conferenceseries.com

Scientific Program

International Conference and Exhibition on

Nanomedicine & Drug Delivery

May 29-31, 2017
Osaka, Japan

200+	15+	10+	50+	3+	10+	B2B
Participation	Interactive Sessions	Keynote Lectures	Plenary Lectures	Workshops	Exhibitors	Meetings

Endorsed by

CRS Controlled Release Society
ESB European Society for Biomaterials
nwa nanotechnology World Association
nanonextnl
Australian Nanotechnology Network

Media Partners

PHARMA FOCUS ASIA
JSB Market Research
asia RESEARCH NEWS
SciDoc Publishers
european pharmaceutical review

Hosting Organizations

Conference Series Ltd

One Commerce Center-1201, Orange St. #600, Wilmington, Zip 19899, Delaware, USA

Toll Free: +1-800-216-6499

Email: nanodelivery@conferenceseries.net; nanodelivery@pharmaceuticalconferences.org

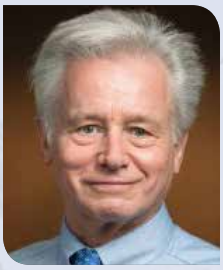
Organizing Committee Members 2017



Diane J. Burgess
University of Connecticut
USA



Vladimir Torchilin
Northeastern University
USA



Volkmar Weissig
Midwestern University
USA



Irach B Taraporewala
Sitara Pharmaceutical
Consulting Group, USA



Takashi Yamagami
Precision NanoSystems, Inc.,
USA



Dr. Clare Selden
The Liver Group UCL
UK



Hiroshi Maeda
Sojo University Institute of
Drug Delivery Science, Japan



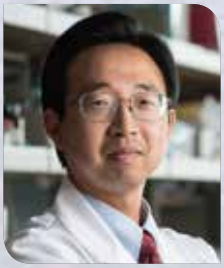
Stephen Mahler
University of Queensland
Australia



Jyh-Ping Chen
Chang Gung University
Taiwan



Moshi Geso
RMIT University
Australia



Kun Cheng
University of Missouri-Kasas City
USA



Vincenzo Guarino
National Research Council of Italy
Italy

Keynote Speakers @ Nanodelivery 2017

DQAsome-based delivery of Phosphorothioate gapmer antisense oligonucleotides as therapy for Clostridium difficile



Volkmar Weissig
Midwestern University
USA

Biography:

Volkmar Weissig, Sc.D., Ph.D. is a Tenured Full Professor of Pharmacology and Chair of the Department of Pharmaceutical Sciences and Co-Director of the Nanomedicine Center of Excellence in Translational Cancer Research at Midwestern University Glendale, AZ, USA. Dr. Weissig holds 16 patents and he has published over 100 research papers, review articles and book chapters, mostly in the area of nano drug delivery systems. He also edited and published 8 books. Since the late 1990s he has pioneered the development of vesicular nanocarriers for the delivery of biologically active molecules to mitochondria within living mammalian cells in vitro and in vivo. In 2009 he was inducted into the World Technology Network as a Fellow and in 2014 Dr. Weissig was elected Inaugural President of the World Mitochondria Society.

Combination siRNA/drug nanopreparations for multidrug resistant cancer



Vladimir P. Torchilin
Northeastern University
USA

Biography:

Vladimir P. Torchilin, Ph.D., D.Sc. is a University Distinguished Professor of Pharmaceutical Sciences and Director, Center for Pharmaceutical Biotechnology and Nanomedicine, Northeastern University, Boston. His interests include drug delivery and targeting, nanomedicine, multifunctional and stimuli-sensitive pharmaceutical nanocarriers, biomedical polymers, experimental cancer therapy. He has published more than 400 original papers, more than 150 reviews and book chapters, wrote and edited 12 books, and holds more than 40 patents. Google Scholar shows more than 44,000 citations of his papers with H-index of 96. He is Editor-in-Chief of Current Drug Discovery Technologies, Drug Delivery, and OpenNano, Co-Editor of Current Pharmaceutical Biotechnology and on the Editorial Boards of many other journals. He received more than $30 M from the governmental and industrial sources in research funding. He has multiple honors and awards and in 2011, Times Higher Education ranked him number 2 among top world scientists in pharmacology for the period of 2000-2010.

