7:30am Breakfast

**Introduction**

8:00am **Catriona Jamieson, MD, PhD**
Chief, Division of Regenerative Medicine; Director, Moores Cancer Center Stem Cell Research Program, UC San Diego

**Session 1: Regenerative Medicine**

8:10am **Chaired by: Robert Signer, PhD**
Assistant Professor, Division of Regenerative Medicine, UC San Diego

8:15am **Keynote Speaker:**
Jane Visvader, PhD
Professor & Joint Division Head, Walter & Eliza Hall Institute for Medical Research

**Mapping the Epithelial Hierarchy to Understand the Origins of Breast Cancer**

8:55am **Clock-like & Mosaic Mutational Processes in Human Somatic Cells**
Ludmil Alexandrov, MPhil, PhD
Assistant Professor, Department of Cellular & Molecular Medicine, UC San Diego

9:25am Detection and Targeting of Malignant Progenitor Reprogramming
**Catriona Jamieson, MD, PhD**
Chief, Division of Regenerative Medicine; Director, Moores Cancer Center Stem Cell Research Program, UC San Diego

9:55am Break

**Session 2: Cell Therapy**

10:10am **Chaired by: Dan Kaufman, MD, PhD**
Professor, Division of Regenerative Medicine, Director of Cell Therapy, UC San Diego

10:15am From Human Pluripotent Stem Cells to Engineered T Cells
**Gay Crooks, MD**
Professor, Pathology and Laboratory Medicine & Professor, Pediatrics, Director, Cancer and Stem Cell Biology Program, UC Los Angeles

10:45am Turbulence Activates Platelet Biogenesis to Enable Clinical Scale Manufacturing from Human Induced Pluripotent Stem Cells
**Koji Eto, MD, PhD**
Professor of Medicine, Deputy Director of CIRA, Kyoto University

11:15am Trends in International Regulation of Stem Cell Clinical Translation and Development
**Douglas Sipp**
Adjunct Professor, Keio University Research Specialist, RIKEN Center for Developmental Biology

11:45pm Lunch

**Session 3: Panel Discussion Stem Cell Clinical Trials**

12:45pm **Moderator:** Patty Maysent, MBA, MPH
CEO, UC San Diego Health

**Catriona Jamieson, MD, PhD** - UC San Diego

**John Adams, MD** - UC San Diego

**Maria Millan, MD** - CIRM

**Sheila Chari, PhD** - Cell Stem Cell

**Joseph Ciacci, MD** - UC San Diego

**John Hood, PhD** - Impact Biomedicines

1:40pm **Andrew and Esther Schorr** - Patient Advocates

**Session 4: Cancer Stem Cells**

1:50pm **Chaired by: Leslie Crews, PhD**
Assistant Adjunct Professor, Division of Regenerative Medicine, UC San Diego

1:55pm Mapping of the Bone Marrow Microenvironment at a Single Cell Resolution
**Iannis Aifantis, PhD**
Chair & Professor, Department of Pathology, NYU School of Medicine

2:25pm Tumor Heterogeneity in Small Cell Lung Cancer and Response to Therapy
**Julien Sage, PhD**
Professor, Pediatrics - Hematology & Oncology & Professor, Genetics, Stanford University School of Medicine

2:55pm Break

3:10pm Disorders of Histone Methylation in Hematological Malignancy
**Jonathan Licht, MD**
Director, University of Florida Health Cancer Center

3:40pm Genetic and Epigenetic Roles for APOBEC Enzymes in Cancer
**Reuben Harris, PhD**
Professor of Biophysics, Department of Biochemistry and Molecular Chemistry
Associate Director, Institute for Molecular Virology, University of Minnesota

**Session 5: Immunotherapy**

4:10pm **Chaired by: Scott Lippman, MD**
Senior Associate Dean and Associate Vice Chancellor for Cancer Research and Care, Moores Cancer Center

4:20pm Developing and Translating Novel Immunotherapies for Prostate Cancer
**Christina Jamieson, PhD**
Associate Professor of Surgery & Urology, UC San Diego

4:50pm Killing Cancer Cells
**Jeremy Rich, MD, MHS, MBA**
Professor, Division of Regenerative Medicine, Director, Neuro-Oncology & Brain Tumor Institute, UC San Diego

5:20pm **Keynote Speaker: Carl June, MD**
Professor of Immunotherapy, Department of Pathology & Laboratory Medicine, UPenn
Engineering T Cells for Cancer

5:50pm Symposium Closing Remarks

6:00pm Networking Cocktail Hour

6:10pm Bella Vista Caffe
West Terrace of Sanford Consortium
The Division of Regenerative Medicine would like to thank the following organizations for their help in making our Annual Symposium a success.

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