

AACR Special Conference on
**RNAs as Drivers, Targets,
and Therapeutics in Cancer**
November 14-17, 2024 | Bellevue, WA



AACR Special Conference in Cancer Research

RNAs as Drivers, Targets, and Therapeutics in Cancer

November 14-17, 2024 | Hyatt Regency Bellevue on Seattle's Eastside | Bellevue, WA

COCHAIRS:

Howard Y. Chang, Stanford University, Stanford, CA

Joshua T. Mendell, University of Texas Southwestern Medical Center, Dallas, TX

Anastasia Khvorova, University of Massachusetts Chan Medical School, Worcester, MA

V. Narry Kim, Seoul National University, Seoul, Korea

THURSDAY, NOVEMBER 14

Registration

Evergreen Ballroom Foyer

4:00- 8:30 p.m.

Welcome and Opening Keynote [CME]

6:00-7:00 p.m.

Evergreen E-F

Talk title: **Unfolding RNA and its translation in cancer etiology and therapy**

Davide Ruggero, UCSF Helen Diller Family Comprehensive Cancer Center, San Francisco, CA

Opening Reception

Evergreen A-D

7:00-8:30 p.m.

FRIDAY, NOVEMBER 15

Continental Breakfast

Evergreen A-D

7:00-8:00 a.m.

Plenary Session 1: Deregulation of RNA in cancer [CME]

Evergreen E-F

Chair: Hani Goodarzi, UCSF Helen Diller Family Comprehensive Cancer Center, San Francisco, CA

8:00-10:00 a.m.

8:00-8:30 a.m. **Systematic discovery and annotation of cancer emergent orphan non-coding RNAs in human cancers**

Hani Goodarzi, UCSF Helen Diller Family Comprehensive Cancer Center, San Francisco, CA

8:30-9:00 a.m. **Alternative polyadenylation as a therapeutic target in cancer**

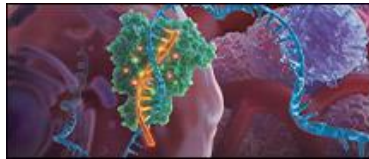
Toshihiro Banjo, Daiichi Sankyo, Tokyo, Japan

9:00-9:30 a.m. **Decoding regulators of lineage infidelity gene programs in classic Hodgkin lymphoma**

Anna Nam, Weill Cornell Medicine, New York, NY

9:30-9:45 a.m. **Targeting RNA methyltransferase in cancer therapy**

Li Lan, Harvard Medical School/Massachusetts General Hospital, Boston, MA



AACR Special Conference in Cancer Research

RNAs as Drivers, Targets, and Therapeutics in Cancer

November 14-17, 2024 | Hyatt Regency Bellevue on Seattle's Eastside | Bellevue, WA

9:45-10:00 a.m. **Epigenetic coordination of transcriptional and translational programs in hypoxia**
Ola Larsson, Karolinska Institutet, Solna, Sweden

Break

Evergreen Ballroom Foyer

10:00- 10:30 a.m.

Plenary Session 2: Design of mRNA drugs [CME]

Evergreen E-F

Chair: Narry Kim, Seoul National University, Seoul, Korea

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

10:30- 11:00 a.m. **Circular RNA, a RNA platform for cancer vaccine?**

Gilles Besin, Orbital therapeutics, Boston, MA

11:00-11:30 a.m. **The role of RNA processing in cancer progression – from basic mechanisms to cancer therapy**

Rotem Karni, The Hebrew University-Hadassah Medical School, Jerusalem, Israel

11:30a.m.- 12:00 p.m. **Cellular regulation of exogenous RNAs: From viral RNAs to mRNA therapeutics**

Narry Kim, Seoul National University, Seoul, Korea

12:00 - 12:15 p.m. **mRNA tumor vaccines: advantages and challenges**

William Jia, Virogin Biotech, Vancouver, BC, Canada

12:15- 12:30 p.m. **Targeting Ribosomal RNA Synthesis to Treat MYC Driven Cancers**

Luc Furic, Australian National University, Canberra, Australia

Lunch Break (Lunch on your own)

12:30-2:30 p.m.

Plenary Session 3: Interaction between RNA drugs and the immune system [CME]

Evergreen E-F

Chair: Sun Hur, Harvard Medical School, Boston, MA

2:30-4:30 p.m.

