



**International Conference on
Nanotechnology in Medicine**

7-9 November 2012

University College London, London, United Kingdom

TECHNICAL PROGRAMME

Dear Colleagues,

Welcome to the **International Conference on Nanotechnology in Medicine** (NanoMED) held at University College London in London, United Kingdom. NanoMED has emerged from the highly successful NANOSMAT conference (www.nanosmat-conference.com), which is held each year, since 2005, in Europe, USA and now in Asia (Asia launch in 2013). I would like to thank Dr Nasar Ali, the founder and chairman of NANOSMAT, for his hard work in organising this extraordinary meeting.



The conference will focus on five critically important areas of active and evolving research in the application of nanotechnology in medicine, with a full session devoted to each. The session themes are 1) Tissue Engineering & Biomedical Sciences, 2) Diagnosis and Imaging, 3) Drug Delivery, 4) Nanoscale Biomaterial Surface Modification and 5) Biosensors.

On the first day of the meeting we have invited speakers in the scientific program to cover these topics, whereas, days 2 and 3 are dedicated to selected abstracts for oral as well as poster presentations.

The oral presentations are in two parallel sessions, which you should attend based on your preferred topic of interests. A dedicated poster session on first and second day will be held at 4:30 PM and will include poster presentations based on accepted abstracts chosen by the Program Committee based on scientific merit. I strongly encourage all participants to view the posters and discuss them with the authors (who should try to stand by them at the dedicated poster sessions). An exciting exhibit of "Artificial Human Body Parts" from "UCL Centre for Nanotechnology & Regenerative Medicine" research team will also be presented. The exhibit will demonstrate how nanotechnology played a big role on development of organs from laboratory into humans, including world first synthetic trachea, bypass graft, lacrimal duct, and other organs. There will also be an opportunity for a limited number of attendees to visit "UCL Centre for Nanotechnology & Regenerative Medicine" at Royal Free Campus, based at Hampstead, one of the most beautiful parts of London.

The NanoMED conference is organized to bring together multidisciplinary experts from wide backgrounds including academia, industry and government. We strive to promote dialogue and collaborations between scientists and clinicians, recognized scientific leaders and trainees, and among nanotechnologists, physicists, chemists, biologists, engineers, biomaterials researchers, surgeons and others whose work addresses fundamental aspects of nanomedicine. While the ambitious program is built around lectures from carefully selected speakers, the success of the meeting will rely on free flowing thought-provoking discussions and debates among all attendees and the generation of cross fertilizing new collaborations and new synergies that facilitate the successful application of nanotechnology in medicine.

London is a dynamic city and Bloomsbury is centrally situated making exploration of the city quite accessible. Bloomsbury has a remarkable literary heritage and the British Museum is a short walk away from the conference venue. The facilities of the recently concluded Olympic Games are a short tube ride away. I hope you will find time before or after the conference to explore this exciting city.

Thank you for participating in this exciting conference. The NanoMED has many new programs in development and I strongly encourage all participants to remain active in this extraordinary Society.

Best Wishes,

Alexander Marcus Seifalian (Chair), Professor of Nanotechnology & Regenerative Medicine, UCL, UK
Jawwad Darr (Co-chair), Professor of Chemistry, UCL, UK

