



Extracellular Signals in the Control of Gene Expression Regulating Cellular Survival, Death and Differentiation

Guest Editors:

Prof. Dr. Claudia Martini

Dipartimento di Farmacia,
Università di Pisa, Pisa, Italy

**Prof. Dr. Maria Letizia
Trincavelli**

Università di Pisa, Dipartimento
di Farmacia, Pisa, Italy

Dr. Simona Daniele

Department of Pharmacy,
University of Pisa, Via Bonanno 6,
56126 Pisa, Italy

Deadline for manuscript
submissions:

closed (30 September 2019)

Message from the Guest Editors

Dear Colleagues,

How do cells “read” information from the environment and translate it into specific cell fate decisions? Recent findings suggest that cell fate is encoded in early signaling events and can be predicted from defined signal properties. Specifically, the time course of activated key signaling molecules can be related to cellular fate such as proliferation or differentiation. Nowadays, the identification of the key signal mediators and their linking to cell fate is also facilitated by transcriptomics and proteomics analyses, assisted by bioinformatics and mathematical modeling. This Special Issue focuses on the recent progress in understanding the biochemical and molecular biology of cellular survival, death and differentiation, considering in particular changes coming from the cellular microenvironment that affect the transcriptional network. Specific changes in gene expression patterns and alterations in the protein expression in cellular or animal models will also be considered in this Special Issue.





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Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of
Odontostomatologic and
Specialized Clinical Sciences,
Sez-Biochimica, Faculty of
Medicine, Università Politecnica
delle Marche, Via Ranieri 65,
60100 Ancona, Italy

Message from the Editor-in-Chief

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MDPI, Grosspeteranlage 5
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