

# Poster Program

- [P.01] **COVID-19, vaccine hesitancy and disinformation: a look at WhatsApp in Brazil**  
Isis Umbelino-Walker<sup>\*1</sup>, Rosana Pinheiro-Machado<sup>2</sup>, Diego Dorgam<sup>3</sup>, <sup>1</sup>VU University Amsterdam, The Netherlands,<sup>2</sup>University of Bath, UK,<sup>3</sup>Mapeo.ai, Brazil
- [P.02] **COVID-19 Vaccine Hesitancy and Intent in California Registered Nurses**  
Linda Vuong<sup>\*</sup>, Julie T. Bidwell, Ester Carolina Apeso-Varano, Fawn A. Cothran, Sheryl L. Catz, Betty Irene Moore School of Nursing at the University of California, Davis, USA
- [P.03] **Adolescent girls' perspectives and recommendations for designing Human Papillomavirus Vaccination Program in Pakistan**  
Rozina Feroz Ali<sup>1</sup>, Vittoria Offeddu<sup>2</sup>, Danya Arif<sup>\*2</sup>, Amna Mirza<sup>1</sup>, Nowshaba Naz<sup>1</sup>, Sara Abdullah<sup>1</sup>, Jane Mingjie Lim<sup>3</sup>, Gayatri Kembhavi<sup>3</sup>, Clarence C Tam<sup>3</sup>, Subhash Chandir<sup>2</sup>, <sup>1</sup>IRD-Pakistan, Pakistan,<sup>2</sup>IRD-Global, Singapore,<sup>3</sup>National University of Singapore, Singapore
- [P.04] **Feasibility assessment carpool model to facilitate immunizations of <2 years children in rural Pakistan**  
Rozina Feroz Ali<sup>1</sup>, Sundus Iftikhar<sup>1</sup>, Mubarak Taighoon Shah<sup>1</sup>, Anokhi Ali Khan<sup>1</sup>, Danya Arif Siddiqi<sup>2</sup>, Subhash Chandir<sup>\*2</sup>, <sup>1</sup>IRD-Pakistan, Pakistan,<sup>2</sup>IRD-Global, Singapore
- [P.05] **Scanning 2d barcodes on vaccine vials to link vials to immunized child, a pilot study**  
Anokhi Ali Khan<sup>\*1</sup>, Muhammed Siddique<sup>1</sup>, Mohannad Abdo<sup>2</sup>, Jon Pearman<sup>2</sup>, Ted Prusik<sup>2</sup>, Subhash Chandir<sup>1</sup>, <sup>1</sup>IRD, Pakistan,<sup>2</sup>Temptime Corporation, A Zebra Technologies Company, USA
- [P.06] **Pilot sentinel surveillance system for the post market monitoring of immunization cold chain equipment: lessons from Bangladesh and Pakistan**  
Zohaib Hassan<sup>1</sup>, Danya Arif Siddiqi<sup>2</sup>, Jobaer Faruque<sup>3</sup>, Mubarak Taighoon Shah<sup>1</sup>, Anokhi Ali Khan<sup>\*1</sup>, Tapash Roy<sup>3</sup>, Edda Magnus<sup>4</sup>, Paul Mallins<sup>5</sup>, Subhash Chandir<sup>2</sup>, <sup>1</sup>Interactive Research and Development Pakistan, Pakistan,<sup>2</sup>Interactive Research and Development Global, Singapore,<sup>3</sup>Interactive Research and Development Bangladesh, Bangladesh,<sup>4</sup>PATH, Switzerland,<sup>5</sup>World Health Organisation, Switzerland
- [P.07] **COVID-19 vaccine acceptance among university students and lecturers in different provinces of Indonesia: A cross-sectional study**  
Madan Khatiwada<sup>\*1</sup>, Ryan Rachmad Nugraha<sup>2</sup>, Kuswandewi Mutyara<sup>3</sup>, Laili Rahayuwati<sup>4</sup>, Carine Dochez<sup>5</sup>, Cissy Kartasasmita<sup>6</sup>, <sup>1</sup>Network for Education and Support in Immunisation (NESI), University of Antwerp, Belgium,<sup>2</sup>USAID Health Financing Activity/ ThinkWell, Indonesia,<sup>3</sup>Faculty of Medicine, Universitas Padjadjaran, Indonesia,<sup>4</sup>Faculty of Nursing, Universitas Padjadjaran, Indonesia,<sup>5</sup>Network for Education and Support in Immunisation (NESI), University of Antwerp, Belgium,<sup>6</sup>Department of Pediatric, Rumah Sakit Umum Pusat Hasan Sadikin, Indonesia
