



Conference Cochairs:

Ravi Majeti, Stanford University, Stanford, CA

Maria (Ken) Figueroa, University of Miami, Miami, FL

Ruben A. Mesa, Atrium Health Wake Forest Baptist Comprehensive Cancer Center, Winston-Salem, NC

[R] – remote presentation

* - short-talk from proffered abstract

MONDAY, JANUARY 23

Registration

3:00 pm-8:00 pm | Zilker Ballroom Foyer

Welcome and Keynote Lectures

5:00 pm-6:30 pm | Zilker Ballroom 1

- | | |
|-----------|--|
| 5:00-5:05 | Welcome and Introduction of Keynote Speaker
Ravi Majeti, Stanford University, Stanford, CA |
| 5:05-5:35 | Understanding and targeting altered RNA splicing in myeloid malignancies
Omar Abdel-Wahab, Memorial Sloan Kettering Cancer Center, New York, NY |
| 5:35-5:45 | Discussion / Q&A |
| 5:45-5:50 | Introduction of Keynote Speaker
Maria (Ken) Figueroa, University of Miami, Miami, FL |
| 5:50-6:20 | Germline predisposition to myeloid malignancies
Lucy A. Godley, University of Chicago, Chicago, IL |
| 6:20-6:30 | Discussion / Q&A |

Opening Reception

6:45 pm-8:30 pm | Zilker Ballroom Foyer and Terrace

TUESDAY, JANUARY 24

Continental Breakfast

7:00 am-8:00 am | Zilker Ballroom 2

Plenary Session 1: Apoptosis

8:00 am-9:35 am | Zilker Ballroom 1

Session Chair: Courtney D. DiNardo, The University of Texas MD Anderson Cancer Center, Houston, TX

- 8:00-8:05 Introduction
Courtney D. DiNardo, The University of Texas MD Anderson Cancer Center, Houston, TX
- 8:05-8:25 Inducing apoptosis in leukemia stem cells by targeting metabolism
Courtney L. Jones, Princess Margaret Cancer Centre, University Health Network, Toronto, ON, Canada
- 8:25-8:30 Discussion / Q&A
- 8:30-8:50 Understanding and preventing resistance to BCL2 inhibitor therapy in AML
Courtney D. DiNardo, The University of Texas MD Anderson Cancer Center, Houston, TX
- 8:50-8:55 Discussion / Q&A
- 8:55-9:15 Understanding differential addiction to anti-apoptotic BCL-2 family towards developing novel treatments in hematological malignancies
Zaneta Nikolovska-Coleska, University of Michigan, Ann Arbor, MI
- 9:15-9:20 Discussion / Q&A
- 9:20-9:35 Panel Discussion

Break

9:35 am-9:55 am | Zilker Ballroom Foyer

Plenary Session 2: Stem Cells

9:55 am-11:45 am | Zilker Ballroom 1

Session Chair: Ravi Majeti, Stanford University, Stanford, CA

- 9:55-10:00 Introduction
Ravi Majeti, Stanford University, Stanford, CA
- 10:00-10:20 Approaches to targeting leukemia stem cells
Monica L. Guzman, Weill Cornell Medicine, New York, NY
- 10:20-10:25 Discussion / Q&A
- 10:25-10:45 Mapping the cellular origins of pediatric leukemia
Eric R. Lechman, University of Pittsburgh, Pittsburgh, PA
- 10:45-10:50 Discussion / Q&A



- 10:50-11:10 Stem cells in human AML
Ravi Majeti, Stanford University, Stanford, CA
- 11:10-11:15 Discussion / Q&A
- 11:15-11:25 Novel anti-leukemia activity of the IRE1-XBP1 signaling pathway in hematopoietic stem and progenitor cells *
Stanley Adoro, National Cancer Institute, Bethesda, MD
- 11:25-11:30 Discussion / Q&A
- 11:30-11:45 Panel Discussion

