Record of the 3rd EMT Meeting ~ Scientific Program

Epithelial-Mesenchymal Transition
10-12 September, 2007, Larischa Palace, Cracow, Poland
As an EMBO Workshop, co-organized by TEMTIA and Marie-Curie
Epiplastcarcinoma RTN network

Conference Poster: PDF

Conference website: **EMBO Workshops**

Co-chairs:

Pierre Savagner Aristides Moustakis

Antonio Garcia de Herreros Amparo Cano

International Scientific Committee:

Shoukat Dedhar Canada Raymond Runyan USA

Raghu Kalluri USA Jean-Paul Thiery Singapore

Suresh Mohla USA Kristin Verschueren Belgium

Donald Newgreen Australia Robert Weinberg USA

Angela Nieto Spain

The **Poster abstracts** may be accessed <u>here...</u>

Monday 10th September, 2007

8:00 AM Registration

8:30 AM - Session I EMT and Development (I) Chair: Raghu Kalluri

10:30 AM Larischa Palace, Conference Room

THE INAUGURAL ELIZABETH HAY LECTURE: Mechanochemistry of cell adhesion in epithelial cell plasticity

Thiery, JP*, Dufour, S#, Chu, HS*, Pincet, F§, Eder, O#, Thomas, W#, Martinez-Rico, C# and Nassoy, P+
*Systems Biology, Institute of Molecular and Cell Biology, 61 Biopolis Drive (Proteos), Singapore, Singapore 138673, Singapore; #CNRS Institut Curie Paris; § Ecole Normale

Superieure Paris

EMT-related and EMT-independent regulation of cell adhesion and movement by Snail

Nieto, MA Instituto de Neurociencias de Alicante, CSIC-UMH Apartado 18. San Juan de Alicante. Spain.

The polarity regulators Scribble and DLG control epithelial migration during development, wound healing and tumourigenesis

Lukas E. Dow*, Jeffrey S. Kauffman*, Ryan Galea*, Jacinta Caddy^, Stephen M. Jane^, Sarah M. Russell# and **Patrick O. Humbert***

*Cell Cycle & Cancer Genetics Laboratory, #Immune Signalling Laboratory, Peter MacCallum Cancer Centre, Melbourne, Australia. ^Rotary Bone Marrow Research Laboratories, Parkville, Australia.

11:00 AM - Session II EMT and Development (II) Chair: Raghu Kalluri12:30 PM Larischa Palace, Conference Room

Gene regulatory network states that control EMT.

McClay, D Developmental Biology, Duke University, Box 90338, Durham, NC 27708, USA;

Conserved and novel features of the NFkB-Slug-Twist network involved in Xenopus mesoderm formation and EMT

<u>Klymkowsky, M</u> Molecular, Cellular & Developmental Biology, University of Colorado, Boulder, 347 UCB, Boulder, CO 80309-0347, USA

Photoactivatable GFP resolves drosophila mesoderm migration behaviour

<u>Murray, MJ</u> and Saint, R Centre for the Molecular Genetics of Development, Research School of Biological Sciences, The Australian National University, Building 46, Acton, Canberra, ACT 0200, Australia

12:30 PM - 2:00 PM

Lunch and Poster viewing Wierzynek Restaurant and Conference Foyer

Posters here...

2:00 PM - Session Cell signalling and EMT (I) Chair: Angela Nieto

Smad proteins of the TGF â pathway instruct a network of transcription

factors for the establishment of EMT

Moustakas, A, Thuault, S, Vanlandewijck, M, Tan, E-J, Raja, E and Heldin, C-H Ludwig Institute for Cancer Research, Box 595, BioMedical Center, Uppsala University, Uppsala SE-751 24, Sweden.

Searching for novel regulators of EMT

Wu, MY, Daly, A and <u>Hill, CS</u> Developmental Signalling Laboratory, London Research Institute, Lincoln's Inn Fields Laboratories, 44 Lincoln's Inn Fields, London, WC2A 3PX, UK

PDGF Links TGF-â Signaling to Nuclear â-Catenin Accumulation in Hepatocellular Carcinoma Progression

Fischer, ANM, Fuchs, E, Mikula, M, Huber, W, *Beug, H and Mikulits, W

Department of Medicine I, Division: Institute of Cancer Research, Medical University of Vienna, Borschke-Gasse 8A, Vienna, 1090, Austria; Research Institute of Molecular Pathology, Dr. Bohr-Gasse 7, A-1030 Vienna, Austria 3:30 PM 71 The Transcription Factor Snail Represses Crumbs3 Expression and Disrupts Apico-Basal Polarity Complexes

Whiteman, EL, Liu, Chia-Jen, Fearon, ER and Margolis, B Internal Medicine, University of Michigan, 109 Zina Pitcher Place, 1698 Biomedical Science Research Building, Ann Arbor, MI 48105, USA

3:50 PM

Afternoon Tea Conference Room Foyer, Larischa Palace

4:30 PM - Session 6:00 PM IV

Session Cell signalling and EMT (II): Chair: Angela Nieto IV Larischa Palace. Conference Room

The Par/Tiam1 polarity complex controls epithelial and mesenchymal properties of epithelial cells.