Time	7 November 2012
08:30 onwards	Registration Location: <i>North Cloisters</i>
10:00 - 10:15	Welcome Address: Conference Chairmen <i>(Old Refectory Lecture Theatre)</i> Professor Alexander M. Seifalian , <i>University College London, UK</i> Professor Jawwad Darr , <i>University College London, UK</i>
10:15 - 10:45	PLENARY Lecture Professor Alexander M. Seifalian , <i>University College London, UK</i> <i>"Nanotechnology: Driving the Future of Organ Development"</i>
10:45 - 11:15	Professor Ueli Aebi , <i>University of Basel, Switzerland</i> <i>"Novel Peptide Nanoparticles: Their Use for Synthetic Vaccine Design, Targeted Drug Delivery and Bio-Imaging"</i>
11:15 - 11:45	Refreshment break
11:45 - 12:15	Professor Ihtesham ur Rehman , <i>University of Sheffield, UK</i> <i>"Role of Spectroscopy in Biomaterials"</i>
12:15 - 12:45	Professor Chia-Liang Cheng , <i>National Dong Hwu University, Taiwan</i> <i>"Nanodiamond for bio imaging and drug delivery"</i>
12:45 - 14:00	Lunch
14:00 - 14:30	Professor Stanislaw Mitura , <i>Koszalin University of Technology, Poland</i> <i>"Carbon in Medicine"</i>
14:30 - 15:00	Dr Nguyen TK Thanh , <i>The Royal Institution of Great Britain, UK</i> <i>"Functionalisation of Nanoparticle for Clinical Application: What Are The Challenges?"</i>
15:00 - 15:30	Professor Paulo Cesar De Moraes , <i>Huazhong University of Science and Technology, China</i> <i>"A new approach for in situ probing the temperature of cells and tissues using magnetic nanoparticles"</i>
15:30 - 16:00	Professor Richard Jackman , <i>University College London, UK</i> <i>"Nanodiamonds and NanoCarbon Onions for neuronal cell attachment and growth"</i>
16:00 - 16:30	Professor Kostas Kostarelos , <i>University College London, UK</i> <i>"Liposome - Gold Nanoparticle hybrid Imaging"</i>
16:30 - 18:00	Poster Session I (with refreshments) Featuring: Live Exhibit of "Artificial Human Body Parts" [Professor Alexander M. Seifalian, UCL Centre for Nanotechnology & Regenerative Medicine, University College London, UK]

Poster Session I:

NANO-11: Martins Maria-Barbara, University of Lisbon, Portugal.

"New long circulating magnetoliposomes as negative contrast agents for MRI"

NANO-12: Ana Luiza Millás, State University of Campinas/UNICAMP, Brazil.

"Production of electrospun cellulose acetate fiber mats as carriers of a natural oil from Copaifera sp."

NANO-18: MASSADEH, SALAM, King Abdulla International Medical Research Center, Saudi Arabia.

"The study of phase transfer of InP/ZnS quantum dots via chemisorption, silanization and polymer coating"

NANO-20: Philip Drake, Industrial Technology Reserach Institute, Taiwan.

"Nanoparticle Labels for the Detection and Identification of Pathogenic Bacteria through DNA Analysis"

NANO-21: A.A. Hosseini, University of Mazandaran, Iran.

"Study of some affecting factors on CNTs characteristics synthesized using chemical vapor deposition method on MgO substrate"

NANO-30: Marcos Massi, Technological Institute of Aeronautics, Brazil.

"Silver and DLC coated surgical mesh by magnetron sputtering technique and their bactericidal potential"

NANO-33: Grzegorz Raniszewski, Technical University of Lodz, Poland.

"Ferromagnetic Carbon Nanotubes for Cancer Treatment"

NANO-34: Grzegorz Raniszewski, Technical University of Lodz, Poland.

"Carbon nanotubes and electrical devices for cancer treatment and therapy"

NANO-47: M.M. Mehanna, Alexandria University, Egypt.

"Tadalafil Nanocrystals: A Novel Nanofabrication Approach for Solubility and Dissolution Rate Enhancement"

NANO-48: M.M. Mehanna, Alexandria University, Egypt.

"Nanocapsules Based Pediatric Liquid Lisinopril Formulation: Design and Physicochemical Characterization"

NANO-57: Radka Gromnicova, Open University, UK.

"Transcytosis of glucose-coated gold nanoparticles across human brain endothelium"

NANO-60: Grit Baier, Max Planck Institute for Polymer Research, Germany.

"Functionalized biodegradable nanocapsules and their cellular uptake in different cells"

NANO-67: Celine Rousse, LISM, France.

"Elaboration of bactericide Cu-Ag Core-Shell Nanostructures"

NANO-70: Rebecca Shipley, University College London, UK.

"Modelling Polymersome Delivery of Anticancer Therapeutics"

NANO-76: Philip Reardon, University College London, UK.

"Morphology controlled porous calcium phosphate nanoplates and nanorods with enhanced protein loading and release functionality"

NANO-77: Ewelina Dondajewska, Poznan University of Medical Sciences, Poland.

