The aim of the Conference is to discuss the importance of dysregulation of cell cycle/cell death programs in the pathogenesis of human disease and to use modulators of these programs as therapeutic tools.

**June 8, 2016**

12.00-13.45 – Registration  
13.45 – 14.00 Welcome to the Conference

**Session 1: Cell Cycle and genome integrity**  
Chair: Boris Zhivotovsky (Karolinska Institutet, Stockholm)

14.00 – 14.30 Paul Nurse (The Francis Crick Institute, UK): *Controlling the cell cycle*  
14.30 – 15.00 Judith Campisi (Buck Institute for Research on Aging, USA): *Cellular senescence: Getting out of cycle*  
15.00 – 15.30 Jiri Bartek (Karolinska Institutet, Sweden):  
*Genome integrity maintenance: Mechanisms and relevance for cancer development and treatment*

**15.30 – 16.00 – Coffee**

**Session 2: Cell Cycle and genome integrity**  
Chair: Maria Masucci (Karolinska Institutet, Sweden)

16.00 - 16.30 Tim Hunt (The Francis Crick Institute, UK):  
*Switches and Latches: The control of entry into mitosis*  
16.30 – 17.00 Camilla Sjögren (Karolinska Institutet, Sweden):  
*Chromosome dynamics during the cell cycle – linked by DNA supercoiling?*  
17.00 - 17.30 Thanos D. Halazonetis (Geneva University, Switzerland):  
*Role of oncogene-induced DNA replication stress in cancer development and therapy*  
17.30 – 18.15 **Keynote lecture**: Stephen J. Elledge (Harvard Medical School, USA): *Identification of new components of DDR-induced cellular senescence*

**18.30 – Reception**
The Cell Cycle and Cell Death in Disease

June 9, 2016

Session 3: Cell Death mechanisms
Chair: Richard Lockshin (Queens College, City University of New York, USA)

09.00 – 09.30 Xiaodong Wang (National Institute of Biological Sciences, China):
Mitochondrial pathways of programmed cell death
09.30 – 10.00 Shigekazu Nagata (Osaka University, Japan):
Exposure of phosphatidylserine to the cell surface
10.00 – 10.30 Adi Kimchi (Weizmann Institute of Sciences, Israel):
Monitoring the dynamics of protein-protein interactions in cells during the process of autophagy and apoptosis: from basic science to a therapeutic vision

10.30 - 11.00 – Coffee

Session 4: Cell Death mechanisms
Chair: Daniel Klionsky (University of Michigan, USA)

11.00 - 11.30 Mauro Piacentini (University of Rome “Tor Vergata”, Italy):
Amra1 a key regulator of autophagy and its implications in HIV pathogenesis
11.30 – 12.00 Boris Zhivotovsky (Karolinska Institutet, Sweden):
Autophagy regulation in cancer cells in response to prolonged starvation
12.00 – 12.30 Aaron Chiecanover (Technion – Israel Institute of Technology, Israel):
Monoubiquitination as a Novel Proteasomal Degradation Signal: Mechanistic and Biomedical Implications

12.30 - 14.00 – Lunch

Session 5: Cell death and cancer therapy
Chair: Bengt Westermark (Uppsala University, Sweden)

14.00 – 14.45 Keynote lecture: Maria Blasco (CNIO, Spain):
Targeting telomeres in cancer
14.45 – 15.15 Scott Lowe (Memorial Sloan Kettering Cancer Center, USA):
Tumor suppression
15.15 – 15.45 Douglas Hanahan (Swiss Institute for Experimental Cancer Research, Switzerland):
Circumventing adaptive resistance to cancer therapies by co-targeting cancer hallmarks: cases studies combining inducers of cell death with inhibitors of tumor angiogenesis
The Cell Cycle and Cell Death in Disease

15.45 – 16.15 - Coffee

**Session 6: Cell death and cancer therapy**  
Chair: Marie Arsenian-Henriksson (Karolinska Institutet, Sweden)

16.15 – 16.45 Antony Letai (Dana-Farber Cancer Institute, Harvard Medical School, USA):  
*Matching the right drugs to the right patients in cancer via mitochondria*

16.45 – 17.15 Klaus-Michael Debatin (Ulm University, Germany):  
*Targeting tumor stem cells in preclinical models of leukemia and glioblastoma by modulators of cell death and survival pathways*