Modes of topical and localized drug delivery of nanoparticle and microparticle based formulations



Irach B Taraporewala
President
Sitara Pharmaceutical
Consulting Group
USA

Biography:

Irach B. Taraporewala has over 30 years' experiece in drug discovery/drug development R&D. He currently is President of the Sitara Pharmaceutical Consulting Group. He previously served as founder, CEO, President and Chief Technology Officer, and on the Board of Directors of OHR Pharmaceutical, Inc. an ophthalmology drug development company, and as a Drug Development consultant at PAREXEL Consulting. Dr. Taraporewala has published papers in drug development and delivery in reputed journals and has lectured extensively. He received a Ph.D. in Medicinal Chemistry from the Philadelpjhia College of Pharmacy and Science, and has been Principal Investigator on several NIH/DoD biomedical research grants.

Development and Bio-applications of Nontoxic C-Dots



Roger M. Leblanc
University of Miami
USA

Biography:

Dr. Roger M. Leblanc received a B.Sc. degree in Chemistry from Université Laval in 1964, followed by a Ph.D. in Physical Chemistry in 1968. Then, he obtained a postdoc position at the Royal Institution of Great Britain for two years before moving to the University of Québec, Trois-Rivières, Canada, where he spent 20+ years of studying photobiophysics. He moved his research to the University of Miami in 1994. Dr. Leblanc is Professor and Chair of Chemistry Department at University of Miami. And his research interests are centered on biophotophysics, spectroscopy and surface chemistry and he has published more than 500 research articles related to these topics and has guided more than 100 Ph.D. and M.Sc.

Keynote Speakers @ Nanodelivery 2017

Drug delivery across the blood brain barrier



Alain L Fymat,
International Institute of Medicine and Science California USA

Biography:

Alain L. Fymat is a medical-physical scientist and an educator who was educated at the Universities of Bordeaux and Paris-Sorbonne, France, and the University of California at Los Angeles. He is the current President/CEO and Professor at the International Institute of Medicine & Science. He was formerly Professor of Radiology, Radiological Sciences, Radiation Medicine (Oncology), Critical Care Medicine, and Physics at several U.S. and European Universities. His current research interests lie at the interface between science and medicine (precision medicine, nanobiotechnology, nanomedicine, genetics/epigenetics/ecogenetics). He has extensively published (>> 300 scholarly publications) and lectured in several national and international academic, professional, governmental and industrial venues. He is a a Board member of several institutions, Editor of the Journals "Nanobiotechnology" and "Global Nanomedicine", and Honored Editor of the Journals "Cancer Prevention and Current Research" and "Nanomedicine Research".

Title: Cathepsin nanofibers substrates for targeted drug delivery



Galia Blum, Institute of Drug Research, The Hebrew University, Israel

Biography:

Professor Blum's main research focus is on the generation of novel chemical probes targeted to proteolytic enzymes and their application for medical uses such as molecular imaging and therapy. She also applies her original probes for basic research investigating the involvement of proteases in normal and pathological conditions. Over the years at the Hebrew University her group among other projects has developed novel probes for caspase-3 and discovered its activity in the ER, (Shaulove-Rotem 2016); and developed novel photodynamic probes targeted to cathepsin proteases and used them for combined detection and therapy of cancer (Ben-Nun 2015). Recently, she began also work on the nano-scale materials where she developed novel protease sensitive drug delivery molecules (Ben-Nun 2016) and nano-probes for CT molecular imaging.

