

COST ACTION CA 17140  
**NANO2CLINIC**  
CANCER NANOMEDICINE - FROM THE  
BENCH TO THE BEDSIDE



## PROGRAMME OF THE 1<sup>st</sup> CA17140 COST CONFERENCE

15<sup>th</sup>-17<sup>th</sup> October 2019, Riga

### Day 1 (15th of October)

#### Session 1 Chair: Barbara Klajnert-Maculewicz

12.00-12.10 Opening

12.10-12.40 Nissim Garti

*Novel nano domains as multipurpose delivery vehicles for bioactives*

12.40-13.00 Susana Cristobal

*Designing a patient-specific nanodrug-protein corona*

13.00-14.00 LUNCH

#### Session 2 Chair: Sabrina Pricl

14.00-14.20 Yrr Morch

*From drug discovery to preclinical studies: SINTEFs nanoparticle-based technologies for cancer treatment*

14.20-14.35 Marta Szczech

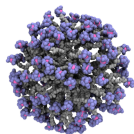
*Bio-polymeric nanoparticles as hydrophobic drug's carriers for biomedical applications*

14.35-14.50 Weronika Gaweda

*Barium ferrite magnetic nanoparticles labeled with <sup>223</sup>Ra: a new potential magnetic radiobioconjugate for targeted alpha therapy*

14.50-15.05 Nina Kostevsek

*Liposomal-based T2 MRI contrast agents*



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15.05-15.20 Marija Vukomanovic

*Magnetic antimicrobial nanodrugs: Functionalized cobalt ferrite / gold nanocomposites*

15.20-15.40 Carla Cruz

*G-quadruplexes nanosystems for cancer therapy*

15.40-16.00 Simo Schwartz

*A new CD44v6-targeted treatment for advanced colorectal cancer mediated by niclosamide-loaded polymeric micelles*

16.00-16.20 COFFEE BREAK

### **Session 3 Chair: Carlo Catapano**

16.20-16.40 Antonios Kanaras

*Messenger RNA-mediated anticancer drug release in mesenchymal cells by spherical nucleic acids*

16.40-16.55 Barbara Strojny

*Inhibition of selected P450 cytochromes by carbon nanostructures*

16.55-17.10 Marzena Szwed

*Assessment of the genotoxic and pro-apoptotic effect of various nanoparticles on human endothelial cells*

17.10-17.25 Veronica Bastos

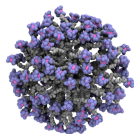
*An innovative nanoplateform with UCNP for multimodal therapy of melanoma*

17.25-17.40 Claudia Martins

*Synthesis of biologic-responsive polymers for the manufacturing of docetaxel-loaded nanoparticles for glioblastoma chemotherapy*

17.40-18.00 Vladimir Sivakov

*Porous silicon-based nanomedicine: Fantasy or future*



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18.00-18.15 Marta Kutwin

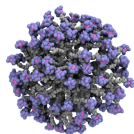
*Graphene nanoplatfom as a selective gene delivery system in glioblastoma cancer research*

18.15-18.30 Malwina Sosnowska

*Mechano-signalling, induced by fullerene C60 nanofilms, arrests the cell cycle in the G2/M phase and decreases proliferation of liver cancer cells*

18.30-18.45 Monica Mullerova

*Carbosilane glycodendrimers: From synthesis to bioapplications*



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## Day 2 (16th of October)

### Session 4 Chair: Nissim Garti

9.00-9.30 S. Moein Moghimi

*Nanomaterials and the innate immunity: the complement challenge*

9.30-9.50 Tracey Bradshaw

*Development of apoferritin formulations for antitumour drug delivery*

9.50-10.05 Maciej Cieslak

*Synthesis of peptidic bola-dendrimers*

10.05-10.20 Barbara Pem

*Effect of particle shape on interactions of gold nanoparticles with proteins of different glycosylation status*

10.20-10.35 Mateusz Wierzbicki

*Graphene oxide nanoplatelets decreases glioma induced angiogenesis*

10.35-10.55 Manuela Gaspar

*Liposomes – a nanotechnological platform for different clinical applications*

10.55-11.15 COFFEE BREAK

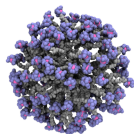
### Session 5 Chair: S. Moein Moghimi

11.15-11.35 Valentin Cena

*The nanomedicine approach to glioblastoma therapy*

11.35-11.50 Viraj Pratap Nirwan

*Functional hybrid material using electrospun polymeric framework and functional elements for cancer therapy*



