

Record of the 4th EMT Meeting ~ Scientific Program



Meeting held in Westward Look Resort, Tucson, Arizona
Wednesday September 23-Saturday September 26, 2009
Convenors: Ray Runyan and Parker Antin

Conference Flyer: [PDF file \(540kb\)](#)

[Special Edition of Cells Tissues Organs](#)

Epithelial-Mesenchymal Transition (EMT) is a cellular process where cells in an epithelium acquire the ability to invade the underlying extracellular matrix or adjacent tissue. It is a normal process in development used for the formation of three-dimensional structure in the embryo but is usually associated with pathologies in the adult.

This meeting is designed to bring together Developmental Biologists, Cancer Biologists and Pathologists, who might not normally interact in discipline-specific meetings, to discuss the common and disparate elements of EMT in their research. We expect that results presented in the areas of cancer metastasis, organ fibrosis, wound healing and embryonic development will lead to new insights and approaches that will move each of the respective research fields and advance health research.

Platform talks will be given by a combination of senior investigators in the field and newer investigators selected from submitted abstracts. Substantial poster presentation time each morning will enable each participant to share their work with the other attendees.

Wednesday 23rd September, 2009

Wednesday, Sept. 23

3:00 - 6:00 Session 1 Overview and sampling of EMT systems

Parker Antin (Tucson)- Welcome

Ray Runyan (Tucson)- EMT in developing heart valves:
Still useful after all these years

Hal Chapman (San Francisco)-Integrin Dependent
Cross-talk between β -catenin and Smad Signaling
Regulates EMT

William Schiemann (Denver)- Activated Abl Kinase
Inhibits Oncogenic Transforming Growth Factor- β
Signaling, EMT, and Tumorigenesis in Mammary Tumors
Opening Reception

8:00-10:00

Thursday 24th September, 2009

7:30-9:25 Breakfast and Poster Session 1
9:25-10:35 Session 2 Physiological EMT: Development

Guojun Sheng (Kobe)- Gastrulation EMT in chick embryos
Nicole Vincent-Jordan (Chapel Hill)- MEKK4-dependent epigenetic regulation of developmental EMT in trophoblast stem cells

10:55-12:40 Session 3 Development II

Michelle Talquist (Dallas)-Deletion of Neurofibromatosis 1 in the epicardium leads to premature epithelial to mesenchymal transition
Joey Barnett (Nashville)- BMP-2 and TGF β 2 Shared Pathways Regulate Endocardial Cell EMT
Andrea Ladd (Cleveland)- Muscleblind-like 1 is a negative regulator of TGF β -dependent epithelial-mesenchymal transition of atrioventricular canal endocardial cells

1:40-3:25 Session 4 Physiological EMT: Palate EMT?

Kathy Svoboda (Dallas)-Palate Fusion is Twist and Snail Dependent Downstream of Tgfbeta3 and PI3 kinase
Ali Nawshad (Lincoln)- Splice variants of ALK5 regulate medial palatal seam cell morphogenesis
Yukiko Kitase (Vancouver)- The Role of Periostin during Palatal Development

3:45-5:30 Session 5 Pathological EMT: Fibrosis

Andras Kapus (Toronto)- Fate-determining mechanisms in epithelial-myofibroblast transition: Smad3 is a critical inhibitor and timer of the myogenic program in the epithelium
Xueming Qian (Thousand Oaks)- Context-Dependent Wnt Modulator WISE Regulates Myofibroblast Formation and Activation in a Mouse Model of Bleomycin-induced Lung Fibrosis
Beiyun Zhou (Los Angeles)- Interactions between Transforming Growth Factor- β 1 (TGF- β 1)/Smad3 and Wnt Signaling Pathways Regulate EMT and α -Smooth Muscle Actin Expression in Alveolar Epithelial Cells (AEC)

5:30-6:30 TEMTIA business Meeting

Friday 25th September, 2009

7:30-9:25 Breakfast and Poster Session 2

9:25-10:35 Session 6 Pathological EMT: Metastasis I

Shoukat Dedhar (Vancouver)- Role of EMT in Breast and Prostate Cancer Progression

Alexandre Deshiere (Grenoble)- Involvement of Protein Kinase CK2 in SNAI1-mediated Epithelial-to-Mesenchymal Transition

10:55-12:40 Session 7 Pathological EMT: Metastasis II

Pierre Savagner (Montpellier)- Role of Slug in supporting partial EMT phenotype during mammary growth and breast carcinoma progression

Guo-fu Hu (Boston)-Cooperativity between EMT and non-EMT cells in spontaneous metastasis of oral squamous carcinoma cells

Gretchen Argast (Farmingdale)-Recapitulation of EMT in vitro and in vivo with multiple drivers in H358 non-small cell lung cancer cells

1:40-3:25 Session 8 Pathological EMT: Metastasis III

Aristidis Moustakas (Uppsala) - Epithelial-mesenchymal transition under the control of TGF- β signaling

Jing Yang (San Diego)- Regulation of Tumor Invasion by Twist

Samy Lamouille (San Francisco)-Role of mTOR signaling in TGF- β -induced EMT

6:00-7:00 Session 9 Neural Crest and EMT ~ **Betty Hay Memorial Lecture**

Marianne Bronner-Fraser (Los Angeles)- Gene regulatory interactions mediating neural crest formation and onset of migration

7:00-9:00 Betty Hay Reception and Buffet

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Saturday 26th September, 2009

7:30-9:25	Breakfast and Poster Session 3	
9:25-10:35	Session 10	Physiological and Pathological EMT: Transcriptional Regulation I
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10:55-12:40	Session 11	Angela Nieto (Alicante)- An ancestral function for the Snail/Scratch genes in the control of cell proliferation/differentiation Antonio Garcia de Herreros (Barcelona)- Regulation of Snail1 expression during EMT Transcription II
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1:40-3:25	Session 12	Russ Carstens (Philadelphia)- Epithelial splicing regulatory proteins (ESRPs) enforce an extensive splicing regulatory program that is lost during the epithelial to mesenchymal transition (EMT) Irina Shapiro (Boston)- A transcriptome-wide analysis of gene expression and alternative splicing during EMT Micheal Henry (Iowa City)-Zeb1 regulates transendothelial migration of prostate cancer cells Post transcriptional regulation of EMT
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3:45-5:30	Session 13	Yeessim Khew-Goodall (Adelaide)- The Pez-TGFb-miR200-ZEB1/2 pathway in epithelial-mesenchymal transition Jacqueline Banyard (Boston)- MicroRNA control of MET (mesenchymal-epithelial transition) in a new tumor METastasis model Jennifer Richer (Denver)- Loss of microRNA-200c, a marker of EMT, Aggressiveness and Chemoresistance in Female Reproductive Cancers Directions and issues in EMT research
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6:00- 9:00	Conference Dinner w/ Music ~ Conference close	