

Poster Programme

Poster Session 1
Sunday October 4th
18:00-19:00 | Grand Gallery

- [P1.01] **Anti-pres responses influence the anti-HBS response in newborns after vaccination with the third generation sci B vac™- vaccine**
S.P.E. Sylvan^{*1}, K. Madalinski², U. Hellstrom³, ¹*Uppsala County Council, Sweden*, ²*National Institute of Health, Poland*, ³*Stockholm County Council, Sweden*
- [P1.02] **Safety and immunogenicity of oral, live trivalent human-ovine rotavirus reassortant vaccine in Chinese infants**
T. Huang^{*1}, R.C. Li¹, Y.P. Li¹, X. Zhou², Y. Nong¹, ¹*Guangxi Center for Disease Prevention and Control, China*, ²*Lanzhou Institute of Biological Products, China*
- [P1.03] **In vivo engineering of a cellular immune response by coadministration of LIGHT as a genetic adjuvant with a DNA immunogen**
S. Pouyanfard^{*1}, T. Bamdad¹, M. Parsania¹, H. Hashemi¹, M. Gorgian Mohamadi¹, ¹*Tarbiat Modares University, Iran*
- [P1.04] **A pilot study on intradermal vaccination of Japanese rabies vaccine for pre-exposure immunization**
A. Nishizono^{*1}, S. Shiota¹, P. Khowplod², K. Ahmed¹, ¹*Oita University, Japan*, ²*Thai red Cross Society, Thailand*
- [P1.06] **Hospital-based, febrile illnesses surveillance and the role of *salmonella* infections in Agogo, Ghana**
F. Marks^{*1}, Y. Adu-Sarkodie^{2,3}, N. Sarpong², F. Huenger², W. Loag⁴, M.O. Favorov¹, ¹*International Vaccine Institute, South Korea*, ²*Kumasi Centre for Collaborative Research in Tropical Medicine, Ghana*, ³*Kwame Nkrumah University for Science and Technology, Ghana*, ⁴*Bernhard Nocht Institute for Tropical Medicine, Germany*
- [P1.08] **IL-7 and IL-15 promote long-lasting T CD4⁺ cell memory against BCG**
J. Agrewala^{*1}, V. Singh¹, ¹*Institute of Microbial Technology, India*
- [P1.09] **Predictors of childhood vaccination uptake: A cross-sectional study in Greece**
K. Danis^{*1}, T. Georgakopoulou², T. Stavrou³, D. Laggas¹, T. Panagiotopoulos¹, ¹*National School of Public Health, Greece*, ²*Hellenic Centre for Disease Control and Preventio, Greece*, ³*Ministry of Health, Greece*
- [P1.10] **Waning immunity and booster responses in adolescents vaccinated with plasma-derived or recombinant hepatitis B vaccine**
C.C. Lin^{*1,3}, Y.L. Huang³, C.T. Shih¹, ¹*Fooyin University Hospital, Taiwan*, ²*Fooyin University, Taiwan*, ³*Kaohsiung Medical University, Taiwan*
- [P1.11] **Potential treatment of human papillomavirus associated tumor using recombinant inactive-E7 lipoproteins**
C.Y. Huang*, J.J.W. Chen, L.S. Chang, T.Y. Huang, S.J. Liu, C.H. Leng, *National Health Research Institutes, Taiwan*
- [P1.13] **Vaccine development against enterovirus 71 using live attenuated *bordetella pertussis* as a nasal delivery system**
W.X. Khong*, S. Alonso, *National University of Singapore, Singapore*
- [P1.14] **Projecting the efficacy of RotaTeq™ against rotavirus related hospitalizations and death in seven Asian countries**
A.C. El Khoury*, T.C. Mast, M. Ciarlet, L. Markson, M. Goveia, *Merck & Co, Inc, USA*
- [P1.15] **Single-dose primary vaccination with AS03_A-adjuvanted prepandemic H5N1 influenza vaccine is sufficient to induce strong, rapid and broad immune response to booster vaccination after 12 months**
T. F. Schwarz¹, T. Horacek², M. Knuf³, H.G. Dammann⁴, Paul Gillard^{*5}, Wolfgang Jilg⁶ et al, ¹*Stiftung Juliusspital, Würzburg*, ²*Medical Practice Witten*, ³*Johannes Gutenberg-University, Mainz*, ⁴*Clinical Research Institute Schwerin, Germany*, ⁵*GlaxoSmithKline Biologicals, Belgium*, ⁶*University Regensburg, Germany*
- [P1.16] **Effect of rhinitis on seroresponse to measles vaccine given by aerosol or injected routes**
A. Dilraj^{*1}, J.V. Bennett², F.T. Cutts³, J.F. de Castro⁴, ¹*Medical Research Council, South Africa*, ²*Consultant, USA*, ³*London School of Hygiene and Tropical Medicine, UK*, ⁴*Instituto Nacional de Salud Publica, Mexico*