"Silk Scaffolds for Cancer Model Engineering"

NANO-79: Clare Hoskins, Keele University, UK.

“Metallic Hybrid Nanoparticles For Image Guided Drug Delivery”

NANO-80: Clare Hoskins, Keele University, UK.

“Remotely triggered scaffolds for controlled degradation in biomedicine”

NANO-81: Anna Florczak, Adam Mickiewicz University, Poland.

“Functionalized spider silk proteins for targeted cancer therapy”

NANO-88: Colin Fowley, University of Ulster, UK.

“Quantum Dot Photosensitizer Hybrids as singlet oxygen generators in Photodynamic therapy”

NANO-90: Julie Laloy, University of Namur, Belgium.

“Study of biocompatible and hemocompatible properties of amorphous hydrogenated carbon coatings produced by pulsed magnetron discharge”

NANO-94: Zhihong Chen, University of Sheffield, UK.

“Morphology Characterization and In-Situ Small Angle X-ray Scattering Study of Materials Transport through Hollow Nanoparticles for Drug Delivery”

NANO-95: Witold Jakubowski, Lodz University of Technology, Poland.

“Biological Evaluation of Carbon Layers Doped With Silver”

NANO-99: Menglin Chen, University of Aarhus, Denmark.

“Electrospun Scaffolds for Annulus Fibrosus Tissue Engineering”

NANO-101: Piotr Niedzielski, Lodz University of Technology, Poland.

“Evaluation of carbon nanocoatings deposited onto polymer parts of artificial heart”

NANO-108: Andrei Avram, National Institute for R&D in Microtechnologies - IMT-Bucharest, Romania.

“Study of Melanoma Cells Apoptosis Induced by Magnetic Hyperthermia”

NANO-109: Siti Fatimah Abdul Ghani, King’s College London, UK.

“Quantum Dots Surface Modification with Bisphosphonates”

NANO-114: Jurgen Schnekenburger, University of Münster, Germany.

“Novel materials for liver directed therapy”

NANO-117: Elnaz Yaghini, University College London, UK.

“Singlet Oxygen Generation from Water Soluble Quantum Dot-Photosensitiser Nanocomposites and their Potential for Photodynamic Therapy”

NANO-120: Taechang An, Andong National University, Korea.

“Preparation of Nanostructured Polymer Surface for Control of Cell Behavior”

8th November 2012

Time	Topic: Drug Delivery Chair: Prof. Jawwad Darr (UK) Room: Old Refectory	Time	Topic: Drug Delivery (Nano Pharmacology) Chair: Prof. Kostas Kostarelos (UK) Room: Chadwick Lecture Theatre
09:00 - 09:20	NANO-49: Mark Baxendale , Queen Mary University of London, UK <i>"Iron-filled carbon nanotubes for magnetic hyperthermia cancer therapy"</i>	09:00 - 09:20	NANO-119: Dayane Batista Tada , Universidade Federal de São Paulo, Brazil <i>"Effect of lipid coating on the interaction between silica nanoparticles and membranes"</i>
09:20 - 09:40	NANO-59: Grit Baier , Max Planck Institute for Polymer Research, Germany <i>"Enzyme-cleavable hyaluronic acid nanocapsules containing polyhexanide and their exposure to bacteria"</i>	09:20 - 09:40	NANO-97: Derick Adigbli , University College London, UK <i>"Attenuation of glutathione synthesis enhances disulfonated meso-tetraphenylporphyrin (TPPS2a) – mediated nano-delivery of saporin in breast cancer cells"</i>
09.40 - 10.00	NANO-71: Sophia G. Antimisiaris , University of Patras, Greece <i>"Dual decorated liposomes with MAb OX-26 and ApoE3 peptide derivative for brain targeting"</i>	09.40 - 10.00	NANO-131: Ayman Gebril , University of Strathclyde, UK <i>"Mucosal immunisation against GnRH-I and GnRH-III conjugates entrapped in lipid nanoparticles"</i>
10.00 - 10.20	NANO-78: S. GuhaSarkar , IIT Bombay, India <i>"Site-specific drug delivery using biodegradable "nanoparticle-in-membrane" systems"</i>	10.00 - 10.20	NANO-167: Pedro Baptista , Universidade Nova de Lisboa, Portugal <i>"Antisense Gold Nanobeacons for Gene Therapy"</i>
10.20 - 10.40	NANO-56: A. N. Begzat , Kazakh National University, Kazakhstan <i>"New Microcapsules As Carriers For Effective Therapy Of Different Kinds Of Tuberculosis"</i>	10.20 - 10.40	NANO-102: Ruchi Chawla , Banaras Hindu University, India <i>"Development and Optimization of Polymeric nanoparticles of Anti-Tubercular Drugs using Central Composite Factorial Design"</i>
10:40 - 11:00	Refreshment break		