Break

11:45 am-12:00 pm | Zilker Ballroom Foyer

Plenary Session 3: Epigenetics

12:00 pm-1:30 pm | Zilker Ballroom 1

Session Chair: Maria (Ken) Figueroa, University of Miami, Miami, FL

- 12:00-12:05 Introduction
Maria (Ken) Figueroa, University of Miami, Miami, FL
- 12:05-12:20 Epigenomic landscapes of MDS
Maria (Ken) Figueroa, University of Miami, Miami, FL
- 12:20-12:25 Discussion / Q&A
- 12:25-12:45 Enhancing TET function for the treatment of myeloid malignancies
Luisa Cimmino, University of Miami Miller School of Medicine, Miami, FL
- 12:45-12:50 Discussion / Q&A
- 12:50-1:10 Targeting IDH-mutant myeloid malignancies by disabling metabolic dependencies
Jian Xu, UT Southwestern Medical Center, Dallas, TX
- 1:10-1:15 Discussion / Q&A
- 1:15-1:30 Panel Discussion

Lunch on own / Free time

1:30 pm-3:15 pm



Plenary Session 4: Niche/Microenvironment

3:15 pm-5:15 pm | Zilker Ballroom 1

Session Chair: Iannis Aifantis, NYU Langone Medical Center, New York, NY

- | | |
|-----------|---|
| 3:15-3:20 | Introduction
Iannis Aifantis, NYU Langone Medical Center, New York, NY |
| 3:20-3:40 | [R] - Dissecting the cross-talk between normal, leukemic stem cells, and the bone marrow microenvironment
Dominique Bonnet, The Francis Crick Institute, London, England |
| 3:40-3:45 | Discussion / Q&A |
| 3:45-4:05 | [R] - MSCs boost AML bioenergetics and facilitate escape from chemotherapy
Simón Méndez-Ferrer, University of Cambridge, Cambridge, England |
| 4:05-4:10 | Discussion / Q&A |
| 4:10-4:30 | Anatomy of normal and leukemic hematopoiesis in the bone marrow
Daniel Lucas, Cincinnati Children's Hospital Medical Center, Cincinnati, OH |
| 4:30-4:35 | Discussion / Q&A |
| 4:35-4:55 | Interactions with the immune microenvironment in MDS and AML
Iannis Aifantis, NYU Langone Medical Center, New York, NY |
| 4:55-5:00 | Discussion / Q&A |
| 5:00-5:15 | Panel Discussion |

Break

5:15 pm-5:30 pm | Zilker Ballroom Foyer

Plenary Session 5: Splicing Mutations

5:30 pm-7:05 pm | Zilker Ballroom 1

Session Chair: Esther A. Obeng, St. Jude Children's Research Hospital, Memphis, TN

- | | |
|-----------|---|
| 5:30-5:35 | Introduction
Esther A. Obeng, St. Jude Children's Research Hospital, Memphis, TN |
| 5:35-5:55 | Targeting the Rbm39 splicing factor in myeloid leukemias and bone marrow transplantation
Sydney X. Lu, Stanford University School of Medicine, Palo Alto, CA |
| 5:55-6:00 | Discussion / Q&A |



- 6:00-6:20 Targeting SF3B1 in myelodysplastic syndromes
Esther A. Obeng, St. Jude Children's Research Hospital, Memphis, TN
- 6:20-6:25 Discussion / Q&A
- 6:25-6:45 Genetic determinants of clonal expansion rate in pre-malignant HSCs
Siddhartha Jaiswal, Stanford University, Stanford, CA
- 6:45-6:50 Discussion / Q&A
- 6:50-7:05 Panel Discussion

Poster Session / Reception

7:15 pm-9:30 pm | Zilker Ballroom 3

WEDNESDAY, JANUARY 25

Continental Breakfast

7:00 am-8:00 am | Zilker Ballroom 2

Plenary Session 6: Measurable Residual Disease

8:00 am-9:35 am | Zilker Ballroom 1

Session Chair: Christopher S. Hourigan, National Heart, Lung and Blood Institute, Bethesda, MD