Collard, J Division of Cell Biology, The Netherlands Cancer Institute, Amsterdam, 1066 CX, The Netherlands Regulation of EMT and Wnt signaling by Integrin-

Linked Kinase

Dedhar, **S** Biochemistry and Molecular Biology, University of British Columbia/BC Cancer Research Centre, Vancouver, BC V5Z1L3, Canada

EMT and Oncogenic Signaling by TGF-â in Mammary Epithelial Cells

Schiemann, WP Department of Pharmacology, MS8303, University of Colorado Health Sciences Center, Aurora, CO 80045, USA

6:00 PM POSTERS / EpiPlast Carcinoma AGM

7:00 PM Welcome Reception Main Hall, Larischa Palace

Tuesday 11th September, 2007

8:30 AM -Session VEMT and Cancer (I) Chair: Antonio Garcia de Herreros 10:00 AM Larischa Palace. Conference Room

> Invasive growth: a MET-driven genetic programme for cancer and stem cells

Comoglio, P IRCC, Institute for Cancer Research and Treatment, University of Torino School of Medicine, Candiolo, Torino, 10060, Italy

EMT in the neural crest model: Does functional manipulation of adhesion and cytoskeletal systems reset the sensitivity to pro-EMT growth factors? Don Newgreen1, Dong Zhang1, Honor Hugo1, Peter Farlie2. Sonia McKeown1 1Embryology Laboratory, and 2 Craniofacial Sciences Laboratory, Murdoch Childrens Research Institute, The Royal Children's Hospital, Parkville, 3052, Australia.

The microRNA-200 family regulates the E-cadherin repressors, ZEB1/deltaEF-1 and SIP1/ZEB2 and EMT Philip A Gregory, Andrew G Bert, Emily L Paterson, Anna Tsvkin, Mathew A Vadas, Yeesim Khew-Goodall and Gregory J Goodall Hanson Institute, Institute of Medical and Veterinary Science, Adelaide, South Australia, Australia, 5000

10:30 AM - Debate: EMT-MET Cycles in tumours Larischa Palace,

Conference Room

Amparo Cano, Gerhard Christofori, Pierre Savagner

and

Erik (Rik) Thompson

11:30 AM

11:30 AM - Session EMT and Cancer (II) Chair: Antonio Garcia de Herreros Larischa Palace, Conference Room

Distinct mechanisms of tumor invasion and metastasis

Lehembre, F, Wicki, A, Yilmaz, M, Grotegut, S, Kren, A, Fantozzi, A, Achermann, C and Christofori, G Institute of Biochemistry and Genetics, University of Basel, CH - 4058, Switzerland

Gene signatures defining Epithelial Mesenchymal Transition and stem cell lineage are a defining characteristic of human breast cancer subtypes Blick, T#, Widodo, E. ^,§, Waltham, M#,^, Hugo, H*, Newgreen, DF*, Lenburg, ME## and **Thompson**, **EW**#,^ #St. Vincent's Institute and 'University of Melbourne Dept. of Surgery, St. Vincent's Hospital, Australia; § Faculty of Medicine, Brawijaya University, East Java, Indonesia; *Embryology Laboratory, Murdoch Children's Research Institute, Parkville, Australia; ##Department of Genetics and Genomics, Boston University School of Medicine, Boston, MA 02118, USA; **Life Sciences Division, Lawrence Berkeley National Laboratory, Berkeley, CA, USA

12:40 PM - 2:15 PM

Lunch/ and Poster viewing Wierzynek Restaurant and Conference Fover

2:15 PM -Session 3:45 PM VII

EMT and Cancer (II) Chair: John Collard Larischa Palace, Conference Room

Understanding the role of Snail factors and other EMT regulators in tumour progression

Cano, A Biochemistry, Universidad Autonoma de Madrid, Instituto de Investigaciones Biomedicas "Alberto Sols" CSIC-UAM, Madrid,, Spain

Malignant progression in colorectal cancer: EMT, â-Catenin & cancer stem cells

Brabletz, T Molecular Oncology, Surgery, Univ. of Freiburg, Germany

The transcription factor ZEB1 promotes tumor progression by repressing master regulators of epithelial differentiation

Aigner, A, Descovich, L, Sultan, A, Brabletz, T* and Foisner, R and Eger, A

Max F. Perutz Laboratories, Department of Medical Biochemistry, Medical University Vienna, Austria; *Department of Visceral and General Surgery, Albert-Ludwigs-University, Freiburg, Germany

4:15 PM -**Session EMT and Cancer (II)** Chair: John Collard Cell motility at the invasive front of tumors: The role of novel Wnt/â-catenin target genes