Time	Topic: Nanoscale biomaterial surface modifications Chair: Dr N. TK Thanh (UK) Room: Old Refectory	Time	Topic: Cancer/Photodynamic therapy Chair: Prof. Ithesham ur Rehman (UK) Room: Chadwick Lecture Theatre
11:00 - 11:20	NANO-111: Sudipto Bari , Singapore General Hospital, Singapore <i>"Functionalized Carbon Nanotubes Enhance Ex Vivo Expansion of Hematopoietic Stem and Progenitor Cell in Human Umbilical Cord Blood"</i>	11:00 - 11:20	NANO-112: Melissa Bovis , University College London, UK <i>"Investigating the Delivery of m-THPC incorporated in Pegylated PLGA Nanoparticles for in vivo PDT"</i>
11:20 - 11:40	NANO-13: Cristina Diaz Jimenez , Centro de Ingeniería Avanzada de Superficies, Spain <i>"Nanoscale plasma treatment for improvement behavior of F-799 alloys for MoM prosthesis application"</i>	11:20 - 11:40	NANO-132: Andrea Lavado , University of Nottingham, UK <i>"Porphyrin-Nanosensors Conjugates: Probing the Sub-Cellular Biochemical Response to Reactive Oxygen Species (ROS)"</i>
11:40 - 12:00	NANO-141: May Lim , The University of New South Wales, Australia <i>"Serum Adsorption Affects Cellular Uptake Profile and Consequent Impact of Nanoparticles on Human Lung Cell Lines"</i>	11:40 - 12:00	NANO-202: P. S. Lai , National Chung Hsing University, Taiwan <i>"C225-Conjugated Polymeric Micelle for Targetable Photodynamic Therapy"</i>
12:00 - 12:20	NANO-145: Syed Ansar Md. Tofail , University of Limerick, Ireland <i>"Electrostatic Nanodomains on Biomaterials: A Novel Methodology to Study Biological Interactions with Surface Charge"</i>	12:00 - 12:20	NANO-62: John Callan , University of Ulster, UK <i>"Nanoparticle / Microparticle - Sensitiser Conjugates as Deeply Penetrating Agents in Photo/Sono-Dynamic Therapy"</i>
12:20 - 13:30	LUNCH		

Time	Topic: Biosensors Chair: Prof. Paolo Morais (Brazil) Room: Old Refectory	Time	Topic: Application of Nanoparticles in Biomedicine Chair: Prof. Richard Jackman (UK) Room: Chadwick Lecture Theatre
13:30 - 13:50	NANO-1: Moritz Graf zu Eulenburg , InovisCoat GmbH, Germany <i>"Multi-layer Application of NanoMed close to the market"</i>	13:30 - 13:50	NANO-196: Suzanne Saffie-Siebert , SiSaf Ltd, Belfast, UK <i>"Improvements relating to Sunscreen agent comprising a plurality of nanoparticles"</i>
13:50 - 14:10	NANO-130: Yu-Wei Chen , National Chiao Tung University, China <i>"Embedded gold nanoparticle in two dimensional reduced graphene oxide/Porous Silica nanosheet (rGO@PSS-Au) as high sensitive SERS-active nanoprobe for intracellular molecule detecting"</i>	13:50 - 14:10	NANO-90(2): Julie Laloy , University of Namur, Belgium <i>"Hemocompatibility of manufactured nanoparticles: Guidelines proposal"</i>