- [P.08] **Say Hello to Bablibot! Development and feasibility-testing of an artificially intelligent chatbot which addresses vaccine hesitancy by answering immunization-related queries of caregivers in Karachi, Pakistan - a mixed methods evaluation**  
Mehr Munir<sup>1</sup>, Fatima Miraj<sup>2</sup>, Humdiya Raza<sup>2</sup>, Owais Ahmed Hussain<sup>3</sup>, Anokhi Ali Khan<sup>2</sup>, Danya Arif Siddiqi<sup>\*1</sup>, Amir Javed Khan<sup>1</sup>, Ali Habib<sup>3</sup>, Subhash Chandir<sup>1</sup>, <sup>1</sup>IRD Global, Singapore,<sup>2</sup>IRD Pakistan, Pakistan,<sup>3</sup>IHS, Pakistan
- [P.09] **Supporting family paediatricians communication skills in the rotavirus vaccination frame in Italy**  
Federico Marchetti<sup>\*1</sup>, Giulia Lamiani<sup>2</sup>, Marco Bona<sup>3</sup>, Chiara Amerighi<sup>3</sup>, Bruno Ruffato<sup>4</sup>, Giorgio Conforti<sup>4</sup>, <sup>1</sup>GSK, Italy,<sup>2</sup>University of Milan, Italy,<sup>3</sup>Choralia, Italy,<sup>4</sup>Family Pediatrician, Italy

- [P.10] **The C-terminal domain of P97 protein of *Mycoplasma hyopneumoniae* activates the Toll-like receptor 5 (TLR5) and increases the immunogenicity of grafted peptides epitopes**  
Félix Lamontagne\*, Laurie Gauthier, Denis Archambault, Steve Bourgault, *Université du Québec à Montréal, Canada*
- [P.11] **The cost of vaccine refusal for measles**  
Daniela Olivera Mesa\*, Peter Winskill, Katharina Hauck, Azra Ghani, *Imperial College London, UK*
- [P.12] **Cost-Effectiveness of Introducing an MF59-Adjuvanted Trivalent Influenza Vaccine for Older Adults in Brazil**  
Rodrigo Angerami<sup>1</sup>, Bernardo Pires<sup>2</sup>, Joaquin Mould-Quevedo<sup>\*3</sup>, Cecilia Magneres<sup>4</sup>, Renato Picoli<sup>2</sup>, Renato Kfour<sup>5</sup>, <sup>1</sup>*Universidade Estadual de Campinas, São Paulo, Brazil*,<sup>2</sup>*Kantar Health Division, São Paulo, Brazil*,<sup>3</sup>*Seqirus USA Inc., USA*,<sup>4</sup>*Seqirus S.A., Buenos Aires, Argentina*,<sup>5</sup>*Sociedade Brasileira de Pediatria, São Paulo, Brazil*
- [P.13] **Comparative evaluation to select optimal adjuvant of novel type *Salmonella* Typhimurium inactivated bacteria against *Salmonella* infections in a murine model**  
Seon Min Kim, Jeong HEE Yu, Yeong Ju Yu, Jin Hur\*, *Jeonbuk National University, Republic of Korea*
- [P.14] **The Financial and Personal Impact of COVID-19 on Intent to Vaccinate Among African-Americans in Southern Louisiana**  
Sara Al-Dahir<sup>1,2</sup>, Brittany Singleton<sup>\*1</sup>, Christopher Gillard<sup>1</sup>, Martha Earls<sup>1</sup>, Daniel Salmon<sup>2</sup>, <sup>1</sup>*Xavier University of Louisiana, USA*,<sup>2</sup>*Johns Hopkins University, USA*
- [P.15] **Downstream processing development for candidate HIV vaccine based on recombinant vesicular stomatitis virus (rVSV)**  
Anahita Bakhshizadeh Gashti\*, Bruno Gaillet, Alain Garnier, *Université Laval, Canada*
- [P.16] **Assessing COVID-19 Vaccine Acceptance in Healthcare Workers (HCWs): Findings from Multi-Site Vaccine Hesitancy Survey in Indonesia**  
