

MODERN VACCINES/ADJUVANTS FORMULATION

IMPACT ON FUTURE DEVELOPMENT – 15-17 May 2013, CHUV, Lausanne, Switzerland

FINAL ORAL PROGRAMME & POSTER PROGRAMME MVAF 2013

SCIENTIFIC ADVISORY PANEL

Conference Chair:

Geert Vanden Bossche (*UNIVAC LLC, Seattle, Washington, USA*)

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Gwyn Davies (*St. George's Hospital, London, UK*)

Matthew Downham (*Medimmune, Liverpool, UK*)

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Alan Shaw (*Vandantia Corporation, Cambridge, Massachusetts, USA*)

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Steve Reed (*IDRI, Seattle, Washington, USA*)

Nicolas Collin (*University of Lausanne, Lausanne, Switzerland*)

Stephane Ascarateil (*SEPPIC, Paris, France*)

Guro Gafvelin (*Viscogel AB, Solna, Sweden*)



08.00 Onwards

Registration

08.55-09.00

Welcome & Opening Remarks

Geert Vanden Bossche (*UNIVAC Ilc., Seattle, Washington, USA*)

**SESSION 1:
OPENING PLENARY**

Moderator: Geert Vanden Bossche (*UNIVAC Ilc., Seattle, Washington, USA*)

09.00-09.30

'An overview of modern vaccines/adjuvants and their potential future development'

Ennio de Gregorio (*Novartis Vaccines & Diagnostics, Siena, Italy*)

09.30-10.00

'The rationales and trends for future vaccine adjuvants'

Virgil Schijns (*University of Wageningen, Wageningen, The Netherlands*)

10.00-10.30

'Adjuvants: The needs, the knowns and the unknowns'

Martin Friede (*WHO, Geneva, Switzerland*)

10.30-11.00

Coffee Break & Poster Set-Up

**SESSION 2:
PLENARY II**

Moderator: Martin Friede (*WHO, Geneva, Switzerland*)

11.00-11.30

'Addressing the challenge of access to adjuvants'

Nicolas Collin (*University of Lausanne, Epalinges, Switzerland*)

11.30-12.00

'Moving from empiricism and alchemy to rational vaccine design: A badly needed (r)evolution in vaccinology?'

Geert Vanden Bossche (*UNIVAC Ilc., Seattle, Washington, USA*)

12.00-12.30

'Adjuvant properties of polyethyleneimine'

Quentin Sattentau (*University of Oxford, Oxford, UK*)

12.30-13.00

'Adjuvanted HIV envelope vaccines: The challenge of eliciting HIV broadly neutralizing antibodies'

Hansi Dean (*IAVI, University of Wisconsin, Madison, Wisconsin, USA*)

13.00-14.00

Lunch Break & Posters

**SESSION 3:
(NANO)PARTICULATES VACCINE ADJUVANTS I**

Moderator: Guro Gafvelin (*Viscogel AB, Solna, Sweden*)

14.00-14.30

'Nanoparticles as vaccine adjuvants – strategies to enhance immunogenicity'

Gerrit Borchard (*University of Geneva, Geneva, Switzerland*)

14.30-14.50

'Polymeric nanoparticle conjugated antigen and CpG adjuvanted enhance Th1 and cytotoxic CD8+ effector and memory cellular responses'

Jeffrey A. Hubbell, Marie Ballester, Sachiko Hirotsue, Chiara Nembrini, Evan A. Scott, Eleonora Simeoni, Armando Stano, Melody A. Swartz and Alexandre de Titta (*Ecole Polytechnique Federale de Lausanne, Lausanne, Switzerland*)

14.50-15.10

'A balanced Th1/Th2./TH17 immune response to a nanoemulsion-inactivated and formulated whole RSV vaccine and its efficacy against live challenge in mouse and cotton rat animal challenge models'

Ali Fattom (*NanoBio Corporation, Ann Arbor, Michigan, USA*)

15.10-15.30

'Matrix-M™ – recent clinical and preclinical experience'

Sofia Magnusson and Linda Stertman (*Isconova AB, Uppsala, Sweden*)

15.30-16.00

Tea Break & Posters

**SESSION 4:
(NANO)PARTICULATES VACCINE ADJUVANTS II**

Moderator: Ali Fattom (*NanoBio Corporation, Ann Arbor, Michigan, USA*)