Application of mass spectrometry imaging in the diagnosis of difficult melanocytic lesions



Rossitza Lazova
Director of Dermatopathology
California Skin Institute
USA

Biography:

Rossitza Lazova trained in Dermatopathology with Dr. A. Bernard Ackerman. She was an Associate-Professor of Dermatology and Pathology and Director of the Dermatopathology Fellowship at the Department of Dermatology at Yale University for 20 years. Currently she is a Director of Dermatopathology at the California Skin Institute in San Jose, USA. Her main interest are melanocytic lesions and particularly Spitzoid neoplasms and melanoma. Dr. Lazova founded the Yale Spitzoid Neoplasm Repository and introduced Mass Spectrometry Imaging as an ancillary method in the diagnosis of difficult melanocytic lesions. Dr. Lazova has directed numerous sessions at national and international meetings in the US and throughout the world and has given hundreds of presentations worldwide. She has over one hundred publications including two textbooks and numerous chapters. She is on the editorial board of many reputable scientific journals. Dr. Lazova served as Vice President of the International Society of Dermatopathology.

Day 1 | May 29, 2017 | Monday

08:00-09:00 Registrations

Hall Name

09:00-09:25 Opening Ceremony

Keynote Forum

09:25-09:30 **Introduction**

09:30-10:00 **Title: Combination siRNA/drug nanopreparations for multidrug resistant cancer**
Vladimir Torchilin, Northeastern University, USA

10:00-10:30 **Title: Modes of topical and localized drug delivery of nanoparticle and microparticle based formulations**
Irach B Taraporewala, Sitara Pharmaceutical Group, USA

Group Photo

Networking and Refreshments 10:30-10:45

10:45-11:15 **Title: Development and bio-applications of nontoxic C-Dots**
Roger M Leblanc, University of Miami, USA

11:15-11:45 **Title: DQAsome-based delivery of phosphorothioate gapmer antisense oligonucleotides as therapy for Clostridium difficile**
Volkmar Weissig, Midwestern University, USA

Sessions:
Nanomedicine | Novel Drug Delivery Systems | Regenerative Medicine and Tissue Engineering

Session Chair: Vladimir Torchilin, Northeastern University, USA
Session Chair: Volkmar Weissig, Midwestern University, USA

11:45-12:05 **Title: Smart soft matter enabled nanomedicines**
Michael Whittaker, ARC Centre of Excellence in Convergent Bio-Nano Science & Technology, Australia

12:05-12:25 **Title: Electrofluidinamics: A new toolbox to design instructive platforms for tissue engineering and molecular therapies**
Vincenzo Guarino, National Research Council of Italy, Italy

12:25-12:45 **Title:Vascular-targeted TNFα and IFNγ inhibited orthotopic colorectal tumor growth**
Chi Hin Cho, The Chinese University of Hong Kong, China

12:45-13:05 **Title: β-casein nanovehicles for oral delivery of chemotherapeutic drug combinations overcoming P-glycoprotein-mediated multidrug resistance in human gastric cancer cells**
Yoav D Livney, Israel Institute of Technology, Israel

Lunch Break 13:05-13:45

Work Shop

13:45-14:25 **Title: Engineered nanomaterials: Toward effective safety management in research laboratories**
Thierry Meyer, EPFL Safety Competence Center, Switzerland

14:25-14:45 **Title: Bone microenvironment targeted nanoparticles for metastatic prostate cancer treatment**
Jamboor Vishwanatha, UNT Health Science Center, USA

14:45-15:05 **Title: Polymer cancerostatics with a coiled coil motif targeted against murine leukemia**
Michal Pechar, Czech Academy of Sciences, Czech Republic

15:05-15:25 **Title: Self-assembly PEGylation Retaining Activity (SPRA) Technology via a host–guest interaction surpassing conventional PEGylation methods of Insulin**
Hidetoshi Arima, Kumamoto University, Japan

Networking and Refreshments 15:25-15:40

15:40-16:00 **Title: Bioengineered nanomedicines for modulation of intestinal anti-diabetic peptide delivery**
Bruno Sarmento, University of Porto, Portugal

16:00-16:20 **Title: The drug delivery (r)evolution: Nanomedicine and 3D printing for personalized therapies**
Yareli Rojas-Aguirre, CCADET-UNAM, Mexico

Sessions:
Nanomedicine and Nanotechnology | Synthesis of Nanoparticles for Drug Delivery | Nanomaterials for drug delivery

