

The Biochemistry and Structural Biology Unit at IEO: a platform for protein production and structure determination

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Digital copy of the poster

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Link to the BSU website

Our mission

The Biochemistry and Structural Biology Unit (BSU) at the European Institute of Oncology (IEO - Milan - Italy) provides high-quality **technical support, training and equipment** in recombinant **protein production, biochemistry, biophysics** and **structural biology** (X-ray crystallography and CryoEM).

We work in close contact with the Principal Investigators to allow the study of the structure and function of biological macromolecules, thus enabling the molecular understanding of cellular processes regulating physiology and cancer.

The team



Linda Andreoli

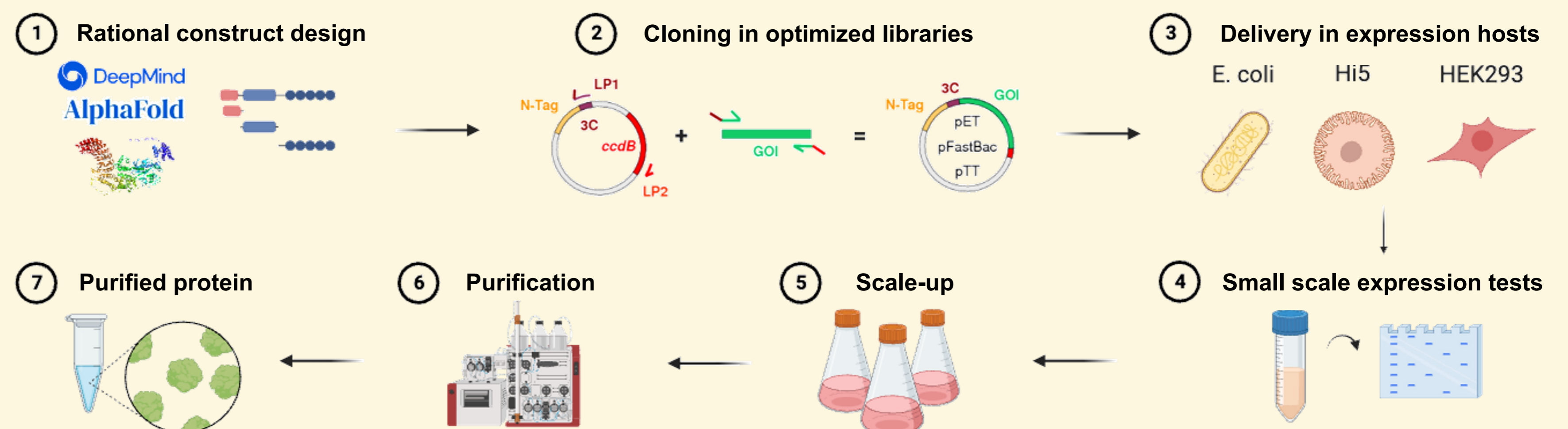
Luigi Scietti

Silvia Monzani

Giuseppe Ciossani

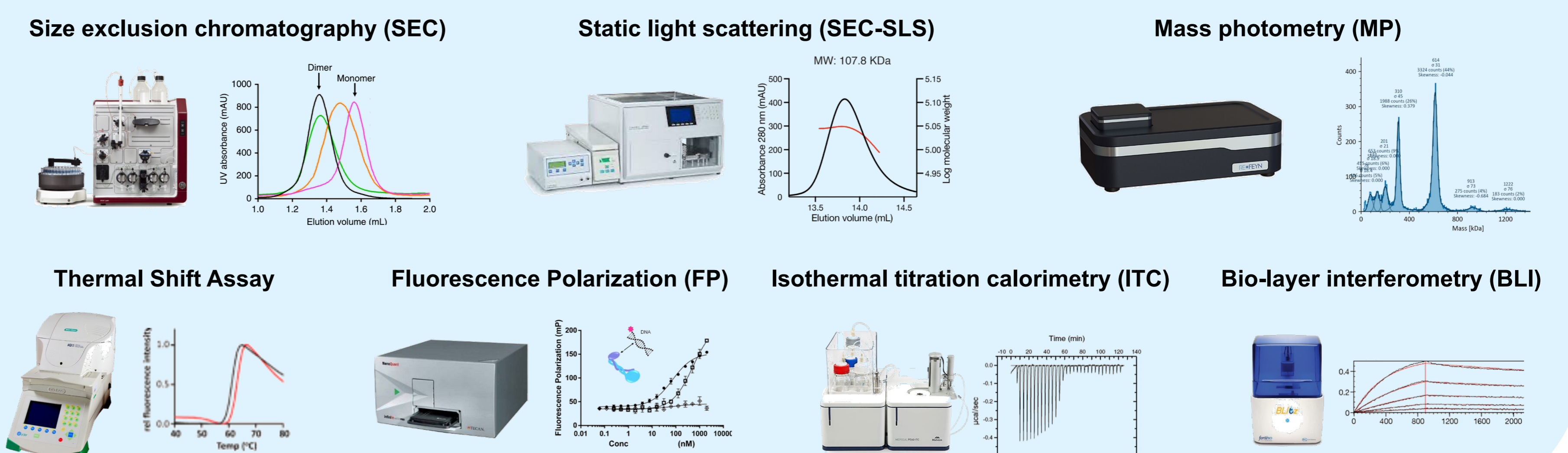
Protein Expression and Purification

We have medium-throughput protein production capabilities thanks to the combination of SLIC-based plasmid libraries and a variety of expression systems.



Biophysics

We are equipped with a diverse range of instruments to measure protein molecular weight, characterize protein stability, and assess protein-ligand interactions.



Structural Biology

We foster collaborations with PIs within the institute by offering assistance, training, and mentoring to PhD students and PostDocs eager to pursue structural biology. In addition to X-ray crystallography, we recently set-up a cryoEM pipeline that includes sample preparation, screening, data collection and processing.

X-ray crystallography

High-throughput crystallization

BAG access to synchrotrons

In house sample preparation



CryoEM

External access to 200 kV Glacios (Uni Milan & Uni Pavia - IT)

BAG access to 300 kV Titan Krios (ESRF CM01 Grenoble - FR)

In house data processing

