



## **Structural biology for translational research & discovery**

### How structural biology can support the agrifood sector?

*The EU project iNEXT-Discovery enables access to structural biology research infrastructures for all European researchers to enable and facilitate transnational research and discovery, including non-experts in structural biology.*

*Structural Biology technologies can be applied in a variety of research field. This event focuses specifically to the Agrifood with the aim to present the opportunities provided by Structural Biology in this field. To this end this event gather together representative of the scientific community and relevant stakeholders from both the academic and the industry, to present and discuss the application of structural biology in this field, share the points of view and main needs of food businesses, from primary production to food and drink industry. The event aims at creating a bridge between Structural Biology platforms and the research food community at large, providing opportunities for inter-sectoral research collaborations and supporting translational research relevant for health, biotechnology, biomaterials, and food science.*



# AGENDA

- 10:00-10:30** Registration
- 10:30-10:45** Welcome and brief introduction on iNEXT-Discovery  
Claudia Zoani (ENEA); Francesca Morelli (CIRMMP); Enrico Ravera (CIRMMP-UNIFI)
- 10:45-11:05** "High- and low-resolution NMR analysis of food samples... and some tricks to improve it"  
Prof. Krzysztof Kazimierczuk (University of Warsaw)
- 11:05-11:25** "Analyzing protein-ligand interaction by NMR. A case of green tea polyphenols with SARS-COV2 proteases"  
Prof. Miguel A Rodriguez (EURECAT)
- 11:25-11:40** Coffee Break
- 11:40-12:00** "Functional properties of whey proteins and their hydrolysates"  
Prof. Nataša Poklar Ulrich (University of Ljubljana)
- 12:00-12:20** "Combining high-resolution mass spectrometry and nuclear magnetic resonance to improve metabolite detection in response to agro-sustainable treatments"  
Prof. Federica Bianchi (University of Parma)
- 12:20-12:40** "Metabolomics for pathway discovery and food quality improvement"  
Dr. Gianfranco Diretto (ENEA)
- 12:40-13:20** Round table 1 *Stakeholders' perspectives* (30' + 10 discussion)  
Guglielmo Gennaro Auricchio (Presidente dei Giovani Imprenditori di Federalimentare) (Gennaro Auricchio SpA); Silvia Orlandini (ICAR); Silvia Baiocco (University of Rome Tor Vergata); Virgilio Maretto (pOsti S.R.L.);  
MODERATOR: Claudia Zoani
- 13:20-14:30** Lunch break
- 14:30-14:50** "NMR relaxometry for accessing food quality and authenticity"  
Prof. Danuta Kruk (University of Warmia and Mazury in Olsztyn)
- 14:50-15:10** "NMR and food matrix studies: structure, bioaccessibility and digestion"  
Dr. Carlo Mengucci (University of Bologna)
- 15:10-15:30** "High resolution structural biology: methodologies and applications"  
Prof.ssa Beatrice Vallone (Sapienza University of Rome)
- 15:30-16:15** Round table 2 *Stakeholders' perspectives* (30' + 15 discussion)  
Angel Martinez Sanmartin (CTNC) ; Alberto Boffi (Sapienza University of Rome); Massimo Reverberi (SARA ENVIMOB); Carlo Giuseppe Rizzello (Sapienza University of Rome)  
MODERATOR: Francesca Morelli
- 16:15-16:30** Concluding remarks

**Organising committee:** Claudia Zoani; Francesca Morelli; Enrico Ravera; Ombretta Presenti; Giacomo Serafini; Gianluigi Torchiani