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11.50-12.05 Aris Xenakis

*Development and applications of nanodispersions as carriers of compounds with pharmaceutical interest*

12.05-12.25 Eleni Efthimiadou

*Advanced theranostic systems based on nanostructure materials*

12.25-12.40 Marce Abal-Sanisidro

*Creating self-illuminating nanoconjugated nanoparticles (nanosystems) to treat pancreatic cancer*

12.40-13.00 Catarina Pinto Reis

*Different rational nanotherapeutic approaches towards superficial cancers*

13.00-14.00 LUNCH

### **Session 6 Chair: Ling Peng**

14.00-14.20 Martin Hruby

*Polysaccharide-graft-poly(2-alkyl-2-oxazoline) hybrid copolymers for nanomedicine applications*

14.20-14.40 Krzysztof Szczepanowicz

*Polymeric nanoparticles for theranostic*

14.40-15.00 Ruth Prassl

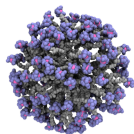
*Liposomes for micro-RNA delivery*

15.00-15.15 Eva Salvanou

*Radiolabeled magnetic nanoparticles for cancer theranostics*

15.15-15.30 Sara Toselli

*Silica-based multifunctional nanomedicine for targeted drug delivery*



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15.30-15.45 Maja Severic

*Targeting prostate cancer via PSMA-peptide decorated exosome-mimetics*

15.45-16.00 Evgeny Apartsin

*pH-sensitive triazine-carbosilane dendrimerosomes for anti-cancer drug delivery*

16.00-16.20 COFFEE BREAK

### **Session 7 Chair: Maria Eugenia Riveiro**

16.20-16.40 Wafa T. Al-Jamal

*Loading doxorubicin-PSA prodrug into thermo-sensitive nanocarriers enhances its therapeutic efficacy in castration-resistant prostate cancer models*

16.40-17.00 Marta Natile

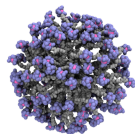
*Lipid-coated upconverting nanoparticles/Ru(II)-anticancer compounds for NIR-light-mediated photodynamic therapy*

17.00-17.15 Aurora Grimaudo

*Biocompatible and versatile sphingolipid nanosystems for personalized medicine*

17.15-17.35 Khuloud Al-Jamal

*Exosomes-mediated RNAi of PAK4 prolongs survival of pancreatic cancer mouse model after loco-regional treatment*



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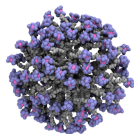
### Day 3 (17th of October)

#### Session 8 Chair: Maria Francesca Ottaviani

- 9.00-9.20      Ling Peng  
*Charm of dendrimer nanotechnology for cancer therapy*
- 9.20-9.35      Mariangela Garofalo  
*Oncolytic viruses and extracellular vesicles for cancer drug delivery*
- 9.35-9.50      Lorena Garcia Hevia  
*Preclinical validation of new hybrid nanocomposites for theranostic applications*
- 9.50-10.10    Dzmitry Shcharbin  
*Nanoparticles for cancer nanomedicine*
- 10.10-10.25   Enrico Catalano  
*Aptamer-functionalized iron oxide and gold nanoparticles for breast cancer theranostics*
- 10.25-10.40   Erving Ximendes  
*Infrared-emitting nanoparticles for in vivo early tumor detection*
- 10.40-11.00   Dietmar Appelhans  
*Supramolecular assemblies for nanomedicine*
- 11.00-11.20   COFFEE BREAK

#### Session 9 Chair: Ivana Vinković Vrček

- 11.20-11.40   Jorn B. Christensen  
*Dendrimers for pharmaceutical applications – potential & challenges*
- 11.40-11.55   Gabriel Lopez Pena  
*Eosin Y and rare-earth-doped nanoparticles for deep-tissue photodynamic therapy*



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11.55-12.10 Luiza Erthal

*Controlled release of a chemotherapeutic drug from a stimuli responsive nanoparticle incorporated in an injectable hydrogel for the treatment of solid tumours*

12.10-12.25 James Wells

*Nanoparticle localization, remote thermometry and hyperthermia therapy application combined in a preclinical Magnetic Particle Imaging Scanner*

12.25-12.40 Maria Cascallar

*Study of new synthetic vectors for cancer gene therapy and interference of metastasis process in zebrafish models*

12.40-13.00 Monica Lopez Fanarraga

*Carbon nanotubes are active-by-design systems for cancer therapeutic delivery*

13.00-13.10 Closing remarks

13.10-14.10 LUNCH