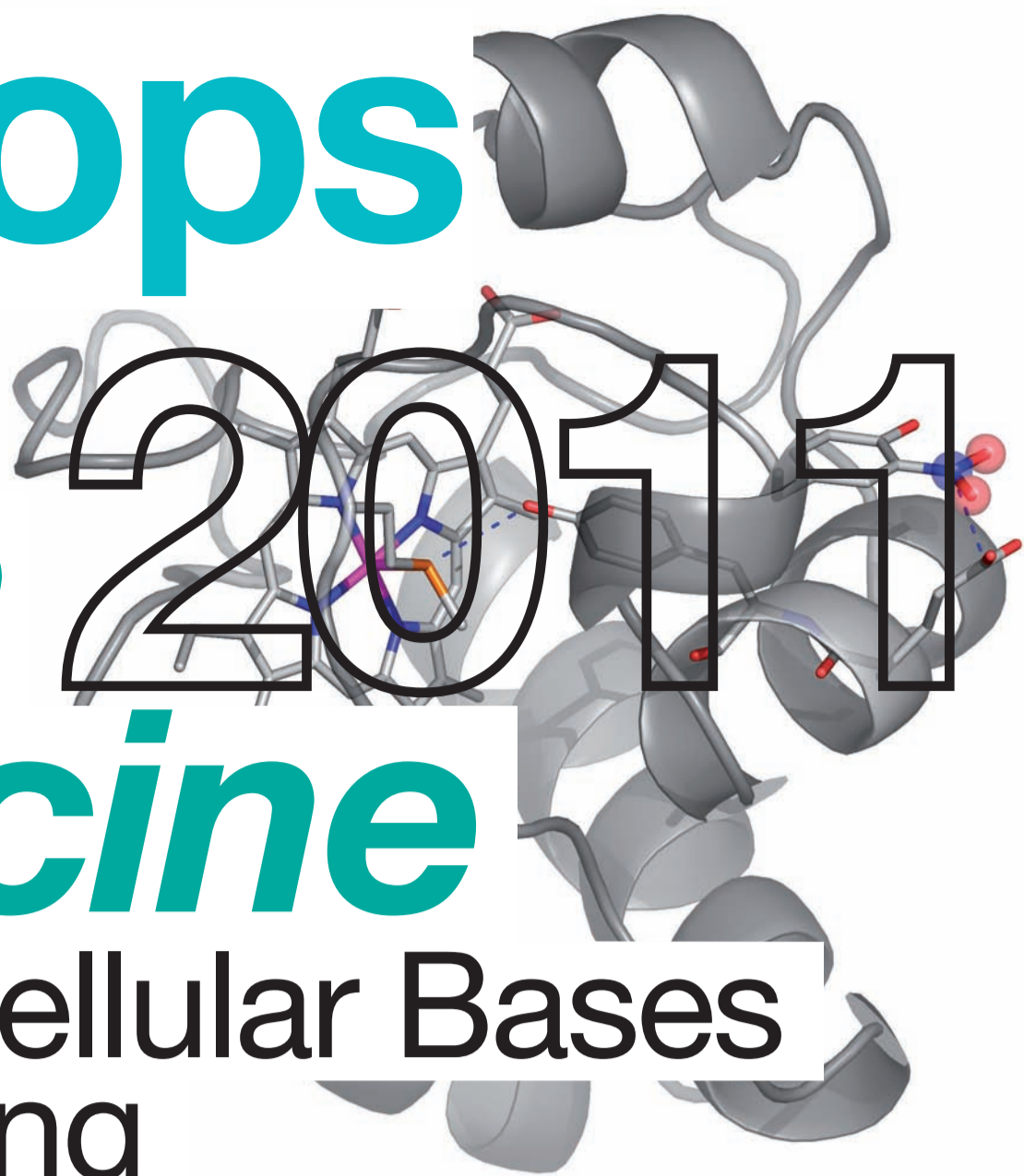


Workshops Current trends in Biomedicine



Molecular and Cellular Bases of Redox Signaling and Oxidative Stress: Implications in Biomedicine

