



Lisbon 2023, at the edge of Europe and Science

Annual EUFEPS Conference, May 31<sup>st</sup> – June 2<sup>nd</sup>, 2023 in Lisbon, Portugal

### Pre-Conference Workshop “History of Pharmacy”

	May 31 <sup>st</sup>
<b>09:00-12.00</b>	<b>Pre-Conference Workshop “History of Pharmacy”</b> Moderation: António Almeida
09:00 – 09:15	Welcome
09:15 – 10:00	Maria Guilherme Semedo, Ana Leonor Pereira, João Rui Pita <b>Cinchona bark and quinine in the Portuguese official pharmacopoeias (1794-2001)</b>
10:00 – 10:45	Toine Peters, <b>The Dutch cinchona and quinine monopoly (1900-1950)</b> , presented by Bert Leufkens
10:45 – 11:15	Coffee break
11:15 – 12:00	Joao Neto, <b>Director of Pharmacy Museum of Lisbon, Time capsule of Science</b>

## Main Conference Program

<b>May 31<sup>st</sup></b>			
<b>12.30– 13.00</b>	<b>Welcome coffee</b>		
<b>13.00– 13.15</b>	<b>Opening of the EUFEPS ANNUAL CONFERENCE 2023,</b> Prof. Dr. Joao Lopes, Conference Chair Prof. Dr. Maria Blanco-Prieto, EUFEPS President Prof. Dr. Beatriz da Silva Lima, Dean of the Faculty of Pharmacy, University of Lisbon  <i>EUFEPS Presidential Distinction Award</i>		
<b>13.15– 14.00</b>	<b>PL1, Anke - Hilse Maitland-van der Zee, <i>On the Edge of Science, On the Edge of Precision Medicine</i></b> <b>Chair: Anna Birna Almarsdóttir</b>		
<b>14.00– 14.45</b>	<b>PL2, Patrick Couvreur, <i>Nanomedicines for the treatment of cancer and neurodegenerative diseases</i></b> <b>Chair: Maria Blanco-Prieto</b>		
<b>14.45– 15.15</b>	<b>Coffee break</b>		
<b>Invited lectures, parallel sessions I</b>			
	<b>Session 1</b>	<b>Session 2</b>	<b>Session 3</b>
<b>15.15– 16.45</b>	<b>Expanding the role of nano drug delivery system in an evolving scenario for global health– <i>EUFEPS Network Nanomedicine</i></b> <b>Chair: Maria Blanco-Prieto / Fabio Sonvico</b>	<b>MedChem – EFMC-Innovative approaches for sustainable Drug Discovery</b> <b>Chair: Gianluca Sbardella</b>	<b>Lipid based drug delivery – <i>Slovenian Pharmaceutical Society</i></b> <b>Chair: Mirjana Gašperlin / Alenka Zvonar Pobirk</b>
<b>15.15– 15.45</b>	<b>Giuseppe De Rosa</b> Lipid self-assembling nanoparticles to foster RNA-based therapies	<b>Antimo Gioiello</b> Multicomponent flow reactions: enabling tools for sustainable medicinal chemistry	<b>Alenka Zvonar Pobirk</b> “Lipid based systems for oral delivery of poorly water soluble drugs and approaches for their solidification”