16.00-16.20

'Inter-cilayer cross-linked membrane vesicles, new solutions for old problems in malaria'

Adrienne Li, James Moon and Darrell Irvine

(*Vedantra Pharmaceuticals, Cambridge, Massachusetts, USA*)

16.20-16.40

'Clinical results from a Phase I/II trial with the chitosan based adjuvant ViscoGel'

Guro Gafvelin^{1,2}, Theresa Neimert-Andersson¹, Mattias Enoksson¹, Jonas Binmyr², Joakim Langebäck¹, Louise Zettergren¹, Anne-Charlotte Hällgren¹, Henry Franzén¹, Alf Lindberg¹, Peter Singer¹, Mats Andersson¹ and Hans Grönlund²

(*Viscogel AB, Solna, Sweden¹ and Karolinska Institutet, Stockholm, Sweden²*)

16.40-17.00

'Recombinant lipoimmunogen based intrinsic adjuvant for vaccine design and adjuvantation'

Chih-Hsiang Leng, Shih-Jen Liu, Hsin-Wei Chen, Hsueh-Hung Liu, Yan Kwok, Chang-Ling Lin, Li-Hsiu Lin, Mei-Yu Chen, Jy-Ping Tsai, Li-Sheng Chang, Fang-Feng Chiu, Li-Wei Lai, Wei-Cheng Lian, Chiou-Ying Yang, Shih-Yang Hsieh, Chiung-Yi Huang, Jeremy J.W. Chen and Pele Chong

(*National Institute of Infectious Diseases and Vaccinology, Miaoli, Taiwan*)

17.00-17.20

'Cationic liposomes as delivery system for a lipooligosaccharide and TbpB based vaccine against group B meningococcal disease'

F. Dalencon, N. Mistretta, B. Guy, Y. Berard, O. Fratantonio, C. Gregoire, A. Lechevallier, P. Lheritier, L. Revet, M. Moreau, J. Haensler and B. Rokbi

(*Sanofi Pasteur, Marcy l'Etoile, France*)

17.20-17.40

'Emulsified nanoparticles based on amphiphilic bioresorbable polymers and their role in vaccine immunogenicity'

Pele Chong, Chih-wei Lin, Chung-Yi Huang, Chih-Hsiang Leng, Shih-Jen Liu, Hsin-Wei Chen and Ming-Hsi Huang

(*National Institute of Infectious Diseases and Vaccinology, Miaoli, Taiwan*)

17.40-18.00

'Viruses characterization and quantification using tunable resistive pulse sensing'

Dimitri Aubert (*Izon Science Ltd, Oxford, UK*)

18.00-19.00

MVAF 2013 Welcome Drinks & Poster Session

SESSION 5: MODELS FOR ADJUVANT ASSESSMENT

Moderator: To be confirmed

09.00-09.30

'Novel models to evaluate modern vaccine adjuvants'

Alex Mann and Rob Lambkin-Williams (*Retroscreen Virology Ltd, London, UK*)

09.30-10.00

'In vitro modeling of age-specific human immunity to inform development of adjuvanted vaccines'

Ofer Levy (*Harvard Medical School, Boston, Massachusetts, USA*)

10.00-10.30

'New lymphatic targeting strategies for therapeutic vaccination'

Melody A. Swartz, Susan N. Thomas, Laura Jeanbart, Marie Ballester, Alexandre de Titta, Efthymia Vokali and Sachiko Hirose (*Ecole Polytechnique Federale de Lausanne, Lausanne, Switzerland*)

10.30-11.00

Coffee Break & Posters

SESSION 6: VACCINE & ADJUVANT FORMULATION & PRODUCTION

Moderator: Lakshmi Khandke

(*Pfizer Vaccine Research, Pearl River, New York, USA*)

11.00-11.30

'Characterization of vaccine formulations with adjuvants'

Lakshmi Khandke (*Pfizer Vaccine Research, Pearl River, New York, USA*)

11.30-12.00

'Engineering a CD8+ T-cell-inducing vaccine adjuvant through rational formulation design'

Dennis Christensen (*Statens Serum Institut, Copenhagen, Denmark*)

12.00-12.20

'Progress to rabies vaccine production in Nepal'

Ganesh Raj Pant (*Rabies Vaccine Production Laboratory, Kathmandu, Nepal*)

