

## TEMTIA 2013

# The 6th International Epithelial-Mesenchymal Transition Meeting

13-16 November 2013 ■ Alicante ■ Spain

### Organizer and Host:

**TEMTIA Inc.** The Epithelial-Mesenchymal Transition International Association (TEMTIA) is an international scientific society created at the time of the inaugural International EMT conference. TEMTIA has biennial meetings organized by a local host committee, on a rotating basis. TEMTIA-VI, the 6th biennial meeting, is the first TEMTIA meetings to be held in Spain. Previous meetings were held in Australia, Canada, Poland, USA and Singapore (<http://www.mtci.com.au/TEMTIA/temtia.html>)

**Local Organizing Committee.** The 2013 meeting will be coordinated through the Instituto de Neurociencias (Universidad Miguel Hernández and Spanish Research Council). The lead organizer is **Prof. M. Angela Nieto**. She is the President of the Spanish Society for Developmental Biology, a member of the Board of directors of the International Society of Differentiation and the Spanish delegate for EMBO/EMBC/EMBL. Co-convenor is **Amparo Cano** (Universidad Autónoma Madrid) and the other local committee members are **Antonio García De Herreros** (Institut Hospital del Mar for Medical Research, Barcelona) and **Jose Luis de la Pompa** (National Centre for Cardiovascular Diseases, Madrid). Each of the local organizers has made recognized contributions to the field.

#### Local Organizing Committee

M. Ángela Nieto  
Amparo Cano  
Antonio García de Herreros  
José Luis de la Pompa

#### Internacional Organizing Committee

M. Ángela Nieto	Raymond Runyan
Thomas Brabletz	Pierre Savagner
Raghu Kalluri	Guojun Sheng
Yeesim Khew-Goodall	Jean Paul Thiery
Don Newgreen	Erik Thompson

## **International Organizing Committee**

**M. Angela NIETO** – Instituto de Neurociencias (CSIC-UMH), Spain

**Thomas BRABLETZ** – Freiburg Medical School, Germany

**Raghu KALLURI**, Harvard Medical School, USA

**Yeesim KHEW-GOODALL** – University of Adelaide, Australia

**Don NEWGREEN** – MCRI, Melbourne, Australia

**Raymond RUNYAN** – University of Arizona, USA

**Pierre SAVAGNER** – Institut de Recherche en Cancérologie de Montpellier, France

**Guojun SHENG** – RIKEN Center for Development Biology, Japan

**Jean Paul THIERY** – A\*STAR - Institute of Molecular and Cell Biology, Singapore

**Erik THOMPSON** – St. Vincent's Hospital, University of Melbourne, Australia

## **Venue**

### **Hotel Melia, Alicante**

The Meliá Alicante is located in the City of Alicante, the capital of the Costa Blanca on the Southeast Spanish Coast. It is located on Postiguet beach, close to the Paseo Marítimo and the marina. The hotel is also just a few minutes from the city center with its shops and the Santa Bárbara castle. It is 1 km from Alicante train station and 8 km from El Altet International airport. Alicante is a city of more than 300,000 people with air and train connections to Madrid and Barcelona and direct flights from many airports in Europe.

## **Conference Themes & Program**

The 4 day meeting will be attended by more than 250 delegates. This crucial and timely meeting will be participated by with researchers, students, clinicians, institute/department heads, decision makers, scientific managers and educators.

TEMTIA-VI will be held over 10 sessions, with broad discussion of 7 main themes:

