



## Systems biology

/

Al-Rubeai, Mohamed (1948-)

Fussenegger, Martin

Springer,  
2007

Electronic books

Monografía

A comprehensive guide to the revolutionary area of systems biology and its application in cell culture engineering, this volume presents an overall picture of the current topics central to structural and functional genomics, proteomics, metabolomics and bioinformatics, including such hot topics as RNAi, metabolic engineering and unfolded protein response. It includes reviews of the cellular response of environmental modulation such as low temperature and osmolarity, critical assessments of the applications of metabolomics and fluxomics approaches, examination of the utility of modulation of key genes and a presentation of a theory of chemical organisation which provides a new view of the system's structure. The clearly written chapters by experts in the field describe methods applicable to investigating the unique facets of cell culture. The book should be of interest to all those working in cell culture development and drug discovery in pharmaceutical and biotechnology companies as well as in academic institutions. It provides an invaluable resource for students and researchers in biotechnology, cell culture, genomics and bioinformatics

<https://rebiunoda.pro.baratznet.cloud:28443/OpacDiscovery/public/catalog/detail/b2FpOmNlbGVicmF0aW9uOmVzLmJhcmF0ei5yZW4vMjU4MjkxMDU>

**Título:** Systems biology edited by Mohamed Al-Rubeai and Martin Fussenegger

**Editorial:** Dordrecht Springer 2007

**Descripción física:** 1 online resource (viii, 423 pages) illustrations

**Mención de serie:** Cell engineering v. 5

**Documento fuente:** Springer e-books

**Bibliografía:** Includes bibliographical references

**Contenido:** Structural Genomics -- RNA Interference in Haematopoietic and Leukaemic Cells -- Genomics and Proteomics of Chinese Hamster Ovary (CHO) Cells -- The Unfolded Protein Response -- Engineering of Cell Proliferation Via Myc Modulation -- The Molecular Response(s) During Cellular Adaptation to, and Recovery from, Sub-Physiological Temperatures -- Molecular Response to Osmotic Shock -- Metabolomics -- Metabolic Flux Analysis of Mammalian Cells -- Metabolic Engineering -- Chemical Organisation Theory -- Prokaryotic Systems Biology

**Copyright/Depósito Legal:** 173516341 228152999 228153000 228377008 320966053 433191900 437240713  
648255358 722576079 756425323 985038965 994689752 1005751946 1020005407 1035668649 1044145765  
1044230877 1056323024 1056373084 1066996828 1077279609 1078838026 1086865250 1086908341  
1110861012 1110941120 1112525278 1125437460

**ISBN:** 9781402052521 1402052529 1402052510 Cloth) 9781402052514 Cloth) 6610864381 9786610864386

**Materia:** Cell physiology Biological systems Cell Engineering Cell Physiological Phenomena Systems Biology  
SCIENCE- Life Sciences- Cell Biology Biomédecine Sciences de la vie Biological systems Cell physiology

**Autores:** Al-Rubeai, Mohamed ( 1948-) Fussenegger, Martin

**Enlace a formato físico adicional:** Print version Systems biology. Dordrecht : Springer, 2007 9781402052514  
1402052510 (DLC) 2007425735 (OCoLC)77482079

**Punto acceso adicional serie-Título:** Cell engineering v. 5

---

### **Baratz Innovación Documental**

- Gran Vía, 59 28013 Madrid
- (+34) 91 456 03 60
- informa@baratz.es