

NCI Nanotechnology Alliance Investigators Meeting

October 16-18, 2007

Poster Numbers	Presenter First Name	Presenter Last Name	Abstract Title
99	Parag	Aggarwal	Methodological Challenges in the Analysis of Nanoparticle Immunological Properties
50	Irfan	Ahmad	Nanofabricated Device Development Training for Nanovectors
1	Md. Rowshon	Alam	Bivalent RGD Peptide as a Carrier Molecule for the Delivery of Anionic Antisense Oligonucleotides Into the Cell
10	John	An	Modular System for siRNA Delivery
34	Leslie	Au	Engineering Gold Nanocages for the Photothermal Therapy of Cancer
39	Bhaswati	Barat	Novel Engineered Antibody-Quantum Dots Conjugates (Immunoqdots) for Multiplexed Imaging of Tumor Cell Surface Markers
70	Candice	Brannen	Magnetic Resonance Imaging (MRI) Using PRINT Technology
6	Eric	Brown	Ability of Titanium Dioxide Peptide Nucleic Acid Nanocomposites To Hybridize Target DNA In Vitro Under Pseudo-Physiological Ionic and Temperature Conditions
38	Weibo	Cai	A Dual Functional Probe for PET and Near-Infrared Fluorescence Imaging of Tumor Vasculature
15	Dorian	Canelas	Targeting and Delivery of Antisense Oligonucleotides via the PRINT Process
55	Guohua	Cao	Respiratory-Gated Micro-CT of Free Breathing Mice Using a Carbon Nanotube Based Micro-Focus Field Emission X-Ray Source
51	Sha	Chang	Development of Nanotechnology-Based High Spatial and Temporal Resolution Cellular and Small Animal Irradiation Systems
11	Haimei	Chen	Folate-Mediated Intracellular Drug Delivery Increases the Anti-Cancer Efficacy of Arsenic Trioxide In Vitro
23	Jianjun	Cheng	Polymeric Nanoparticles With High Drug Loading, Quantitative Drug Incorporation Efficiency and Controlled Release Profiles
93	Jeffrey	Clogston	Batch versus Flow Mode DLS Metrology: The Effect on Nanoparticle Size
104	Jeffrey	Clogston	Physico-Chemical Characterization of Nanomaterials for Cancer Diagnosis, Imaging, and Therapy
29	Christine	Conwell	Single Serum Protein Incorporation Lowers Toxicity of Lipid-Based Vectors
42	Adam	de la Zerda	A Comparison Between Spectral and Time Domain Imaging Systems for Imaging Quantum Dots in Small Living Animals
32	Harikrishna	Devalapally	Nanoparticulate Therapeutic Strategy for Intracellular Ceramide Modulation To Lower Apoptotic Threshold and Overcome Multidrug Resistance in Cancer
5	Vidula	Dixit	Selective Killing of Smad4-Negative Tumor Cells via a Designed Repressor Strategy
84	Marina	Dobrovolskaia	Preclinical Immunological Studies of a Dendrimer-based MRI Contrast Agent
3	Andrew	Ellington	Development of Diagnostic and Therapeutic Anti-Tumor Aptamers
17	Elizabeth	Enlow	Bioabsorbable Nanoparticles via PRINT for Antisense Oligonucleotide Therapy
71	Panos	Fatouros	Characterization of Trimetallic Nitride Endohedral Metallofullerenes
91	Panos	Fatouros	Theoretical Studies on Functionality of Endohedral Metallofullerenes by OH Radicals
56	Kris	Ford	Nanoparticle Binding Affinity and Release of Antisense Oligonucleotides for Cell Transfection
111	Sharon	Gaheen	caNanoLab: Developing a Nanoparticle Characterization Data Portal and Standards for Representing Nanoparticle Characterizations in Biomedicine
19	David	Gaul	Polyamidoamines Dendrimer as Nucleic Acid Carriers
92	Claudia	Gottstein	Quantitative In Vitro Analysis of Nanoparticle Uptake by Cells of the Reticuloendothelial System
94	Stephanie	Gratton	Imparting Superior Control on Materials for Nanomedicine: Preliminary Biodistribution Studies of PRINT Particles
72	Jonathan	Gunn	Targeted-T Cell Tracking via Superparamagnetic Nanoparticles for Enhanced Immunotherapy Assessment
53	Michael J.	Heller	Ex Vivo DEP System for Cancer Cell, Nanovesicle, and DNA Nanoparticulate Biomarker Isolation and Detection
58	Joshua	Herr	Microfluidic Flow Cytometry for Point of Care Blood Analysis
89	Diana	Hoover	Dip Pen Nanolithography as a Method for the Study of Cell Adhesion and Polarization
60	Wei	Hu	Physical Fabrication of High Moment Magnetic Nanoparticles
65	David	Issadore	Hybrid CMOS/Microfluidic Chip for Cell Manipulation
66	Shaoyi	Jiang	Molecular Engineering of Surfaces for Sensing and Detection
18	Stephen	Jones	Observations of the Phagocytic Behavior of Macrophages Utilizing Live-Cell Imaging and PRINT Nano and Micro Technologies
67	Ken-ichiro	Kamei	Micro-Pathology Chips (mPLCs) for PI3K Signaling Pathway Profiling in Glioblastoma:
4	Hyunmin	Kang	Cellular Delivery and Antisense Splice Correction Activity of an Oligonucleotide Nanocarrier Mediated by Cyclic RGD Peptide
36	Kian	Kani	Proteomic Identification of Therapeutic Response Biomarkers in Prostate Cancer
69	Kattesh	Katti	New X-Ray Computer Tomography Agent for Imaging of Liver
79	Kattesh	Katti	Nano-Naturo Connection in Nanomedicine
80	Kattesh	Katti	Prostate Tumor Targeting Gold Nanoparticles
16	Jennifer	Kelly	Utilizing Protein PRINT Particles: Applications, Characterizations, and Implications
98	Shay	Keren	Noninvasive Molecular Imaging of Small Living Subjects Using Raman Spectroscopy and Raman Nanoparticles
75	Jason	Kim	Multifunctional Nanoparticles for Multimodal Imaging of Cancer and Inflammation
105	Ai Leen	Koh	TEM Studies of Iron Oxide Nanoparticles for Cell Labeling and Magnetic Separation
107	Ai Leen	Koh	Electron Microscopy Characterization of Composite Organic-Inorganic Nanoparticles (COINs) as Raman Labels for Extra-Cellular Analyses
37	Rajiv	Kumar	In Vitro Multiplex Imaging and In Vivo Biodistribution Studies With Targeted and Radiolabeled ORMOSIL Nanoparticles Incorporating Conjugated Fluorophores

