Next Generation Vaccines: Adjuvants and delivery systems
Monday, 20 October 2014
Cineworld: The O2, London, SE10 0DX, UK
www.regonline.co.uk/vacc2014

This event will discuss current research into the development of new or enhanced adjuvants and novel delivery systems which are widely accepted as key to creating more efficacious vaccines with improved methods for storage and delivery.

This event has CPD accreditation and is part of Vaccines 2014. Oct 20th -22nd, LONDON, UK

www.vaccines2014.com

The deadline for abstract submissions for oral presentation is August 10th 2014
Abstracts for poster presentation only can be submitted up to two weeks before the event. You can download the instructions for authors at

www.euroscicon.com/AbstractsForOralAndPosterPresentation.pdf

Keywords: Edible vaccines, microneedles, microparticulates, needle-free delivery, TLRs, vaccine delivery systems, vaccine,therapeutic, vaccines, adjuvant, DNA vaccination, DEC205, CD40, Active Heymann Nephritis (HN), adjuvant delivery system, subunit vaccines, protein conformation and immunogenicity, glycolipids, Anti-vaccine forces, vaccine safety, vaccine effectiveness, public policy

Talk times include 5 – 10 minutes for questions

9:00 – 9:45 Registration

9:45 – 10:00 Introduction by the Chair:

10:00 – 10:30 Talk to be confirmed
Professor Nikolai Petrovsky, Flinders Medical Centre, Adelaide, Australia

10:30 – 11:00 Optimizing delivery of next generation immune potentiators
Dr Manmohan Singh, Novartis Vaccines, North Carolina, USA

11:00 – 11:30 Speakers’ photo then mid-morning break and poster exhibition and trade show
Please try to visit all the exhibition stands during your day at this event. Not only do our sponsors enable Euroscicon to keep the registration fees competitive, but they are also here specifically to talk to you.
11:30 – 12:00 Talk to be confirmed
Professor Yvonne Perrie, Aston University, Birmingham, UK

12:00 – 12:30 Oral Presentations

12:30 – 13:30 Lunch, poster exhibition and trade show
Please try to visit all the exhibition stands during your day at this event. Not only do our sponsors enable Euroscicon to keep the registration fees competitive, but they are also here specifically to talk to you.

13:30 – 14:30 Discussion Session
This discussion session is an informal question and answer session. This is an ideal opportunity to get advice and opinion from experts in this area. This session is not for questions about specific talks, which can be asked after the speakers session, but for discussing either general topics or specific issues.
There are three ways you can ask questions:
1. Before the session you can submit your question to Euroscicon staff at the registration desk,
2. Before and during the session you can submit a question or comments, by email, which will be provided on the day of the event
3. During the session you can put your hand up and join in

14:30 – 15:00 Tubular immunostimulating complex based on glycolipid and saponin from marine hydrobiont
Professor Nina Sanina, Far Eastern Federal University, Russia
Tubular immunostimulating complex (TI-complex) is a new adjuvant delivery system for subunit vaccines. These nanoparticles are formed from cholesterol and biologically active components isolated from marine hydrobionts (glycolipid monogalactosyldiacylglycerol (MGDG) and triterpene glycoside cucumarioside A2-2 from marine macrophytes and invertebrate Cucumaria japonica, respectively). TI-complex with incorporated protective antigen – porin YOmpF from Yersinia pseudotuberculosis induced stronger immune answer than ISCOM and complete Freund’s adjuvant. Anti-porin response depended on the physical state of MGDG surrounding antigen in TI-complex. MGDGs, which stabilized conformation of protein moderately, induced maximal levels of antibodies and IL-12. However other antigens may require its specific lipid surroundings.

15:00 – 15:30 Afternoon Tea, last poster session and trade show

15:30 – 16:00 The Next Generation of Vaccines, Adjuvants, and Delivery Systems: Lessons from the Past 50 Years
Dr Lawrence Dean Frenkel, Professor, Departments of Pediatrics and Microbiology, University of Illinois, USA
In spite of irrefutable evidence that vaccines have dramatically altered the health of mankind worldwide, acceptance of individual vaccines over time has been variable. Limited efficacy (influenza), correeted science (measles), moral misinformation (HPV), cost, etc have all played a role in less than desired vaccine use. This presentation will discuss these issues from the perspective of providers, governmental regulators and policy makers, and statewide immunization
16:00 – 16:30  **Talk to be confirmed**