*Cancer and EMT*

*Developmental EMT*

*Organ Fibrosis and wound repair*

*Cell/Molecular Biology of EMT*

*Systems and Mathematical Modeling of EMT*

*Therapies, Drug discovery and EMT*

*Cancer Stem cells and EMT*

### Definition of EMT:

Epithelial Mesenchymal Transition (EMT) is a basic cellular process by which epithelial cells change phenotype and become invasive cells within a three dimensional matrix. The embryo uses EMT to form three dimensional tissues from sheets of cells while a majority of EMT's in the adult produce pathologies. Examples of EMT in the embryo include gastrulation, neural crest cell and heart valve formation and breakdown of the Mullerian duct in the reproductive system among other tissues. Indeed, with the exception of the central nervous system and the epidermis, all adult tissues and organs are the result of a least one round of EMT and the reverse process (MET). In pathology, kidney and liver fibrosis and cancer metastasis have been shown to invoke EMT mechanisms. Though the process of EMT was first discussed in the late 1970s and early 1980s in the context of developmental biology, it was not widely appreciated until the middle 1990s. Interest in the field has grown as molecules first identified as EMT regulators in development were shown to be involved in cancer metastasis and organ fibrosis. The first paper on experimental analysis of EMT was written in 1982 and by 1992 there were less than 75 papers in this area. In 2011, there were more than 1100 primary research articles published that addressed aspects of EMT. The proposed meeting is a an important venue where investigators working in areas such as lung or kidney fibrosis can compare results with cancer stem cell and metastasis investigators or developmental biologists.

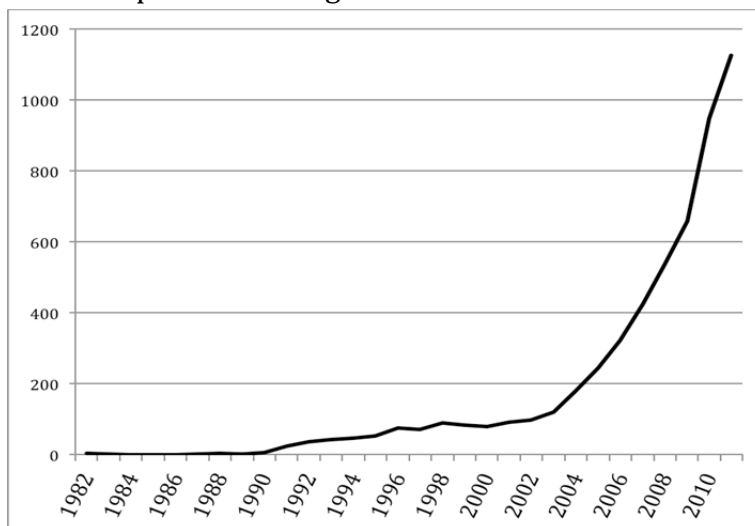


Fig. 1. Growth of the primary literature in EMT. The first experimental analysis of EMT in development was published in 1992. The relationship of EMT to growth factors was found in 1989. Transcriptional regulation of EMT was identified in 1994. Subsequent growth was stimulated by linkage to metastasis, organ fibrosis and stem cells. In 2011, there were more than 1100 primary papers published in the field.

### Meeting Format:

The format for the meeting is a 3+ day meeting with approximately 30 speakers. The keynote talk will be given on Wednesday evening by Dr. Robert Weinberg (Whitehead Institute, USA) on EMT and Cancer Stem Cells. On Thursday, Friday and Saturday we will have talks each day from both invited speakers and speakers selected from submitted abstracts. The emphasis on speaker selection is to include new findings and contributors to the field and we have avoided selecting speakers from recent meetings.

This reflects the vitality of the field and puts an emphasis on recent findings. Session topics include the Cell/molecular Biology of EMT, Developmental EMT, Non-transcriptional regulation of EMT, Organ fibrosis, Cancer and EMT, Mathematical modeling of EMT, Therapies and drug discovery and Cancer stem cells. The closing lecture will be presented by Mina Bissell (Lawrence Berkeley Labs, USA) on EMT in breast cancer. The meeting is at a venue where all of the attendees will stay together and meals will be scheduled so that there is a maximum opportunity for interaction and discussion.

#### History of the Meeting:

While EMT as a topic has been explored at sessions within specific meetings, there is no other meeting that regularly brings together the diversity of investigators with an interest in this subject. The first International EMT meeting was organized in Port Douglas, Australia in 2003. A second meeting was organized in Vancouver in 2005 and a third meeting was organized with EMBO support in Krakow, Poland in 2007. The meeting was held in Tucson, Arizona, USA in 2009 and in Singapore in 2011. The meeting rotates between Asia, North America and Europe as both a reflection of the growing interest in this topic around the world and to integrate the research efforts of the participants in a global collaboration.

