

# European Consortium for Systematic Stem Cell Biology (EuroSyStem)

 [consortiapedia.fastercures.org/consortia/eurosystem/](http://consortiapedia.fastercures.org/consortia/eurosystem/)

## Research Areas



Tool Development

## At a Glance

- Status: **Completed Consortium**
- Year Launched: **2008**
- Initiating Organization: **European Commission Sixth Framework Programme (FP6)**
- Initiator Type: **Government**

## Abstract

The European Consortium for Systematic Stem Cell Biology (EuroSyStem) brought together elite European research teams to create a unique and world-leading program in fundamental stem cell biology. The project goal was to interlink complementary biological and computational expertise to drive the generation of new knowledge on the characteristics of normal and abnormal stem cells.

## Mission

EuroSyStem concentrated on illuminating the molecular circuitry governing the decision between self-renewal and commitment to differentiation. By measuring and modeling stem cell properties and behavior, it paved the way for application of systems methodology. It mined and exploited information from studies and screens in model organisms, but its primary focus was the paradigmatic mammalian stem cell systems — hematopoiesis and epithelia in vivo, and embryonic and neural stem cells in vitro.

EuroSyStem cross-evaluated between systems issues of cellular hierarchy, signaling, epigenetics, dysregulation, and plasticity. Microenvironmental perturbation, asymmetric division, and transcriptional



regulation were considered in a cross-cutting, mechanism-centered work package.

Its multidisciplinary approach included transgenesis, real-time imaging, multi-parameter flow cytometry, transcriptomics, ribonucleic acid (RNA) interference, proteomics, and single-cell methodologies.

Small to medium-sized enterprises (SMEs) contributed to the development of enhanced-resolution quantitative technologies. A platform work package provided new computational tools and database resources, enabling implementation of novel analytical and modeling approaches. EuroSyStem engaged with and provided a focal point for the European stem cell research community. The focused collaborations within the EuroSyStem research project were augmented by federating the best new independent European investigators working in different tissues and organisms.

---

## Consortium History

March 2008: Project start

August 2012: Project end

---

## Financing

The total cost was €16.0 million, of which the European Union contributed €12 million.

---

## Impact/Accomplishment

EuroSyStem set and achieved the following major objectives during its four years:

---

## Links/Social Media Feed

Homepage

<http://www.eurosystemproject.eu/>

---

## Points of Contact



Jenny Walsham  
Project Manager

Jo Butler  
Planning and Communications Assistant

For project and events inquiries, contact the Project Office:

phone: +44 (0) 1223 760 288

fax: +44 (0) 1223 760 241

email: [eurosystem-office@cscr.cam.ac.uk](mailto:eurosystem-office@cscr.cam.ac.uk)

For press inquiries, contact the Communications Officer:

Cathy Southworth

Communications Officer

phone: +44 (0) 131 651 9508

fax: +44 (0) 131 651 9501

email: [eurosystem-comms@ed.ac.uk](mailto:eurosystem-comms@ed.ac.uk)

## Sponsors & Partners

---

Dresden University of Technology

Ecole Polytechnique Federale de Lausanne

European Institute of Oncology

German Cancer Research Institute

Helmholtz Centre Muenchen

Hospital San Raffaele

IMBA – Institute for Biotechnology

Institut de genetique et de biologie moleculaire  
et cellulaire (IGCCM)

Institut Pasteur

Karolinska Institute

Lund University

Netherlands Cancer Institute

Netherlands Institute for Developmental Biology



Oxford Gene Technology  
Universita degli Studi di Milano  
University Groningen Medical Centre  
University of Cambridge  
University of Edinburgh  
University of Leipzig  
University of Oxford

---

Updated: **04/15/2016**