<u>Ben-Ze'ev, A</u> Molecular Cell Biology, Weizmann Institute of Science, Hertzl Street, Rehovot, 76100, ISRAEL PDGF-dependent cancer fibroblasts and pericytes as novel cancer drug targets

Östman, A Molecular Oncology and Cancer Therapies, Karolinska Institute, Department of Oncology, Stokholm, Sweden

â-Arrestin-1 as messenger of endothelin A receptordriven â-catenin signaling pathway and epithelial to mesenchymal transition: implication for an effective combined therapy in ovarian cancer

* Rosano', Laura, * Cianfrocca, Roberta, * Masi, Stefano,

* Spinella, Francesca, * Di Castro, Valeriana, *** Nicotra, Maria Rita, ** Natali, Pier Giorgio and * Bagnato, Anna *Laboratories of Molecular Pathology and Ultrastructure, and **Immunology, Regina Elena Cancer Institute, Rome, Italy;***Molecular Biology and Pathology Institute, National Research Council, Rome, Italy.

LOXL2 as a player in epidermal homeostasis and early marker of squamous cell carcinomas

Peinado, H., Moreno-Bueno, G, Santos, V., Perez-Gomez, E., Hardisson, D.*; De Diego J.I.*, Quintanilla, M., Portillo, F. and Cano, A. Departamento de Bioquimica. Instituto de Investigaciones Biomedicas Alberto Sols Consejo Superior de Investigaciones Cientificas-Universidad Autonoma de Madrid, Spain. *Hospital Universitario de la Paz. 28029 Madrid. Spain

6:05 PM **POSTERS / TEMTIA AGM**

7:00 PM **Conference Dinner** Folwark Zalesie

Wednesday 12th September, 2007

8:30 AM - Session 10:00 AM IX

Physiological aspects of EMT Chair: Aristidis Moustakas Larischa Palace, Conference Room

The Effects of BMP-7 on EndMT and Cardiac Fibrosis Kalluri, R Center for Matrix Biology, Beth Israel Hospital/Harvard Medical School, Boston, MA 2215, USA Slug regulates early epithelial differentiation by maintaining a metastable phenotype Savagner, P U868 INSERM Centre de Recherche en Cancerologie, CRLC Val d'Aurelle-Paul Lamarque, Montpellier, 34298, France Gene Regulation Network Analysis Suggests

Gene Regulation Network Analysis Suggests
Epigenetic Mechanism for Silencing of TIMP3 in EMT

Zavadil, J*, Dickman, K#, Bitzer, Mß, Jelinek, J,^, Grollman, AP# and Blumenberg, M** *Pathology & **Dermatology, NYU School of Medicine, New York, NY; #Pharmacology, SUNY at Stony Brook, NY; ßMedicine, Albert Einstein College of Medicine, Bronx, NY.; ^Leukemia Department, M.D. Anderson Cancer Center, Houston, TX.

10:30 AM - Debate: 11:30 AM **EMT** in development and physiology Michael Klymkowsky, Raghu Kalluri and Angela Nieto

Larischa Palace, Conference Room

11:30 AM - Session XPhysiological aspects of EMT Chair: Aristidis Moustaka
 12:45 PM Larischa Palace, Conference Room

Regulation of EMT in the atrioventricular canal of the developing heart

Runyan, RB, Mercado-Pimentel, ME, Tavares, ALP, Hubbard, AD, Willingham, CC, Maring, KM, Zumbusch, TB and Schnurr, DS

Cell Biology and Anatomy, University of Arizona, Tucson, Arizona USA

Delineation of GTPase pathways in EMT: A role for every Rho?

Hutchison, N, Hendry, BM and **Sharpe, CC** Renal Medicine, King's College London, UK;

New concepts in desmosomal adhesion and their implications for EMT

Garrod DR, Kimura TE, Nie Z and Merritt AJ

Faculty of Life Sciences, University of Manchester, UK

12:45 PM - 2:15 PM

Lunch and **Poster Viewing** Conference Room Foyer, Larischa Palace

2:15 PM - Session 4:00 PM XI

Cell signalling and EMT (II) Chair: Paolo Comoglio Larischa Palace, Conference Room

The role of IGF/AKT pathways in the induction of epithelium mesenchyme transition

<u>Lionel LARUE</u> Institut Curie, Bat 110, Orsay, Paris, France.

The adhesion junction protein E-cadherin plays a central role in the process of epithelial morphogenesis Garcia de Herreros, A Unitat de Biologia Cellular i Molecular, Institut Municipal d'Investigacio Medica, Universitat Pompeu Fabra, Barcelona, Catalunya 08003, Spain Functional analysis of EMT-inducing transcription factors in invasion and metastasis

De Craene, B1,2, Vandewalle, C1,2, Raspé, E 1,2, Seflek Unay, Z1,2, Van Roy, F1,2, <u>Berx, G</u>1,2 Department of Molecular Biomedical Research, VIB and Ghent University, Ghent (Zwijnaarde), Belgium

4:00 PM Close and Announcement of 2009 Meeting