2:30-3:00 p.m. **Regulation of cellular response to endogenous dsRNA**

Sun Hur, Harvard Medical School, Boston, MA

3:00 - 3:30 p.m. **Double Stranded RNAs in cancer therapeutics**

Yoosik Kim, Korea Advanced Institute of Science and Technology, Daejeon, South Korea.

3:30 - 4:00 p.m. **RNA-modifying enzyme inhibitors as precision cancer therapeutics**

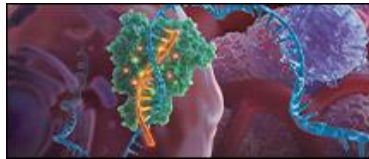
Serena Silver, Accent Therapeutics, Boston, MA

4:00 - 4:15 p.m. **Modulating the immunosuppressive pancreas tumor microenvironment through intratumoral delivery of cytokine encoding mRNAs**

Chaitanya Naimesh Parikh, University of Massachusetts Medical School, Worcester, MA

4:15- 4:30 p.m. **Target validation and drug discovery for exoribonuclease XRN1**

P. Ann Boriack-Sjodin, Accent Therapeutics, Lexington, MA



AACR Special Conference in Cancer Research

RNAs as Drivers, Targets, and Therapeutics in Cancer

November 14-17, 2024 | Hyatt Regency Bellevue on Seattle's Eastside | Bellevue, WA

Poster Session A (with light refreshments)

Evergreen A-D

4:30-6:30 p.m.

SATURDAY, NOVEMBER 16

Continental Breakfast

Evergreen A-D

7:00-8:00 a.m.

Plenary Session 4: RNA delivery [CME]

Evergreen E-F

Chair: Howard Chang, Stanford University, Stanford, CA

8:00-10:00 a.m.

8:00- 8:30 a.m. **Small RNAs as guardians of genome integrity**

Gregory J. Hannon, University of Cambridge, Cambridge, UK

8:30- 9:00 a.m. **Leveraging engineered virus-like particles for protein and RNA delivery**

Aditya Raguram, MIT, Cambridge, MA

9:00- 9:30 a.m. **Antisense Oligonucleotides Diffuse Midline Glioma**

Adrian Krainer, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY

9:30-9:45 a.m. **Delivering on the promise of using microRNAs as anti-cancer agents**

Andrea Kasinski, Purdue University, West Lafayette, IN

9:45- 10:00 a.m. **Transformable supraclusters to reverse immune suppression and enhance stereotactic ablative
Radio-immunotherapy**

Yuyan Jiang, Stanford University School of Medicine, Stanford, CA

Break

Evergreen Foyer

10:00-10:30 a.m.

Plenary Session 5: RNAs as drivers and targets in cancer [CME]

Evergreen E-F

Chair: Josh Mendell, University of Texas Southwestern Medical Center, Dallas, TX

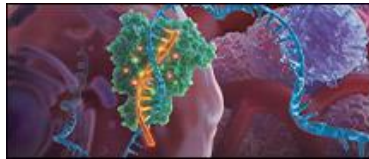
10:30 a.m.-12:30 p.m.

10:30- 11:00 a.m. **How codon content impacts mRNA stability and translation in mammalian cells**

Josh Mendell, University of Texas Southwestern Medical Center, Dallas, TX

11:00- 11:30 a.m. **Long noncoding RNAs at the intersection of cancer pathways**

Nadya Dimitrova, Yale University, New Haven CT



AACR Special Conference in Cancer Research

RNAs as Drivers, Targets, and Therapeutics in Cancer

November 14-17, 2024 | Hyatt Regency Bellevue on Seattle's Eastside | Bellevue, WA

11:30 - 12:00 p.m. **Cancer genes beyond chromosomes**
Howard Chang, Stanford University, Stanford, CA

12:00 - 12:15 p.m. **mascrRNA regulation of LARS-mTOR in breast cancer**
Erin Ahn, University of Alabama at Birmingham, Birmingham, AL

12:15- 12:30 p.m. **Non cell autonomous tumor promotion in DICER1 cancer predisposition**
Mark Hatley, St. Jude Children's Research Hospital, Memphis, TN

Lunch Break (lunch on your own)
12:30-2:30 p.m.

