

ORAL PROGRAM

Wednesday, June 23, 2021 (times listed in ET)

1.00 – 2.30pm	Careers Under the Microscope Workshop (pre-registration required; separate agenda)
2.40 – 2.45pm	Welcome and Keynote Introduction, Phillip D. Zamore , <i>HHMI, RNA Therapeutics Institute, UMass Medical School</i>
2.45 – 3.30pm	Keynote: Michael Rosbash , <i>Brandeis University</i> More than 50 years of RNA: Plus ça change...
3.30 – 4.15pm	Virtual Poster Session and Exhibit Hall- VOTE for the best poster Poster Session Sponsored by Agilent Technologies
4.15 – 5.00pm	RNATx Kickoff, Virtual Happy Hour via Spatial Chat Lobby , Sponsored by Sirnaomics

Thursday, June 24, 2021

8.55 – 9.25am	Virtual Coffee & Networking, Spatial Chat Lobby
Session I: Editing Session Chair: <i>Xiaolong Dong, RTI, UMass Medical School</i>	
9.25 – 9.30am	Welcome and Introduction, Phillip D. Zamore
9.30 – 9.55am	Genome editing and single cell approaches to study early human development Kathy Niakan , <i>Crick Institute</i>
10.00 – 10.25am	In vivo gene editing in muscles and muscle stem cells Amy Wagers , <i>Harvard University</i>
10.30 – 10.55am	Development of gene-drives and a method to block them in <i>A. gambiae</i> Chrysanthi Taxiarchi , <i>Imperial College of London</i>
11.00 – 11.25am	Site-directed RNA editing: current strategies and future directions Joshua Rosenthal , <i>Marine Biological Laboratory</i>
ON DEMAND	Short Talks from abstracts – Vote for your favorite talk within the conference platform!
11:30 – 12:00pm	Virtual Networking & Coffee Break, Spatial Chat Lobby Sponsored by TriLink BioTechnologies
Session II: RNAs in Immunity Session Chair: <i>Kexin Zhang, RTI, UMass Medical School</i>	
12.15 – 12.40pm	Innate Immune nucleic acid sensing pathways Kate Fitzgerald , <i>UMass Medical School</i>
12.45 – 1.10pm	N6-Methyladenosine in Immunity Ye Grace Chen , <i>Yale University</i>
ON DEMAND	Short Talks from abstracts – Vote for your favorite talk within the conference platform!
1.15 – 2.00pm	Virtual Poster Session and Exhibit Hall - VOTE for the best poster Poster Session Sponsored by Agilent Technologies
Session III: Regulatory RNAs Session Chair: <i>Amena Arif, RTI, UMass Medical School</i>	
2.00 – 2.25pm	RNA Regulation in the Germline Ruth Lehmann , <i>Whitehead Institute</i>
2.30 – 2.55pm	Deciphering the role of the Argonaute proteins in mammalian gametogenesis Paula Cohen , <i>Cornell University</i>
3.00 – 3.25pm	piRNA guided heterochromatin formation Julius Brennecke , <i>IMBA</i>
3.30 – 3.55pm	Exploiting microRNAs to modulate cell senescence therapeutically Myriam Gorospe , <i>National Institutes of Health</i>
4.00 – 5.00pm	RNATx Mixer & Party, Sponsored by ChemGenes (in GoREMOTE)

Friday, June 25, 2021

9.00 – 9.30am	Virtual Coffee & Networking, Spatial Chat Lobby
9.30 – 9.45am	Accelerating RNA Therapeutics R&D with a Modern Informatics Solution LIVE Short Talk: Prem Mohanty, *Sponsored by Benchling
Session IV: Oligonucleotide Design & Delivery	
Session Chair: Samantha Sarli, RTI, UMass Medical School	
10.00 – 10.25am	Splice-switching antisense oligonucleotides for the treatment of disease Michelle Hastings, Rosalind Franklin
10.30 – 10.55am	Rapid synthesis and delivery of antisense oligonucleotides enabled by machine learning Bradley Pentelute, Massachusetts Institute of Technology
11.00 – 11.25am	Oligonucleotide Therapeutics to Treat Familial and Sporadic ALS Jonathan Watts, RTI, UMass Medical School
11.30 – 11.45am	Personalized splice-switching ASO therapy for a child with progressive blindness and insensitivity to pain LIVE Short Talk: Boxun Zhao, Boston Children's Hospital
ON DEMAND	Short Talks from abstracts – Vote for your favorite talk!
11:45 – 12:15pm	Virtual Networking & Coffee Break, Spatial Chat Lobby Sponsored by TriLink BioTechnologies
Session V: RNA Mechanisms & Therapeutics in the Era of COVID-19	
Session Chair: Eraj Khokhar, RTI, UMass Medical School	
12.15 – 12.40pm	mRNA as Medicine Melissa Moore, Moderna Therapeutics
12.45 – 12.55pm	RNA-communication between viruses and their hosts LIVE Short Talk: Omer Ziv, University of Cambridge
1.00 – 1.10pm	Live-cell single-molecule investigation of localization and translation efficiency of m6A-modified mRNA LIVE Short Talk: Andreas Schmidt, University of Michigan
ON DEMAND	Short Talks from abstracts – Vote for your favorite talk within the conference platform! Voting for short talks & posters ONLY OPEN until 3pm ET TODAY
1.15 – 2.00pm	Virtual Poster Session and Exhibit Hall - VOTE for the best poster Poster Session Sponsored by Agilent Technologies
Session VI: Translating Discoveries	
Session Chair: Shun-Qiang (Simon) Liang, RTI, UMass Medical School	
2.00 – 2.25pm	Engineering Antibody Oligonucleotide Conjugates (AOCs): Taking Receptor-Mediated Uptake One Step Further Art Levin, Avidity Biosciences
2.30 – 2.45pm	Ribosome inhibition by C9ORF72-ALS/FTD-associated poly-PR and poly-GR proteins revealed by cryo-EM LIVE Short Talk: Anna Loveland, RTI, UMass Medical School
2.45 – 3.10pm	ASOs as individualized medicine: updates from the field Timothy Yu, Boston Children's Hospital, Harvard Medical School
3.15 – 3.30pm	Virtual Networking & Coffee Break, Spatial Chat Lobby Sponsored by TriLink BioTechnologies
	Keynote Introduction: Guanping Gao, Horae Gene Therapy Center, UMass Medical School
3.30 – 4.15pm	Keynote: Katherine High, AskBio DNA Therapeutics: What have we learned from gene therapy drug development in the past decade?
4.15 – 5.00pm	The Road to the Clinic Panel Discussion Aimee Jackson, Atlanta Therapeutics Patrick Baumhof, CureVac Melissa Moore, Moderna Therapeutics T. Scott Johnson, Comanche Biopharma Dmitry Samarsky, Sirnaomics Moderator: Julia Alterman, RTI, UMass Medical School
5.00pm	Closing Remarks, Awards, and Thank You!