14:10 - 14:30	NANO-148: Jonathan Aylott , University of Nottingham, UK <i>"Fluorescent Nanosensors for Measuring the Cellular Environment"</i>	14:10 - 14:30	NANO-125: Chin-Sheng Chiang , National Chiao Tung University, Taiwan <i>"Enhancement of Cancer Therapy Efficacy by Herceptin-conjugated and pH-Sensitive Nanocapsules with Simultaneous Encapsulation of Hydrophilic and Hydrophobic Compounds"</i>
14:30 - 14:50	NANO-19: Philip Drake , Industrial Technology Reserach Institute, Taiwan <i>"Culture Free Bacteria Detection"</i>	14:30 - 14:50	NANO-164: Sarwat Rizvi , UCL, UK <i>"A novel POSS-PCU nanocomposite polymer as a biocompatible coating for quantum dots"</i>
14:50 - 15:10	Refreshment break		
15:10 - 15:30	NANO-84: Marta Sanmarti , Institute for Bioengineering of Catalonia, Spain <i>"Accurate c-myc-Olfactory Receptor quantification on characterized natural nanovesicles for biosensor applications"</i>	15:10 - 15:30	NANO-158: Nai-Tzu Chen , National Taiwan University(NTU), Taiwan <i>"Mesoporous Silica Contrast Agents for the Endoscopic Detection of Nascent Colorectal Cancer"</i>
15:30 - 15:50	NANO-9: Yongbai Yin , University of Sydney, Australia <i>"An integrated solution for rapid end-user ready biosensing"</i>	15:30 - 15:50	NANO-195: Giuseppe Chirico , University of Milano Bicocca, Italy <i>"Branched Gold Nanoparticles for Thermal Treatments of Cells"</i>
15:50 - 16:10	NANO-103: Sikha Saha , University of Leeds, UK <i>"Rare-earth ion conjugated metabolites for imaging biomarkers for cardiovascular disease"</i>	15:50 - 16:10	NANO-51: Aaron Tan, UCL, UK <i>"Inception to Actualization: Next Generation Coronary Stent Coatings incorporating Nanotechnology"</i>
16:10 - 16:30	NANO-144: Syed Ansar Md. Tofail , University of Limerick, Ireland <i>"Microwave Sensing of Common Enzymes with Nanocrystalline Hydroxyapatite"</i>	16:10 - 16:30	NANO-14: Gilmanov Murat , Kazakh National University, Kazakhstan <i>"The Phosphatidylinositol Microcapsules for Successful Therapy of Dangerous Diseases"</i>
16:30 - 18:00	Poster Session II (with Reception Drinks)		
19:00	Banquet		

Poster Session II

NANO-121: Taechang An, Andong National University, Korea.

"Fabrication of anti-bacterial nanofiber containing Ag-nanoparticles"

NANO-123: Trinh T. Nguyen, University of Calgary, Canada.

"The Kinetics of Anesthetic Enhanced Membrane Fusion in DOPC Liposomes"

NANO-124: S.H. Masunaga, Universidade de São Paulo, Brazil.

"Synthesis and characterization of Ni nanoparticles"

NANO-127: Cordelia Selomulya, Monash University, Australia.

"Effects of different administration routes on in vivo immune responses for malaria DNA vaccination with magnetic gene vectors"

NANO-129: Michael Forrester, Loughborough University, UK.

"The design of metamaterials to channel and focus radiation"

NANO-133: N Naderi, Swansea University, UK.

"Octa-Ammonium POSS Conjugated Single-walled Carbon Nanotubes (CNTs) as Vehicles for Targeted Delivery of Paclitaxel"

NANO-135: Jesus Penaranda Avila, University of Milan Bicocca, Italy.

"Influence of the Reaction Conditions in the Preparation of MnO Nanoparticles as T1 Contrast Agents"

NANO-136: Remon R. K. Bazak, University of Alexandria, Egypt.

"Cytotoxic effect of photoexcited titanium dioxide-dna nanocomposites on the nasal cancer cells in vitro"

NANO-139: Simone Pinto Carneiro, Universidade Federal de Ouro Preto, Brazil.

