccination among inner city residents in Vancouver, Canada**
Brian Conway*^{1,2}, Shawn Sharma¹, Girogia Toniato¹, Shana Yi¹, Rossitta Yung¹, ¹*Vancouver Infectious Diseases Centre, Canada*,²*Simon Fraser University, Canada*
- [P2.066] Long-term vaccine durability of COVID-19 vaccines**
Kirsty Morrison*¹, Lucy Cullen¹, Emmanuel Ezeoke², Vera Chua², Allan James², Christopher Sullivan², Ross McQueenie², Kimberly Marsh², ¹*Public Health Scotland, UK*,²*Public Health Scotland Glasgow Office, UK*

- [P2.067] Qualitative analysis of COVID-19 vaccine errors in Scotland, December 2020 to March 2023**
Laura Macdonald^{*1}, Cheryl Gibbons¹, Michelle Falconer¹, William Malcolm^{2,1}, Esme Wright¹, Mike Birnie¹, Kat Karacaoglu¹, Marianne Alsina², Claire Cameron¹, ¹Public Health Scotland Glasgow Office, UK, ²NHS National Services Scotland, UK
- [P2.068] Proposal to adopt a new joint external evaluation tool to build vaccine confidence**
Lawrence Stanberry^{*1}, Tariro Makadzange², Wilmot James³, Janan Dietrich⁴, Susan Rosenthal¹, Natalia Pasternak Taschner⁵, Shabir Madhi⁴, ¹Columbia University Irving Medical Center, USA, ²Mutala Research, Zimbabwe, ³Brown University, USA, ⁴University of the Witwatersrand Johannesburg, South Africa, ⁵Instituto Questão de Ciência, Brazil
- [P2.069] Global and regional burden of attributable and associated bacterial antimicrobial resistance avertable by vaccination: modelling study**
Chaelin Kim¹, Marianne Holm², Isabel Frost³, Mateusz Hasso-Agopsowicz³, Kaja Abbas^{*1}, ¹London School of Hygiene & Tropical Medicine, UK, ²International Vaccine Institute, Republic of Korea, ³World Health Organisation, Switzerland
- [P2.070] Safety evaluation in pregnant ewes of the Rift Valley Fever live-attenuated vaccine candidate 40Fp8**
Pedro J. Sanchez-Cordon^{*1}, Celia Alonso¹, Oscar García García², Rafael Gonzalez Cano³, Belen Borrego¹, Alejandro Brun¹, ¹Animal Health Research Center, Spain, ²National Association of Breeders of Manchegan Sheep (AGRAMA), Spain, ³Regional Institute of Castilla-La Mancha for Agri-Food and Forest Research and Development (IRIAF), Spain
- [P2.071] Reliable intradermal vaccination with VAX-ID using prediction models for controlled depth allowing use of fractional dose as part of pandemic preparedness programs**
Koen Beyers^{*}, Daniele Scalco Vasconcelos, Momen Rbeihat, Vanessa Vankerckhoven, Idevax BV, Belgium

- [P2.073]** **Co-administration of COVID-19 and flu vaccines in Scotland: Enablers, and assessment of uptake**
Nuala Healy¹, Debbie Maguire², Graham McGowan³, Claire Cameron^{*1}, Lorna Willocks⁴, ¹*Public Health Scotland, UK*,²*Scottish Government Population Health Directorate, UK*,³*Public Health Scotland, UK*,⁴*Scottish Government, UK*
- [P2.074]** **Understanding the working modalities of Neglected Tropical Diseases (NTDs): a leverage mechanism for implementing COVID-19 vaccine awareness and uptake in Yobe and Ebonyi states**
Sidney Sampson, Sunday Atobatele, Akolade Jimoh^{*}, Saheed Isiaka, *Sydani Group, Nigeria*
- [P2.075]** **Peptide-encapsulated PLGA nanoparticles as a novel vaccine strategy against *Leishmania infantum***
Clara Hurtado-Morillas^{*}, Alicia Mas, José A Orden, Javier Carrión, Abel Martínez-Rodrigo, Gustavo Domínguez-Bernal, *Complutense University of Madrid, Spain*
- [P2.076]** **Intranasal delivery of *Salmonella* OMVs decorated with *Chlamydia trachomatis* antigens induces specific local and systemic immune responses in mice**
Dung T. Huynh^{*1,2}, Emanuele Nolfi³, Alice J. A. M. Sijts³, Joen Luirink^{1,2}, ¹*Abera Bioscience AB, Uppsala, Sweden*,²*Vrije Universiteit Amsterdam, The Netherlands*,³*Utrecht University, The Netherlands*