- [P1.17] **Safety and immunogenicity of adjuvanted and non-adjuvanted influenza A (H5N1) vaccine in children**
T. Chotpitayasunondh¹, C. Pancharoen², S. Pepin³, Y. Hutagalung^{*4}, ¹Queen Sirikit National Institute of Child Health, Thailand,
²Chulalongkorn Hospital, Thailand, ³Sanofi Pasteur, France, ⁴Sanofi Pasteur, Singapore
- [P1.18] **Expression library immunization screening of *Burkholderia mallei* for subunit vaccine candidates**
D.M. Estes^{*1}, A. Deeraska¹, B.M. Judy¹, G.M. Whitlock¹, K. Sykes², A. Torres¹, ¹University of Texas Medical Branch, USA, ²Arizona State University, USA
- [P1.19] **Development of a second-generation vaccine against dengue**
D. Nico, R.M.C. Godinho, A.C.E.R. Berbel, L. Arruda, C.B. Palatnik-de-Sousa*, Universidade Federal do Rio de Janeiro (UFRJ), Brazil
- [P1.20] **Oral MucoRice-CTB induces toxin-protective serum antibodies but does not influence natural intestinal immunity in nonhuman primates**
Y. Yuki^{*1}, T. Nochi¹, Y. Katakai², H. Shibata³, D. Tokuhara¹, M. Mejima¹, ¹The University of Tokyo, Japan, ²Corporation for Production and Research of Laboratory Primates, Japan, ³Tsukuba Primate Research Center, Japan
- [P1.21] **A patient safety issue: Mandatory influenza vaccination for health care workers**
S. Wicker*, H.F. Rabenau, University Hospital Frankfurt, Germany
- [P1.22] **Immunoinformatic-discovered *Mycobacterium tuberculosis* T-cell epitope vaccine candidates are validated in HLA transgenic mice**
L. Moise^{1,2}, J. Desrosiers¹, R. Tassone¹, W. Martin¹, A. De Groot^{*1,2}, H. Kornfeld³, ¹EpiVax, Inc, USA, ²University of Rhode Island, USA, ³University of Massachusetts Medical Center, USA
- [P1.23] ***Staphylococcus aureus* vaccines: Protection depends on the bacterial strain and the pre-immune state of the host**
M. Lafrance¹, M. Rivest¹, P. Lacasse³, J. Perez-Casal², F. Malouin¹, B. Talbot^{*1}, ¹Université de Sherbrooke, Canada, ²Vaccine and Infectious Disease Organisation, Canada, ³Agriculture and Agri-Food, Canada
- [P1.24] **The administration dosage of influenza vaccine for infants: Is it sufficient in Japan?**
T. Tanaka*, Hitachi, Ltd. Mito General Hospital, Japan, Mito Kyodo General Hospital, Japan
- [P1.25] **Identification of naturally processed HLA-A11-restricted CTL epitopes derived from HPV type 18**
H.W. Chen^{1,2}, C.H. Leng¹, H.Y. Liu^{*1}, W.F. Cheng³, Y.W. Chang¹, P.Y. Wu⁴, ¹Vaccine Research and Development Center, Taiwan, ²China Medical University, Taiwan, ³National Taiwan University, Taiwan, ⁴Academia Sinica, Taiwan