15.45-16.15	<b>Dagmar Fischer</b> From biofilms and hen's eggs: Nano-based drug delivery systems for infection and inflammation	<b>Kevin Lam</b> Electrosynthesis: Your Chemistry Got Potential	<b>Katarina Bolko Seljak</b> Improving drug solubility in novel dosage forms with SMEDDS
16.15-16.30	<b>Tomáš Etrych</b> pH-responsive Polymer Nanomedicines for Photodynamic Therapy and Tumor Imaging	<b>Sofia Lisina</b> Nano differential scanning fluorimetry as a rapid stability assessment tool in the nanoformulation of proteins.	<b>Jose Catita</b> Relevance of solid state characterization in the pharmaceutical industry
16.30-16.45	<b>Héctor Rilo-Alvarez</b> mRNA Activated Matrices as a System for Articular Cartilage Regeneration	<b>Edorta Santos-Vizcaino</b> Development of an immortalized human hair follicle-derived mesenchymal stromal cell (i-HF- MSC) line for the overtime production of scalable secretome	<b>Seval Olgac</b> Screening and assessment of excipients for nanoemulsion formulations of interleukin-2 with computational studies
16:45-17:45	<b>Flash presentations (5 min each)</b> Moderator: António Almeida		
1	<b>Seoyoung Park</b> , IPT012 intravitreal implant inhibits choroidal neovascularization through promotion of pathogenic $\beta$ -catenin degradation	6	<b>Sara Gutierrez-Gutierrez</b> , Anionic polyphosphazenes as gene transport enhancers
2	<b>Joana Pinto-da-Silva</b> , Microencapsulation of bacterial lysates by spray-drying: microparticle characterisation and antigen stability	7	<b>Mariana Landin</b> , From trial-and-error to genetic algorithms for the formulation of microparticles. A methodological revolution
3	<b>Ágnes Ruzsnyák</b> , Formulation and investigation of cyclodextrin polymer-based siRNA delivery systems	8	<b>Sara Signorini</b> , Development and characterization of a polymeric film for ocular controlled release of micelles loaded with neuroprotective drugs
4	<b>Marina Beraza-Millor</b> , Novel substrate reduction therapy based on siRNA golden lipid nanoparticles for Fabry Disease	9	<b>Barbara Herlah</b> , Simulation-based optimization of 4,6-substituted-1,3,5-Triazin-2(1H)-Ones as catalytic inhibitors of the human DNA Topoisomerase IIA
5	<b>Sebastian Polak</b> , Virtual Bioequivalence assessment of ropinirole prolonged release tablets – case study discussion		
17.45-19.00	<b>Guided Poster Tour</b>		
18.30-22.00	<b>Welcome Reception</b>		

	<b>June 1<sup>st</sup></b>	
<b>08.00-08.30</b>	<b>Welcome coffee</b>	
<b>8.30-9.15</b>	<b>PL3 Thomas Sauer, Pioneering technology platforms enable next generation Biologics</b> <b>Chair: Dieter Steinhilber</b>	
<b>9.15-10.00</b>	<b>PL4 Staffan Folestad, Supplying the Future - Pharma Manufacturing Innovation and Unified Approaches to Personalized Medicine</b> <b>Chair: Fabio Sonvico</b>	
<b>10.00-10.30</b>	<b>Coffee break</b>	
	<b>Parallel sessions II</b>	
<b>10.30-12.00</b>	<b>Session 4</b>	<b>Session 5</b>
	<b>Particle design – EUFEPS - QbD &amp; PAT Network</b> <b>Chair: Jukka Rantanen / Joao Lopes</b>	<b>EurSci4Health: where to go?</b> <b>Chair: Bert Leufkens</b>
	<b>10.30 – 10.55 Ruud van Ommen</b> Atomic layer deposition (ALD) for particle design	In 2019 EUFEPS initiated the EurSci4Health platform with the objective to advise on scientific policies for health and safety, within European institutions, in order to facilitate the integrated development, regulation and use of diagnostics, therapeutics and other health technologies. The platform aimed to umbrella various scientific societies or federations of societies, and to liaise intensively with other groups (patients, industry, NGOs, other European platforms, etc.).  The question of how we as scientists can engage and influence agendas on a European level, is about prioritizing of topics and taking a long view. Research agendas and funding mechanisms work in cycles of (many) years. ‘Brussels’ looks as a tennis ball launcher constantly sending new policy and/or strategy plans, ideas, consultations, etc. To hit back on time and with success means careful, timely and smart manoeuvring. There is always a WHAT (priority topics/needs) and a HOW (methods of dialogue/intervention) question involved.  The proposed panel will reflect on the WHAT and HOW questions from their own background and experiences. All panellists have an extensive background in working in and around the ‘Brussels’ space.
	<b>10.55 – 11.20 Eftychios (Efty) Hadjittofis</b> Using a morphological population balance to develop a model-driven QbD approach for crystallisation processes	
<b>11.20 – 11.30 Lucia Martin-Banderas</b> VCAM-1-targeted nanosystems enhance cannabinoid anti-atherogenic properties		

