# Strategic pipeline planning: from sample preparation to 3D structure determination with bio SAXS & other biophysical techniques

The National Hellenic Research Foundation Athens, 5 – 10 April 2014

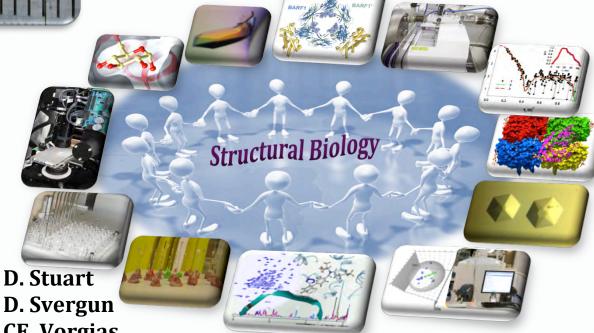
### Speakers

P. Agianian
T. Bergfors
J-M. Carazo
S. Ciofi-Baffoni
M. Graewert
E. M. Petoukhov

I. Ioannidis S. Pispas
M. Klapa A. Politou
M. Kokkinidis E. Saridakis

P. Konarev S. Savvides D. Svergun L-M. Korou Th. Schneider CE. Vorgias E. Mavroidis P. Shaw-Stewart M. Walsh

R. Meijers G. Spyroulias M. Wilmanns



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Career development session

C. Pascual, M. Samara, G. Tzenou National Documentation Center/NHRF

A. Savvaidis, MCFA-HELLAS

 $\underline{http://www.eie.gr/nhrf/institutes/ibmcb/News/2014/05\_04\_2014\_Workshop.html}$ 

## Organizing committee

### Local organizers



ED. Chrysina

V. Papadimitriou

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M. Zervou

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**IM. Mavridis** 

SE. Zographos



#### organizers



Directorate General for Research & Innovation Octavi Quintana Trias, Director of ERA policy



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### The workshop

The workshop will provide training on creating a roadmap towards determining the 3D structure of a macromolecular target including troubleshooting and rational decision-making. Emphasis will be given on Bio SAXS as a method of choice to characterize the structure of a single protein and protein complexes in solution coupled with X-ray crystallography, NMR spectroscopy, and electron microscopy (EM). An overview of mainstream methods will also be presented and attention will be drawn to techniques developed the last years like X-ray imaging. In addition, the participants will have a chance to get informed about the options they have for career development. Overall, the workshop will enable the attendees to adopt a broader way of thinking and get acquainted with state-of-the-art approaches currently employed in structural biology. This will increase researchers' awareness on the facilities and services provided and capitalize on the investment that has already been made by Europe with the aim to promote innovative research.

### **Target Group & Selection process**

Target Group & Selection process: The workshop targets mainly PhD students and post-doctoral scientists who are currently working in the structural biology field and have already some experience in working with macromolecules. Experienced researchers will also be considered but priority will be given to younger scientists. A total of 25 participants will be accepted in the workshop. The applicants will be expected to send a CV (max. 2 pages), a motivation letter (max. 1 page) explaining why they wish to participate and what they expect from the course and a reference letter. The Biostruct-X and local organizers will be responsible for the selection process to ensure that equivalent criteria will be applied.

### Benefits

Participants that have been accepted to the course are offered to send protein samples for characterization and crystallization to the Sample Preparation and Characterization (SPC) facility at the EMBL in Hamburg. The samples must be relatively pure (>90 % according to SDS-PAGE). The SPC will offer a preliminary sparse matrix screen that can be customized to the particular sample, as well as complementary characterization by thermal shift assay, dynamic light scattering and mass spectrometry. The preliminary results of this characterization will be discussed during the course. For more information, please visit the SPC website: <a href="https://htx.embl-hamburg.de/htxlab/">https://htx.embl-hamburg.de/htxlab/</a>

A limited number of fellowships will be awarded to participants coming from INSTRUCT member countries (Belgium, Czech Republic, France, Germany, Israel, Italy, Netherlands, Portugal, Spain, Sweden, United Kingdom) awarded by **INSTRUCT** (<a href="http://www.structuralbiology.eu">http://www.structuralbiology.eu</a>).

#### Host

**Host:** The event will be hosted by NHRF, coordinator of Instruct-EL, the national distributed research infrastructure that functions as a hub for structural biology in South East European area and Cyprus.

The course is organized in conjunction with the International Conference on Research Infrastructures (ICRI-2014) that will also be held in Athens April 2<sup>nd</sup> – April 4<sup>th</sup>, <a href="http://www.icri2014.eu">http://www.icri2014.eu</a>

**Registration fees:** €50 for academic participants and €1000 for participants coming from industry.

http://www.eie.gr/nhrf/institutes/ibmcb/News/2014/05 04 2014 Workshop.html

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