"Development of polymeric nanocapsules containing clobetasol propionate by in situ polymerization for topical use"

NANO-140: Samar Nabil El-Achy, University of Alexandria, Egypt.

"Novel methods for detection of intravenously administered titanium dioxide nanoparticles in tissues of transgenic mice"

NANO-142: May Lim, The University of New South Wales, Australia.

"A Numerical Model to Reduce Guesswork in the Design of Nanoparticles for Nanomedicine"

NANO-143: Syed Ansar Md. Tofail, University of Limerick, Ireland.

"Durable, Washable, Photosterilisable Textiles with Binder-free Nano Titania"

NANO-146: Witold Szymanski, Lodz University of Technology, Poland.

"Mechanical and tribological properties of nanocomposite carbona-C:H/Ti silver doped layers for medical applications"

NANO-147: Witold Szymanski, Lodz University of Technology, Poland.

"Erosion of human dental enamel after exposure to teeth storage liquids and acidic drinks investigated by AFM, CLSM and NI techniques"

NANO-151: Ben Webb, University College London, UK.

"HIV envelope detection using Whispering Gallery Mode Sensing"

NANO-154: Katrin Pechstedt, University of Southampton, UK.

"Study on the Interaction between Peptide Functionalised Colloidal Quantum Dots (CdSe/ZnS) and DNA Strands"

NANO-159: Michael Fichter, Children's University Hospital Mainz, Germany.

"Nanocapsules generated out of a polymeric dexamethasone shell suppress the inflammatory response of liver macrophages"

NANO-160: Damian Batory, Lodz University of Technology, Poland.

"Plasma synthesis of biocompatible carbon-hydroxyapatite nanostructures"

NANO-165: Kristina Schlegel, University College London, UK.

"Monitoring virus viability using dielectrophoretic collections"

NANO-169: Nareerat Kitisripanya, Kasetsart University, Thailand.

"Electronic properties calculation and docking studies toward new potentially AChE inhibitors"

NANO-176: Vitaly Zinkevich, University of Portsmouth, UK.

"Evaluation of functional probes for biochips using a novel cassette method"

NANO-177: Philip Drake, Industrial Technology Research Institute, Taiwan.

"Nanoparticle induced magnetic field hyperthermia combined with radiotherapy enhances tumour therapy by modulating antihypoxia and vascular disruption"

NANO-178: Amy Tekrony, University of Calgary, Canada.

"Nanoparticles for Tolerogenesis: Analyzing Key Properties"

NANO-182: Piotr Komorowski, Institute of Materials Science and Engineering, Poland.

"Cells cultured on a biomaterial surface have altered transcriptome and proteome"

NANO-187: F. A. Fisusi, University College London, UK.

"Lomustine Particulate Formulations are Effective Brain Cancer Treatments"

NANO-204: A. Anwar, University College London, UK.

"Continuous (plastic) flow synthesis (CPFS) of phase pure HA and other calcium phosphate phases (β -TCP, CDHA and biphasic HA/ β -TCP) at (near) ambient conditions"

