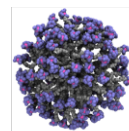


# 1<sup>st</sup> CA17140 STSM VIRTUAL CONFERENCE PROGRAMME

MARCH 16, 2022  
CET Time



## ❖ **Opening (09:00-09:15)**

*Presenters: Sabrina Pricl (Action Chair); Maria Francesca Ottaviani (Grant Awarding Coordinator)*

## ❖ **Guidelines for clinical trials and regulatory aspects (09:15-10:00)**

*Session chair: Darío Manzanares Sandoval*

### **09:15 – 09:45 Plenary lecture**

**Nissim Garti, Sharon Garti- Levi and Rotem Edri**

*“Novel in-situ formation of thin film embedded with nano-domains coroneted by drug molecules for controlled transdermal release of drugs”*

### **09:45 – 10:00 Short oral**

**Virginia Cazzagon, C. Fito**

*“Development of an occupational risk assessment for nanobiomaterials used in Advanced Therapy Medicinal Product for cancer treatment”*

## ❖ **Manufacturing nanodrugs Part I (10:00-11:30)**

*Session chair: Elham Poonaki*

### **10:00 – 10:15 Short oral**

**M. Hovorková, D. Goyard, J. Červený, V. Křen, O. Renaudet, P. Bojarová.**

*“Advanced High-Affinity Glycocluster Ligands of Galectins”*

### **10:15 – 10:30 Short oral**

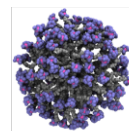
**Valeria Arkhipova, Nadezhda Knauer, Ekaterina Pashkina, Alina Aktanova, Javier Sánchez-Nieves, Francisco Javier de la Mata, Rafael Gómez, Evgeny Apartsin**

*“Synthesis of amphiphilic carbosilane dendrons for cancer nanomedicine”*

### **10:30 – 10:45 Short oral**

**Antonín. Edr, E. Apartsin, J. Kalasová, J. Malý and T. Strašák**

*“Carbosilane Dendritic Amphiphiles for Cancer Nanomedicine Drug Delivery”*



**10:45 – 11:00 Short oral**

**Joana Figueiredo, Israel Carreira-Barral, Roberto Quesada, Jean-Louis Mergny, Carla Cruz**

*“Synthesis and evaluation of phenanthroline-based derivatives as human pre-MIR150 G-quadruplex binders for lung cancer therapy”*

**11:00 – 11:15 Short oral**

**André Miranda, Roi Lopez-Blanco, Eduardo Fernandez-Megia, Carla Cruz**

*“Development of aptadendrimers for prostate cancer therapy”*

**11:15 – 11:30 Short oral**

**Dina Maciel, Dominika Wróbel, João Rodrigues, Tomáš Strašák and Monika Müllerová**

*“Carbosilane glycodendrimers for anticancer drug delivery”*

❖ **Manufacturing nanodrugs Part II (11:30-12:00)**

*Session chair: Natalia Sanz del Olmo*

**11:30 – 11:45 Short oral**

**Kinga Skrzyniarz, Javier Sanchez-Nieves, Andrea Barrios-Gumiel, Sara Quintana, Karol Ciepluch**

*“Synthesis of metal nanoparticles modified with carbosilane dendrons as antitumoral agents”*

**11:45 – 12:00 Short oral**

**E Elham Poonaki, Ann-Christin Nickel, Mehdi Shafiee Ardestani, Ali Gorji, Sven G. Meuth, E. Apartsin, Christoph Janiak, U. Kahlert**

*“CD-133 functionalized Gold nanoparticles loaded CB839 targeted drug delivery suppressed Glioblastoma stem cells”*

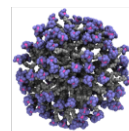
❖ **Physico-chemical characterization of nanodrugs Part I (12:00-13:30)**

*Session chair: Dilara Buse Durdabak*

**12:00 – 12:15 Short oral**

**Viktor Andonovic and Aleksandar Dimitrov**

*“Algorithm based on XRD data for determining the number and distribution of layers of graphene as drug delivery nanocarrier”*