[P2.077]

Real-world-evidence on different COVID-19 vaccines combinations' effectiveness in six electronic healthcare data sources from four pan-European countries

Fabio Riefolo^{*1,2}, Belén Castillo Cano³, Mar Maria Martin³, Davide Messina⁴, Roel Elbers⁵, Dorieke Brink-Kwakkel⁵, Felipe Villalobos⁶, Ylenia Ingrassiotta⁷, Patricia Garcia-Poza³, Karin Swart-Polinder⁸, Patrick Souverein⁹, Luis Carlos Saiz¹⁰, Carlo Alberto Bissacco⁶, Leire Leache¹¹, Michele Tari¹², Salvatore Crisafulli⁷, Elisa Barbieri¹³, Luca Stona¹⁴, Xavier Garcia de Albeniz¹⁵, Satu Siiskonen¹⁶, Lamiae Grimaldi¹⁷, Tiago Vaz⁵, Rosa Gini^{4,2}, Olaf Klungel⁹, Elisa Martin Merino^{3,2}, ¹Teamit Institute, Partnerships, Barcelona Health Hub, Barcelona, Spain, ²Vaccine monitoring Collaboration for Europe, Brussels, Belgium, ³Spanish Agency of Medicines and Medical Devices-AEMPS, Madrid, Spain, ⁴Agenzia Regionale di Sanita' Toscana, Florence, Italy, ⁵University Medical Center Utrecht, The Netherlands, ⁶Fundació Institut Universitari per a la recerca a l'Atenció Primària de Salut Jordi Gol i Gurina (IDIAPJGol), Barcelona, Spain, ⁷University of Verona, Italy, ⁸PHARMO Institute for Drug Outcomes Research, Utrecht, The Netherlands, ⁹Utrecht University, The Netherlands, ¹⁰Navarre Health Service, Pamplona, Spain, ¹¹Navarre Health Service, Spain, ¹²Caserta Local Health Unit, Caserta, Italy, ¹³University of Padua, Italy, ¹⁴Fondazione Penta ONLUS, Padova, Italy, ¹⁵RTI-Health Solutions, Barcelona, Spain, ¹⁶Utrecht Institute for Pharmaceutical Sciences, The Netherlands, ¹⁷l'Assistance Publique-Hôpitaux de Paris (APHP), University Paris-Saclay, Paris, France

[P2.078]

Immunogenicity and protective efficacy of recombinant porcine epidemic diarrhoea virus spike protein

Hsing Chieh Wu, Doan Thi Thu Dung, Min Kung Hsu, Hsian Yu Wang, Chun Yen Chu^{*}, National Pingtung University of Science and Technology, Taiwan

- [P2.079] A systematic review of barriers and enablers associated with uptake of influenza vaccine among care home staff**
Faisal Alsaif^{*1}, Michael Twigg¹, Sion Scott², Annie Blyth¹, David Wright², Amrish Patel¹, ¹*University of East Anglia, UK,*²*University of Leicester, UK*
- [P2.080] EBHS recombinant vaccine prototype: development and standardization of a simple and cost-effective production procedure**
Claudia Colabella^{*}, Lucia Anzalone, Elisabetta Manuali, Rosario Liberti, Antonella Di Paolo, Giulio Severi, Monica Cagiola, Antonio De Giuseppe, *Istituto Zooprofilattico Sperimentale dell'Umbria e delle Marche "Togo Rosati", Italy*
- [P2.081] Factors associated with trust and acceptance of mRNA technology: A review of current evidence**
Ana Bolio^{*}, Prima Alam, Heidi Larson, *London School of Hygiene & Tropical Medicine, UK*
- [P2.082] Oral cholera vaccine coverage following a targeted mass-campaign in Goma, Democratic Republic of the Congo**
Emily Briskin^{*1}, Stéphane Hans Bateyi Mustafa², Rachel Mahamba³, Laurent Akilimali⁴, Deka Kabunga⁵, Janvier Kubuya⁵, Klaudia Porten¹, Placide Okitayemba Welo⁴, Anaïs Broban¹, ¹*Epicentre, France,*²*National Vaccination Program, Democratic Republic of Congo,*³*MSF/Epicentre, Democratic Republic of Congo,*⁴*National Plan for Cholera Elimination (PNECHOL), Democratic Republic of Congo,*⁵*Provincial Health Division, Democratic Republic of Congo*