	<b>11.30 – 11.40 Ana Rita Resus</b> Improving the effectiveness of ocular delivery systems using natural deep eutectic solvents	Moderator: Hubert Leufkens, Utrecht University, the Netherlands  1. Mareike Lutz, Chalmers University of Technology, Gothenburg, Sweden 2. Rui Moreira, University of Lisbon, President European Federation for Medicinal Chemistry and Chemical Biology, Portugal 3. Jon de Vlieger, Lygature, Utrecht, the Netherlands 4. Afonso Duarte, national contact point and national delegate for health, member of the IHI States representatives group, Agency for Clinical Research and Biomedical Innovation, Lisbon, Portugal
	<b>11.40 – 12.00 Discussion and Q&amp;A</b>	

Parallel sessions III			
	Session 6	Session 7	Session 8a
<b>12.00-13.30</b>	<b>Pharmacogenomics at the Tipping Point – EUFPS EPRIN Network</b> Chair: Jesse Swen	<b>New drug Formulations for precision medicine – Spanish Pharmaceutical Society</b> Chair: Marcos Garcia Fuente / María Blanco-Prieto	<b>Translating Science: Bench to Bedside – Portuguese Pharmaceutical Society</b> Chair: Joao Lopes / Helena Florindo
<b>12.00-12.30</b>	<b>12:00 – 12:45 Caroline Samer</b> The effect of inflammation on CYP450 activity measured by the Geneva phenotyping cocktail	<b>Stefaan De Smedt</b> Beyond nucleic acids as vaccines: curing ocular diseases with nucleic acids?	<b>Paolo Cesare</b> A MEA-based microphysiological toolbox for in vitro modelling of neuronal disorders
<b>12.30-13.00</b>		<b>12.30 – 12.50 Guojun Xiong</b> Strategies for enhancing the chemotherapeutic effect of paclitaxel in triple negative breast cancer model'sf	<b>Ronit Satchi-Fainaro</b> 3D-Bioprinted cancer models for target discovery, drug development, and personalized therapy
<b>13.00-13.15</b>	<b>12:45 – 13:30 Jesse J. Swen</b> Results of the Ubiquitous Pharmacogenomics project	<b>12.50 – 13.10 Elisa Garbayo</b> Self-assembled squalene-adenosine nanoparticles for the treatment of cardiac ischemia-reperfusion injury	<b>Mehtap Saydam</b> A single-dose, open label, randomized, two period, cross-over, pilot bioequivalence study of a BCS class III drug: Tenofovir alafenamide film coated tablet
<b>13.15-13.30</b>		<b>13.10 – 13.30 Matilde Durán-Lobato</b>	<b>Teresa Leonardo Alves</b>

		A targeted nanomedicine for the treatment of venous thromboembolism, in vitro and in vivo evaluation	Impact of TTS reports associated with Vaxzevria and Jcovden on national COVID-19 vaccination policies
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	<b>Lunch break</b>	
<b>13.30-14.30</b>	<b>Workshop: PubPharm: The freely accessible search platform for pharmacy-specific literature and information resources</b>	
<b>14:30-15.15</b>	<b>PL5 Laura Lechuga</b> , Ultrasensitive Nanophotonic biosensors for label-free and real-time multiplexed analysis <b>Chair: Elisa Garbayo Atienza</b>	
<b>15.15-16.00</b>	<b>PL6 Rogério Gaspar</b> , <i>WHO role in public health emergencies: bringing together science, regulation and health care</i> <b>Chair: Joao Lopes</b>	
<b>16.00-16.30</b>	<b>Coffee break</b>	
	<b>Parallel sessions IV</b>	
	<b>Session 8b</b>	<b>Session 9</b>
<b>16.30-18.00</b>	<b>Translating Science: Bench to Bedside – Portuguese Pharmaceutical Society</b> <b>Chair: Joao Lopes / António Almeida</b>	<b>Strategies for the preservation of effective antibiotics – the One Health Concept in application– EUFEPS Network Veterinary Medicines</b> <b>Chair: Ivo Schmerold</b>
<b>16.30-17.00</b>	<b>Felix Carvalho</b> The One Health Concept Under the Perspective of a Toxicologist	<b>Sevda Senel</b> Advanced Formulation Strategies to overcome Antimicrobial Resistance in veterinary and human medicine
<b>17.00-17.30</b>	<b>Pedro Gouveia</b> Augmented reality and artificial intelligent in breast cancer therapy	<b>I.M. (Inge) van Geijlswijk</b> How to ensure the availability of effective antimicrobials?
<b>17.30-17.45</b>	<b>Fabiola Guareschi</b> Cyclosporine A micellar nasal spray exhibits a promising antiviral activity against SARS-CoV-2	<b>Lucia Pappalardo</b> Novel research in diagnosis and treatment of avian respiratory fungal disease in falcon patients
<b>17.45-18.00</b>	<b>Marcos Garcia Fuentes</b> Peptide/polymer hybrid nanoplatfoms as immunostimulants against cancer	
<b>19.30</b>	<b>Conference dinner</b>	

