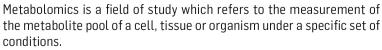
Transbio Workshop





Metabolomics and Molecular Interactions for Biology and Health ITQB | Oeiras | 13-15 Nov 2013

Transbio Rupture Technology Workshop



These unique chemical fingerprints can give an instantaneous snapshot of the physiology of a cell and help explain the mechanisms of biochemical and regulatory pathways, and specific cell responses that change with disease or exposure to toxins.

Rupture developments in techniques such as Nuclear Magnetic Resonance (NMR), Mass-Spectrometry (MS), X-Ray and informatics tools, lay bare a new world of possibilities in the study Metabolomics and Molecular Interactions.

In this workshop participants will:

- 1. Understand the principles governing NMR, X-Ray, MS techniques and informatics tools:
- 2. Interpret data in 'hands-on' sessions;
- 3. Discuss the application of these techniques to metabolomics and molecular identification $\!.$

TRANSBIO is a transnational interdisciplinary project of R&D institutions in the Southwest region, supported by the European Regional Development Fund (FEDER), under the framework of the Southwest European Space Territorial Cooperation Programme (SUDOE).

Registration is mandatory but free of charge

http://MetBioMeet.itqb.unl.pt

Lecturers: JC Portais, A Pineda-Lucena, P Lamosa, A Coelho, I Bento Organizing Commitee: P Lamosa, R Louro, A Coelho, I Bento, M Nunes

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09h30- 09h40 Opening Session

09h00 - 09h30 Registration

auditorium Cláudio Soares, ITQB Director

Rémy Poupot, TRANSBIO Coordinator

09h40 - 10h50 Introduction to metabolomics

auditorium Jean-Charles Portais, Université de Toulouse

11h20 - 13h00 The NMR technique: fundamentals, applications to metabolomics and structure determination

2.13 Pedro Lamosa, ITOB-UNL

13h00-14h00 Lunch

14h00 - 15h30 The MS technique: fundamentals and applications

2.13 Ana Coelho, ITQB-UNL

16h00 - 18h00 Visits to the Uni-MS and CERMAX, Magnetic Ressonance Center

trium Ana Coelho/ Isabel Bento/ Pedro Lamosa, ITQB-UNL

DAY 2: 14th November

9h00 - 12h30 Theoretical-practical NMR session on small molecule structure

2.13 determination

Pedro Lamosa, ITQB-UNL

12h30 - 14h00 Lunch

14h00 - 16h00 MS tutorial

3 Ana Coelho, ITQB-UNL

16h30 - 18h00 NMR Metabolomics and AMIX software

2.13 Martial Piotto, Bruker BioSpin

DAY 3: 15th November

9h00 - 11h00 The X-Ray technique: fundamentals

13 Isabel Bento, ITQB-UNL

11h30 - 13h00 Protein interactions

auditorium António Pineda-Lucena, Centro de Investigación Principe Felipe, Valência

13h00 - 14h30 Lunch

14h30 - 16h30 X-Ray tutorial

.13 Isabel Bento, ITOB-UNL

17h00 - 18h30 X-Ray applications to small molecules

.13 Isabel Bento, ITOB-UNL

Closing Ceremony at Lagar de Azeite, courtesy of Câmara Municipal de Oeiras.