Over the past several years, the Hippo tumor suppressor pathway has emerged as a complex signaling network that has significant implications for our understanding of the molecular mechanisms of cancer development and stem cell biology. The main effectors of this pathway, YAP and TAZ, are transcriptional co-activators, which act as stemness factors and potent oncogenes. Recent studies have revealed that abnormal expression of components of the network can lead to cancer. Therefore, the pathway and its networking molecules are attractive targets for the development of cancer drugs and unconventional therapeutic interventions. Several paradoxes have emerged in the field in recent years, and fast progress in this field is due, in large part, to an active dialog between Drosophila geneticists and mammalian signalers. The overwhelming interest of researchers in the function of the Hippo pathway in stem cells and cancer prompted us to seek a larger forum. At the Keystone Symposia meeting on The Hippo Tumor Suppressor Network we aim to: (i) Define why YAP and TAZ function as either oncogenes or tumor suppressors; (ii) Identify membrane complexes, which activate the Hippo pathway in mammals, as the orthology with the fly receptors is not clear; (iii) Define targets for small molecule inhibitors and activators within pathway components based on structured modules, including WW, PDZ and SARAH domains. The meeting will be unique in bringing together Drosophila geneticists, basic and clinical cancer researchers, and the stem cell research community. We anticipate that this meeting will help to consolidate the emerging field and have an impact on development of new cancer therapies.

Session Topics:
- Membrane and Upstream Signals
- Hippo in Flies and Mammals: Orthology and Diversity
- Junctional Complexes and the Hippo Pathway
- Hippo Network in Organ Size Control
- Deregulation of Hippo Pathway in Cancer
- From Structure-Function Analysis to Details of the Mechanisms that Govern Hippo Signaling
**Junctional Complexes and the Hippo Pathway**

**TUESDAY, MAY 21**

**Poster Session 1**

**Hippo in Flies and Mammals: Orthology and Diversity**

*Yosef Shaoul*, Weizmann Institute of Science, Israel  
*Why Crowded Cell Cultures Are Radiosensitive: A Direct Cross-Talk between Hippo and DNA Damage Response Pathways*

*Hiroshi Sasaki*, Osaka University, Japan  
*Mechanisms of Position-Dependent Specification of Cell Fates in Preimplantation Embryos*

*Georgina C. Fletcher*, Cancer Research UK, UK  
*Short Talk: Positive Feedback and Mutual Antagonism Combine to Polarize Crumbs in the Drosophila Follicle Cell Epithelium*

*Bernhard Schermer*, University Hospital of Cologne, Germany  
*Short Talk: Nephrocystin Proteins Control Nuclear Translocation and Activation of YAP/TAZ Implicating Deregulated Hippo Signaling in the Pathogenesis of Cystic Kidney Disease and Related Ciliopathies*

**Hippo Network in Organ Size Control**

*Kenneth Irvine*, Rutgers University, USA  
*Giovanni Blandino*, Regina Elena Cancer Institute, Italy

*Junichiro Sadoshima*, Rutgers New Jersey Medical School, USA  
*Coordinated Regulation of Autophagy and Apoptosis by Mst1 in Cardiomyocytes*

*Georg A. Halder*, Katholieke Universiteit Leuven, Belgium  
*Mask Is Required for the Activity of the Hippo Pathway Effector Yki/YAP*

*Stefano Piccolo*, University of Padua, Italy  
*Regulation of TAZ and YAP by Wnt Signaling and Cell Shape*

*Diane D. Shao*, Harvard Medical School, USA  
*Short Talk: Genome-Scale Expression Screen Reveals Role for YAP1 in KRAS Oncogenic Addiction*

**Posters Session 2**

**WEDNESDAY, MAY 22**

**Deregulation of Hippo Pathway in Cancer**

*Georg A. Halder*, Katholieke Universiteit Leuven, Belgium  
*Duojia D.J. Pan*, HHMI/Johns Hopkins University School of Medicine, USA  
*Kieran F. Harvey*, Peter MacCallum Cancer Centre, Australia  
*Yael Aylon*, Weizmann Institute of Science, Israel  
*Giovanni Blandino*, Regina Elena Cancer Institute, Italy  
*Filippo G. Giancotti*, Memorial Sloan-Kettering Cancer Center, USA  
*Cathie M. Pfleger*, Mount Sinai School of Medicine, USA  
*Yiting Qiao*, Cancer Science Institute, Singapore

**Junctional Complexes and the Hippo Pathway**

*Filippo G. Giancotti*, Memorial Sloan-Kettering Cancer Center, USA  
*Sabrina Strano*, Regina Elena National Cancer Institute, Italy  
*Joseph L. Kissil*, The Scripps Research Institute, USA  
*Wanjin Hong*, Institute of Molecular and Cell Biology, Singapore

*Angiomotins as Substrates of Hippo Core Kinases*
From Structure-Function Analysis to Details of the Mechanisms that Govern Hippo Signaling

*Fernando D. Camargo, Boston Children's Hospital, USA
Xaralabos (Bob) Varelas, Boston University School of Medicine, USA
Crosstalk between the Hippo and TGFbeta Pathways Directs Tumor-Initiating Signals

Marius Sudol, National University of Singapore, Singapore
Hippo Pathway as the WW Domain-Mediated Network of Signals

Closing Keynote Address

Joseph Avruch, Massachusetts General Hospital, USA
The Mammalian Hippo Tumor Suppressor Pathway-Negative Regulation of the YAP Oncogene

THURSDAY, MAY 23

Departure