

An AACR Special Conference on

Cell Death Mechanisms and Cancer Therapy

Conference Program

Monday, February 1

7:00 p.m.-9:00 p.m. **Opening Session**

Keynote Presentations

7:00 **The desirable death of the cancer cell:
Immunogenic cell death for optimal chemotherapy**

Guido Kroemer

INSERM, Institut Gustave-Roussy, Villejuif, France

8:00 **From novel target to novel therapeutic:
Compressing the timeline from discovery to the
clinic**

James H. Doroshow

National Cancer Institute, Bethesda, MD

9:00 p.m.-10:30 p.m. **Opening Dessert Reception**

Tuesday, February 2

7:30 a.m.-8:00 a.m. **Continental Breakfast**

8:00 a.m.-10:00 a.m. **Session 1:
The Canonical Pathways of Cell Death Signaling**
*Chairperson: Douglas R. Green, St. Jude Children's Research
Hospital, Memphis, TN*

8:00 **Ubiquitin, Mcl-1, and cell survival**
Vishva M. Dixit, Genentech, Inc., South San Francisco, CA

8:30 **Towards resolving the conflicting models of Bcl-2 family regulation**
Douglas R. Green

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9:00 **Death's other face: Dissecting and targeting the BAX activation pathway**

Loren D. Walensky, Dana-Farber Cancer Institute, Boston, MA

9:30 **Targeting p53 independent cell death pathways for cancer therapy***

Christopher J. Kemp, Fred Hutchinson Cancer Research Center, Seattle, WA

9:45 **Autophagic cell death regulation by a cyclin E fragment***

Alex Almasan, The Cleveland Clinic, Cleveland, OH

10:00 a.m.-10:30 a.m. Refreshment Break

10:30 a.m.-12:30 p.m. Session 2:

Novel Cell Death and Survival Mechanisms

Chairperson: Junying Yuan, Harvard Medical School, Boston, MA

10:30 **A direct role for tRNA in regulating apoptosis**

Xiaolu Yang, University of Pennsylvania, Philadelphia, PA

11:00 **Protein N- α -acetylation couples metabolism and apoptosis**

Junying Yuan, Harvard Medical School, Boston, MA

11:30 **Metabolic alterations that promote tumorigenesis and tissue degeneration**

Michael Karin, University of California, San Diego, CA

12:00 **Degradation of p73 by E3 ubiquitin ligases and development of ITCH inhibitors**

Gerry Melino, University of Rome, Rome, Italy

12:30 p.m.-2:30 p.m. Lunch

2:30 p.m.-4:30 p.m. Session 3:

Metabolism, Cancer, and Cell Fate

Chairperson: Tak W. Mak, University of Toronto, Toronto, ON, Canada

2:30 **PI3-kinase and cancer cell metabolism**

Lewis C. Cantley, Beth Israel Deaconess Medical Center, Boston, MA

3:00 **Lymphocytic cell death mechanisms during an anti-tumor response**

Tak W. Mak, University of Toronto, Toronto, ON, Canada

3:30 **p53, ARF, and autophagy**

Maureen E. Murphy, Fox Chase Cancer Center, Philadelphia, PA

4:00 **Autophagy regulation of the way tumor cells die: Does it make a difference?***

Andrew M. Thorburn, University of Colorado Health Sciences Center, Aurora, CO

4:15 **Targeting IAPs: NF- κ B signaling regulates IAP antagonist stimulated death pathways***

Domagoj Vucic, Genentech, Inc., South San Francisco, CA

4:30 p.m.-6:30 p.m. Poster Session A and Refreshments

Wednesday, February 3

7:30 a.m.-8:00 a.m. Continental Breakfast

8:00 a.m.-10:00 a.m. Session 4:

Cell Death and Resistance to Therapy

Chairperson: John C. Reed, Burnham Institute for Medical Research, La Jolla, CA

8:00 **A day in the life of Xiap**

John C. Reed, Burnham Institute for Medical Research, La Jolla, CA

8:30 **Small molecules and targets to promote death receptor signaling in resistant cancers**

Wafik S. El-Deiry, University of Pennsylvania School of Medicine, Philadelphia, PA

9:00 **Cell death and the leukemia microenvironment**

Michael Andreeff, UT M. D. Anderson Cancer Center, Houston, TX

9:30 **Mutational analysis of the melanoma genome***

Yardena Samuels, National Human Genome Research Institute, National Institutes of Health, Bethesda, MD

9:45 **Breast cancer cell protection from chemotherapy-induced apoptosis via Cas overexpression and activation of c-Src and PI3K signaling pathways***

Brianne Ray, University of Virginia, Charlottesville, VA

10:00 a.m.-10:30 a.m. Refreshment Break

10:30 a.m.-12:30 p.m. Session 5:

Avoidance of Cell Death: Autophagy and Senescence

Chairperson: Eileen P. White, The Cancer Institute of New Jersey and Rutgers University, New Brunswick, NJ

10:30 Constructing and deconstructing cancer using mouse models and RNAi
Scott W. Lowe, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY

11:00 Autophagy in cellular senescence
Masashi Narita, Cancer Research UK Cambridge Research Institute, Cambridge, England