**12:15 – 12:30 Short oral**

**Beti Andonovic, A. T. Dimitrov and J. Djordjevic**

*“Structural Characterization and determination of topological indices of Carbon Nanomaterials: Graphene and CNTs”*

**12:30 – 12:45 Short oral**

**Marina Kovacevic, I. Balaz, D. Marson , E. Laurini, B. Jovic**

*“Structure of mixed-monolayer gold nanoparticles: Molecular Dynamics study”*

**12:45 – 13:00 Short oral**

**Maria José Silveira, María de La Fuente, Maria José Oliveira, Bruno Sarmiento**

*“Development of novel targeted immunomodulatory nanoparticles for colorectal cancer treatment”*

**13:00 – 13:15 Short oral**

**Aleksandar T. Dimitrov, Beti Andonovic, Zeljko Kamberovic**

*“Characterization of Carbon nanostructures”*

**13:15 – 13:30 Short oral**

**Jose Antonio Laz-Ruiz, Maria Victoria Cano-Cortes, Juan Jose Diaz-Mochon, Tore-Geir Iversen and Rosario Maria Sanchez-Martin**

*“Preclinical characterization of biocompatible multifunctional nanodevices for cancer nanomedicine”*

**❖ Physico-chemical characterization of nanodrugs Part II (13:30-15:00)**

*Session chair: Jose Antonio Laz-Ruiz*

**13:30 – 13:45 Short oral**

**Lucija Božičević, A. Iskrzynska, M. Loparić, I. Vinković Vrček**

*“Nanomechanical tool for characterization of breast cancer cells”*

**13:45 – 14:00 Short oral**

**Michal Gorzkiewicz, D. Appelhans, S. Boye, A. Lederer, B. Voit, B. Klajnert-Maculewicz**

*“Complexation properties of glycodendrimers towards nucleotides”*

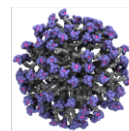
**14:00 – 14:15 Short oral**

**Tamara Rodríguez-Prieto, Alberto Fattori, Claudimar Camejo, F. Javier de la Mata, Jesús Cano, M. Francesca Ottaviani, Rafael Gómez**

*“Study of imidazolium-terminated carbosilane dendritic systems by EPR”*

**14:15 – 14:30 Short oral**

**Barbara Pem, V. Vrček, A. Adamatzky and I. Vinković Vrček**



*“Computational approach to the study of nano-bio interface”*

**14:30 – 14:45 Short oral**

**Rafael Ramírez-Jiménez, R. Barbir, K. Ilić, E. Galic, B. Pem, I.Pavičić, R. Martín-Rapún, J. Martínez de la Fuente and I. Vinković Vrček**

*“Drug delivery of doxorubicin with gold nanoparticles”*

**14:45 – 15:00 Short oral**

**Esperanza Padín González, Elena Navarro Palomares, Marco Monopoli, Mónica López Fanarraga**

*“Customizing the identity of nanomaterials to enhance the targeting”*

### **❖ Physico-chemical characterization of nanodrugs Part III (15:00-16:00)**

*Session chair: Darío Manzanares Sandoval*

**15:00 – 15:15 Short oral**

**Natalia Sanz del Olmo, C. de la Torre, V. Ceña and M. Malkoch.**

*“Cationic amino functional bis-MPA based linear-dendritic block copolymers as non-viral vectors of siRNA”*

**15:15 – 15:30 Short oral**

**Rinea Barbir, R. Ramírez Jiménez, R. Martín-Rapún, V. Strasser, D. Domazet Jurašin, S. Dabelić, J. M. de la Fuente, and I. Vinković Vrček**

*“Interaction of Differently Sized, Shaped, and Functionalized Silver and Gold Nanoparticles with Glycosylated versus Nonglycosylated Transferrin”*