Session Chair: Vladimir Torchilin, Northeastern University, USA
Session Chair: TBD

16:20-16:40 **Title: Ultrasound microbubbles: unique vehicles for targeted delivery of therapeutic molecules**
Rene J P Musters, VU University Medical Center, The Netherlands

16:40-17:00	**Title: Bacterial-Derived Gamma Polyglutamic Acid (γ-PGA) as a Protective Agent for Beneficial Viruses and its Potential Applications as a Smart Delivery System** Iza K Radecka, University of Wolverhampton, UK
17:00-17:20	**Title: Liposomes targeted with therapeutic antibodies: a potent tool in anticancer therapy** Aleksander F Sikorski, University of Wroclaw, Poland
17:20-17:40	**Title: Peptide-based nanoparticles of immune-evasive, immune-tolerable, and immune-active properties** Shunsaku Kimura, Kyoto University, Japan
17:40-18:00	**Title: Islet-based insulin delivery to the brain for treatment of cognitive and metabolic disorders** Konstantin Bloch, Tel Aviv University, Israel
18:00-18:20	**Title: Biological and Micellar Properties of Nano Transition Metal (Co, Fe, Ni, Cu and Zn) Complexes of 4-(1H-Imidazo[4,5-f][1,10]Phenanthroline-2-yl)-N,Ndimethylbenzene Amine.** Md Abdus Subhan,Shah Jalal University of Science and Technology, Bangladesh
	Panel Discussion
	Day 1 Concludes

Day 2 | May 30, 2017 | Tuesday	
Hall Name	
Keynote Forum	
09:30-10:00	**Title: Drug delivery across the blood brain barrier** Alain L Fymat, International Institute of Medicine and Science California, USA
10:00-10:30	**Title: Cathepsin nanofibers substrates for targeted drug delivery** Galia Blum, The Hebrew University of Jerusalem, Israel
10:30-11:00	**Title: Application of mass spectrometry imaging in the diagnosis of difficult melanocytic lesions** Rossitza Lazova, California Skin Institute, USA
	Networking and Refreshments 11:00-11:15
Sessions: Nanomedicine | Novel Drug Delivery Systems	
Session Chair: Alain L Fymat, International Institute of Medicine and Science California, USA Session Chair: TBD	
11:15-11:35	**Title: Nanomaterial synthesis and study for biomedicine and cancer treatment** Erwan Rauwel, Tallinn University of Technology, Estonia
11:35-11:55	**Title: Platform technologies for accelerating the translation of nanomedicine** Chun Xia Zhao, The University of Queensland, Australia
11:55-12:15	**Title: Stability of ranibizumab and aflibercept for sustained release, Their delivery from thiolated chitosan-based hydrogels** Miguel Moreno, Nanyang Technological University, Singapore
12:15-12:35	**Title: Conformational epitopes-based lipopeptide vaccines against Schistosoma mansoni and Necator americanus** David Passlick, Max Planck Institute for Polymer Research, Germany
12:35-12:55	**Title: The NanoAssemblr platform: Novel nanoparticle engineering for delivery of the genetic toolbox** Mehran Ghiaci, Isfahan University of Technology, Iran
	Lunch Break 12:55-13:35
13:35-13:55	**Title: Fabrication, characteristic, and future-biomedicine applications of villous oxalates** Chen Hsu, Lungwha University,Taiwan
13:55-14:15	**Title: Synthesis, antibacterial, cytotoxicity and sensing properties of starch-capped silver nanoparticles** Oluwatobi S Oluwafemi, University of Johannesburg, South Africa
14:15-14:35	**Title: "Quadrugnostic" Nanomedicine for overcoming anticancer drug resistance and for diagnostics** Yoav D Livney, Israel Institute of Technology, Israel
14:35-14:55	**Title: Intelligent nanoparticles for combination photoimmunotherapy of cancer** Yaping Li, Chinese Academy of Sciences, China
14:55-15:15	**Title: Rapid prototyped nanocomposite magnetic scaffolds for tissue regeneration** Roberto De Santis, National Research Council of Italy, Italy
15:15-15:35	**Title: Consecutive evaluation of graphene oxide and reduced graphene oxide nanoplatelets immunotoxicity on monocytes** Chia-Hua Lin, National Formosa University, Taiwan

