The Conformation Of S-phase chroMOSomes

Fact Sheet

Project Information

COSMOS
Grant agreement ID: 888181

DOI
10.3030/888181

Project terminated on 31 January 2023

Funded under
EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions

Total cost
€ 271 732,80

EU contribution
€ 271 732,80

Coordinated by
THE CHANCELLOR MASTERS AND SCHOLARS OF THE UNIVERSITY OF CAMBRIDGE
United Kingdom

Project description

Delineating chromosomal architecture during mitosis

Eukaryotic cells temporally regulate DNA replication at multiple origins throughout chromosomes. Failure to do so results in genomic stress and may lead to cancer. The scope of the EU-funded COSMOS project is to understand the mechanism behind this temporal regulation and delineate the propagation of the structural elements at the chromosomal origins of replication during mitosis. To achieve this, researchers will employ Hi-C, a method for studying the three-dimensional architecture of genomes, to generate information separately for each sister chromatid. Insight into the interplay between replication timing, DNA damage and
chromosome structure will help scientists comprehend the causes of chromosomal aberrations with obvious consequences for cancer therapy.

**Fields of science**

natural sciences > biological sciences > genetics > DNA
medical and health sciences > clinical medicine > oncology
natural sciences > biological sciences > genetics > chromosomes
natural sciences > biological sciences > genetics > genomes

**Keywords**

Replication Origins  Hi-C  Replication Stress  TAD  A
B Compartments  Replication Timing Domain

**Programme(s)**

H2020-EU.1.3. - EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions  MAIN PROGRAMME
H2020-EU.1.3.2. - Nurturing excellence by means of cross-border and cross-sector mobility

**Topic(s)**

MSCA-IF-2019 - Individual Fellowships

**Call for proposal**

H2020-MSCA-IF-2019

See other projects for this call

**Funding Scheme**

MSCA-IF - Marie Skłodowska-Curie Individual Fellowships (IF)
THE CHANCELLOR MASTERS AND SCHOLARS OF THE UNIVERSITY OF CAMBRIDGE

Net EU contribution

€ 271 732,80

Address
Trinity lane the old schools
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United Kingdom

Region
East of England > East Anglia > Cambridgeshire CC

Links
Contact the organisation Website Participation in EU R&I programmes HORIZON collaboration network

Other funding

€ 0,00

Partners (1)

UNIVERSITY OF MASSACHUSETTS

United States

Net EU contribution

€ 0,00

Address
Butterfield terrace 70
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Activity type
Higher or Secondary Education Establishments

Links
Contact the organisation Participation in EU R&I programmes HORIZON collaboration network
Other funding

€ 165 265,92

**EC signature date** 19 March 2020

**Last update:** 24 July 2023

**Permalink:** [https://cordis.europa.eu/project/id/888181](https://cordis.europa.eu/project/id/888181)

European Union, 2023