17.15 – 17.45 Thomas Helleday (Karolinska Institutet, Sweden):  
*Molecular mechanism how oxidative DNA damage kills cells*

19.00 Dinner

**June 10, 2016**

**Session 7: Immunosurveillance**  
Chair: Rune Toftgård (Karolinska Institutet, Sweden)

09.00 – 09.30 Guido Kroemer (Université Paris Descartes, France):  
*Immunogenic cell death in anticancer immunosurveillance*

09.30 – 10.00 Patrizia Agostinis (Catholic University, Belgium):  
*Harnessing endoplasmic reticulum stress for immunotherapy against cancer; from translational medicine to molecular mediators*

10.00 – 10.30 Peter Krammer (DKFZ, Germany):  
*Receptor mediated apoptosis and annexin induced self-tolerance*

10.30 - 11.00 – Coffee

**Session 8: Cell death and inflammation**  
Chair: Helena Jernberg-Wiklund (Uppsala University, Sweden)

11.00 - 11.45 **Keynote lecture:** Vishva Dixit (Genentech, USA):  
*Gasdermin-D mediates LPS-induced non-canonical inflammasome signaling downstream of caspase-11*

11.30 – 12.00 Michael Karin (University of California, San Diego, USA):  
*The autophagy receptor p62/SQSTM1 promotes carcinogenesis but suppresses Inflammation*

12.00 – 12.30 Junying Yuan (Harvard Medical School, USA):  
*Regulation of Necroptosis and Inflammation by RIPK1*

12.30 - 14.00 – Lunch
The Cell Cycle and Cell Death in Disease

Session 9: Cell death and inflammation
Chair: Patrik Ernfors (Karolinska Institutet, Sweden)

14.00 – 14.30 Hans-Uwe Simon (University of Bern, Switzerland):
Neutrophils and eosinophils undergo necroptosis under inflammatory conditions

14.30 – 15.00 Marie-Lise Gougeon (Pasteur Institute, France):
Innate sensing of viral infections: The Janus face of dendritic cells and contribution of HMGB1

Session 10: p53-family and cell death
Chair: Thierry Soussi (Karolinska Institute, Sweden)

15.00 – 15.30 Gerry Melino (University of Rome “Tor Vergata”, Italy):
The p53 family in cancer biology

15.30 – 16.00 - Coffee

16.00 – 16.30 David Lane (Karolinska Institutet, Sweden):
The expression and regulation of mutant and wild type p53 protein in normal and tumor epithelia

16.30 – 17.00 Xin Lu (Ludwig Institute, UK):
From cell death to sudden death: a p53/iASPP story

17.00 – 17.30 Andreas Strasser (Walter and Elize Hall Institute, Australia):
How does the tumor suppressor p53 protect us against cancer development?

17.30 – 18.00 Klas Wiman (Karolinska Institutet, Sweden):
Targeting mutant p53 for efficient cancer therapy

19.00 Dinner

June 11, 2016
Session 11 Cell death and neurodegeneration
Chair: Pierluigi Nicotera (DZNE, Germany)

09.00 – 09.30 David C. Rubinsztein (Cambridge University, UK):
Autophagy, a guardian against neurodegeneration.

09.30 – 10.00 Bertrand Joseph (Karolinska Institutet, Sweden):
Guilt by association, caspase-3 regulates microglia polarization

10.00 – 10.30 Michael Heneka (DZNE, Germany):
Innate immune activation in Alzheimer’s disease

10.30 – 11.00 – Coffee
The Cell Cycle and Cell Death in Disease

Session 12: Tumor metabolism and treatment
Chair: Klas Wiman (Karolinska Institute, Sweden)

11.00 – 11.30 Tak Mak (University of Ontario, Canada):
   Fire and water are good servants but bad masters
11.30 – 12.00 Brent R. Stockwell (Columbia University, USA):
   Ferroptosis: Death by lipid peroxidation and regulation by metabolism
12.00 – 12.45 Keynote lecture: Craig B. Thompson (Memorial Sloan Kettering Cancer Center, USA):
   Metabolic regulation of cell survival and proliferation

12.45 – 13.00 – Concluding remarks
13.00 – End of the Conference