All Actions
Biomedicine and Molecular Biosciences (BMBS)
In Detail
Actions
Restricted Area
Chemistry and Molecular Sciences and Technologies (CMST)
Earth System Science and Environmental Management (ESSEM)
Food and Agriculture (FA)
Forests, their Products and Services (FPS)
Individuals, Societies, Cultures and Health (ISCH)
Information and Communication Technologies (ICT)
Materials, Physics and Nanosciences (MPNS)
Transport and Urban Development (TUD)
Trans-Domain Proposals

BMBS Action COST TD0901

Hypoxia sensing, signalling and adaptation

Descriptions are provided by the Actions directly via e-COST.

The main objective of the Action is to promote basic research on hypoxia signalling pathways, accelerating scientific progress on the levels of basic science, technology, pharmacology and translational medicine, with the ultimate goal to exploit hypoxia signalling pathways for clinical application. Insufficient tissue oxygenation (hypoxia) occurs in a wide range of physiological and pathological conditions, including high altitude, embryonic development, wound healing, anemia, inflammation, cancer, and ischemic diseases such as infarction and stroke. A detailed understanding of the mechanisms of hypoxia sensing, signaling and adaptation is important to exploit this signaling pathway for therapeutic applications. Towards this goal, the four most pressing problems in hypoxia research have been identified: basic science (function and interaction of the different oxygen sensing systems in our body); technology (detection of oxygen-dependent protein modifications); pharmacology (development of drugs modulating the oxygen signaling pathways); and translational medicine (function of these drugs in living organisms). An interdisciplinary COST Action is considered to be the best way to bundle the already existing, widespread research activities in this field, ultimately accelerating the solution of these problems. The Action will coordinate and strengthen European research on hypoxia signaling pathways and their exploitation for clinical application. Improved knowledge on hypoxia signaling is the basis for new therapies that serve patients' health, and it will be a driving force for new employment opportunities in Europe.

Biomedicine and Molecular Biosciences COST Action TD0901
Description
Parties
Management Committee

General Information*

Chair of the Action:
Prof. Roland WENGER (CH)

Vice Chair of the Action:
Prof. Dorthe KATSCHINSKI (DE)

DC Rapporteurs:
Prof. Pedro MORADAS FERREIRA (PT)

DC Rapporteurs:
Prof. Antonio LAGANA (IT)

Science officer of the Action:
Dr Magdalena RADWANSKA

Administrative officer of the Action:
Ms Anja VAN DER SNICKT

Downloads*

Action Fact Sheet
Download AFS as .RTF

Memorandum of Understanding
Download MoU as PDF

Annual Progress Conference Report
Download Annual Progress Conference Report as PDF

Progress Report
Download Progress Report as PDF

Poster
Download Poster as PDF

Websites*

Action website:
www.hypoxianet.com

Domain website:
http://www.cost.eu/bmbs

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Publications

International School of Quantum Electronics: 43rd Course - Matter in Super-Intense Laser Fields
European Perspectives & Randstad Holland: Synergy in Urban Networks
Recherche et développement - La recherche industrielle alimentaire dans les pays de la communauté Européenne - 1re Partie
more...

Videos

COST Foresight 2030 - Aubrey de Grey
COST Foresight 2030 - Melae Langbein
COST Foresight 2030 - Magdalena Radwanska

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