12.20-13.30

Lunch Break & Posters

SESSION 7: VACCINES

Moderator: Heather G. Davis (*Pfizer Vaccine Research, Ottawa, Canada*)

13.30-14.00

'NIC7 anti-nicotine vaccine for smoking cessation'

Heather G. Davis (*Pfizer Vaccine Research, Ottawa, Canada*)

14.00-14.30

'Evaluation of a virosomal Respiratory Syncytial Virus vaccine adjuvanted with monophosphoryl lipid A in cotton rats'

Toon Stegmann, Tobias Kamphuis, Aalzen de Haan, Muhammed Shafique, Tjarko Meijerhof and Jan Wilschut (*Mymetics BV, Leiden, The Netherlands*)

14.30-15.00

'Enteric fever and pneumococcal protein capsular matrix vaccines'

Kevin Killeen (*Matrivax Inc., Boston, Massachusetts, USA*)

15.00-15.30

'Manufacture of an intranasal viral flu vaccine'

Matthew Downham (*Medimmune, Liverpool, UK*)

15.30-15.50

'Development of the intranasal RSV F subunit vaccine SynGEM®'

Natalija Van Braeckel-Budimir, Kees Leenhouts, Bert Jan Haijema, Ivy Widjaja, Alan Rigter, Xander de Haan and Peter Rottier (*Mucosis BV, Groningen, The Netherlands*)

15.50-16.05

Tea Break & Posters

SESSION 8: ADJUVANT AND VACCINE DELIVERY SYSTEMS

Moderator: Matthew Downham (*Medimmune, Liverpool, UK*)

16.10-16.40

'Optimizing delivery of novel immune potentiators'

Michele Pallaora (*Novartis Vaccines, Holly Springs, North Carolina, USA*)

16.40-17.00

'Delivery systems for peptide vaccines'

Istvan Toth (*The University of Queensland, Brisbane, Queensland, Australia*)

17.00-17.20

'Self-replicating RNA vaccine delivery to dendritic cells by chitosan-nanogel delivery'

Panagiota Milona, Isabelle Bassi, Rolf Suter, Nicolas Ruggli and Kenneth C. McCullough (*Institute of Virology and Immunoprophylaxis, Mittelhausen, Switzerland*)

17.20-17.40

'Induction of potent CD8+ T cell responses through the delivery of vaccines to skin antigen-presenting cells (APCs) using a microprotection array (Nanopatch™)'

Germain J.P. Fernando, Hwee-Ing Ng and Mark A.F. Kendall (*The University of Queensland, Brisbane, Queensland, Australia*)

17.40-18.00

'A therapeutic virosome-based vaccine against recurrent *C. albicans vaginitis*: Phase I data for intramuscular and intravaginal route of immunization'

M. Mueller, M. Kaiser, A. Amacker and C. Moser (*Pevion Biotech AG, Ittigen/Bern, Switzerland*)

18.00-18.20

'Clinical validation of a novel self-adjuvanting peptide-based pan influenza A T-cell vaccine'

James Francis (*Immune Targeting Systems Ltd, London, UK*)

Free Evening for Delegates

**SESSION 9:
ADJUVANTS**

Moderator: Ali Harandi (*University of Gothenburg, Gothenburg, Sweden*)

09.00-09.30

'Biomarkers of experimental mucosal adjuvants'

Ali Harandi (*University of Gothenburg, Gothenburg, Sweden*)

09.30-10.00

'Complement as natural adjuvant'

Martin Bachmann (*University of Zurich, Zurich, Switzerland*)

10.00-10.20

'A novel combination adjuvant for mucosal vaccination against respiratory syncytial virus'

Sylvia van Drunen Little-van den Hurk, R. Garg, R. Brownlie, L. Latimer, W. Connor, E. Simko, V. Gerdts, L.A. Babiuk and A. Potter (*VIDO-Intervac, University of Saskatchewan, Saskatoon, S7N 5E3, Canada*)

10.20-10.40

'Novel vaccine adjuvants for induction of cellular and humoral immunity'

Sandrine Crabe and Vincent Serra (*Wittycell SA, Reims, France*)

10.40-11.10

Coffee Break & Posters

**SESSION 10:
TLRS AND CLRS & DENDRITIC CELLS**

Moderator: Christopher Fox (*IDRI, Seattle, Washington, USA*)

11.10-11.40

'In vitro evaluation of TLR4 agonist activity: Formulation effects'