11:30 Targeting mTOR- and autophagy-mediated survival in renal cancer
Eileen P. White, The Cancer Institute of New Jersey and Rutgers University, New Brunswick, NJ

12:00 Autophagy as a survival response to sigma1 receptor ligand-induced endoplasmic reticulum stress*
Felix J. Kim, Memorial Sloan-Kettering Cancer Center, New York, NY

12:15 p53 mediated senescence impairs the induction of apoptosis and tumor response to chemotherapy in a mouse model of breast cancer*
James G. Jackson, UT M. D. Anderson Cancer Center, Houston, TX

12:30 p.m.-2:30 p.m. Poster Session B and Buffet Lunch

2:30 p.m.-3:30 p.m. Special Session: NIH Funding Opportunities

Co-Chairpersons: Suresh Mohla, National Cancer Institute, Bethesda, MD and Mary Wolpert-DeFilippes, National Cancer Institute, Bethesda, MD

Funding trends and opportunities, much like the research they support, continually evolve at the National Cancer Institute. This special session will present the new review paradigms being practiced in the Center for Scientific Review and NCI, as well as current NCI paylines. Drs. Mohla and Wolpert-DeFilippes will discuss areas of research supported in the Division of Cancer Biology and the Division of Cancer Treatment and Diagnosis, as well as new funding opportunities. The latter half of the session will focus on discussion and Q & A with the audience.

- 3:30 p.m.-5:30 p.m. Session 6:
Death in the Tumor Microenvironment**
Chairperson: Wafik S. El-Deiry, University of Pennsylvania School of Medicine, Philadelphia, PA
- 3:30 Role of the tumor microenvironment in response to therapy**
Zena Werb, University of California, San Francisco, CA
- 4:00 The SMRT way to resist death**
Valerie M. Weaver, University of California, San Francisco, CA
- 4:30 Functions of wild-type and mutant p53**
Karen Vousden, The Beatson Institute for Cancer Research, Glasgow, United Kingdom
- 5:00 Development of a novel chemo/immunotherapeutic strategy to eradicate established solid tumors by combining histone deacetylase inhibitors and immunostimulatory monoclonal antibodies***
Ricky W. Johnstone, Peter MacCallum Cancer Center, East Melbourne, Australia
- 5:15 Regulation of ceramide synthase-mediated crypt epithelial cell apoptosis by DNA damage repair enzymes***
Jimmy A. Rotolo, Memorial Sloan-Kettering Cancer Center, New York, NY
- 5:45 p.m.-6:30 p.m. Special Lecture**
Causes and consequences of microRNA dysregulation in cancer
Carlo Croce, Ohio State University Comprehensive Cancer Center, Columbus, OH

Thursday, February 4

7:00 a.m.-8:00 a.m. Continental Breakfast

- 8:00 a.m.-10:00 a.m. Session 7:
Cell Death Targeted Therapies in the Clinic I**
Chairperson: Simone Fulda, Ulm University, Ulm, Germany
- 8:00 Development of mapatumumab, a fully human agonistic monoclonal antibody which targets and activates the tumor necrosis factor apoptosis-inducing ligand receptor-1 (TRAIL-R1)**
Gillies Gallant, Human Genome Sciences, Inc., Rockville, MD

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- 8:30** **Targeting cancer with proapoptotic receptor agonists**
Avi Ashkenazi, Genentech, Inc., South San Francisco, CA
- 9:00** **Targeting IAP proteins in cancers: From mechanisms to therapeutic application**
Simone Fulda, Ulm University, Ulm, Germany
- 9:30** **FoxO family of tumor suppressors in oncogene-induced evasion of apoptosis***
Roya Khosravi-Far, Beth Israel Deaconess Medical Center, Boston, MA
- 9:45** **Novel, small molecule MIF antagonists induce cell death in ovarian cancer cell lines in vitro***
Guy Nadel, Yale University, New Haven, CT
- 10:00 a.m.-10:15 a.m. Refreshment Break**
- 10:15 a.m.-12:15 p.m. Session 8: Cell Death Targeted Therapies in the Clinic II**
Chairperson: Alex A. Adjei, Roswell Park Cancer Institute, Buffalo, NY
- 10:15** **Targeting cell death in the clinic: The promise and the challenge**
Alex A. Adjei, Roswell Park Cancer Institute, Buffalo, NY
- 10:45** **Therapeutic targeting of inhibitor of apoptosis proteins**
Leigh S. Zawal, Novartis Institute for BioMedical Research, Inc., Cambridge, MA
- 11:15** **Targeting mitochondrial Hsp90 for cancer therapy**
Dario C. Altieri, University of Massachusetts Medical School, Worcester, MA
- 11:45** **Identification of a new proapoptotic transcript: *air* (apoptosis-induced regulator). Functional and structural studies***
Morena d'Avenia, University of Salerno, Salerno, Italy
- 12:00** **Inducing apoptosis in triple-negative breast cancers by targeting the MYC oncogene pathway***
Dai Horiuchi, University of California, San Francisco, CA
- 12:15 p.m. Closing Comments and Departure**

*Indicates proffered presentation from selected abstracts