- [P1.26] **Infection with a highly attenuated strain of *Bordetella pertussis* in mice provides cross-protection against lethal challenge with influenza a viruses by dampening the cytokine storm**
R. Li, A. Lim*, T. Narasaraju, M.C. Phoon, V.T. Chow, S. Alonso, National University of Singapore, Singapore
- [P1.27] **Immunogenicity of a 10-valent pneumococcal non-typeable *haemophilus influenzae* protein D-conjugate vaccine (PHID-CV) co-administered with routine paediatric vaccines in asian infants**
N. Bernal^{*1}, T.Y. Lin², L.M. Huang³, S. Gatchalian⁴, H. Tang⁴, L. Schuerman⁴, ¹Research Institute for Tropical Medicine, Philippines, ²Chang Gung Memorial Hospital, Taiwan, ³National Taiwan University Hospital, Taiwan, ⁴GlaxoSmithKline Biologicals, Belgium
- [P1.28] **Burden of dengue fever in Eastern Kolkata, India: Data from a prospective community based study**
S. Kanungo^{*1}, D.A.C.L. Amarasinghe², D. Sur¹, B. Manna¹, S. Chatterjee¹, P. Sadhukhan¹, ¹Indian Council of Medical Research, India, ²International Vaccine Institute, South Korea
- [P1.29] **Recombinant influenza A N1 neuraminidase induces cross-protective immunity against H5N1 viruses**
P.L. Hervé, V. Lorin, N. Noulin, F. Reynard, G. Jouvion, N. Escriou*, Institut Pasteur, France
- [P1.30] **Immunogenicity study of rabies post-exposure vaccination after switching schedule from intramuscular regimen to intradermal regimen**
T. Tantawichien^{*1}, P. Shantavasinkul¹, P. Khawplod¹, T. Tantawichien^{1,2}, ¹Queen Saovabha Memorial Institute, Thailand, ²Chulalongkorn University, Thailand
- [P1.31] **Th1 and Th2 type epitopes cocktail, as a DNA vaccine against *Helicobacter pylori***
T. I. Carvalho^{*1}, M. Roxo-Rosa¹, C. R. C. Calado¹, ¹Universidade Católica Portuguesa, Portugal
- [P1.32] **Expression of fusion protein of human respiratory syncytial virus from chimeric rubella virus vectors**
K.N. Hsiao*, P. Chong, Y.H. Chow, National Health Research Institute, Taiwan
- [P1.33] **HIV-1 gag-virus-like particles induce in vitro and in vivo stimulation of NK cell and T cell immune responses**
M.O. Chang*, T. Suzuki, H. Suzuki, H. Takaku, Chiba Institute of Technology, Japan
- [P1.34] **Rapid development of adenovirus-based vaccines for biosafety level 4 viruses**
M. Sahib^{*1,2}, R. Flick³, H. Feldmann³, G. Kobinger^{1,2}, ¹University of Manitoba, Canada, ²National Microbiology Laboratory/Public Health Agency of Canada, Canada, ³Bioprotection Systems Corporation, USA, ⁴Rocky Mountain Laboratories, USA