**15:30 – 15:45 Short oral**

**Dilara Buse Durdabak, S. Dogan, M. Eser, K. Başak, C. O’Sullivan, B. Guvenc Tuna**

*“Development of Lateral Flow Assay for Detection of DOX-Resistant Breast Cancer Biomarker”*

**15:45 – 16:00 Short oral**

**Dominika Wróbel, A. Fattori, M. Müllerová, T. Strašák, J. Malý, M. F. Ottaviani**

*“Glucose-decorated Carbosilane dendrimers interacting with a model cell membrane, studied by means of the spin-probe EPR technique”*

### **❖ Preclinical studies of nanodrugs Part I (16:00 – 17:30)**

*Session chair: Natalia Sanz del Olmo*

**16:00 – 16:15 Short oral**

**Dominika Wróbel, A. Janaszewska, M. Müllerová, T. Strašák, J. Malý and B. Klajnert-Maculewicz**

*“Anti-inflammatory properties of carbosilane dendrimers”*

**16:15 – 16:30 Short oral**

**Monika Sramkova and I. V. Vrcek.**

*“Advanced in vitro models for (nano)toxicity determination”*

**16:30 – 16:45 Short oral**

**Kristina Jakic, M. Sramkova, A. Babelova, S. Spring, M. Müller, T. Knoll, Y. Kohl and A. Gabelova.**

*“A microfluidic model of the kidney – a platform for the determination of renal toxicity”*

**16:45 – 17:00 Short oral**

**Emerik Galić, Y Richaud, I. Fernández Carasa, I. Vinković Vrček and A. Raya.**

*“Stem cells as in vitro model for testing nanodrug delivery properties of selenium nanoparticles”*

**17:00 – 17:15 Short oral**

**Filipe Olim, A. R. Neves, V. Ceña and H. Tomás.**

*“Fucoïdan/dendrimer nanoparticles for glioblastoma treatment: in vitro siRNA delivery studies”*

**17:15 – 17:30 Short oral**

**Nadezhda Knauer, V. Arkhipova, R. Gómez, J. Sánchez-Nieves, E. Pashkina, V. Kozlov, E. Apartsin and U. Kahlert.**

*“Dendrimers for microRNA delivery into human glioblastoma stem-like cells”*

## ❖ **Preclinical studies of nanodrugs Part II (17:30 - 19:00)**

**Session chair: Natalia Fernández Bertólez**

**17:30 – 17:45 Short oral**

**Monika Marcinkowska, A. Janaszewska and B. Klajnert-Maculewicz.**

*“Influence of PAMAM-taxanes-monoclonal antibody conjugates on the breast cancer cells”*

**17:45 – 18:00 Short oral**

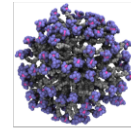
**Danai Prokopiou, V. Kusigerski, S. Vranjes-Duric and E. K. Efthimiadou.**

*“Iron oxide magnetic nanoparticles modified with biomolecules for theranostic applications”*

**18:00 – 18:15 Short oral**

**Anna Janaszewska, D. Wróbel, M. Liegertová, J. Malý, M. Marcinkowska and B. Klajnert-Maculewicz.**

*“Application of auto-fluorescent nanoparticles as a new bioimaging agents in vivo”*



**18:15 – 18:30 Short oral**

**M. Giannakou, N. Evripidou, A. Antoniou, and Christakis Damianou.**

*“Manual positioning device for FUS induced BBB disruption in mice”*

**18:30 – 18:45 Short oral**

**Jéssica Lopes-Nunes, J. Lifante, Y. Shen, E. C. Ximendes, M. C. Iglesias-de la Cruz, D. Jaque, C. Cruz**

*“ICG-tagged aptamer as drug delivery system for malignant melanoma”*

**18:45 – 19:00 Short oral**

**Atida Selmani, I. Vidaković, C. J. Hill, R. Prassl and I. Vinković Vrček**

*“Stability of selenium nanoparticles as novel anticancer delivery vehicle in relevant biological media”*

**❖ Closure (19:00 – 19:15)**

*Presenters: Sabrina Pricl, Maria Francesca Ottaviani*