







International Conference on **Emerging Technologies** in Transdermal Drug Delivery



APRIL 17th - 19th 2023

**HOTEL SAN FRANCESCO AL MONTE - Corso Vittorio Emanuele - Naples - Italy** 

### **Conference Chairs**

- D. Paolino Full Professor at UMG
- L. De Stefano Head of Unit of ISASI CNR

### **Scientific Committee**

- L. Nicolais President of MATERIAS
- T. Fossati Head of R&D Pharmaceutical of IBSA
- I. Rendina Director of ISASI CNR
- M. Pagliuca Technical Director of ALTERGON
- A. Zampella Pharmacy Director of UNINA

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### **HIGHLIGHT**

**Advances in Topical and Transdermal Drug Delivery** Microneedle Technologies and Future Directions **Overview of the Current Global Regulatory Landscape** 



## Day One | Monday April 17th 2023 | Start 12:00

### 12:00 Reception and Registration of delegates

- 14:00 Luigi Nicolais Materias Welcome Address
- **14:15 Conor O'Mahony** University College Cork
  Micro Transdermal Interface Platforms (MicroTIPs) for delivery
  and diagnostics
- **15:00 Ciro Chiappini** King's College Nanoneedles for topical intracellular nucleic acid therapy
- **15:30 Principia Dardano** ISASI-CNR

  Photolithographic approach for microneedle devices:

  from design to applications
- **15:50 Sara Coppola** ISASI-CNR

  Merging bottom-up fabrication approaches of substrata for medical devices
- 16:10 Raffaele Vecchione Italian Institute of Technology
  Design and application of multi-compartmental microneedles
  for controlled intradermal release of biomolecules in an active form
- 16:30 Mario Battisti Materias

  Microneedles fabrication on curved surfaces
- 16:45 Coffee Break
- 17:15 **Hèlder A. Santos** University of Groningen
  Preparation and characterization of dissolving microneedles
  for drug delivery applications
- 17:45 Luca Casula University of Cagliari
  Diclofenac nanosuspension loaded dissolving microneedles
  for transdermal delivery
- **18:05 Chiara Attanasio** University of Naples "Federico II" Animal research today: understanding the legal framework
- 18:25 Discussion
- 18:35 Networking cocktail







Day Two   Thursday April 18th 2023   Start 9	<b>):30</b>
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- **9:30 Elka Touitou** The Hebrew University of Jerusalem Enhancing delivery of active molecules into and across the skin by nanocarriers
- **10:15 Francesco Cilurzo** University of Milan *Transdermal patches: is there still room for innovation?*
- 10:45 Coffee break
- 11:15 Antonia Mancuso University of Catanzaro "Magna Graecia" Exploiting nanocarriers for the co-delivery of natural active ingredients for the topical treatment of inflammatory diseases
- 11:35 Elisabetta Esposito University of Ferrara
  Ethosomes and transethosomes for transdermal administration
  of phytocompounds
- 11:55 **Debora Santonocito** University of Catania

  Effects of lipid content and lipid nanoparticles incorporation
  on the technological properties of emulsions for topical drug delivery
- 12:15 Rossella Di Raimo Exolab

  Plant-derived exosome the ideal for drug delivery system
- 12:35 Gianluca Boesso

  RCA Bignami Transdermal patch machinery commitment to excellence
- 12:50 Networking Lunch
- 13:50 Elka Touitou Award
- 14:00 Federica De Gaetano University of Messina
  Unsaturated fatty acid vesicles loading ammonium glycyrrhizinate:
  a promising topical delivery system
- 14:20 Annalisa La Gatta University of Campania "Luigi Vanvitelli" Design of self-esterified hyaluronan (HA) for topical delivery of multiple HA families of defined molecular weight along with other bioactive molecules
- 14:40 Paola Rizzo University of Salerno
  Innovative controlled drug delivery systems based on syndiotactic polystyrene staple fibers
- **15:00 Lucia Baldino** University of Salerno *Transfersomes: the solution for transdermal drug delivery?*
- 15:20 Assunta Borzacchiello IPCB-CNR
  Innovative hyaluronic acid-based nanoemulsions as carrier
  for transdermal drug delivery
- **15:40 Marco Biondi** University of Naples "Federico II" Lipid vesicles for skin delivery of active natural compounds

16:00	Luigia Serpico - ISASI-CNR
	A biocompatible thin film for a controlled, ph-responsive release
	of antioxidant selenium compounds

### 16:20 Discussion

17:10

### 16:30 Coffee Break

# 17:00 Maria Cristina Straccia - Altergon Transdermal drug delivery system based on hyaluronic coating microneedles for immunomodulation

Daiana laven - University of Pavia

# Complexes based on whey protein isolate and chitosan or derivatives: new biomaterials for the design and development of innovative medical devices 17:20 Chiara Grazia Milena Gennari - University of Milan

## 17:20 Chiara Grazia Milena Gennari - University of Milan Design of sebs-based pressure-sensitive adhesives for transdermal patches preparation

# 17:30 Valeria Nocerino - ISASI-CNR Simulation models: photopolymerization and mechanical indentation of micro-needles (MNs) for transdermal drug delivery

# 17:40 Jacopo Forte - University of Rome "Sapienza" Lentiscus oil based nanoemulsions for skin infections: characterization and preliminary antibacterial activity evaluation

### 17:50 Discussion

### 20:00 Gala dinner

## Day Three | Wednesday April 19th 2023 | Start 9:30

- **9:30** Paola Minghetti University of Milan
  Patches and semisolids for cutaneous administration: key regulatory aspects
- 10:00 Paola Volontè University of Milan
  What level of structural similarity is necessary to support post
  marketing variations of semisolid products
- 10:10 Valerio Pasca IBSA Swiss

  Transdermal and topical products: a regulatory overview
- 10:30 Maria Emilia Mercurio Materias

  From research to business: Materias model

## 10:50 Discussion

- 11:00 Coffee break
- 11:30 Annalisa Capuano University of Naples "Federico II"

  Pharmacovigilance
- 11:50 Paolo Garavelli A.BRE.MAR. S.r.l.

  Patents and trademarks: instructions for use

### 12:10 Conclusion and Farewell