- [P1.35] **Application of electroporation in the development of multivalent DNA vaccines**
B.D. Livingston*, D. Hannaman, *Ichor Medical Systems, USA*
- [P1.36] **Mechanisms of *anisakis*-induced contact dermatitis and associated systemic sensitization**
N.E. Nieuwenhuizen¹, D.R. Herbert¹, M.F. Jeebhay¹, F. Brombacher¹, A.L. Lopata^{*1,2}, ¹*University of Cape Town, South Africa*, ²*RMIT University, Australia*
- [P1.37] **Immunogenicity and safety of an investigational hepatitis B vaccine: Experience in 2,500 subjects**
S.A. Halperin¹, M.L. Pecoraro², J.T. Martin^{*2}, ¹*Dalhousie University, Canada*, ²*Dynavax Technologies, USA*
- [P1.38] **Phase II clinical trials of oral therapeutic hepatitis vaccine in patients with chronic hepatitis B and C**
A.S. Bourinbaiar, *Immunitor USA Inc, USA*
- [P1.39] **An evaluation of HT29 cells for plaque formation with *apy* mutant of *shigella flexneri* 2A construct: Towards development of live attenuated *shigella* vaccine**
M. Nisha^{*1}, M.Z. Salleh³, L. Hut Yee², M. Ravichandran⁴, K. Kirnpal¹, ¹*Universiti Sains Malaysia (USM), Malaysia*, ²*Universiti Teknologi Mara (UiTM), Malaysia*, ³*Universiti AIMST University(AIMST), Malaysia*
- [P1.40] **SopB of *Salmonella enterica* serovar *typhimurium* is a potential DNA vaccine candidate in conjugation with live attenuated bacteria**
A.G. Nagarajan*, D. Chakravortty, *Indian Institute of Science, India*
- [P1.41] **Mass spectrometry analysis of HIV-1 envelope proteins**
A.N. Galkin, E.Y. Filinova*, A.I. Soloviev, A.B. Bychenko, N.B. Polyakov, V.N. Nikiforov, *Advanced Biomedical Research Laboratory, Russian Federation*
- [P1.42] **Immunogenicity of a recombinant *mycobacterium bovis* bacille Calmette–Guérin expressing T and B cell epitopes of *M. tuberculosis* antigens**
N.M. Norazmi^{*1}, R. Mohamud¹, R. Kadir¹, M. Azlan¹, N. Olivares², A. Vila², ¹*Universiti Sains Malaysia, Malaysia*, ²*Instituto Finlay, Cuba*
- [P1.43] **PLGA nanospheres encapsulated with autoclaved *Leishmania major* (ALM) and CpG-ODN: Preparation and in vitro characterization**
S.A. Sajadi Tabassi*, M. Tafaghodi, N. Amiri, *University of Medical Sciences, Iran*
- [P1.44] **Evaluation of immunogenicity of cross-genotypic liposome encapsulation of hepatitis E virus open reading frame 2 protein/DNA components of genotypes 1 and 4 in mice**
S. Shrivastava*, K. Lole, V. Arankalle, *National Institute of Virology, India*
- [P1.45] **Development of combination vaccine against hepatitis B and hepatitis E viruses: A liposome encapsulation approach**
S. Shrivastava*, K. Lole, A. Tripathy, V. Arankalle, *National Institute of Virology, India*
- [P1.46] **Assessing herd immunity in the elderly following the vaccination of school children with live, attenuated trivalent influenza vaccine (LAIV): A county-level analysis**
A.M. McBean^{*1}, H.F. Hull², D.S. Caldwell¹, H. O'Connor¹, ¹*University of Minnesota, USA*, ²*H.F. Hull & Associates, USA*
- [P1.47] **Weighing benefits and risks of universal vaccination against illness from a pandemic low-profile influenza virus: Obtain informed consent in preventive vaccination programs based on individualized assumptions**
J. Mau, *Heinrich Heine University Hospital, Germany*
- [P1.48] **RetroVLP-based vaccines: Technology and application to Hepatitis C**
C. Dalba*, P. Garrone, A.C. Fluckiger, I. du Chene, J. Mancip, P. Mangeot, et al, *EPIXIS S.A., France*
- [P1.49] **Pneumococcal vaccination and risk of myocardial infarction and stroke**
H.F. Tseng*, J. Slezak, V.P. Quinn, S.J. Jacobsen, *Kaiser Permanente, USA*
- [P1.50] **Production of the recombinant dermatophagoides farinae paramyosin Blo t 11 and its immunodominant peptide in insect cells**
N. Malainual¹, J. Rababler^{*2}, S. Tiewchareon¹, D. Tongdee², R. Pipatchaipaisan², ¹*Mahidol University, Thailand*, ²*Silpakorn University, Thailand*