NCI Nanotechnology Alliance Investigators Meeting

October 16-18, 2007

68	Andrew	Kummel	An Example Toward Personalized Medicine
44	Wing-Cheung	Law	Organically Modified Silica Nanoparticles Co-Encapsulating Quantum Dots and Magnetite Nanoparticles as Efficient Magnetically Guided Biomarkers for Confocal and Two-Photon Imaging of Cancer Cells
88	Eun-ju	Lee	Developing Dynamic Substrates for Studies of Cell Adhesion and Migration
48	Jae-Seung	Lee	Amplified Detection of Protein Cancer Markers Through the Nanoparticle-Based Biobarcode Assay
24	Shyh-Dar	Li	Efficient Gene Silencing in Metastatic Tumors by Systemically Delivered siRNA
110	Mark	Lim	The NCI Best Practices for Biospecimen Resources and the Biospecimen Research Network
14	Zhuang	Liu	Biomedical Application of Carbon Nanotubes, From In Vitro RNAi to In Vivo Cancer Therapy
87	Jane	Maduram	Shape Cues for Cytoskeletal Organization
101	Lamar	Mair	Does Particle Shape Matter in Transport Through Tissue?
25	Bharat	Majeti	Selective Ablation of Metastatic Disease With Integrin avb3 Targeted Nanoparticle Drug Delivery
30	Debatosh	Majumdar	Nanotechnology in Cancer Therapy: Design and Synthesis of Nanoscale System for Targeted Delivery of Anti-Cancer Drug
82	John	Matson	Fluorine-18 Functionalized Nanoparticles as In Vivo Molecular Imaging Agents
61	John	McClade	Forming Structured Arrays of Nanoscale Structures for Microscopy and Biosensing
28	Dal-Hee	Min	Targeted Multi-Functional Nanoparticles for siRNA Delivery to Tumors
41	Aaron	Mohs	Investigation into the Toxicology of Strain-Tunable Semiconductor Quantum Dots
62	John	Muth	Nanostructured Metallic Structures for Biological Sensing Using Optical Fiber Tips
102	Ed	Myers	Stanford Nanofabrication Facility Service Facility for the Proliferation of Nanotechnology and Nanoscience Device Solutions
81	Dattatri	Naqesha	In Vitro Imaging of Embryonic Stem Cells Using Multiphoton Luminescence of Gold Nanoparticles
26	Tymish	Ohulchanskyy	Organically Modified Silica Based Nanoparticles for Two-photon Induced Photodynamic Therapy
12	Ji Ho	Park	Porous Silicon "Motherships"—Nano-Therapeutics and Hypoxia Sensing Toward Cancer Treatments
77	Jennifer	Park	Magnetic Nanoworms for In Vivo Tumor Targeting
83	Tatjana	Paunesku	Testing Different Compositions of Nanoconjugates for Intracellular Magnetic Resonance Imaging
100	Tatjana	Paunesku	Determining Intracellular Kinetics of TiO ₂ -DNA Using X-Ray Fluorescence Microscopy
13	Robby	Petros	PRINT Nanoparticle-Based Cancer Immunotherapies
78	William	Rieter	Nanoscale Metal-Organic Frameworks as Potential Multimodal Imaging Agents
108	Charles	Roth	IGERT Program in Nanopharmaceutical Engineering and Science
35	Indrajit	Roy	Zinc Oxide Nanoparticles as Nonlinear Optical Probes for Targeted Imaging of Cancer Cells
103	Sucharita	Saha	Development of Nanoparticle and Nanowire Technologies To Treat Spinal Cord Injuries
40	Meike	Schipper	Particle Size, Surface Coating, and Pegylation Influence the Biodistribution of Quantum Dots in Living Mice
90	Meike	Schipper	Initial Toxicology Studies of Single Walled Carbon Nanotubes in Mice
73	Elise A.	Schultz Sikma	Bioactivated Nanoprobes for Molecular Imaging of Cancer