15:35-15:55	**Title: Nano-liposomes using supercritical fluid system for nutraceuticals** Manohar Balaraman,CSIR-Central Food technological research Institute, India
	Networking and Refreshments 15:55-16:10
16:10-16:30	**Title: Supercritical micronization as an important technique to produce pharmaceutical microparticles** Beatriz P Nobre, Lisbon University, Portugal
16:30-16:50	**Title: Lipid-dendrimer hybrid nanosystems as smart carriers of anti-cancer agents** Gigi N.C. Chiu, University of Singapore, Singapore
16:50-17:10	**Title: Impermeable metal nano-capsules for drug delivery without side effects** James Hitchcock, University of Leeds, UK
	Poster Presentations @ 16:00-18:00
Poster Judges:	Erwan Rauwel, Tallinn University of Technology, Estonia Vladimir Torchilin, Northeastern University, USA
PND01	**Title: Exposure to excess phenobarbital negatively influences the osteogenesis of chick embryos** Yu Yan, Jinan University, China
PND02	**Title: Study of the interactions of polymeric nanoparticles with model lung surfactant** Weiam Daear, University of Calgary, Canada
PND03	**Title: Co-delivery of Squalenoyl-Gemcitabine and Paclitaxel by thermo-responsive polymeric micelles to pancreatic cells in vitro** Mandana Emamzadeh, UCL School of Pharmacy, UK
PND04	**Title: Synthesis of polymeric Nano Particles (NPs) for the encapsulation of Mono Myristin (MM)** Sirirat Boondireke, Srinakharinwirot University, Thailand
PND05	**Title: In vivo imaging of passively tumor targeted polymer carrier and the enzymatically cleavable drug model** Robert Pola, Academy of Sciences of the Czech Republic, Czech Republic
PND06	**Title: Preparation and in vitro evaluation of polymer conjugates actively targeted using RGD-based peptides** Eliska Bohmova, Academy of Sciences of the Czech Republic, Czech Republic
PND07	**Title: Polymer nanotherapeutics for overcoming of multidrug resistance** Alena Braunova, Academy of Sciences of the Czech Republic, Czech Republic
PND08	**Title: HA-based nanocomplexes for head and neck cancer with lymphatic metastasis** Chih-Peng Liu, Industrial Technology Research Institute, Taiwan
PND09	**Title: Assembly of double-hydrophilic block copolymers triggered by gadolinium ions: New colloidal MRI contrast agents** Agathe Figarol, UPS/CNRS; IMRCP, France
PND10	**Title: Polymeric self-assemblies for photodynamic therapy: A critical approach** Agathe Figarol, UPS/CNRS; IMRCP, France
PND11	**Title: Laser triggered release of gemcitabine from polymer coated gold nanoshells for pancreatic cancer** Mina Emamzadeh, UCL School of Pharmacy, UK
PND12	**Title: Impact of cargo-carrier interactions on micelles' biodistribution** Adrian T Press, Jena University Hospital, Germany
PND13	**Title: Evaluation of drug delivery system targeting glioblastoma cells using liposome modified with monomeric fusion protein of CTX (M-CTX-FC)** Hafizah Mahmud, Okayama University, Japan
PND14	**Title: Targeting of gioblastoma with multivalent of anti-CD44 antibodyPaclitaxel glycoside liposomes** Apriliana Cahya Khayrani, Okayama University, Japan
PND15	**Title: A microfluidic-based gradient medical waveform generator for pharmacology in single-cell** Yiran Guo, Huazhong University of Science & Technology, China
PND16	**Title: Modeling of 3D additive manufactured nanocomposite scaffolds** Paola Castaldo, Fastissues srls, Italy
PND17	**Title: Chemiluminescence mediated light free photodynamic therapy** Berwin Singh S V, Chonbuk National University, Republic of Korea
PND18	**Title: Evaluation of wound healing effect of hydrogen peroxide responsive vanillyl alcohol-containing polymer in vivo** Berwin Singh S V, Chonbuk National University, Republic of Korea
PND19	**Title: Targeting of liposomes loaded with mitoxantrone, into melanoma cells in a 3D spheroid model** Nina Filipczak, University of Wroclaw, Poland