Poster Programme

Poster Session 2

Monday October 5th

12:30-13:40 | *Grand Gallery*

- [P2.02] **Multifront assault on antigen presentation by Japanese encephalitis virus subverts CD8⁺ T cell responses**
Y.W. Han*, M.M. Rahman, S.J. Kim, E. Uyanga, S.B. Kim, S.K. Eo, *Chonbuk National University, South Korea*
- [P2.03] **Immune responses induced by prime-boost immunization using DNA vaccine, adenovirus, and vaccinia virus expressing E protein of dengue virus**
Y.W. Han^{*1}, J.H. Kim¹, M.M. Rahman¹, S.J. Kim¹, E. Uyanga¹, S.K. Eo¹, ¹*Chonbuk National University, South Korea*
- [P2.04] **Evaluation of the effectiveness of GP96 rich lysate as a vaccine against infection with *Salmonella typhimurium***
N.H. Jazani*, S. Shahabi, R Ghareaghaji, *Urmia University of Medical Sciences, Iran*
- [P2.05] **Genetic fusion of heat shock protein 70 (HSP70) to a mycobacterial antigen enhances the antigen-specific T cell responses**
T. Uto*, M. Uchijima, Y. Koide, T. Suda, K. Chida, H. Nakamura, *Hamamatsu University, Japan*
- [P2.06] **Vaccination and allergy: The right choice of the adjuvant system as well as the time point of vaccination might influence allergy development**
A. Wagner^{*1}, B. Winkler¹, I. Schabussova¹, C. Herzog², U. Wiedermann¹, ¹*Medical University of Vienna, Austria*, ²*Berna Biotech Crucell, Switzerland*
- [P2.07] **BCG immunisation induces multifunctional Th1 cells in the spleen & lungs which preferentially expand and correlate with active immunity to a *mycobacterium bovis* challenge**
D.A. Kaveh, R.G. Hewinson, P.J. Hogarth*, *Veterinary Laboratories Agency, UK*
- [P2.08] **The immunomodulatory effects of astragalus polysaccharides on immunosuppressive dogs**
H. Qiu^{*1}, J. Xu¹, F. Liu², X. Zhu², J. Zhao¹, Y. Zhang³, ¹*China Agricultural University, China*, ²*Beijing University of Agriculture, China*, ³*Beijing Medicass Biotechnologies, Co. Ltd., China*
- [P2.09] **T-cell responses to H5 and H1N1 antigens after vaccination with an adjuvanted or non-adjuvanted H5N1 vaccine**
M. Denis¹, F. Janet-Blaudez¹, C. Caillet¹, M. Dupuy¹, A. De Montfort¹, Y. Hutagalung^{*2}, ¹*Sanofipasteur, France*, ²*Sanofipasteur, Singapore*
- [P2.10] **AS03_A-adjuvanted pandemic influenza vaccine protects against heterologous H5N1 challenge in the pig model**
A. De Vleeschauwer¹, B. Baras², C.S. Kyriakis¹, S.L. Giannini^{*2}, S. Mossman², K. Van Reeth¹, ¹*Ghent University, Belgium*, ²*GlaxoSmithKline Biologicals, Belgium*
- [P2.11] **Molecular Enteropathogenesis of ctxA and rtxC genes of *V. cholerae* O139 in rabbit model**
T. GimCheong*, *University Sains Malaysia, Malaysia*, ²*AIMST University, Malaysia*, ³*Management & Science University, Malaysia*
- [P2.12] **Comparison of the immune protection induced by the Chinese attenuated eiav vaccine eiav_{FDDV12} and its infectious molecular clone**
J. Ma^{*1,2}, N. Shi¹, Y. Lin¹, R. Shen¹, X. Kong¹, J. Zhou¹, ¹*Harbin Veterinary Research Institute, China*, ²*Northeast Forestry University, China*
- [P2.13] **Antibody response to allelic variants of 19-kDa fragment of MSP1 - recognition of variant and protection associated with ethnicity in Assam, India**
S. Baruah*, S.D. Lourembam, *Tezpur University, India*

- [P2.14] Reduced cellular response following immunization with multivalent DNA vaccines against avian influenza H5N1 suggests antigenic interference**
A. Patel^{*1,2}, M. Gray², T. Taylor², K. Tran², D. Kobasa^{1,2}, G. Kobinger^{1,2}, ¹*University of Manitoba, Canada*, ²*National Microbiology Laboratory, Public Health Agency of Canada, Canada*
- [P2.15] Immunocomplexes of IL-2 and anti-IL-2 mAb as novel perspective tool for cancer immunotherapy**
J. Tomala*, H. Chmelova, B. Rihova, M. Kovar, *Institute of Microbiology, V.VI, Czech Republic*
- [P2.16] Modulation of immune responses by immunocomplexes of IL-2 and different anti-IL-2 mAbs**
M. Kovar*, J. Tomala, H. Chmelova, B. Rihova, *Institute of Microbiology, Czech Republic*
- [P2.18] A non-adapted dengue virus strain as a model for acute lethal dengue infection and vascular leakage syndrome in mice upon peripheral administration**
T. Kai Xin Grace*, A. Sylvie, *National University of Singapore, Singapore*

