

11th European Workshop on Particulate Systems in Nanomedicine

March 13-14, 2014

Program

Organizer:

Dr. C.F. (René) van Nostrum
Utrecht University
"David de Wied" building
Universiteitsweg 99
3584 CG Utrecht



Universiteit Utrecht

Program

Thursday, March 13

9:30 Registration and coffee

10:00 Welcome

10:15 **Keynote lecture** (chair: René van Nostrum)
Jean-Christophe Leroux (ETH Zürich)
Colloidal approaches to biodetoxification

Session 1 : triggered release and active targeting

(chair: Wim Hennink)

11:00 **Roel Deckers** (University Medical Center Utrecht)
High intensity focused ultrasound triggered drug release from nano-carriers

11:20 **Neda Samadi** (Utrecht University)
Nanobody-targeted and RNase-loaded nanoparticles based on a hydrophilic polyester aimed for cancer therapy

11:40 **Zahraa S. Al-Ahmady** (University of Manchester)
Antibody-targeted temperature-sensitive liposomes:
enhanced in vivo tumor accumulation by heat activation

12:00 **Arianna Gennari** (University of Manchester)
Hyaluronic acid-coated chitosan nanoparticles: the influence of hyaluronic acid presentation

12:20 lunch break

Session 2 : nanoparticles for imaging (chair: Robbert Jan Kok)

13:20 **Céline Xayaphoummine** (University of Geneva)
Synthesis and characterization of a self assembling amphiphilic chelating molecule for molecular MRI

13:40 **Nathalie Stransky-Heilkron** (University of Geneva)
Development of a nanoparticulate imaging agent for pancreatic amyloids in type 2 diabetes

14:00 **Neus Lozano** (University of Manchester)
Looking and listening dynamically at the tumour extravasation of sterically stabilized liposomes by multispectral optoacoustic tomography

14:20 **Thomas Blin** (Université Paris-Sud)
Precise engineering of multifunctional pegylated polyester nanoparticles for cancer cell targeting and imaging

14:40 Coffee/thee break

Session 3 : Novel formulations (chair: Gert Storm)

15:00 **Jorrit Water** (University of Copenhagen)
Hydrogel nanoparticles for delivery of antimicrobial peptides

15:20 **Adam Bohr** (Université Paris-Sud)
Characterization of dendriplexes of cationic phosphorous dendrimers and siRNA

15:40 **Katrin Fuchs** (University of Geneva)
Sunitinib-eluting beads for chemoembolization

16:00 **Andrei Maksimenko** (Université Paris-Sud)
Novel therapeutic modalities of squalenoyl doxorubicin nanoassemblies – a unique long circulating and non pegylated anticancer medicine

16:20 Break with refreshments

Session 4 : Nanocrystals and inorganic nanoparticles
(chair: Herre Talsma)

16:40 **Christopher Cadman** (University of Manchester)
Synthesis, functionalization and photooxidative capabilities of TiO₂ nanoparticles

17:00 **Gregori Romero** (Free University of Berlin)
Long-term stability of smartcrystals[®] from poorly soluble plant actives

17:20 **Sven Staufenbiel** (Free University of Berlin)
Protein adsorption patterns on differently produced & sized i.v. amphotericin B nanocrystals

17:40 Closure of the day

19:00 Diner @ restaurant "Inspired", Biltstraat 47, Utrecht

Friday, March 14

9:00 **Keynote lecture** (chair: Wim Hennink)
To be announced

Session 5 : Oral applications (chair: René van Nostrum)

9:45 **Maria García-Díaz** (University of Copenhagen)
Insulin-lipid loaded poly(lactic-co-glycolic acid) PLGA nanoparticles for oral delivery of insulin

10:05 **Kimberley Span** (Utrecht University)
Development of a novel oral complex for iron delivery: encapsulation of hemin in polymeric micelles and its in-vitro absorption

10:25 **My-Hanh Nguyen** (Free University of Berlin)
Nanocrystalline maghemite: an efficient novel oral phosphate binder

10:45 **Qionghua Wei** (Free University of Berlin)
Amorphous CapsMorph[®] with high drug loading capacity for oral formulation

11:05 Coffee/thee break

Session 6 : Inflammatory and immunological response of nanomedicines (chair: Gert Storm)

11:25 **Nadège Grabowski** (Université Paris-Sud)
Cytotoxicity and inflammatory response following exposure of polymeric nanoparticles to a co-culture of lung cells and macrophages

11:45 **Rie Selchau Kallerup** (University of Copenhagen)
The acyl chain length of trehalose-6,6'dibehenate analogues (TDX) effects the physicochemical properties and immunological profile of DDA/TDX liposomal adjuvante

12:05 **Signe Tandrup Schmidt** (University of Copenhagen)
Formulation of a cationic liposomal adjuvant with different DDA-analogues affects the CD8⁺ T-cell response

12:25 **Iris Allijn** (University of Twente)
Towards nanoformulations of natural anti-inflammatory compounds

12:45 Closure of the workshop

13:00 Light lunch