Christopher Fox (*IDRI, Seattle, Washington, USA*)

11.40-12.00

'Ligands for toll-like and C-type lectin receptors for targeting and activating dendritic cells'

Kenneth C. McCullough, Ranji Sharma, Brigitte Herrmann, Evgeniya Rapoport, Nicolai Bovin, Isabelle Bassi, Panagiota Milona, Thomas Demoulines and Arin Ghasparian (*Institute of Virology and Immunophylaxis, Mittelhausern, Switzerland*)

12.00-12.20

'Dendritic cell targeting by nanogels: influence of surface decoration'

L.J. Thomann-Harwood, C.A. Schuetz, B.H. Herrmann, P. Kaeuper, N. Rossi and K.C. McCullough (*Institute of Virology and Immunophylaxis, Mittelhausern, Switzerland*)

12.20-13.30

Lunch Break & Posters

**SESSION 11:
ADJUVANTS FOR THERAPEUTIC VACCINES**

Moderator: Adriana Baz Morelli (*CSL Limited, Parkville, Victoria, Australia*)

13.30-14.00

'Enhancing the efficacy of cancer therapeutic monoclonal antibodies with ISCOMAB formulation: a technology based upon ISCOMATRIX adjuvant'

Adriana Baz Morelli (*CSL Limited, Parkville, Victoria, Australia*)

14.00-14.20

'Delayed type hypersensitivity reactions correlating with overall survival in patients with metastatic melanoma, after vaccination with peptides, CpG and Montanide'

Daniel E. Speiser (*University of Lausanne, Lausanne, Switzerland*)

14.20-14.40

'Montanide ISA 51 VG and Montanide ISA 720 VG, adjuvants dedicated to therapeutic vaccines'

Stephane Ascarateil (*SEPPIC, Paris, France*)

14.40-15.00

'Targeting the tumor-draining lymph node with a nanoparticle vaccine enhances its therapeutic efficacy as cancer immunotherapy'

Laura Jeanbart, Patricia Corthésy, Marie Ballester, Alexandre de Titta, André van der Vlies, Jeffrey A. Hubbell and Melody A. Swartz (*Ecole Polytechnique Federale de Lausanne, Lausanne, Switzerland*)

15.00-15.20

'RNAAdjuvant®, a novel RNA-based immunomodulator, combines strong immunostimulatory capacities with a favourable safety profile'

Regina Heidenreich, Benjamin Petsch, Edith Jasny, Mariola Fotin-Mleczek, Patrick Baumhof, Birgit Scheel, Söhnke Voss and Karl-Josef Kallen (*CureVac GmbH, Tübingen, Germany*)

15.20-15.35

Tea Break & Poster Breakdown

**SESSION 12:
REGULATORY & SAFETY ISSUES**

Moderator: Geert Vanden Bossche (*UNIVAC Ilc., Seattle, Washington, USA*)

15.35-16.05

'Vaccine CMC – anticipating the regulator'

Brijesh Patel (*MHRA, London, UK*)

16.05-16.35

'Regulatory issues regarding manufacture and control of vaccine adjuvants. The EU situation'

Wim Van Molle, K. Brusselmans, L. Tesolin and G. Waeterloos (*Scientific Institute of Public Health, Brussels, Belgium*)

16.35

Closing Remarks & Departure

Geert Vanden Bossche (*UNIVAC Ilc., Seattle, Washington, USA*)

* This final programme is correct at the time of printing. However the organisers reserve the right to make any alterations that may be required in the interests and integrity of the final MVA 2013 conference programme.

Poster 101

'Alginate-coated chitosan nanogel capacity to modulate the effect of TLR ligands on blood dendritic cells'

Thomas Demoulins, Isabelle Bassi and Kenneth C. McCullough
(*Institute of Virology and Immunophylaxis, Mittelhausern, Switzerland*)

Poster 102

'Emulsified nanoparticles overcomes antigenic competition in a trivalent vaccine formulation containing inactivated virions of influenza, enterovirus and Japanese encephalitis virus'

Ming-His Huang, Chih-Wei Lin, Jui-Yuan Chang, Chia-Chyi Liu, Alan Yung-Chi Hu, Ai-Hsiang Chou and Pele Chong
(*National Health Research Institutes, Zhunan, Miaoli, Taiwan*)