Poster Programme

Poster Session 3

Tuesday October 6th

12:10-13:20 | Grand Gallery

[P3.01] **Preclinical investigation of synthetic lysine lipopeptides as adjuvants for desired (Th1&Th2) immune responses**

T. Sidiq*, P. Suden, A. Khajuria, T. Ismail, H.S. Kumar, S.C. Taneja, *Indian Institute of Integrative Medicine, India*

[P3.02] **Preparation and optimization of chitosan nanospheres containing adjuvanted influenza vaccine for nasal delivery**

S. Dehghan*¹, M. Tafaghodi¹, M. Tavassoti Kheiri², ¹*Mashhad School of Pharmacy and Pharmaceutical Research Center, Iran*, ²*Influenza Research Center, Iran*

[P3.03] **IgA and IgG levels in lung and serum after oral immunization with BCG encapsulated in alginate microspheres**

S. Ajdary*¹, M. Hosseini¹, F. Dobakhti², ¹*Pasteur Institute of Iran, Iran*, ²*Zanjan University of Medical Sciences, Iran*

[P3.04] **Attenuated *salmonella typhimurium* expressing swine interferon-a shows antiviral activity and alleviates clinical sign induced transmissible gastroenteritis virus infection in suckling pigs**

S.J. Kim*, S.B. Kim, Y.W. Han, M.M. Rahman, E. Uyanga, S.K. Eo, *Chonbuk National University, South Korea*

[P3.05] **Orally administered recombinant *lactococcus lactis* induces protection against H5N1 virus challenge in mice**

H. Lei*, Y. Xu, *Shanghai Jiao Tong University, China*

[P3.07] **The immunomodulatory properties of *lactobacillus plantarum* are dependent on CD14, NOD2 and MAPK**

P. Rigaux¹, E. Adam¹, C. Bouillot¹, J.G. Magalhaes², D. Philpott², A. Jacquet*^{1,3}, ¹*Universite Libre de Bruxelles, Belgium*, ²*University of Toronto, Canada*, ³*Chulalongkorn University, Thailand*

[P3.08] **The recombinant attenuated coxsackievirus as a viral vector for vaccination or gene therapy**

K.B. Park*, D.S. Kim, Y.J. Cho, J.H. Nam, *The Catholic University of Korea, South Korea*

[P3.10] **Transcutaneous immunization by chitosan complex-patch based DNA vaccines is effective vaccination against Japanese encephalitis virus infection**

C.J. Wu, H.N. Huang*, *National Taiwan Ocean University, Taiwan*

[P3.11] **Antigen cross-presenting effect of gas-producing liposomes**

J. Chen*, H. Huang, Y. Yang, Q. Ding, W. Ding, Y. Xu, *Shanghai Jiao Tong University, China*

[P3.12] **Functional reconstitution liposomes with MHC-II rich lipid rafts**

D. Qian*, Y.H. Xu, *Shanghai Jiao Tong University, China*

[P3.13] **Self-assembled nanoparticles made of dextrin and mannan: Production, characterization, biocompatibility and potential applications**

F.M Gama*, S.M Ferreira, C. Gonçalves, *Minho University, Portugal*

[P3.14] **Lipid microparticles: Novel immunoadjuvant for mucosal immunization**

S.S. Deodia*¹, G. Mittal², A. Bhatnagar², V.K. Kashyap³, N.K. Jain¹, ¹*Dr. H. S. Gour University, India*, ²*Nuclear Medicine Division, India*, ³*National Institute of Biologicals, India*

[P3.15] **Preclinical study to access the immunogenicity and safety of recombinant HBsAg vaccine with potent adjuvant candidate (immunoside)**

