



**Structural biology for translational
research & discovery**

OPEN EVENT

***Agrifood Research & Innovation:
Exploring the Role of Structural Biology***

ROME, 6 MAY 10:00-18:00

**Cavour Congress Centre
via Cavour 50/A
00184 Rome**





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
- 10:45-11:05** "High- and low-resolution NMR analysis of food samples... and some tricks to improve it"
Prof. Krzysztof Kazmierczuk (University of Warsaw)
- 11:05-11:25** "Analyzing protein-ligand interaction by NMR. A case of green tea polyphenols with SARS-COV2proteases"
Prof. Miguel A Rodríguez (EURECAT)
- 11:25-11:40** Coffee Break
- 11:40-12:00** "Functional properties of whey proteins and their hydrolysates"
Prof. Nataša Poklar Ulrih (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)
- 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)
- 16:15-16:30** Concluding remarks

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