Ryan Rachmad Nugraha<sup>\*1</sup>, Madan Khatiwada<sup>2</sup>, Kuswandewi Mutyara<sup>3</sup>, Laili Rahayuwati<sup>4</sup>, Carine Dochex<sup>2</sup>, Cissy Kartasasmita<sup>5</sup>, <sup>1</sup>*ThinkWell, Indonesia*,<sup>2</sup>*Network for Education & Support for Immunization (NESI), University of Antwerp, Belgium*,<sup>3</sup>*Department of Public Health, University of Padjadjaran, Indonesia*,<sup>4</sup>*Faculty of Nursing, University of Padjadjaran, Indonesia*,<sup>5</sup>*Department of Child Health, University of Padjadjaran, Indonesia*
- [P.17] **Molecular manipulation of the human adenovirus-5 vector encoding foot-and-mouth disease virus subunit vaccine.**  
Aishwarya Mogulothu<sup>\*1,2</sup>, Gisselle N. Medina<sup>2,3</sup>, Lauro Velazquez-Salinas<sup>2,4</sup>, Steven M. Szczepanek<sup>1</sup>, Patrick Hearing<sup>5</sup>, Teresa De Los Santos<sup>2</sup>, <sup>1</sup>*Department of Pathobiology and Veterinary Science, University of Connecticut, USA*,<sup>2</sup>*Plum Island Animal Disease Center (PIADC), ARS, USDA, USA*,<sup>3</sup>*National Bio and Agro-Defense Facility (NBAF), ARS, USDA, USA*,<sup>4</sup>*Department of Anatomy and Physiology, Kansas State University, USA*,<sup>5</sup>*Department of Microbiology and Immunology, School of Medicine, Stony Brook University, USA*
- [P.18] **Identification of effective peptide derived from WSSV-VP15 for protection of *Masupenaeus japonicus* against WSSV**  
Jirayu Boonyakida<sup>\*1</sup>, Jian Xu<sup>2</sup>, Jun Satoh<sup>3</sup>, Takafumi Nakanishi<sup>4</sup>, Toru Mekata<sup>5</sup>, Tatsuya Kato<sup>1,6,4</sup>, Enoch Y. Park<sup>1,2,4</sup>, <sup>1</sup>*Department of Bioscience, Graduate School of Science and Technology, Shizuoka University, Japan*,<sup>2</sup>*Research Institute of Green Science and Technology, Shizuoka University, Japan*,<sup>3</sup>*Fisheries Technology Institute of National Research and Development Agency, Japan Fisheries Research and Education Agency, Tamaki Field Station, Mie, Japan*,<sup>4</sup>*Department of Applied Biological Chemistry, Graduate School of Integrated Science and Technology, Shizuoka University, Japan*,<sup>5</sup>*Fisheries Technology Institute of National Research and Development Agency, Japan Fisheries Research and Education Agency, Namsei Field Station, Mie, Japan*,<sup>6</sup>*Research Institute of Green Science and Technology, Shizuoka University, Japan*

- [P.19] **Highly expressing, plant-produced vaccine candidates enhance antigen immunogenicity in mice without the need for adjuvant**  
Mary D. Pardhe\*, Andrew G. Diamos, Haiyan Sun, Joseph G.L. Hunter, Jacquelyn Kilbourne, Qiang Chen, Hugh S. Mason, *Arizona State University, USA*
- [P.20] **Protective efficacy of recombinant modified Stx2e proteins against porcine edema disease in Korean piglets**  
Jeong Hee Yu, Yeong Ju Yu, Seon Min Kim, Jin Hur\*, *Jeonbuk National University, Republic of Korea*
- [P.21] **Use of small ruminants in preclinical trials of tuberculosis vaccines.**  
Claudia Arrieta-Villegas<sup>1</sup>, Mariano Domingo<sup>1,2</sup>, Bernat Pérez de Val<sup>\*1</sup>, *<sup>1</sup>Institut de Recerca i Tecnologia Agroalimentàries - Centre de Recerca en Sanitat Animal (IRTA-CReSA), Spain,<sup>2</sup>Departament de Sanitat i Anatomia Animal, Universitat Autònoma de Barcelona, Spain*
