

# Summer School on Pharmaceutical Analysis 2024

## New therapeutic approaches, new analytical challenges: peptide- and protein-based drugs

### Scientific Program

18th September 2024			
13.30-14.30	Registration		
14.30-15.00	<b>Opening ceremony</b>		
	<i>Chair: Manuela Bartolini</i>		
15.00-16.00	Opening Lecture	Quality control on novel biotech drugs: just routine or real science?	<b>Luigi Colombo</b> Medical Technology Lab, Milano, Italy
	<i>Chair: Giancarlo Aldini</i>		
16.00-17.00		Biological Quality Control in Biotechnological Products: Innovative Approaches and regulatory guidelines updates	<b>Marzia Scalarone</b> Merck R.B.M., Ivrea, Italy
17.00-18.00		Analysis of 'High-Risk' Host Cell Proteins (HCP)	<b>Ettore Giraldoni</b> Philochem AG, Zurich, Switzerland
20.00	Social dinner		

19th September 2024			
	<i>Chair: Marina Naldi</i>		
08.30-9.30		The analytical toolbox & the protein wonderland: deep dive into the early stages of drug discovery	<b>Barbara Pioselli</b> Chiesi Farmaceutici, Italy
9.30-10.30		Characterization of Therapeutic Peptides, Proteins, and Monoclonal Antibodies	<b>Nazim Mekaoui</b> Novartis Pharma AG, Basel, Switzerland
10.30-11.00	Coffee break		
	<i>Chair: Massimo Breda</i>		
11.00-12.00		Analytical Characterization and Bioanalytical Assays for Antibody Drug Conjugates Development	<b>Federico Riccardi Sirtori</b> Merck R.B.M., Ivrea, Italy; an affiliate of Merck KGaA, Darmstadt, Germany
12.00-12.35		Trastuzumab and its ADCs: the Impact of Conjugation on Stability and Functionality	<b>Martino Benvenuti</b> NanoTemper Technologies, Munich, Germany
12.35-13.40	Lunch break		
	<i>Chair: Luca Regazzoni</i>		
13.40-14.40		Glycosylation analysis studies	<b>Caterina Temporini</b> University of Pavia, Pavia, Italy
14.40-15.40		Method Development and Validation of Ligand Binding Assays Using Biological Matrices	<b>Elena Piccoli</b> , Frontage Europe S.r.l., Nerviano, Italy
15.40-16.10	Coffee break		

	<i>Chair: Francesco Epifano</i>		
16.10-17.10	<b>PhD presentations</b>	Bioactive compounds from non-psychoactive Cannabis sativa L. as innovative therapeutic agents against cancer cell proliferation and oxinflammation	<b>Clarissa Caroli</b> University of Modena and Reggio Emilia, Modena, Italy
		Novel approach for assessing the GPx-like activity of natural and semisynthetic compounds: a revised version of the Iwaoka's assay	<b>Chiara Collevocchio</b> University of "G. D'Annunzio" of Chieti-Pescara, Chieti, Italy
		Valorization of by-products from agri-food supply chains for the development of functional ingredients and nutraceuticals	<b>Larissa Della Vedova</b> Università degli Studi di Milano, Milan, Italy
20.00	<i>Piadina dinner</i>		

## 20th September 2024

	<i>Chair: Caterina Temporini</i>		
9.00-10.00		Immunogenicity Evaluation in Drug Development	<b>Francesca Morandini</b> Aptuit (Verona) S.r.l, an Evotec Company, Italy
10.00-11.00		Multi-Attribute Method: implementation, challenges and applications	<b>Sara Carillo</b> NIBRT National Institute for Bioprocessing Research and Training
11.00-11.30	<i>Coffee break</i>		
11.30-12.05	<b>Case study</b>	Analysis of mHTT (mutant protein of Huntington disease) to support clinical studies	<b>Silvia Lorenzi</b> Aptuit (Verona) S.r.l, an Evotec Company, Italy
12.05-13.10	<i>Lunch break</i>		
	<i>Chair: Manuela Bartolini</i>		
13.10-14.10		Plasma-derived product stability study design. Evaluation of shelf life, comparability approach to support process/product changes post-licensure, lean approach	<b>Ciro Battaglia</b> Kedrion S.p.A, Italy
	<i>Chair: Alberto Massarotti</i>		
14.10-15.50	<b>PhD presentations</b>	Leveraging cross-linking mass spectrometry for modeling antibody-antigen complexes	<b>Andrea Di Ianni</b> University of Turin, Torino, Italy; Merck Serono RBM S.p.A., an affiliate of Merck KGaA, Darmstadt, Germany
		Development of an advanced analytical platform for the characterization of recombinant human collagen produced by yeasts for therapeutic use	<b>Martina Lioi</b> University of Pavia, Pavia, Italy
		Valorization of by-products from agri-foods for pharmaceutical, cosmetics, and nutraceutical applications	<b>Cristina Terenzi</b> Alma Mater Studiorum University of Bologna, Rimini, Italy
		Recombinant protein analysis using innovative orthogonal characterization techniques	<b>Isabella Senini</b> University of Pavia, Pavia, Italy
		Application of omics approaches in drug discovery and biomarker identification	<b>Beatrice Zoanni</b> Università degli Studi di Milano, Milan, Italy
15.50-16.10	<i>Closing remarks</i>		