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Scope

The significance of reactive oxygen (ROS) and nitrogen species (RNS) (grouped here as RONS) has become increasingly recognized to the point that they are now considered to be a component of virtually every disease, but mainly including inflammation, cancer, neurodegeneration, cardiovascular disease, diabetes or gastrointestinal disorders. While it is clear that RONS are a central theme germane to many problems in biology, there has been little advance in reconciling the huge amount of chemical knowledge accumulated for about half a century with the relatively unknown biological function and biomedical relevance of these species. Thus, a fundamental aim of this workshop is to attempt to bridge this gap, so that some light may be shed on the yet challenging questions in the field. In addition a critical review of the area is required regarding: a) detection and quantification of chemically-defined reactive species; b) development of novel methodologies with improved specificity and sensitivity; c) characterization of the molecular mechanisms by which oxidative modifications in biomolecules lead to intracellular signalling, dysfunction or death; d) definition of the participation of reactive species in pathology initiation and development; e) analysis of novel site-directed antioxidant strategies to cope with toxic effects of reactive species in vitro and in vivo. Hence the workshop will provide successful approaches and discussion on these items, which may serve to move the field forward in terms of finding novel and much-needed practical applications in a series of human disease conditions.

Format of the Workshop

The workshop will bring together 17 speakers and a maximum of 33-35 participants, to form a group of around 50 people. The scientific programme will start in the morning of Wednesday, November 2nd, and will end around noon on Friday, November 4th. Ample time for informal discussion will be reserved. Participants will be invited to present a poster.

Venue of the Workshop

The workshop will be held in Baeza, at the "Sede Antonio Machado", a XVII century building turned into a Conference Centre of the Universidad Internacional de Andalucía (UNIA). This Seat includes a recently restored residence, where participants will be accommodated. Baeza is a World Historic Heritage town, renowned for its Renaissance and Gothic buildings.

Organized by:

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Speakers

Juan P. Bolaños. Departamento de
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Neurociencias de Castilla y León, Universidad
de Salamanca. Salamanca, Spain.

Enrique Cadenas. Department of
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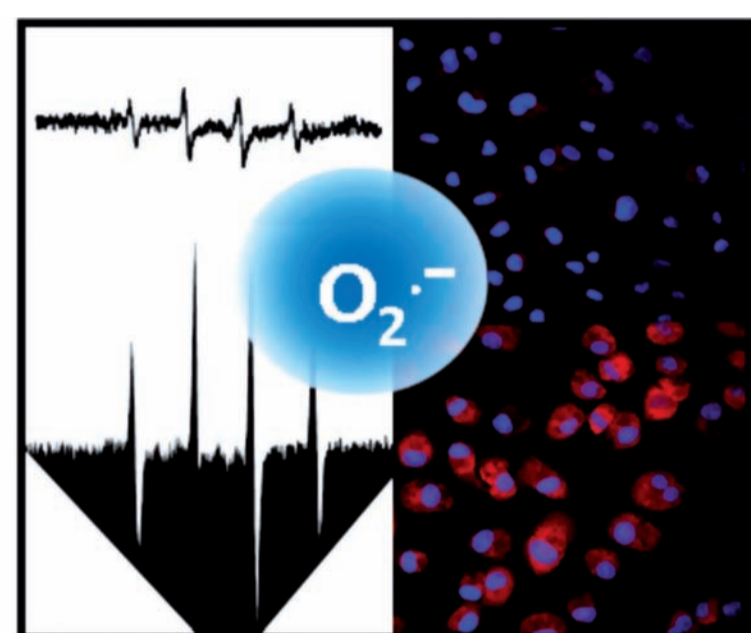
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Sponsored by:



Baeza, Spain
• 2nd-4th November
2011

Deadline:
9th September 2011

Venue:
Sede Antonio Machado
Universidad Internacional de Andalucía
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**More information and
application:**
<http://www.unia.es/biomedicine>