

- The Biogenesis of Iron-sulfur Proteins: from Cellular Biology to Molecular Aspects

1st FeSBioNet Training School, 19-23 June 2017, Caparica, Portugal UCiBIO@Caparica & ITQB@Oeiras | Universidade NOVA de Lisboa Hands-on Training School

Understanding the molecular mechanisms of Fe/S protein biogenesis

On behalf of the Cost Network, we would like to invite you to attend this Hands-on Training School, that aims at providing an overview of the main challenges in studying Fe/S biogenesis pathways.

We offer unique expertise in experimental approaches tailored specifically for the studies of Fe/S clusters, in a friendly environment with beautiful surroundings.

Scope:

- Provide participants with the fundamental knowledge and hands-on experience in genetic manipulation, protein purification, spectroscopic analysis and structural characterization of Fe/S proteins.
- This hands-on course includes seminars & practical sessions introducing the relevant techniques to PhD students and young researchers
- 18 places will be available for FeSBioNet participants

Local Organizing Committee:

Anjos L. Macedo (UCIBIO,FCT-NOVA), Sofia Pauleta (UCIBIO,FCT-NOVA), Smilja Todorovic (ITQB NOVA), Catarina Pimentel (ITQB NOVA)



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PROGRAM | Lectures

- Bioinorganic perspective on Fe/S clusters
- Overview of Biogenesis & Function of Fe/S proteins
- Genetic Tools
- Production & Purification strategies / Sample handling
- Microcalorimetry: Stability & Interactions
- Bioelectrochemistry
- Advanced vibrational spectroscopy (Raman, FTIR, RR, SERRS, SEIRA)
- EPR and Fe-S fingerprint
- Paramagnetic NMR: Protein Structure & Interactions
- SAXs: Principles and Applications
- Soft skills

| Hands-on sessions

- Protein purification & Sample Handling
- Genetic Tools
- Advanced vibrational spectroscopy
- Electrochemistry
- EPR
- Paramagnetic NMR
- Microcalorimetry

Soft Skills

 Science Communication and Social Networks for Scientists

Arrival – 18 June (Sunday) Departure – 24 June (Saturday)

Arrival	Day 1	Day 2	Day 3	Day 4	Day 5	Departure
	Lectures	Lectures	Lectures	Lectures	Lectures	
Welcome	Lectures	Hands-on sessions	Hands-on sessions	Hands-on sessions	Hands-on & Students Presentation	

Day 3 – Lectures & Hands-on sessions will take place at ITQB-Oeiras: Raman & SERRS, electrochemistry and Genetic tools. (Transportation will be provided)



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Day 0 June 18		Day 1 June 19	Day 2 June 20	Day 3 @ITQB June 21	Day 4 June 22	Day 5 June 23	Day 6 June 24	
	9h	L0-Introduction FeSBioNet CA15133 L1-Fe/S clusters characterization & versatility	L4-Genetic Tools	L6- Advanced Vibrational Spectroscopy	L8-Paramagnetic NMR: Protein Structure & Interactions	L10-SAXs. Principles and Applications	Departure	
	10.30h	Coffee Break						
	11h	L2-Biogenesis & function of Fe/S proteins	L5-Production & Purification strategies / Sample handling	L7- Bioelectrochemistry	L9-EPR and Fe/S fingerprint	L11- Microcalorimetry: Stability & Interactions		
	12.30h	Lunch & Poster Presentation/Discussion						
18h Registration Welcome	14h 18h	L3-Soft Skills / Science Communication	Hands-on S1	Hands-on S2 / S3 DINNER	Hands-on S4 / S5	Pract Aspects S6 - Presentations & Discussion - Closing Remarks		

Lecturers

- LO- Mario Picciolli & Anjos Macedo
- L1- Nick Le Brun, School of Chemistry, UEA, Norwich, UK
- L2- Tracey Rouault, NIH Bathesda, USA
- L3- Joana Lobo Antunes, ITQB NOVA, UNL, PT
- L4- Oliver Stehling, Philipps University, Marburg, DE
- L5- Sofia Pauleta, UCIBIO-Requimte, NOVA, Caparica, PT
- L6- Peter Hildebrandt, Technical Univ. Berlin, DE
- L7- Gabriela Almeida, UCIBIO-Requimte, NOVA, Caparica, PT
- L8- Mario Picciolli, CERM, Florence, IT
- L9- Miguel Teixeira, ITQB NOVA, PT
- L10- Haydyn Mertens, EMBL Hamburg, DE
- L11- Margarida Bastos, Faculdade de Ciências, CIQ-UP, Porto, PT

Hands-on Sessions

- S1 Purification & Sample Handling
- S2 Raman & Bioelectrochemistry
- S3 Genetic Tools
- S4 EPR introduction & Fe/S fingerprint
- S5 NMR in paramagnetic systems

Practical Aspects

S6 – Microcalorimetry: Stability & Interactions

Smilja Todorovic Sofia Pauleta Catarina Pimentel Anjos Macedo Célia Silveira Brian Goodfellow

Teresa S. Silva



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Who can apply and How to apply

PhD students and young researchers should send the pre-registration form, abstract and letter of Intend to anjos.macedo@fct.unl.pt and sofia.pauleta@fct.unl.pt, with the email subject "FeSBionet Workshop, 2017". A recommendation letter from the supervisor should accompany the application.

Registration Fees

- COST FeSBioNet participants: 200 euros (include coffee breaks, lunch, dinner and classes materials)
- Non-COST participants: 250 € (including coffee breaks, lunch, TS dinner and material for hands on sessions)
- Only lectures: 25 € / Day (including coffee breaks, lunch)

Important dates

- Applications including abstract + letter of intent + supervisor recommendation letter, should be sent by email until **April 7**, 2017.
- Final decisions will be made available before **April 14** (the number of participants is limited).

Grants:

- 18 grants will be available for COST Action CA15133 participants:

Trainee Grant: 900 €

Iberian Trainee Grant: 600 €.

Please note that only Registration Fees will be reimbursed to participants from the Lisbon area.

- Pre-registration form + letter of intent + supervisor recommendation letter + abstract should be sent for registration.
- Final decision will be made taking into account letter intent + abstract + recommendation Letter + country/lab representation (a committee integrating LO and CA Coordinator will be organized for this purpose).

Travel and Accommodation:

Successful candidates are expected to arrange their own travel and accommodation.

Special prices for double room accommodation are available at Hotel Mercure-Almada, 10 min by Metro from the University, (double room accommodation 32 euros/person/night; single room 53 euros). Reservations to Hotel Mercure should be made by email to HA040-SL@accor.com, indicating special rate for COST Training School.

All information on the TS will be available on the FeSBionet website: www.fesbionet.eu

Contacts: Anjos.Macedo@fct.unl.pt and Sofia.Pauleta@fct.unl.pt (secretariat); Phone Number: +351 212948356 / 00 and +351 917604636 (mobile)



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We are HERE