85	Catherine	Shachaf	Detection of Surface Proteins and Intracellular Phosphorylation Events by Surface Enhanced Raman Scattering (SERS) Using Composite Organic-Inorganic Nanoparticles (COINs) in Single Cells
95	Babak	Shahbaba	Identifying Biomarkers and Enriched Pathways Using a Hierarchical Bayesian Model
64	Clifton	Shen	Integrated Microfluidic Chip for the Radiochemical Synthesis of PET Imaging Probes
33	Jae Ho	Shin	Nitric Oxide-Releasing Silica Nanoparticles as an Anticancer Chemotherapy
43	Bryan	Smith	Direct Visualization of RGD-Quantum Dot Binding in Tumor Neovasculature Using Intravital Microscopy on Living Mice
27	Hugh	Smyth	Microsystems and Nanoparticles for Aerosol Drug Delivery of Anti-Cancer Agents to the Lung
59	Jeffrey	Soochoo	Microfluidic Liquid Filters for Leukocyte Isolation
22	Stephany	Standley	Self-Assembled Nanofibers for Cancer Therapies
97	Stephen	Stern	In Vitro and In Vivo Pharmacokinetic Characterization of Short Chain C6-Ceramide Liposomes
106	Stephen	Stern	Protection Against Cisplatin-Induced Apoptosis in LLC-PK1 Cells by Dendritic Fullerenes
31	Ellen	Stevens	Nitric Oxide-Releasing Nanoparticles as a Potential Targeted Therapy for Ovarian Cancer
49	K.R.V.	Subramanian	Cancer Cell Charge-Sensing Devices Based on the Extraordinary Electroconductance (EEC) Effect
63	Scott	Tabakman	Functionalized Carbon Nanotubes for In Vitro Biological Sensing and Imaging
2	Tambet	Teesalu	Blood Clearance of Bacteriophage and Dextran-Coated Iron Oxide Nanoparticles
21	Bill	Trogler	Hollow Silica and Titania Nanospheres for Targeted Drug and Gene Delivery
86	Andrea	Utrecht	Cellular Polarity During Migration on Nanopatterned Surfaces
8	Alex	Valencia	Generation of Multivalent Affinity Molecules for the Delivery of Nanoparticles
9	Omid	Veisoh	A Multifunctional Nanoparticle for Detection and Treatment of Medulloblastoma
7	Veronica	Volgina	Engineering of Antibody Fragments for 'Smart' Drug Delivery
47	Sigen	Wang	Development of a High-Resolution Image-Guided Micro-RT System for Animal Model Research
57	Shan	Wang	Magneto-Nano Chips, Sifters, and Nanoparticles for Cancer Diagnostics
20	James	Weaver	Targeting B-Cell Lymphoma using PRINT Technology
109	Aiguo	Wu	Titanium Dioxide-DNA Nanocomposites: Applications in Materials Science and in Cell Biology
45	Yun	Xing	Self-Illuminating Semiconductor Quantum Dots for Prolonged Animal Imaging and Protease Detection

NCI Nanotechnology Alliance Investigators Meeting

October 16-18, 2007

54	Guang	Yang	Novel Gantry-Free Digital Breast Tomosynthesis (DBT) System Using a Stationary Multibeam Field Emission X-Ray Source Array Based on Carbon Nanotubes
76	Lily	Yang	Receptor-Targeted Multifunctional Nanoparticles for In Vivo NIR Optical and MR Imaging of Pancreatic Cancer
96	Siavash	Yazdanfar	Frequency Domain Lifetime Measurement of Quantum Dots for Preclinical Imaging
46	Ken-Tye	Yong	Quantum Rod (QR) Bioconjugates as Targeted Optical Probes for Detection of Human Cancer
74	Christina	Zavaleta	Use of Non-Invasive Raman Spectroscopy Imaging in Living Mice for Evaluation of Tumor Targeting With Carbon Nanotubes
52	Jian	Zhang	Hadamard Multiplexing Radiography Based on Carbon Nanotube Field Emission Multi-Pixel X-Ray Technology