[P2.083] Factors affecting oral cholera vaccination status after a mass preventative campaign in rural Bukama health zone, Democratic Republic of the Congo, 2022

Emily Briskin^{*1}, Toto Kyungu², Etienne Numbi³, Nelson Kasongo⁴, Patient Kamavu⁴, Rachel Mahamba⁴, Klaudia Porten¹, Patrick Banza Mpiong², Laurent Akilimali⁵, Placide Okitayemba Welo⁶, Anaïs Broban¹, ¹*Epicentre, France,* ²*Provincial Health Division, Haut-Lomami, Democratic Republic of Congo,* ³*Bukama Health Zone, Democratic Republic of Congo,* ⁴*MSF/Epicentre, Democratic Republic of Congo,* ⁵*National Vaccination Program, Democratic Republic of Congo,* ⁶*National Plan for Cholera Elimination (PNECHOL), Democratic Republic of Congo*

[P2.084] Waning of specific antibodies against Delta and Omicron variants five month after a third dose of BNT162b2 SARS-CoV-2 vaccine in elderly individuals

Yun Shan Goh^{*1}, Angeline Rouers¹, Siew-Wai Fong¹, Nicole Zhuo², Pei Xiang Hor¹, Chiew Yee Loh¹, Yuling Huang¹, Vanessa Neo¹, Isaac Kam¹, Bei Wang², Eve Ngoh², Siti Nazihah Mohd Salleh², Raphael Lee³, Surinder Pada⁴, Louisa Sun⁵, Desmond Ong⁶, Jyoti Somani⁷, Eng Sing Lee⁸, Sebastian Maurer-Stroh³, Cheng-I Wang², Ee Chee Ren², Yee Sin Leo⁹, David Lye⁹, Barnaby Young⁹, Lisa Ng¹, Laurent Renia¹, ¹*A*STAR ID Labs, Singapore,* ²*Singapore Immunology Network, Singapore,* ³*Bioinformatics Institute, Singapore,* ⁴*Ng Teng Fong General Hospital, Singapore,* ⁵*Alexandra Hospital, Singapore,* ⁶*National University Polyclinic, Singapore,* ⁷*National University of Singapore, Singapore,* ⁸*National Healthcare Group Polyclinics, Singapore,* ⁹*National Centre for Infectious Diseases, Singapore*

- [P2.085] Heterologous prime-boost Zika virus vaccination supplies a comprehensive humoral and cellular immunity in mouse model**
Giuditta De Lorenzo^{*1,2}, Rapeepat Tandavanitj^{1,3}, Lorena Preciado-Llanes⁴, Ricardo Sanchez-Velazquez¹, Raissa Prado Rocha⁴, Young Chan Kim⁴, Arturo Reyes-Sandoval^{4,5}, Arvind Patel¹, ¹MRC-University of Glasgow Centre for Virus Research, UK,²AREA Science Park, Italy,³Research and Development Institute, Thailand,⁴University of Oxford, UK,⁵Instituto Politécnico Nacional, Mexico
- [P2.086] Effectiveness of HPV vaccination in preventing high grade cervical disease and cancer diagnoses in Wales**
Lauren O'Gorman^{*1}, Malorie Perry¹, Simon Cottrell¹, Katie Walbeoff², Dyfed Huws³, Helen Clayton⁴, Louise Richards⁵, ¹Public Health Wales Vaccine Preventable Disease Programme, UK,²Public Health Wales Cervical Screening Wales, UK,³Public Health Wales Welsh Cancer Intelligence and Surveillance Unit, UK,⁴Public Health Wales Informatics Division, UK,⁵Digital Health and Care Wales, UK
- [P2.087] Validation of a double-color ELISpot assay of IFN-γ and IL-4 production in human Peripheral Blood Mononuclear Cells**
Giulia Fantoni^{*}, VisMederi srl, Italy, University of Siena, Italy
- [P2.088] Establishment and validation of a high-throughput micro-neutralization assay for Respiratory Syncytial Virus (subtypes A and B)**
Leonardo Armini^{*}, VisMederi srl, Italy, University of Siena, Italy
- [P2.090] The Cedar Project: Vaccine perceptions and the impact of colonialism on COVID-19 vaccine uptake among Indigenous People who use drugs in British Columbia**
Chenoa Cassidy-Matthews^{*1,2}, David Zamar², Sherri Pooyak³, Margo Pearce⁴, Jeffrey Reading⁵, Martin Schechter¹, Patricia Spittal^{1,2}, ¹The University of British Columbia, Canada,²BC Children's Hospital Research Institute, Canada,³University of Victoria, Canada,⁴Fraser Health, Canada,⁵Simon Fraser University, Canada