- [P.22] **In vitro manipulated cell-based vaccines induce multiantigen-specific CD8 T-cell responses against murine pancreatic cancer in a PD-1/PD-L1-dependent manner**  
Katja Stifter<sup>\*1</sup>, Johann Gout<sup>2</sup>, Martin Wagner<sup>2</sup>, Thomas Seufferlein<sup>2</sup>, Reinhold Schirmbeck<sup>1</sup>, *<sup>1</sup>Ulm University Hospital, Germany,<sup>2</sup>University Hospital Ulm, Germany*
- [P.23] **New technology for stabilizing and protecting biologics**  
Flavia Maria Sutera\*, Ashkan Dehsorkhi, Paulina Baran-Rachwalska, Holly Cherise Pennington, Roja Hadianamrei, Mukhtar Ahmed, Michael Welsh, Nissim Torabi-Pour, Suzanne Saffie-Siebert, *SiSaf Ltd, UK*
- [P.24] **Flagellin-based nanostructures as a versatile vaccine platform with tailored immunostimulatory properties**  
Mélanie Côté-Cyr<sup>\*1,2,3</sup>, Ximena Zottig<sup>1,2,3</sup>, Denis Archambault<sup>3</sup>, Steve Bourgault<sup>1,2</sup>, *<sup>1</sup>Chemistry Department, Université du Québec à Montréal, Canada,<sup>2</sup>Quebec Network for Research on Protein Function, Engineering and Applications (PROTEO), Canada,<sup>3</sup>Department of Biological Sciences, Université du Québec à Montréal, Canada*
- [P.25] **Altering mumps virus polymerase fidelity**  
Mirna Jurković<sup>\*1,2</sup>, Jelena Ivančić-Jelečki<sup>1,2</sup>, Anamarija Slović<sup>1,2</sup>, Dubravko Forčić<sup>1,2</sup>, Tanja Košutić-Gulija<sup>1,2</sup>, Renata Jug<sup>1,2</sup>, Maja Jagušić<sup>1,2</sup>, *<sup>1</sup>Center for Research and Knowledge Transfer in Biotechnology, University of Zagreb, Croatia,<sup>2</sup>Center of Excellence for Viral Immunology and Vaccines, CERVirVac, Croatia*
- [P.26] **Efficacy and safety of the first Russian live vaccine against B. pertussis**  
Ilya Dyakov<sup>1,2</sup>, Alisa Medkova<sup>\*2</sup>, Evgeny Semin<sup>2</sup>, Lyudmila Sinyashina<sup>2</sup>, Nadezda Snegireva<sup>1</sup>, Irina Chernyshova<sup>1</sup>, Marina Gavrilova<sup>1</sup>, Kristina Bushkova<sup>1</sup>, Natalia Abaeva<sup>1</sup>, Gennady Karataev<sup>2</sup>, *<sup>1</sup>I. I. Mechnikov research institute of vaccine and sera, Russia,<sup>2</sup>N. F. Gamaleya Federal Research Center for Epidemiology & Microbiology, Russia*
- [P.27] **The Impact of Conflict on Vaccine Completion Among Children in Anbar, Iraq from 2014-2021: A Cross-Sectional, Household Based Survey**  
Sara Al-Dahir<sup>\*1,2</sup>, Alaa Khalil<sup>3</sup>, Tahseen Abdul Latif Hassan<sup>4</sup>, Gilbert Burnham<sup>1</sup>, William Moss<sup>1</sup>, Kawsar Talaat<sup>1</sup>, Maria Knoll<sup>1</sup>, *<sup>1</sup>Johns Hopkins University, USA,<sup>2</sup>Xavier University of Louisiana, USA,<sup>3</sup>Nunez Community College, USA,<sup>4</sup>Iraq Department of Health - Hadeetha.- Anbar, Iraq*
- [P.28] **Vaccine brand preference among unsheltered people experiencing homelessness in Los Angeles County, California, May 2021**  
Chelsea Shover<sup>1</sup>, Anna Bratcher<sup>\*1</sup>, Savannah Walseth<sup>2</sup>, Brooke Robie<sup>2</sup>, Nicolas Leachman<sup>2</sup>, Ashley Frederes<sup>1</sup>, Brenda Cruz<sup>1</sup>, Michelle Tabajonda<sup>1</sup>, Alicia Chang<sup>3</sup>, Emily Thomas<sup>2</sup>, *<sup>1</sup>University of California Los Angeles, USA,<sup>2</sup>Los Angeles County Department of Health Services, USA,<sup>3</sup>Los Angeles County Department of Public Health, USA*