- 8:00-8:05 Introduction
Christopher S. Hourigan, National Heart, Lung and Blood Institute, Bethesda, MD
- 8:05-8:25 Measurable residual disease in AML: A roadmap for evidence and implementation
Christopher S. Hourigan, National Heart, Lung and Blood Institute, Bethesda, MD
- 8:25-8:30 Discussion / Q&A
- 8:30-8:50 Measurable residual disease assessment for lower intensity therapy in AML
Farhad Ravandi-Kashani, The University of Texas MD Anderson Cancer Center,
Houston, TX
- 8:50-8:55 Discussion / Q&A
- 8:55-9:15 Targeting senescence-like resilient AML cells to reduce measurable/minimal residual
disease
Cihangir Duy, Fox Chase Cancer Center, Philadelphia, PA
- 9:15-9:20 Discussion / Q&A
- 9:20-9:35 Panel Discussion



Break

9:35 am-9:55 am | Zilker Ballroom Foyer

Plenary Session 7: Inflammation

9:55 am-11:45 am | Zilker Ballroom 1

Session Chair: Ruben A. Mesa, Atrium Health Wake Forest Baptist Comprehensive Cancer Center, Winston-Salem, NC

- | | |
|-------------|---|
| 9:55-10:00 | Introduction
Ruben A. Mesa, Atrium Health Wake Forest Baptist Comprehensive Cancer Center, Winston-Salem, NC |
| 10:00-10:20 | Inflammation and the MPNs: From phenotype to therapy
Ruben A. Mesa, Atrium Health Wake Forest Baptist Comprehensive Cancer Center, Winston-Salem, NC |
| 10:20-10:25 | Discussion / Q&A |
| 10:25-10:45 | Age- and gut injury-induced accumulation of a bacterial metabolite promotes expansion of leukemic cells
Daniel T. Starczynowski, Cincinnati Children's Hospital Medical Center, Cincinnati, OH |
| 10:45-10:50 | Discussion / Q&A |
| 10:50-11:10 | Fish and CHIPs: Dissecting the mechanisms of clonal disorders using cellular barcoding
Serine Avagyan, University of California, San Francisco, CA |
| 11:10-11:15 | Discussion / Q&A |
| 11:15-11:25 | RSK1 targeting impedes oncogenic driver and inflammatory cytokine signaling to attenuate myeloid neoplasms *
Tim Kong, Washington University in St. Louis School of Medicine, St. Louis, MO |
| 11:25-11:30 | Discussion / Q&A |
| 11:30-11:45 | Panel Discussion |

Break

11:45 am-12:00 pm | Zilker Ballroom Foyer



Plenary Session 8: Cell and Immune Targeting in Myeloid Malignancies

12:00 pm-1:25 pm | Zilker Ballroom 1

Session Chair: Paresh Vyas, University of Oxford, Oxford, United Kingdom

- | | |
|-------------|---|
| 12:00-12:05 | Introduction
Paresh Vyas, University of Oxford, Oxford, United Kingdom |
| 12:05-12:25 | Graft versus Leukemia (GvL): Identification and characterization of alloreactive antigens and cognate T cell responses in acute myeloid leukemia
Paresh Vyas, University of Oxford, Oxford, United Kingdom |
| 12:25-12:30 | Discussion / Q&A |
| 12:30-12:50 | Bispecific split CD13/TIM3 CAR T cells eliminate AML <i>in vivo</i> without toxicity in preclinical models
Xianxin Hua, Abramson Family Cancer Research Institute University of Pennsylvania, Philadelphia, PA |
| 12:50-12:55 | Discussion / Q&A |
| 12:55-1:05 | ADCLEC.syn1 CAR T cells detect combinatorial target signatures to safely prevent antigen-low AML escape *
Sascha Haubner, Memorial Sloan Kettering Cancer Center, New York, NY |
| 1:05-1:10 | Discussion / Q&A |
| 1:10-1:25 | Panel Discussion |

Closing Remarks and Departure

1:25 pm-1:30 pm | Zilker Ballroom 1

Ruben A. Mesa, Atrium Health Wake Forest Baptist Comprehensive Cancer Center, Winston-Salem, NC