- [P2.091] Effectiveness of second BNT162b2 mRNA booster doses in protecting against SARS-CoV-2 infection during the Omicron sub-variant waves; the UK SIREN study June 2022 to March 2023**
Sarah Foulkes¹, Peter Kirwan², Victoria Hall^{*1}, Ferdinando Insalata¹, anne presanis², Andre Charlett¹, daniela de Angelis², Susan Hopkins¹, ¹*UK Health Security Agency, UK*, ²*University of Cambridge, UK*
- [P2.092] Progress towards a virus-free polio vaccine: a virus-like particle (VLP) vaccine as a safe alternative to current vaccines**
David Rowlands, Nicola Stonehouse, Pedro Martín-Reyes^{*}, *University of Leeds, UK*
- [P2.093] The CATCH-UP study; determinants of HPV vaccine uptake in a Dutch campaign for young adults**
Chaja Kater^{*}, Adriette Oostvogels, Dirk Hoevenaars, Milly Haverkort, *GGD Kennemerland, The Netherlands*
- [P2.094] Levels of confidence, complacency, constraints and collective responsibility predict COVID-19 vaccination behaviour amongst South African school educators**
Kesentseng Mahlaba^{*}, Dineo Mmakgwale, Maria Kau, Rosemary Burnett, Johanna Meyer, *Sefako Makgatho Health Sciences University, South Africa*
- [P2.095] Seasonal influenza virus vaccine effectiveness through recombinant neuraminidase on VLPs**
Leticia Guzman Ruiz^{*1}, Irene Hoxie², Miriam Klausberger¹, Florian Krammer², Alois Jungbauer^{1,3}, Reingard Grabherr¹, ¹*University of Natural Resources and Life Sciences Vienna, Austria*, ²*The Mount Sinai Hospital, USA*, ³*Austrian Centre of Industrial Biotechnology, Vienna, Austria*
- [P2.096] Bivalent SARS-CoV-2 mRNA vaccination provides optimal protection against XBB.1 infection in a murine challenge model**
Jordan Clark^{*}, Michael Scherm, Nisreen Okba, Brian Monahan, Juan Manuel Carreño, Anass Abbad, Viviana Simon, Florian Krammer, *Icahn School of Medicine at Mount Sinai, USA*

- [P2.097] The epidemiological profile of typhoid fever in Greater Glasgow and Clyde between April 2014 and March 2023: evidence of the intercontinental spread of extensively-drug resistant typhoid fever from Pakistan to Scotland**
Jacob Asplin*, *NHS Greater Glasgow and Clyde, Public Health Protection Unit, UK*
- [P2.098] Sociodemographic and economic factors associated with the willingness to accept a free COVID-19 vaccine among households in Nigeria**
Oghenowede Eyawo*¹, Shenyi Pan², Mishel Mahboob³, Telma Oroh⁴, Uchechukwu Ugoji⁵, ¹*School of Global Health, York University, Canada,* ²*Department of Statistics, University of British Columbia, Canada,* ³*York University School of Kinesiology and Health Science, Canada,* ⁴*Coventry University, UK,* ⁵*Salem Clinic & Maternity, Warri, Nigeria*
- [P2.099] Measles susceptibility in Scotland: preventing a resurgence**
Cheryl Gibbons*, Melissa Llano, Neil Perkins, Salomi Barkat, Laura MacDonald, Michelle Falconer, Claire Cameron, *Public Health Scotland, UK*
- [P2.100] Differential antibody dynamics to multiple MPOX antigens following two doses of MVA-BN (IMVANEX) in a longitudinal cohort**
Bethany Hicks*¹, Scott Jones², Cathy Rowe², Ashley Otter³, ¹*UK Health Security Agency, UK,* ²*UK Health Security Agency, UK,* ³*UK Health Security Agency, UK*
- [P2.101] Opt-out vaccination of COVID-19 in selected municipalities in Japan**
Hiroshi Nishura*, *Kyoto University, Japan*
- [P2.102] Emphasizing the importance of Shariah Islamic perspectives in vaccine manufacturing**
Hazlin Kadir Shahar*, *Department of Islamic Development Malaysia, Malaysia*