- [P.29] **A framework to facilitate a shared understanding of a healthy market for vaccines and evidence-based policymaking**  
Marina Rodes-Sanchez<sup>1</sup>, Julia Spencer<sup>\*2</sup>, Anupama Tantri<sup>2</sup>, Rachel Mitrovich<sup>2</sup>, Boris Rachev<sup>2</sup>, Isha Sharma<sup>2</sup>, Adrian Towse<sup>1</sup>, Lotte Steuten<sup>1</sup>, *<sup>1</sup>Office of Health Economics, UK,<sup>2</sup>Merck, USA*

- [P.30] **The shift of HAI serogroup specificity in the African swine fever chimeric virus**  
Andrey Koltsov, Mihail Suher, Sergey Krutko, Galina Koltsova\*, *Federal Research Center for Virology and Microbiology, Russia*
- [P.31] **A Pharmacist Led Intervention Model to Increase COVID-19 Vaccine Uptake Among African-Americans**  
Christopher Gillard\*<sup>1</sup>, Sara Al-Dahir<sup>1</sup>, Brittany Singleton<sup>1</sup>, Martha Earls<sup>1</sup>, Daniel Salmon<sup>2</sup>, <sup>1</sup>*Xavier University of Louisiana College of Pharmacy, USA,*<sup>2</sup>*John Hopkins University, USA*
- [P.32] **Ensuring the full value of vaccination is recognized across the decision-making pathway for public vaccination programs**  
Rachel Mitrovich\*, Julia Spencer, *Merck & Co., USA*
- [P.33] **Hesitancy to receive the novel coronavirus vaccine and potential influences on vaccination among a cohort of healthcare workers in the Democratic Republic of the Congo, August 2020 to August 2021**  
Angelica L. Barrall\*<sup>1</sup>, Kamy Musene<sup>2</sup>, Nicole A. Hoff<sup>1</sup>, Anna Bratcher<sup>1</sup>, Camille Dzogang<sup>3</sup>, Sylvia Tangney<sup>1</sup>, Michel Kabamba<sup>4</sup>, Placide Mbala<sup>2</sup>, Didine Kaba<sup>5</sup>, Anne W. Rimoin<sup>1</sup>, <sup>1</sup>*Fielding School of Public Health, University of California, Los Angeles, USA,*<sup>2</sup>*Institut National de Recherche Biomédicale, Kinshasa, Democratic Republic of Congo,*<sup>3</sup>*UCLA-DRC, Kinshasa, Democratic Republic of Congo,*<sup>4</sup>*National Expanded Program for Immunization, Kinshasa, Democratic Republic of Congo,*<sup>5</sup>*Ecole de Sante Publique, Université de Kinshasa, Kinshasa, Democratic Republic of Congo*
- [P.34] **Development and preclinical assessment of DNA vaccine candidates against norovirus**  
Rebekka Kreuzer\*, Ulrike Protzer, Dieter Hoffmann, Hassan Moeini, *Institute of Virology, Technische Universität München, Germany*
- [P.35] **Information sources and vaccine hesitancy among healthcare workers in the democratic republic of congo**  
Sylvia Tangney\*<sup>1</sup>, Angie Barrall<sup>1</sup>, Kamy Musene<sup>2</sup>, Nicole Hoff<sup>1</sup>, Anna Bratcher<sup>1</sup>, Camille Dzogang<sup>2</sup>, Michel Kabamba<sup>3</sup>, Placide Mbala<sup>4</sup>, Didine Kaba<sup>5</sup>, Anne Rimoin<sup>1</sup>, <sup>1</sup>*UCLA, USA,*<sup>2</sup>*UCLA-DRC, Democratic Republic of Congo,*<sup>3</sup>*DRC Expanded Programme on Immunization, Democratic Republic of Congo,*<sup>4</sup>*Institut National pour la Recherche Biomedicale, Democratic Republic of Congo,*<sup>5</sup>*Kinshasa School of Public Health, Democratic Republic of Congo*
- [P.36] **Vaccine hesitancy in people who inject drugs**  