9th November 2012

Time	Topic: Drug delivery (Nano-vehicle delivery systems) Chair: Prof. Stanislaw Mitura (Poland) Room: Old Refectory	Time	Topic: Diagnosis and Imaging Chair: Prof. Chia-Liang Cheng (Taiwan) Room: Chadwick Lecture Theatre
09:00 - 09:20	NANO-126: Sandy Budi Hartono , The University of Queensland, Australia <i>"Multifunctional Large Pore Mesoporous Silica Nanoparticles as a novel gene carrier"</i>	09:00 - 09:20	NANO-10: M. Clara Gonçalves , Technical University of Lisbon, Portugal <i>"Potentiality of ORMOSIL nanoparticles as negative Contrast Agents for MRI"</i>
09:20 - 09:40	NANO-188: Francesca Baldelli Bombelli , University of East Anglia, UK <i>"Development of Engineered Nanocarriers for the Treatment of Metastatic Melanoma"</i>	09:20 - 09:40	NANO-116: Elnaz Yaghini , University College London, UK <i>"Cadmium Free Quantum Dots as a Novel Fluorescence Probe for In Vivo Sentinel Lymph Node Imaging"</i>
09.40 - 10.00	NANO-92: Petr Toman , University of Portsmouth, UK <i>"Nanoparticles of Alkylglyceryl-Dextran-poly(lactic acid) for Drug Delivery to The Brain"</i>	09.40 - 10.00	NANO-118: Maria Luisa Bondi , Consiglio Nazionale delle Ricerche, Istituto per lo Studio dei Materiali Nanostrutturati, Italy <i>"Oligonucleotide-decorated carboxyl-modified PVP nanogels: a new platform for diagnosis and gene-therapy"</i>
10.00 - 10.20	NANO-35: Ana Maria Carmona-Ribeiro , Universidade de São Paulo, Brazil <i>"Supramolecular assemblies of cationic lipid and gramicidin as microbicidal agents"</i>	10.00 - 10.20	NANO-186: Samir Iqbal , University of Texas at Arlington, USA <i>"Isolation and Typing of Tumour Cells from Images of Aptamer-Functionalized Chips"</i>
10.20 - 10.40	NANO-153: Margaret Holme , University of Basel, Switzerland <i>"Shear stress sensitive nanocontainers with tunable release properties"</i>	10.20 - 10.40	NANO-28: Jiunn-Der Liao , National Cheng Kung University, Taiwan <i>"SERS-based DNA detection using inverted multi-angular Au nano-cavity array-embedded microfluidic device"</i>
10.40 - 11.00	NANO-179: David Cramb , University of Calgary, Canada <i>"Critical factors in nanoparticle drug delivery design"</i>	10.40 - 11.00	NANO-31: Kevin Critchley , Molecular and Nanoscale Physics Group, UK <i>"Cadmium Free Quantum Dots "</i>
11:00 - 11:30	Refreshments break		

Time	Topic: Tissue Engineering & Biomedical Sciences Chair: Dr Brian Cousin (UK) Room: Old Refectory	Time	Topic: Diagnosis and Imaging Chair: Prof. Ueli Aebi (Switzerland) Room: Chadwick Lecture Theatre
11:30 - 11:50	NANO-149: Volker Mailänder , Max Planck Institute for Polymer Research, Germany <i>"Specific targeting by (oligo)mannose functionalized hydroxyethyl starch nanocapsules: en route to drug delivery systems with targeting properties"</i>	11:30 - 11:50	NANO-55: Manlio Tassieri , University of Glasgow, UK <i>"Measuring the viscous and elastic properties of single cells using particle tracking microrheology"</i>
11:50 - 12:10	NANO-32: Angel Millan , Universidad de Zaragoza, Spain <i>"Multifunctional Nanoplatfrom for Biomedical Applications"</i>	11:50 - 12:10	NANO-58: Alessandra Bestetti , The University of Melbourne, Australia <i>"A Versatile and Widely Applicable Strategy for the Conjugation of Quantum Dots to Biomolecules through Click Chemistry"</i>
12:10 - 12:30	NANO-17: Vesselin N Paunov , University of Hull, UK <i>"Encapsulation of Living Cells into Sporopollenin Microcapsules"</i>	12:10 - 12:30	NANO-63: E. Castro , University of Minho, Portugal <i>"Could anisotropic iron oxide nanoparticles lead to further enhancing in magnetic resonance imaging?"</i>
12:30 - 12:50	NANO-194: Raffaella Aversa , Second University of Naples, Italy <i>"Mechanical and Swelling Behaviour of New Hybrid Ceramo-Polymeric bio-nanocomposites"</i>	12:30 - 12:50	NANO-82: Jérémy Paris , Université de Bourgogne, France <i>"Bimodal Contrast Agents for the in Vivo Imaging: The Elaboration of Functionalized SuperParamagnetic Iron Oxide Nanoparticles"</i>
12:50 - 14:00	LUNCH		
Time	Topic: Tissue Engineering & Biomedical Sciences Chair: Prof. Jawwad A. Darr (UK) Room: Old Refectory	Time	Topic: Diagnosis and Imaging Chair: Dr Nasar Ali (UK) Room: Chadwick Lecture Theatre
14:00 - 14:20	NANO-25: Mohd Zobir Hussein , Universiti Putra Malaysia, Malaysia <i>"Zinc Layered Hydroxide-Salicylate Nanohybrid and Its Effect on Vero3 Cells Viability"</i>	14:00 - 14:20	NANO-85: Julien Boudon , Université de Bourgogne, France <i>"Biodistribution Study of a Novel Theranostic Versatile Platform Composed of Surface-modified Titanate Nanotubes"</i>
14:20 - 14:40	NANO-16: Vesselin N Paunov , University of Hull, UK <i>"Triggered Cell Release from Shellac-Cells Composite Microcapsules"</i>	14:20 - 14:40	NANO-86: John Wang , National University of Singapore, Singapore <i>"Multifunctional Hybrid Nano Core@shells via Bioinspired Silification for Targeted Diagnosis"</i>
14:40 - 15:00	NANO-52: Cynthia Wong , Deakin University, Australia <i>"Potential of electrospun polyurethane blended with elastin and collagen as vascular graft"</i>	14:40 - 15:00	NANO-96: Yang Liu , Loughborough University, UK <i>"AFM Measurement of Single Cell Mechanical Properties of Live, Membrane-Impaired and Dead Human Mesenchymal Stem Cells"</i>