Poster 103

'Emulsification of recombinant lipoprotein elicits potent immune responses'

Hsin-Wei Chen, Chen-Yi Chiang, Ming-Hsi Huang, Chien-Hsiung Pan, Chun-Hsiang Hsieh, Mei-Yu Chen, Hsueh-Hung Liu, Jy-Ping Tsai, Shih-Jen Liu, Pele Chong and Chih-Hsiang Leng
(*National Institute of Infectious Diseases and Vaccinology, Miaoli, Taiwan*)

Poster 104

'Development of the intranasal RSV F subunit vaccine SynGEM®'

Natalija Van Braeckel-Budimir, Kees Leenhouts, Bert Jan Haijema, Ivy Widjaja and Alan Rigter, Xander de Haan and Peter Rottier
(*Mucosis BV, Groningen, The Netherlands*)

Poster 105

'Nanocarriers for DNA vaccination: Simultaneous TLR9 and NLR2 stimulation leads to synergistic enhancement of pro-inflammatory cytokine release from murine macrophages'

J. Poecheim et al.
(*University of Geneva/University of Lausanne, Geneva, Switzerland*)

Poster 106

'Development of novel nanoparticle-based vaccines and immunotherapies: Tuberculosis, lung metastasis and allergy as models'

Marie Ballester et al. (*EPFL, Lausanne, Switzerland*)

Poster 107

'Matrix-M™ adjuvanted West Nile virus envelope protein vaccine leads to protection against experimental West Nile virus infection'

Sofia E. Magnusson et al. (*Isconova AB, Uppsala, Sweden*)

Poster 108

'Robust adjuvant formulations for stable vaccines'

Juliette Ben Arous et al. (*SEPPIC, Puteaux, France*)

Poster 109

'Harnessing innate immunity to design novel adjuvant formulations that enhance vaccine immunogenicity in multiple animal species: The case for CpG-ODN'

Sharath K. Rai et al. (*Zoetis Inc., Kalamazoo, Michigan, USA*)

Poster 110

'Development and *in vitro* evaluation of cell culture adapted thermostable Newcastle disease vaccine in Pakistan'

Faisal Siddique et al. (*University of Agriculture, Faisalabad, Pakistan*)

Poster 111

'Evaluation of immune response to measles vectored & Pichia Pastoris expressed recombinant HPV vaccine formulations'

Gaurav Gupta et al. (*Cadila Healthcare Ltd, Ahmedabad, India*)

Poster 112

'Emulsified nanoparticles containing TLR9 agonist inducing anti-tumor immunity'

Shih-Jen Liu et al.
(*National Institute of Infectious Diseases and Vaccinology, Miaoli, Taiwan*)

Poster 113

'Saponin-containing nanoparticles as an efficient adjuvant system for influenza vaccine mucosal immunization'

V.E. Berezin et al. (*Institute of Microbiology & Virology, Almaty, Kazakhstan*)

Poster 114

'Recombinant liposome-based OspC experimental vaccine with lipophilic derivatives of norAbuMDP'

Josef Masek et al. (*Veterinary Research Institute, Brno, Czech Republic*)

Poster 115

'Liposomal formulations of norAbuMDP/GMDP as immunomodulators and adjuvants'

Jaroslav Turanek et al. (*Veterinary Research Institute, Brno, Czech Republic*)

FUTURE EVENTS INFORMATION

PBVA 2013 – PLANT-BASED VACCINES & ANTIBODIES

5-7 June 2013, Verona, Italy

SVS 2013 – SKIN VACCINATION SUMMIT

4-6 September 2013, Seattle, Washington, USA

MUCOVAD 2013 – MUCOSAL VACCINES, ADJUVANTS & DELIVERY

25-27 September 2013, Copenhagen, Denmark

RSVVW 2013 – RSV VACCINES FOR THE WORLD

14-16 October 2013, Porto, Portugal

VED 2013 – VACCINES FOR ENTERIC DISEASES

13-15 November 2013, Bangkok, Thailand

To receive further information concerning future events please contact:
John Herriot at Meetings Management (jherriot@meetingsmgmt.u-net.com)

Meetings Management, The Old Dairy Tower, Peper Harow Park, Godalming, Surrey GU8 6BD, United Kingdom
Telephone: +44 (0)1483 427770 E-mail: jherriot@meetingsmgmt.u-net.com Website: www.meetingsmanagement.com

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