David Arnopole\*<sup>1,2</sup>, Louann O'Dell<sup>1</sup>, <sup>1</sup>*King University, USA,*<sup>2</sup>*Pellissippi State Community College, USA*
- [P.37] **New adjuvant technology for injectable poultry vaccines**  
Aude Puget\*, Nicolas Versillé, Cécile Lacaze, Juliette Ben Arous, *Seppic SA, France*
- [P.38] **An *in silico*-designed multiepitope COVID-19 vaccine targeting the out of sight antigens of SARS-CoV-2**  
Amirhosein Kefayat\*<sup>1</sup>, Fatemeh Ghahremani<sup>2</sup>, Parvin Goli<sup>3</sup>, Ashkan Safavi<sup>4</sup>, <sup>1</sup>*Isfahan University of Medical Sciences, Isfahan, Iran,*<sup>2</sup>*Arak University of Medical Sciences, Arak, Iran,*<sup>3</sup>*Isfahan University of Medical Sciences, Isfahan, Iran,*<sup>4</sup>*Islamic Azad University of Tehran, Iran*
- [P.39] **Immunoprotective effect of an *in silico*-designed multiepitope cancer vaccine with SYCP1 and ACRBP antigens target in a murine triple-negative breast cancer model**  
Amirhosein Kefayat\*<sup>1</sup>, Fatemeh Ghahremani<sup>2</sup>, Parvin Goli<sup>3</sup>, Ashkan Safavi<sup>4</sup>, <sup>1</sup>*Isfahan University of Medical Sciences, Isfahan, Iran., Iran,*<sup>2</sup>*Arak University of Medical Sciences, Arak, Iran., Iran,*<sup>3</sup>*Isfahan University of Medical Sciences, Isfahan, Iran,*<sup>4</sup>*Islamic Azad University of Tehran, Iran*
- [P.40] **Caregiver and service provider vaccine confidence following the Changchun Changsheng vaccine incident in China: A cross-sectional mixed methods study**  
Shiyi Tu<sup>1</sup>, Fiona Yueqian Sun\*<sup>2</sup>, Tracey Chantler<sup>2</sup>, Xuan Zhang<sup>3</sup>, Mark Jit<sup>2</sup>, Kaiyi Han<sup>2,1</sup>, Lance Rodewald<sup>3</sup>, Fanxing Du<sup>1</sup>, Zhiyuan Hou<sup>1</sup>, Heidi Larson<sup>2</sup>, <sup>1</sup>*Fudan University, China,*<sup>2</sup>*London School of Hygiene & Tropical Medicine, UK,*<sup>3</sup>*Chinese Center for Disease Control and Prevention, China*

- [P.41] **CMV-based vectors as candidates for T cell-based vaccines**  
Maja Cokarić Brdovčak<sup>\*1</sup>, Lydia Gačina<sup>1</sup>, Marko Šustić<sup>1</sup>, Jelena Železnjak<sup>1</sup>, Lea Hiršl<sup>1</sup>, Suzanne Welten<sup>2</sup>, Irena Slavuljica<sup>1,3</sup>, Stipan Jonjić<sup>1</sup>, Annette Oxenius<sup>2</sup>, Astrid Krmpotić<sup>1</sup>, <sup>1</sup>Faculty of Medicine, University of Rijeka, Croatia,<sup>2</sup>Institute of Microbiology, ETH Zürich, Switzerland,<sup>3</sup>Clinical Hospital Center Rijeka, Croatia
- [P.42] **Is the maternal pertussis vaccination needed in Indonesia?**  
Sunarno Sunarno<sup>\*</sup>, Nelly Puspadari, Ratih Dian Saraswati, Dwi Febriyana, Tati Febrianti, Vivi Setiawaty, Centre for Research and Development of Biomedical and Basic Health of Technology, National Institute of Health Research and Development, Jakarta, Indonesia, Indonesia
- [P.43] **Shared decision making enhances adult influenza vaccination rates in outpatient care – a systematic review and meta-analysis**  