15:00 - 15:20	NANO-54: Antonio Apicella , Second University of Naples, Italy <i>"Hybrid Ceramo-Polymeric Modified Dental Implants with Improved Biomimetic Characteristics"</i>	15:00 - 15:20	NANO-100: A. G. Denkova , Delft University of Technology, Netherlands <i>"Polymersomes as nanocarriers for radionuclide imaging"</i>
15:20 - 15:40	NANO-61: O.S. Adeyemi , Rhodes University, South Africa <i>"Characterising the interaction between silver/gold nanoparticles and recombinant form of arginine kinase of Trypanosomabrucei (TbAK)"</i>	15:20 - 15:40	NANO-156: Riccardo Di Corato , Université Paris Diderot, France <i>"Monitoring the organization of multicellular tissue constructs by magnetic manipulation and dual imaging"</i>
		Time	Topic: Tissue Engineering & Biomedical Sciences Chair: Prof A. Seifalian (UK) Room: Chadwick Lecture Theatre
15:40 - 16:00	NANO-64: Laurent JEANNIN , Peptisyntha SA, Belgium <i>"Peptide-based Hydrogels for Cell Culture"</i>	15:40 - 16:00	NANO-93: Alessandra Sutti , Deakin University, Australia <i>"Short biocompatible nanofibres as a flexible building block for nano-scaffolds in tissue engineering"</i>
16:00 - 16:20	NANO-65: S. Bhatt , LGPPTS, France <i>"Plasma Polymerized Poly (ϵ-Caprolactone)-Poly (ethylene glycole) Copolymer Coatings - As a Biodegradable Carrier for Controlled Drug Delivery Applications"</i>	16:00 - 16:20	NANO-98: Menglin Chen , University of Aarhus, Denmark <i>"Electrospun Nanofiber Mediated Stimuli Responsive Drug Release"</i>
16:20 - 16:40	NANO-75: Yuen Ling Ng , University of Nottingham, UK <i>"Cell-to-cell adhesion and adhesion to extracellular matrix molecules in directing stem cell proliferation and differentiation"</i>	16:20 - 16:40	NANO-185: Achala de Mel , UCL, UK <i>"Tubular nanocomposite scaffolds for applications in paediatric tissue engineering"</i>
16:40 - 17:00	NANO-83: Deepti Dyondi , Indian Institute of Technology (IIT) Bombay, India <i>"Biologically active nanoparticulate based injectable polymeric matrices for tissue regeneration"</i>	16:40 - 17:00	NANO-66: S. Levi , LISM, France <i>"Bactericide studies of Cu-Ag Core-Shell Nanostructures"</i>
17:00-17:30	Refreshments Break and Closing Remarks		