*Professor Talin Barisani-Asenbauer*, Scientific Director, OCUVAC - Centre of Ocular Inflammation and Infection, Medical University of Vienna, Austria

16:30 - 17:00  **DNA Vaccination Encoding CD40 Targeted to Dendritic Cells Protects Against Chronic Kidney Disease.**

*Dr Yuan Min Wang*, Senior Scientist, Senior Lecturer, University of Sydney Renal Laboratory, Centre for Kidney Research, Australia

CD40-CD154 costimulatory pathway has been shown to be critical for both T and B cell activation in autoimmune disease. In this study, we assessed the effects of blocking CD40-CD154 pathway, using CD40 DNA vaccine enhanced by dendritic cell (DC) targeting, on the development of Heymann Nephritis (HN), a rat model of human membranous nephropathy. We utilized a plasmid containing the gene encoding a single-chain Fv antibody specific for the DC-restricted antigen-uptake receptor DEC205 (scDEC) and the target gene CD40 and the adjuvant tetanus sequence p30 and a control plasmid without scDEC. Rats vaccinated with scDEC-CD40 were protected from developing HN.

17:00  **Chairman’s summing up**

### About the Speakers

**Yuan Min Wang** is currently working at the Centre for Kidney Research as a Senior Scientist and a Senior Lecturer in the University of Sydney, Australia. Dr Wang worked as a Gastroenterologist in China since 1987, obtained her Master’s Degree in the National University of Singapore in 1997. She completed a PhD at University of Sydney in 2002. For the last ten years, Yuan Min has led a program of research in DNA vaccination, regulatory T cells in renal disease. Her high quality research work has been demonstrated by leading journal publications in nephrology and in national and international conference presentation.

Nina Sanina graduated Voronezh State University in 1975 (specialty Biophysics). She works at Far Eastern Federal University since 1978. In 1989, she defended PhD Thesis ‘Thermotropic behavior of the major membrane lipids of marine invertebrates’ (specialty Biochemistry). Since this year, she worked as a Senior Lecturer and then as Associate Professor. In 2006, she defended Dr. Sci Thesis ‘Membrane-forming lipids: physicochemical fundamentals of thermal adaptation of marine invertebrates and macrophytes’ and became Professor. Her main lecture courses are ‘Liquid crystals in biological systems’, ‘Immunology’, ‘Biochemistry’, ‘Biomembranes’, ‘Nanobiotechnology’. She is the author of more than 150 publications and 5 patents.

Lawrence Frenkel is an academic pediatrician, infectious disease specialist, and immunologist, who has devoted himself to teaching, research, clinical care and advocacy for over four decades. He received his MD from
Georgetown U, did his residency at the New York Hospital-Cornell, served in the US Public Health Service, assigned to the Clinical Center of the NIH, and did a fellowship at Georgetown in Immunology and Infectious Diseases. He has published or presented over 150 papers (in over 50 countries) fostering his long term interest in international travel and health. Dr. Frenkel has been an editor and reviewer for a score of renowned, peer reviewed publications. He has been an advisor and grant reviewer for the March of Dimes, the World Health Organization, the Pan American Health Organization, the Gates Foundation, the CDC and the NIH, as well as the state health departments of New Jersey and Illinois. He is currently a member of the NJ State Department of Health Immunization Registry Steering Committee and serving his second term as Co-Chair of the New Jersey Immunization Network.

Frequently asked questions about our events

- **Is the delegate list available?**
  Yes this is available to everyone who attends the event and our sponsors.
  It is available in real time. To access the list please just log into your registration details or use the QR code on right of the agenda card which is provided on the day of the event.
  You will not be included in this list if you have opted out and you can do this by logging into your registration details. This list will not be sold or ever give out to third parties.

- **Can I have the speakers slides?**
  We cannot give out the slides from our speaker’s presentations as they are deleted immediately after each event. If you require a particular set of slides please approach the speaker. We will however have a meeting report and you will be emailed when this report is published.

- **Can I have a notepad?**
  Notepads and pens are provided in the delegate bags and at the registration desk

- **How can I keep up to date with Euroscicon Events?**
  To keep updated on our events and other Life Science News, please sign up for our newsletter at [www.eurosciconnews.com](http://www.eurosciconnews.com)

- **I don’t want my photograph on any Euroscicon promotional material**
  Please let our tech person know

- **Is there WIFI?**
  Yes, please ask registration for log in details

- **Can I have a CPD certificate?**
  Please leave your name with registration before the end of lunch a certificate will be created for you and available in the afternoon