Previous meetings produced meeting reports (in Cells, Tissues, Organs) and an edited book volume on the subject (Savagner, Rise and Fall of the Epithelium, Landes Bioscience).

## **PROGRAM**

### **Wednesday, 13th Nov**

12.00-14.00:  
Registration

14.15-14.30  
**Inauguration/ Wellcome address**  
M Angela Nieto

14.30-15.30  
**Plenary conference. Betty Hay's EMBO lecture**  
- Robert Weinberg (Whitehead Inst Cancer Res., Cambridge, USA). EMBO member

15.30-17.30

**Symposium I. Cell/Molecular Biology of EMT**

- Stephen Weiss (University of Michigan, Ann Arbor, USA)
- Eric Sahai (CRUK London Research Institute, UK)
- Fernando Martin-Belmonte (CBMSO, Madrid, Spain)

2 short talks

17: 45-19:45 **Poster session** (drinks and snacks)

**Thursday, 14th Nov**

8.30-10.40

**Symposium II. Developmental EMT**

- Maria Leptin (EMBO, Germany)
- Jordi Casanova (IRB, Barcelona, Spain)
- Darren Gilmour (EMBL, Heidelberg, Germany)

2 short talks

10.40-11.00: Coffee break

11.00-13.10

**Symposium III. Non-transcriptional regulation of EMT I.**

- Andrew P Feinberg (John Hopkins University, School Medicine, Baltimore, USA)
- Kuo-Juey Wu (National Yang-Ming University, Taiwan)

2 short talks

13.00-14.00. Lunch time (many local restaurants and snack bars around)

14.00-16.10

**Symposium IV. Non-transcriptional regulation of EMT II.**

- Maria Dominguez (Inst Neurociencias CSIC-UMH, Alicante, Spain)
- Gregory D Longmore (The BRIGHT Institute, St. Louis, USA)
- Binhua P. Zhou (University of Kentucky Markey Cancer Center)

2 short talks

16.10-16.30: Coffee break

16.30-18.40

**Symposium V. Organ Fibrosis and wound repair**

- Damian Medici (Brown University, Providence, USA )
- Hal Chapman (UCSF, USA)

- Cedric Blanpain (Universite Libre de Bruxelles, Belgium)

2 short talks

18.40-20.30 **Poster session** (drinks and snacks)

19.30-20.30: **TEMTIA Assembly**

## **Friday, 15th Nov**

8.30-10.40

### **Symposium VI. Cancer and EMT**

- Ben Z Stanger (University of Pennsylvania, Philadelphia, USA)
- Alberto Muñoz (IIB CSIC-UAM, Madrid, Spain)
- Stefano Piccolo (University of Padua, Italy)

2 short talks

10.40-11.00:

Coffee break

11.00-13.00

### **Symposium VII. Cancer and EMT**

- Jing Yang UCSD, USA
- David Lyden (Cornel University, New York, USA)

3 short talks

13.00-14.00. Lunch time (many local restaurants and snack bars around)

14.00-16.10

### **Symposium VIII. Cancer stem cells, reprogramming and EMT**

- Eduard Batlle (IRB, Barcelona)
- Duanqing Pei (Chinese Academy of Sciences, Guangzhou, China)
- Jeffrey L Wrana (Mount Sinai Hospital, Toronto, Canada)

