

## **COST ACTION CM0603**

### **Free Radicals in Chemical Biology (CHEMBIORADICAL)**

#### **Working Group #2 (Sulphur, aromatic and proline residues) Meeting.**

**Barcelona, 6-7 March 2008.**

#### **1. Meeting Venue.**

The meeting will be held from the 6<sup>th</sup> of March 2008 (starting afternoon, 15.30h) to the 7<sup>th</sup> March (whole day, ending late at 20.00 h).

Sessions will be at a Lecture Room (Aula de Graus) offered by the Faculty of Biology of the University of Barcelona. This is located at the University of Barcelona campus in Pedralbes, close to other science Faculties, specifically the Faculty of Chemistry, and the “Parc Científic of the Universitat de Barcelona”. The postal address of the venue is:

Facultat de Biologia (<http://www.ub.edu/biologia/>)

Universitat de Biologia.

Av. Diagonal 645

08028-Barcelona

(web for location: <http://www.ub.edu/ubicat/>)

#### **Local Organizers:**

#### **Universitat de Barcelona, through the:**

**Faculty of Biology, FB-UB**

**Biomedicine Institut, IBUB**

All foreign assistants have been suggested to book in the “Residencia del Consejo Superior de Investigaciones Científicas (CSIC)” in Barcelona. These are specially convenient lodging facilities for researchers visiting Barcelona.

## **2. Presentation Schedules.**

### **Thursday, 6<sup>th</sup> March :**

Afternoon Session: From 3,30 pm to 7 pm: (talks: 20 min + 10 min discussion)

#### **15.30-16.00 Welcome & General Information.**

Sílvia Atrian, Prof. Molecular Genetics, UB, local Organizer.

Francesc Villarroya, Head of the Institut de Biomedicina de la Universitat de Barcelona.

Javier Casado, Dean of the Faculty of Biology of the University of Barcelona.

#### **16.00-16.30 Dr. Chryssostomus Chatgililoglu**

*ISOF, Consiglio Nazionale delle Ricerche, Bologna, Italy.*

“Reductive modification of Methionine and Cysteine Residues in Peptides and Proteins”

#### **16.30-17.00 Dr. Anna M<sup>a</sup> Salzano**

*ISPAAM, Consiglio Nazionale delle Ricerche, Napoli, Italy.*

“ The reductive desulfurization of Methionine and Cysteine in bovine RNAase residues is associated with the formation of translipids in a mimetic model of biological membranes”.

#### **17.00-17.30 Coffee Break**

#### **17.30-18.00 Dr. Sílvia Atrian**

*Dept. Genetics, Fac. Biology, and IBUB, Universitat de Barcelona, Barcelona, Spain.*

“Raman Analysis of sulfide-containing Zn-metallothionein complexes”

#### **18.00-18.30 Dr. Manel Portero**

*Dept. Ciències Mèdiques Bàsiques, Universitat de Lleida, Lleida, Spain.*

“ Molecular heterogeneity of protein oxidative modifications in neurodegenerative diseases”

#### **18.30-19.00 Open general Discussion**

### **Friday, 7<sup>th</sup> March :**

Morning Session: From 9,00 pm to 1 pm:

#### **9.00-9.30 Dr. Chantal Houée-Levin**

*LCP, UMR 8000, Université Paris-Sud, Orsay, France.*

“One-electron addition to Protein disulfide bonds. A long story”

#### **9.30-10.00 Dr. Jacqueline Bergès**

*LCT, UMR 7616, Université Pierre et Marie Curie, Paris, France.*

“One electron-one proton transfer in Thioredoxin: a QM/MM study”

10.00-10.30 **Dr. Philippe Renaud**  
*Dept. Chemistry and Biochemistry, University of Berne, Switzerland.*

“Hydrogen atom transfer involving O-H bonds”

10.30-11.00 Coffee Break

11.00-11.30 **Dr. Francesc Villarroya** (Barcelona, Spain)  
*Dept. Biochemistry and Molecular Biology, Fac. Biology & IBUB, Universitat de Barcelona, Barcelona, Spain.*

“The role of uncoupling proteins in the control of reactive species production by mitochondria: physiological implications”

11.30-12.00 **Dra. Marta Giralt** (Barcelona, Spain)  
*Dept. Biochemistry and Molecular Biology, Fac. Biology & IBUB, Universitat de Barcelona, Barcelona, Spain.*

“Implications of oxidative stress in the metabolic syndrome”

12.00-12.30 **Dr. Troels Skrydstrup**  
*Dept. Chemistry, University of Aarhus, Aarhus, Denmark.*

“ Amino Acids, Peptides and Radical Chemistry”

12.30-13.00 **Dr. Anna K. Croft**  
*University of Wales, Bangor, U.K.*

“ DFT calculations on chlorine-aromatic complexes”

Afternoon Session: From 15,30 pm to 18,00 pm:

15.30-16.00 **Dr. Bronislaw Marciniak**  
*Fac. Chemistry, Adam Mickiewicz University, Poznan, Poland.*

“Competitive photosensitized oxidation of tyrosine and methionine residues in enkephalins and their model peptides”

16.30-16.30 **Dr. Krzysztof Bobrowski**  
*Inst. Nuclear Chemistry & Technology, Warszawa, Poland.*

“Intramolecular electron transfer in dipeptides containing tyrosine and methionine: relevance to radical chemistry in peptides and proteins”

16.30-17.00 **Dr. Jan Enghild**  
*Dept. Molecular Biology, University of Aarhus, Denmark.*

“To be determined”