JOURNAL OF

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EDITORIAL POLICY

Journal of Developmental Origins of Health and Disease publishes leading research in the field of developmental origins of health and disease (DOHaD), focusing on how the environment during early animal and human development, and interactions between environmental and genetic factors, influence health in later life and risk of disease. It publishes original research articles, short communications and reviews, and plans regular themed issues, with guest editors; it is also a platform for conference/workshop reports, and for opinion, comment and interaction. The journal is multi-disciplinary, with contributions from basic scientists working in the fields of physiology, nutrition, endocrinology and metabolism, developmental biology, molecular biology and epigenetics, human biology and anthropology, evolutionary developmental biology, and clinicians, nutritionists, epidemiologists, social scientists, economists, public health specialists and policy makers.

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CALL FOR PAPERS

Journal of Developmental Origins of Health and Disease Themed Issue on Epigenetics

Important Dates

Manuscript submission deadline: 1st August 2011 Publication of themed issue: to be confirmed

There is growing evidence that changes in epigenetic processes are a key mechanism in the induction of stable phenotypes by environmental cues acting during early life. Thus epigenetic mechanisms are likely to play a fundamental role in the developmental origins of health and disease. Understanding how signals from the early life environment are translated into epigenetic changes, and the relationship between such modifications and the phenotype of the offspring, including differential disease risk, is likely to make a major contribution to the a range of research activities including molecular biology, physiology and evolutionary biology. The findings of such studies can potentially be translated into interventions to ameliorate adverse effects of the early life environment on health and into novel techniques for assessing disease risk. However, research into epigenetics and differential disease risk is at an early stage and so provides a considerable opportunity to make a substantial contribution to this field.

The purpose of this themed issue is to bring together insightful manuscripts on epigenetic processes in the early life origins of disease with novel research findings. Submitted papers may target, but are not limited to, the following issues and questions:

Mechanisms by which the early life environment can induce epigenetic change:

What early life environmental cues can affect the epigenome?

What are the key signalling pathways?

Do different environmental cues activate distinct signalling pathways?

What is the relationship between histone modifications, miRNAs and DNA methylation changes?

How stable is the epigenome?

Are there periods of plasticity after early development?

Does the epigenome change during the life course and, if so, what determines the nature and rate of change?

How are the effects of the early life environment on the epigenome targeted?

Can induced epigenetic changes be linked directly to future disease risk?

Guest Editor

Graham Burdge, Institute of Human Nutrition/DOHaD Division, Southampton General Hospital, UK **Karen Lillycrop**, School of Biological Sciences, University of Southampton

Submission Guidelines

Only original and unpublished high-quality research papers are considered and manuscripts must be in English. You <u>must</u> provide a cover letter to indicate that the submission is for "Epigenetics and the Early Life Origins of Disease". If this is not supplied, or if too many/insufficient papers are accepted for a particular theme, they will be published by the journal as regular submissions. All papers will be submitted to a rigorous peer-review process and the mere fact that they are part of a themed issue (solicited or not) does not guarantee acceptance

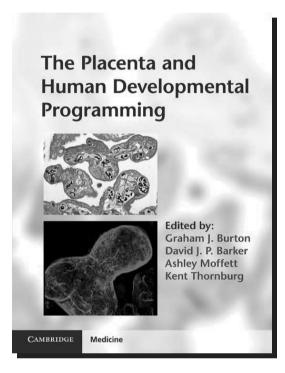
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CAMBRIDGE

Medicine

The Placenta and Human Developmental Programming

Edited by Graham J. Burton, David J. P. Barker Ashley Moffett, Kent Thornburg



Developmental programming is a rapidly advancing discipline of great importance to basic scientists and health professionals alike. text integrates, for the first time. contributions from world experts to explore the role of placenta in developmental programming. The book considers the maternofetal supply line, and how perturbations of placental development impact on its functional capacity. Chapters examine ways in which environmental, immunological and vascular insults regulate expression of conventional and imprinted genes, along with their impact on placental shape and size, transport, metabolism and endocrine function. Research in animal models is integrated with human clinical and epidemiological data, and questions for future identified. research are **Transcripts** discussions between the authors allow readers to engage with controversial issues.

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- Includes transcripts of discussions, allowing readers to get a feel for controversial issues
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