<b>June 2<sup>nd</sup></b>			
<b>08.00-08.30</b>	<b>Welcome coffee</b>		
<b>8.30-9.30</b>	<p><b>Round Table / Interview</b>  <b>“Emerging therapies: regulatory perspective”</b></p> <p><b>Moderator: Margarida Sousa, Journalist, CNN Portugal</b>  <b>Panel:</b></p> <p><b>1. Rogério Sá Gaspar (WHO, Regulation and Pre-qualification Department)</b>  <b>2. Hubert Leufkens (Utrecht University)</b>  <b>3. Alexandre Guedes Silva (SPEM - President of the Portuguese Association of Multiple Sclerosis)</b>  <b>4. Catarina Silva, (Vice-President of EPSA)</b></p>		
<b>Parallel sessions V</b>			
	<b>Session 10</b>	<b>Session 11</b>	<b>Session 12</b>
<b>09.30-11.00</b>	<b>Regulation of orphan medicinal products: a strong learning device for regulatory science – EUFEPS Network Regulatory Science</b> <b>Chair: Hubert Leufkens / Carla Torre</b>	<b>Drug delivery to Skin: Local and Systemic applications – Turkish Pharmaceutical Society</b> <b>Chair: Selma Sahin / Zeynep Teksin</b>	<b>Tailoring clinical pharmacotherapy to patients’ needs – Danish Pharmaceutical Society, FIGON and Portuguese Pharmaceutical Society</b> <b>Chair: Anna Birna Almarsdóttir / Teresa Alves</b>
<b>09.30-10.00</b>	<b>Joao Rocha</b> Two decades of of orphan drug development in Europe: where are we?	<b>Sevgi Güngör</b> Current approaches and Challenges in In vitro Release and Permeation Tests for Topical Semi-Solid Products	<b>09.35 – 10.00 Ana Mirco, Joao Pinto</b> New technologies to tailor pharmacotherapy
<b>10.00-10.30</b>	<b>Enrico Costa</b> The global impact of orphan drug legislations	<b>Margarida Miranda</b> Tackling formulation complexity in bioequivalence assessment of topical generic products	<b>10.00 – 10.25 Charlotte Vermehren</b> Deprescribing as an approach to tailor pharmacotherapy
<b>10.30-10.45</b>	<b>Lourens Bloem</b> Orphan medicinal products as learning device for regulatory science	<b>Luca Giulio</b> Development of Innovative Formulations for the Topical Delivery of Methotrexate	<b>10.25 – 10.50 Ema Paulino</b> Testing for COVID-19: Involvement of community pharmacists in Portugal