Linda Sanftenberg<sup>\*1</sup>, Flora Kuehne<sup>1</sup>, Charlotte Anraad<sup>2</sup>, Caroline Jung-Sievers<sup>3</sup>, Tobias Dreischulte<sup>1</sup>, Jochen Gensichen<sup>1</sup>, <sup>1</sup>Institute of General Practice and Family Medicine, LMU University Hospital, Munich, Germany, Germany,<sup>2</sup>Department of Work and Social Psychology, Faculty of Psychology and Neuroscience Maastricht University, 6211 LK Maastricht, The Netherlands, The Netherlands,<sup>3</sup>Chair of Public Health and Health Services Research, Institute for Medical Information Processing, Biometry and Epidemiology (IBE), Ludwig-Maximilians-University Munich, Germany, Germany
- [P.44] **COVID-19 vaccination disparities and vaccine hesitancy in Puerto Rico**  
Kaumudi Joshipura<sup>\*1,2</sup>, Marijulié Martínez-Lozano<sup>1</sup>, Christian Vega<sup>1</sup>, Karen Martínez<sup>1</sup>, Elba Díaz<sup>1</sup>, <sup>1</sup>University of Puerto Rico Medical Sciences Campus, Puerto Rico,<sup>2</sup>Harvard T. H. Chan School of Public Health, USA
- [P.45] **Assessing gaps in the COVID-19 vaccine rollout in selected municipalities and cities in Mindanao, Philippines**  
Reneepearl Kim Sales<sup>\*</sup>, Lynnell Ong, Aaron Joe, Kristine Alvina, Michael Caampued, Alliance for Improving Health Outcomes, The Philippines
- [P.46] **Immunoinformatics approach to identify antigenic epitopes in surface protein candidates of Staphylococcus aureus, the causative agent of bovine mastitis**  
Camila Rengifo-Ibáñez<sup>\*1</sup>, Sabrina Jimenez<sup>1</sup>, Jose Daniel Corredor<sup>2</sup>, Ligia Torres<sup>1</sup>, <sup>1</sup>AGROSAVIA, Colombia,<sup>2</sup>University of the Andes, Colombia
- [P.47] **Moonlighting proteins from Leptospira spp. subclades P1 and P2 as cross-reactive vaccine candidates against bovine leptospirosis**  
Camila Rengifo-Ibáñez<sup>\*1</sup>, Natalia Delgado<sup>2</sup>, Sabrina Jimenez<sup>1</sup>, Ligia Torres<sup>1</sup>, Rocío Herrera<sup>1</sup>, <sup>1</sup>AGROSAVIA, Colombia,<sup>2</sup>Universidad El Bosque, Colombia
- [P.48] **Different stages vaccination and viral clearance constitute the integrated prevention and control technique for nervous necrosis virus (NNV-IPCT), a betanodavirus**  
Siyou Huang<sup>1</sup>, Lianpan Su<sup>1</sup>, Taowen Su<sup>1</sup>, Jianguo He<sup>1,2</sup>, Junfeng Xie<sup>\*1,2</sup>, <sup>1</sup>Sun Yat-Sen University, China,<sup>2</sup>State Key Laboratory of Biocontrol, China
- [P.49] **Exploring COVID-19 vaccine hesitancy in Canada**  
Cindy Na-Young Kang<sup>\*</sup>, Catherine Yu, Temerty Faculty of Medicine, University of Toronto, Canada
- [P.50] **Optimization of conditions to support efficient HEK293 cell growth and adenovirus production**  
Syed Khalil<sup>\*</sup>, Wen-Yang Tsai, Anna-Barbara Hachmann, Thermo Fisher Scientific, USA
- [P.51] **Sharing health misinformation and conspiracy theories in digital culture: the case of anti-vaccination Internet memes**  
Daniela Stefan<sup>\*</sup>, University of Bucharest, Romania
- [P.52] **Expanding pharmacy personnel scope of practice to increase adult pneumococcal vaccination coverage rates at a state-level**  
Ava Skolnik<sup>\*1</sup>, Alexandra Bhatti<sup>1</sup>, Amanda Eiden<sup>1</sup>, Mawuli Nyaku<sup>1</sup>, Erik Muther<sup>2</sup>, Kaitlyn Esselman<sup>2</sup>, Eric Wahlstrom<sup>2</sup>, Sheila Crean<sup>3</sup>, Gary Schneider<sup>3</sup>, <sup>1</sup>Merck & Co Inc, USA,<sup>2</sup>Discern Health, USA,<sup>3</sup>Real Chemistry, USA