

Keystone Symposia: Role of Inflammation in Oncogenesis (Joint with meeting on: Molecular and Cellular Biology of Immune Escape in Cancer)

Sponsored by Pfizer Global Research & Development

February 7–12, 2010 • Keystone Resort • Keystone, Colorado • USA

Scientific Organizers: Nina Bhardwaj and Giorgio Trinchieri

PROGRAM FACULTY & TALKS

- Ana Carrizosa Anderson**, Harvard Medical School, USA
New Roles for TIM Family Members in Immune Regulation
- Frances R. Balkwill***, Queen Mary University of London, Barts and The London Medical School, UK
Inflammatory Cytokines and Autocrine Tumor-Promoting Networks
- Jiri Bartek**, Danish Cancer Society, Denmark
DNA Damage and Oncogenesis
- Nina Bhardwaj**, New York University School of Medicine, USA
Modulating Inflammatory Dendritic Cell Responses against Cancer
- Jacqueline Bromberg**, Memorial Sloan Kettering Cancer Center, USA
STATs and Cancer
- Lisa M. Coussens***, University of California, San Francisco, USA
Role of Inflammation in Tumor Progression
- Charles Drake**, Johns Hopkins University, USA
Th17 Cells in Tumors
- Gerard I. Evan***, University of California, San Francisco, USA
Immune Function and Angiogenesis in Myc-Mediated Tumor Formation
- Napoleone Ferrara**, Genentech, Inc., USA
VEGF and Regulation of Angiogenesis
- Thomas F. Gajewski***, University of Chicago, USA
T Cell Defects in the Cancer Context
- Curtis C. Harris**, National Institutes of Health, USA
Association of inflammation-related and microRNA gene expression with cancer specific mortality of colon adenocarcinoma
- Yinling Hu**, University of Texas MD Anderson Cancer Center, USA
IKKalpha in Skin Cancer
- Michael Karin***, University of California, San Diego, USA
NF-kappaB in Inflammation, Progression and Immune Response
- Claire E. Lewis***, University of Sheffield Medical School, UK
Macrophages as Key Mediators of Tumor Angiogenesis: Responses to Hypoxia
- Alberto Mantovani**, Istituto Clinico Humanitas, Italy
Tumor Microenvironment: Sculpting the Inflammatory Response during Tumor Formation
- Margarita Mueller**, German Cancer Research Center (DKFZ), Germany
Inflammation in Epithelial Skin Tumors
- Martin Oft**, SP-Biopharma, USA
The Switch from Tumor Promoting Inflammation into Tumor Immune Surveillance
- David H. Raulet**, University of California, Berkeley, USA
NKG2S and Spontaneous Malignancy
- Hans Schreiber***, University of Chicago, USA
Role of Tumor Stroma in Immune Escape in Cancer
- Robert D. Schreiber***, Washington University School of Medicine, USA
Co-Evolution of Immunoediting on Oncogenesis during Tumor Formation
- Mark J. Smyth**, Peter MacCallum Cancer Centre, Australia
Suppression and Innate Immune Surveillance
- Giorgio Trinchieri**, National Cancer Institute at Frederick, USA
Innate Resistance and Cancerogenesis
- Jürg Tschopp**, University of Lausanne, Switzerland
NLRs and Cancer
- Shannon Jennifer Turley**, Dana Farber Cancer Institute, Harvard Medical School, USA
Tolerance vs. Immunity: Novel Control Mechanisms
- Erwin F. Wagner***, Spanish National Cancer Research Centre, Spain
AP-1(Fos/Jun) in Inflammatory Disease and Cancer
- Hua E. Yu***, Beckman Research Institute, City of Hope, USA
The Role of STAT3 in Tumor Progression and Immune Defects in Cancer
- Laurence Zitvogel**, Institut Gustave Roussy, France
Natural Killer and Dendritic Cells in Cancer

*Keynote speaker. *Speaker in a joint session. Programs subject to change.
Current as of September 21, 2009



Cancer is characterized by accelerated and uncontrolled growth, dysregulation of apoptosis, invasion and metastasis. While genetic and epigenetic mechanisms may underlie transformation, the tumor microenvironment promotes the neoplastic process. Chronic inflammation and infection, in particular, are linked to the development of cancer. Examples include the association between inflammatory bowel disease and colon cancer, *Helicobacter pylori* infection with gastric cancer and HPV with cervical cancer. Recent studies have linked the innate immune system, through production of inflammatory cytokines, with cancer progression. Factors such as TNF α , IL-6 and TGF β , produced by macrophages and dendritic cells amongst other cells, enhance tumor growth, invasion, metastasis and angiogenesis, while simultaneously impairing anti-tumor immune mechanisms. There have been several advances in our understanding of the influences of inflammation on tumorigenesis. However, critical elements of the involved inflammatory pathways that modulate tumor progression still remain to be identified. The complex interrelationship between inflammatory vs. immune suppressive cytokines and their effects on the neoplastic process remain to be defined. The association between DNA damage and inflammation and the link between pathogen-associated molecular patterns (PAMPs) and novel pattern recognition molecules (TLRs and NOD like receptors) in driving tumor development require further characterization. How cancer-associated inflammation might actively dysregulate the innate immune system, in particular of dendritic cell, NK and NKT cell anti-tumor function, is also an area of interest and intense speculation. This meeting will focus specifically on mechanisms of inflammation-induced carcinogenesis, and will bring together investigators with diverse interests and expertise – immunology, signal transduction, cancer biology and therapeutics. It is anticipated that the pairing with the concurrent meeting on Immune Escape in Cancer will attract a large body of scientists who share a common interest in cancer pathogenesis, inflammation and mechanisms underlying immune evasion. The goal of the meeting is to enhance discussion, foster collaborations, report on new paradigms and ultimately to develop approaches that will modulate inflammation-associated tumor progression.

PROGRAM PLENARY SESSIONS & WORKSHOPS:

- Tumor Microenvironment and Immune Escape (Joint)
- Inflammation in the Tumor Microenvironment
- Inflammation and Carcinogenesis
- Workshop: Inflammation and Carcinogenesis
- Innate Resistance and Tumor Escape
- Transcriptional Regulation of Immune Escape (Joint)
- Innate Receptors, Cancer and Inflammation
- Dendritic Cells and Macrophages in Cancer
- Cytokines in the Tumor Microenvironment

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