<b>10.45-11.00</b>	<b>Zilke Claessens</b> Impact of expediting regulatory measures on reimbursement of medicines addressing unmet medical needs in Belgium	<b>Ayşe Nur Oktay</b> Pharmacokinetic Evaluation of Cyclodextrin-Based Nanogel Following Dermal Administration on Rats	<b>10.50 – 11.00 Discussion and Wrap-up</b>
<b>11.00-11.30</b>	<b>Coffee break</b>		
<b>11.30-12.30</b>	<b>PhD's Competition</b> Moderator: Luisa Corvo <i>See detailed program below</i>		
	<b>Parallel sessions VI</b>		
	<b>Session 13</b>	<b>Session 14</b>	<b>Session 15</b>
<b>12.30-14.00</b>	<b>Sustainable/Green pharmacy– Finish Pharmaceutical Society</b> Chair: Jarkko Ketolainen / Tiina Sikanen.	<b>In vitro tools to predict in vivo bioavailability of drugs – EUFEPS BABP Network</b> Chair: Erem Bilensoy / Henning Blume	<b>Radiopharmacy – Austrian Pharmaceutical Society</b> Chair: Helmut Viernstein / Markus Mitterhauser
<b>12.30-13.00</b>	<b>Tiina Sikanen</b> Sustainable Drug Development and Use: Toward Better End-of-Life Design	<b>Anne Seidlitz</b> Predictive in vitro models for non-oral dosage forms	<b>Markus Mitterhauser</b> You see what you treat, you treat what you see: the theranostic concept in nuclear medicine
<b>13.00-13.30</b>	<b>Lasse Alajärvi</b> Population perspectives on environmental sustainability in the pharmaceutical sector	<b>Annette Müllertz</b> Oral dosage forms and predictive in vitro tools to assess drug bioavailability	<b>Cecile Philippe</b> Radiopharmaceuticals as a tool for Immunoimaging
<b>13.30-13.45</b>	<b>Neele Puhmann</b> Insights from Pharmaceutical Industry into Drug Discovery & Development: Opportunities to design greener APIs	<b>Michał Romański</b> Application of a novel PhysioCell® apparatus for biopredictive dissolution testing of immediate release formulations - a workflow for in vitro-in vivo modeling	<b>Eva-Maria Patronas</b> Autoradiography on deparaffinised tissue sections
<b>13.45-14.00</b>	<b>Eride Quarta</b> Biodegradable materials for improving solubility and oral absorption of carbamazepine for an eco-sustainable approach	<b>Mehtap Saydam</b> In-vitro dissolution, cytotoxicity, in-vitro cell culture and in-vivo pharmacokinetic evaluation of solid dosage formulation containing a water-insoluble orphan drug	<b>Theresa Balber</b> Investigation of [18F]FDHT binding sites at the cellular level and during prostate cancer progression
<b>14.00-14.30</b>	<b>Awards and Closing ceremony</b>		



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|  | <ul style="list-style-type: none"><li>-EJPS Best Paper Award</li><li>- Poster Awards</li><li>- EUFEPS WIPS Awards</li><li>- Pearls of Bioequivalence Award</li></ul> |
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## **EUFEPS PhD Students Competition 2023**

June 2, 2023 from 11:30 - 12:30 WEST in Lisbon, Portugal

Moderator: Luisa Corvo

Jury: Ana Grenha (University of Algarve). Dieter Steinhilber (Goethe University Frankfurt) and Thomas Sauer (Sanofi Aventis)

11:30 – 11:35	<i>Luisa Corvo</i> , <b>Welcome and short introduction</b>
11:35 – 11:40	<i>Cristina Casadidio (FIGON)</i> , <b>Injectable thermosensitive hydrogel for heart regeneration</b>
11:40 – 11:45	<i>Sipos Bence (Hungary)</i> , <b>Meeting patient and regulatory expectations in the early development stages of polymeric nanocarriers</b>
11:45 – 11:50	<i>Souhaila El Moukhtari (Spain)</i> , <b>Nanomedicines for the treatment of pediatric neuroblastoma</b>
11:50 – 11:55	<i>Shaquib Rahman Ansari (Sweden)</i> , <b>A quality-by-design approach to engineer superparamagnetic nanoparticles for hyperthermia therapy</b>
11:55 – 12:00	<i>Honey Bokharaie (Finland)</i> , <b>Proteolytic activation of VEGF-C and its diversity in major clades of the animal kingdom</b>

12:00 – 12:05	<i>ČRT DRAGAR (Slovenia)</i> , <b>DEVELOPMENT OF NANOFIBERS WITH MAGNETIC NANOPARTICLES FOR BIOMEDICAL APPLICATIONS</b>
12:05 – 12:10	<i>Bárbara Carreira (Portugal)</i> , <b>Translational nanotechnology-based cancer nanovaccine to re-educate host immune response against melanoma brain metastases</b>
12:10 – 12:15	<i>Gianluca Bazzoli (Italy)</i> , <b>New inhalation drug delivery systems for the treatment of pulmonary fibrosis</b>
12:15 – 12:20	<i>Gülşen Aybar Tural (Turkey)</i> , <b>Preparation and Characterization of Microrobot Systems for Active Drug Targeting</b>
12:20 – 12:25	<i>Ioannis Partheniadis (Greece)</i> , <b>Hot-melt extrusion using preprocessed feed for the preparation of co-amorphous griseofulvin/amino acid systems</b>