2 short talks

16.10-16.30

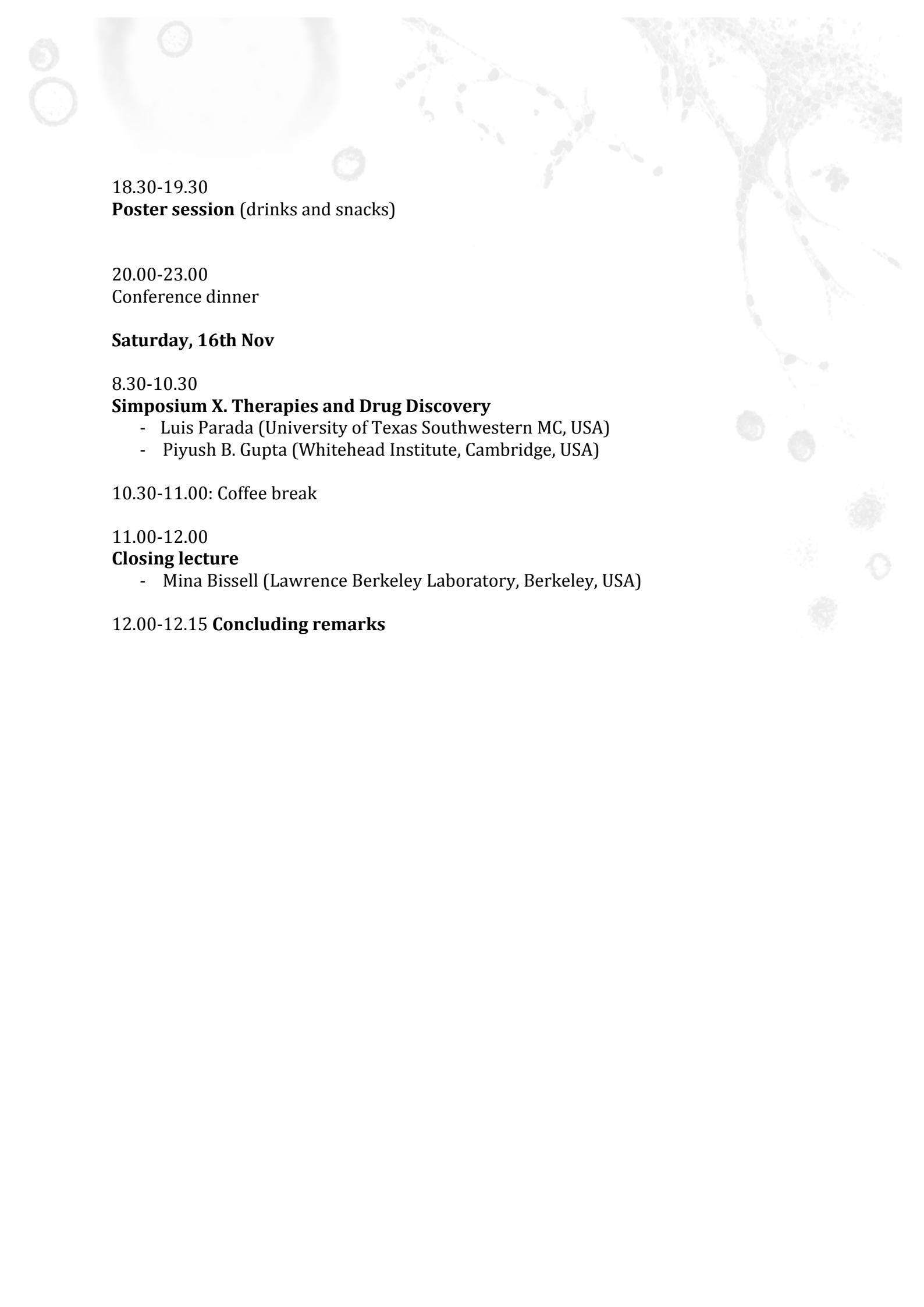
Coffee break

16.30-18.30

### **Symposium IX. Systems and Mathematical modelling of EMT**

- Josef Käs (University of Leipzig, Germany)
- Mark Chaplain (University of Dundee, UK)

3 short talks

A faint, artistic background image showing a microscopic view of cells. On the left, there are several circular cells with distinct nuclei. On the right, there are elongated, branching structures that resemble neurons or specialized cells with many small granules.

18.30-19.30

**Poster session** (drinks and snacks)

20.00-23.00

Conference dinner

**Saturday, 16th Nov**

8.30-10.30

**Symposium X. Therapies and Drug Discovery**

- Luis Parada (University of Texas Southwestern MC, USA)
- Piyush B. Gupta (Whitehead Institute, Cambridge, USA)

10.30-11.00: Coffee break

11.00-12.00

**Closing lecture**

- Mina Bissell (Lawrence Berkeley Laboratory, Berkeley, USA)

12.00-12.15 **Concluding remarks**