Plenary Session 6: Small RNA therapeutics [CME]
Evergreen E-F

Chair: Anastasia Khvorova, University of Massachusetts Chan Medical School, Worcester, MA
2:30-4:30 p.m.

2:30 - 3:00 p.m. **Engineering therapeutic siRNAs for Extrahepatic Delivery: Tumor Targeting**
Anastasia Khvorova, University of Massachusetts Chan Medical School, Worcester, MA

3:00 - 3:30 p.m. **Living in the World of RNAi Therapeutics: Past, Present and Future**
Muthiah Manoharan, Alnylam Pharmaceuticals, Cambridge, MA

3:30- 4:00 p.m. **Antisense oligonucleotides as therapeutics for difficult-to-drug targets in oncology**
Andrew Denker, Flamingo, Philadelphia, PA

4:00 - 4:15 p.m. **miR-590-3p nanomiRs inhibit rGBM growth**
Hernando Lopez-Bertoni, Johns Hopkins University School of Medicine, Baltimore, MD

4:15- 4:30 p.m. **A first-in-class EGFR-directed KRAS G12V inhibitor**
Lyla Stanland, EnFuego Therapeutics, Morrisville, NC

PRESENTATION OF CHAIR GIFTS

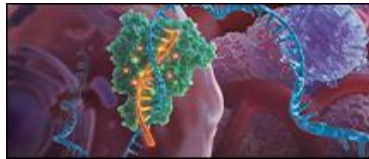
Poster Session B (with light refreshments)
Evergreen A-D

4:30-6:30 p.m.

SUNDAY, NOVEMBER 17

Continental Breakfast
Evergreen A-D
7:00-8:00 a.m.

Plenary Session 7: RNA for Cancer immunotherapy [CME]
Evergreen E-F
Chair: Crystal Mackall, Stanford University, Stanford, CA



AACR Special Conference in Cancer Research

RNAs as Drivers, Targets, and Therapeutics in Cancer

November 14-17, 2024 | Hyatt Regency Bellevue on Seattle's Eastside | Bellevue, WA

8:00-10:00 a.m.

8:00- 8:30 a.m. **RNA vaccines for pancreatic cancer**

Vinod Balachandran, Memorial Sloan Kettering Cancer Center, New York, NY

8:30 - 9:00 a.m. **RNA Based Tuning of CAR-T Cell Function**

Crystal Mackall, Stanford University, Stanford, CA

9:00-9:30 a.m. **RNA Modifications Immunity**

Grace Chen, Yale University, New Haven CT

9:30-9:45 a.m. **Identification, therapeutic potential, and regulatory networks of tumor suppressing miRNAs in angiosarcoma**

Jason Hanna, Purdue University, West Lafayette, IN

9:45-10:00 a.m. **PVT1 fusion on extrachromosomal DNA**

Hyerim Yi, Stanford University School of Medicine, Stanford, CA

Break

Evergreen Foyer

10:00-10:30 a.m.

Plenary Session 8: Emerging RNA Technologies [CME]

Evergreen E-F

Chair: Xiaojing Gao, Stanford University, Stanford, CA

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

10:30. - 11:00 a.m. **Programmable RNA sensors for internal states and external cues**

Xiaojing Gao, Stanford University, Stanford, CA

11:00 -11:30 a.m. **Protein-targeted medicines affect cancer-causing RNAs and methods to make them RNA-specific**

Samantha Myer, Scripps Research Institute/The Herbert Wertheim UF Scripps Institute for Biomedical Innovation & Technology, Jupiter, FL

11:30 - 12:00 p.m. **RNA-targeted small molecule drug discovery, with atomic precision**

Manjunath Ramarao, Atomic AI, Stanford, CA

12:00 - 12:15 p.m. **Decoding RNA metabolic networks by RNA-linked CRISPR screening in human cells**

Arvind Subramaniam, Fred Hutchinson Cancer Center, Seattle, WA

12:15- 12:30 p.m. **Tool for profiling RNA modifications**

Norman Chiu, University of North Carolina at Greensboro, Greensboro, NC

Closing Remarks

Evergreen E-F

12:30-12:45 p.m.