Record of the 2nd EMT Meeting ~ Scientific Program

EMT 2005 ~ October 1–3, 2005
The Mercure Grand Hotel, Vancouver, Canada
Convenors:
Shoukat Dedhar and Raghu Kalluri

International Committee:

Mina Bissell | Jean-Paul Thiery | Elizabeth Hay | Robert Weinberg | Suresh Mohla

Erik Thompson | Donald Newgreen | Pierre Savagner | Kohei Miyazono

Meeting review in the Journal of Cell Biology

Special Edition of Cells Tissues Organs

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The conversion of an epithelial cell to a mesenchymal cell is critical to metazoan embryogenesis and a defining structural feature of organ development. Current interest in this process, which is described as an epithelial-mesenchymal transition (EMT), stems from its developmental importance and its involvement in several adult pathologies. Interest and research in EMT are currently at a high level, as seen by the attendance at the recent EMT meeting in Vancouver, Canada (October 1-3, 2005). The meeting, which was hosted by The EMT International Association, was the second international EMT meeting, the first being held in Port Douglas, Queensland, Australia in October 2003. The EMT International Association was formed in 2002 to provide an international body for those interested in EMT and the reverse process, mesenchymal-epithelial transition, and, most importantly, to bring together those working on EMT in development, cancer, fibrosis, and pathology.

These themes continued during the recent meeting in Vancouver. Discussion at the Vancouver meeting spanned several areas of research, including signaling pathway activation of EMT and the transcription factors and gene targets involved. Also covered in detail was the basic cell biology of EMT and its role in cancer and fibrosis, as well as the identification of new markers to facilitate the observation of EMT in vivo. This is particularly important because the potential contribution of EMT during neoplasia is the subject of vigorous scientific debate (Tarin, D., E.W. Thompson, and D.F. Newgreen. 2005. Cancer Res. 65:5996-6000; Thompson, E.W., D.F. Newgreen, and D. Tarin. 2005. Cancer Res. 65:5991-5995).

Publication ~ Special Issue:

Preamble

Papers arising from the 2005 Vancouver EMT Meeting are found in " <u>Cells Tissues Organs</u>, vol. 185, 2007"

Advances in Epithelial-Mesenchymal Transitions: 2nd International EMT Meeting, Vancouver, October 2005

Edited by: E.W. Thompson (Melbourne, Vic.) and Pierre Savagner (Montpellier)

A multidisciplinary overview of the EMT process in development and disease

Reviews developments in the concept of epithelial-mesenchymal transitions (EMT) that has brought useful insights to the study of complex processes involved in early embryo development, wound healing, carcinoma progression or kidney fibrosis. This book also reviews first localizations of Snail proteins in human cancers.

The concept of epithelial-mesenchymal transitions (EMT) has brought valuable insights to the study of complex processes involved in early embryo development, wound healing, carcinoma progression or kidney fibrosis. Major advances are reported in identifying new model systems, transcriptional regulators (including chromatin structure and microRNA), specific signaling pathways, and effector molecules.

In this special issue, recent developments in the EMT field are reviewed, including the first localizations of Snail proteins in human cancers. Snail signaling and targets are carefully explored in several systems. Another emerging signaling pathway discussed involves TGF-beta. Several new concepts are consolidated including partial EMT, resulting in a metastable phenotype in cancer systems, and reversed EMT, described during bladder cancer progression as a mesenchymal-epithelial transition. Some of the papers focus on the first therapeutic approaches and different microarray analysis approaches specifically targeting the EMT process.

Basic and clinical researchers, clinicians as well as graduate and PhD students in the fields of cell and developmental biology, oncology and nephrology will appreciate this multidisciplinary and up-to-date overview of the EMT process.

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Research theme/topic

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