



# "Non-traditional emerging technologies in drug product manufacturing"

10<sup>th</sup> A.It.U.N. Annual Meeting Parma, 5<sup>-6th</sup> May 2016



10 Years
2006-2016

#### Goals of the meeting

Considering the FDA approval in 2015 of the first 3D printed pharmaceutical dosage form, the aim of the 2016 A.It.U.N. Annual Meeting is to introduce the new tendencies in the production of pharmaceuticals, focusing on the technological aspects and the related formulative challenges. Among the available most promising technologies particular attention will be paid to 3D printing, electro-spinning, hot-melt injection moulding and micro-needles based technologies.

### May, 5<sup>th</sup> 2016:

13:30-14:30 Participants Registration

14:30-14:45 Opening Remarks

14:45-15:30 Main Lecture: "Electrospinning: a versatile technology for drug delivery systems and pharmaceutical applications". (Prof. Maria Letizia Focarete, Univ. of Bologna)

15:30-16:15 Main Lecture: Pharmaceutical Application of 3D Printing by Fused Deposition Modeling (Dr. Alice Melocchi, Univ. of Milan)

16:15-16:35 Oral Presentation: "Electrospun bioabsorbable composite matrices for esophageal reconstruction" (S.Pisani, Univ. of Pavia).

16:35-16:55 Oral Presentation: "On the preparation of opioid-loaded cutaneous patches", (Dr. U.M. Musazzi, Univ. of Milan).

17:00 End of Session.

19:45 Welcome Reception at Trattoria Corrieri, Via Conservatorio 1, 43121, Parma.

# May, 6<sup>th</sup> 2016:

09:30-10:00 Invited Lecture: "3D Printing of Bioactive Silicate-based Ceramics and Glass-ceramics for Tissue Engineering Regeneration" (Hamada El Sayed, Univ. of Padua).

10:00-10:45 Main Lecture: "Manufacture of polymeric microneedles for drug delivery" (Dr. Helen Quinn, Univ. of Belfast)

10:45-11:15 Coffee Break

- 11:15-12.00 Main Lecture: "3-Dimensional Printing of Medicines" (Dr. Alvaro Goyanes, University College London)
- 12:00-12:20 Oral Presentation: "Crystalline Sugars In High-Shear Granulation Process: Binder Amount Prediction And Process Feasibility" (R.Baggio, Univ. of Padua)
- 12:20-12:40 Oral Presentation: "Optimization Of A 3D Printing Technique For The Production Of Biocompatible Chitosan Scaffolds" (C.Bergonzi, Univ. of Parma)
- 12:40-14:15 Lunch and Poster Session
- 14:15-15:00 Main lecture: Direct tissue engineering approaches for regenerative biology and medicine (Prof. Suwan N. Jayasinghe, University College London)
- 15:00-15:40 Invited Lecture from Industry: "Driving innovation to market"; The industrial perspective: points to consider and main hurdles to achieve targets. (Dr. Stefano Minari, Chiesi Farmaceutici)
- 15:40-16:10 Coffee Break
- 16:10-16:30 Oral Presentation "Feasibility Of Easily Resuspendable Polymeric Nanoparticles By Spray-Drying" (G.Magri, Univ. of Milan)
- 16:30-16:50 Oral Presentation "Improved size-tunable preparation of PLGA nanoparticles by microfluidic-assisted nanoprecipitation" (E.Chiesa, Univ. of Pavia)
- 16:50-17.30 Poster Awards and Concluding Remarks
- 17.30-18.00 A.It.U.N. Assembly

#### **Program Planning Committee**

Davide Frascio, Ms – University of Parma;

Francesca Borgna, Ms – University of Padua;

Vieri Piazzini, Ms- University of Florence;

Enrica Chiesa, Ms – University of Pavia;

Elisa Gurian, Ms – University of Trieste.

#### **Faculty Advisor**

Prof. Ruggero Bettini

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