PND20	**Title: Copper II ions detection via localized surface plasmon resonance** Seongjae Jo, Korea University, Republic of Korea
PND21	**Title: HA-based nanocomplexes for head and neck cancer with lymphatic metastasis** Chih-Peng Liu, Industrial Technology Research Institute, Taiwan
PND22	**Title: Applications of flower-shaped polymer-ZnO nanocomposites for topical delivery of Dendropanax morbifera extract and ginsenoside Rh2** Josua Markus, Kyung Hee University, Republic of Korea
PND23	**Title: Synthesis of nanomaterials for drugs delivery and cancer biomarkers and therapy** Badis Bendjemil, University Badji Mokhtar, Algeria
PND24	**Title: Remote control of light-triggered virotherapy** Zi-Xian Liao, National Sun Yat-sen University, Taiwan
PND25	**Title: CD44 targeting hyaluronic acid coated lapatinib nanocrystals for fostered efficacy against triple-negative breast cancer** Satish Agrawal, CSIR-Central Drug Research Institute, India
Group Photo (Poster Presentations)	
Panel Discussion	
Day 2 Concludes	

Day 3 | May 31, 2017 | Wednesday	
Hall Name	
Young Researchers Forum	
Session Chair: Erwan Rauwel, Tallinn University of Technology, Estonia Session Co-Chair: TBD	
09:30-09:45	**Title: Linear and branched polyethynimines for skin regeneration treatment – In vitro study** Lucas B Naves, University of Minho, Portugal
09:45-10:00	**Title: Dental pulp stem cells as anticancer drug delivery system** Hamideh Salehi, University of Montpellier, France
10:00-10:15	**Title: Anti-angiogenic Efficacy Enhancement in Nano Phospholipid complex of Orthosiphon Stamineus Ethanolic Extract** Mansoureh Nazari Vishkaeia, Universiti Sains Malaysia, Malaysia
10:15-10:30	**Title: Size-dependent targeted GNPs as CT contrast agents for molecular imaging of cancer** Darya Tsvirkun, Institute of Drug Research, The Hebrew University of Jerusalem, Israel
10:30-10:45	**Title: Fluorometholone loaded nanospheres PLGA for the treatment of oculars disorders** Roberto González Pizarro, University of Barcelona, Spain
10:45-11:00	**Title: Encapsulation of agonist PPAR- γ in polymeric nanoparticles to treat ocular inflammatory processes** Marcelle Silva de Abreu, University of Barcelona, Spain
Networking and Refreshments 11:00-11:15	
11:15-11:30	**Title: The combination of pH-Responsive peptide and cationic liposomes can improve siRNA transfection efficiency in cancer cells** Shahd Abuhelal, King's College London, UK
11:30-11:45	**Title: Oral delivery of folate targeted colorectal cancer therapeutics** Dewan Taslima Akhter, University of Queensland, Australia
11:45-12:00	**Title: Controlling the stiffness of biomimetic silica nanocapsules and its impact on cellular uptake** Yue Hui, The University of Queensland, Australia
12:00-12:15	**Title: Synthesis of ginseng-based nanoparticles and its applications** Yeon-Ju Kim, Kyung Hee University, Republic of Korea
12:15-12:30	**Title: High yield synthesis of surfactant-free gold nanostars for biosensing, photothermal therapy and drug delivery applications** Akash Arya, Indian Institute of Technology Patna, India
12:45-13:00	**Title: Cerium oxide nanoparticles: An emerging class of UVA filter** Aditya Arya, India
Lunch Break 13:00-13:40	
Final Day Group Photo	
B2B Meetings	
Award Ceremony	