A. Khajuria*, T. Sidiq, P. Suden, R. Sharma, A. Kaul, S. Singh, et al *Indian Institute of Integrative Medicine, India*

[P3.16] **Modulation of immune responses by targeting macrophage and T & B- cell activation**

T. Sidiq*, P. Suden, A. Khajuria, K.A. Suri, N.K. Satti, S.C. Taneja, *Indian Institute of Integrative Medicine, India*

- [P3.17] **Improved intradermal immunization using microneedle patches coated with influenza VLPs**
Y.C. Kim^{*1}, F.S. Quan², J.M. Song², R.W. Compans², S.M. Kang², M.R. Prausnitz¹, ¹*Georgia Institute of Technology, USA*, ²*Emory University School of Medicine, USA*
- [P3.18] **Advantages of intranasal vaccination and considerations on device selection**
D. Marx, *Ing. Erich Pfeiffer GmbH, Germany*
- [P3.19] **Modulation of immunity against herpes simplex virus via mucosal genetic co-transfer of DNA vaccine with β_2 -adrenergic agonist**
S.B. Kim*, Y.W. Han, M.M. Rahman, S.J. Kim, E. Uyanga, S.K. Eo, *Chonbuk National University, South Korea*
- [P3.20] **Protective immunity enhanced by genetic co-transfer of CCR7 ligands and prolonged survival against virulent challenge of pseudorabies virus**
Y.W. Han*, M.M. Rahman, S.J. Kim, E. Uyanga, S.B. Kim, S.K. Eo, *Chonbuk National University, South Korea*
- [P3.21] **Modulation of the nature of protective immunity by genetic co-transfer of plasmid DNA encoding chemokine with DNA vaccine against pseudorabies virus**
Y.W. Han*, M.M. Rahman, S.J. Kim, E. Uyanga, S.B. Kim, S.K. Eo, *Chonbuk National University, South Korea*
- [P3.22] **Elevation of the immunity of piglets to Mycoplasma vaccine with the fusion gene for pig IL-4 and IL-6 encapsulated in chitosan nanoparticles**
X. Yang*, J.L. Chen, H. Zhang, X.P. Wan, L. Cai, R. Gao, *Sichuan University, China*
- [P3.23] ***Bordetella bronchiseptica* aroA mutant as a live vaccine vehicle for heterologous porcine circovirus type 2 major capsid protein expression**
T. Kim*, J. Lee, B. Lee, *Chonnam National University, South Korea*
- [P3.24] **Evaluation of the inactivated H9N2 avian influenza vaccine on viral replication and shedding in broiler chickens using TaqMan real time PCR**
H.T. Tavakkoli, K.A. Asasi*, A.M. Mohammadi, *Shiraz University, Iran*
- [P3.25] **The effect of infectious bronchitis live vaccine (H120) on LPAI H9N2 replication and shedding in broiler chickens**
H.T. Tavakkoli, K.A. Asasi, A.M. Mohammadi*, *Shiraz University, Iran*
- [P3.26] **Codon-optimized expression of fish iridovirus capsid protein in yeast and its application as a vaccine candidate**
T. Kim*, J. Lee, *Chonnam National University, South Korea*
- [P3.27] **Evaluation the quality of oil-emulsion avian influenza subgroup H9N2 vaccines in in-vitro**
Z. Rajabi*, H. Tayefi-Nasrabadi, A.B. Syofi-Khojin, *University of Tabriz, Iran*
- [P3.28] **Hypervaccination as a new efficient strategy for eradication of classical swine fever (CSF)**
V.A. Sergeyev*, O.V. Sergeyev, *The D.Ivanovski Institute of Virology, Russian Federation*
- [P3.29] **A delivery vehicle for oral vaccination of poultry**
W.I. Muir^{*1}, G. Vandenberg², T.A. Scott³, ¹*University of Sydney, Australia*, ²*PerOs Systems Technology, Canada*, ³*Provimi Research and Innovation, Belgium*
- [P3.30] **Development of engineering vaccines based on protective antigens 45W-4B and TSOL18 from *Taenia solium* oncosphere**
X. Cai*, X. Luo, Y. Zheng, *Lanzhou Veterinary Research Institute, China*