

OddPols 2021 Virtual Schedule

The times shown for the OddPols 2021 sessions reflect the Denver time zone (Mountain Daylight time). Each day the conference will begin promptly at 7:00 AM MDT.

Time Zone Conversions for Start Times:

Denver	New York	London	Heidelberg	Shanghai	Canberra
7:00 (AM)	9:00	14:00	15:00	21:00	23:00

Schedule of Sessions

(12MT= 12 minute talks, 8MT= 8 minute talks, 3MT= special 3 minute talks)

Day 1 (Monday, June 14)

7:00: Introduction, Dave Engelke

7:07 Session 1 (12MT) Marv Paule, Chair

Abstract #	Speaker	Title
	Marv Paule	History of OddPols
	Kenneth A. Johnson	Kinetic and structural basis for inhibition of the SARS coronavirus RNA-dependent RNA polymerase by Remdesivir
	Katsuhiko Murakami	Direct binding of TFE α opens DNA binding cleft of archaeal RNA polymerase
	Simona Pilotto	The structural basis of RNA polymerase inhibition in archaea

8:00 Session 2 (3MT) Elaine Sanij, Chair

Abstract #	Speaker	Title
	Natalia Zawrotna	Depletion of ribosome biogenesis proteins during yeast replicative aging
	Christophe Dez	Investigating RNA Polymerase I regulation using a super-active mutant
	Alana Belkevich	Exploring the interaction specificity between the eukaryotic RNA polymerase α -like subunits
	Julia Daiß	Preparation of human RNA polymerase in close-to-native states
	Florian B. Heiss	Conserved strategies of RNA polymerase I hibernation and activation
	Nathan Munoff	Defining the critical DNA features targeted by RNA polymerase I Core Factor
	Michael Pils	Structural basis of RNA polymerase I pre-initiation complex

		formation and promoter melting
	Qianmin Wang	Structural insights into transcriptional regulation of human RNA polymerase III
	Robyn Moir	Functional characterization of <i>Polr3a</i> hypomyelinating leukodystrophy mutations in the <i>S. cerevisiae</i> homolog, <i>RPC160</i>

9:00 Break - Zoom Breakout Rooms

10:00 Session 3 (8MT) Astrid Roy-Engel, Chair

Abstract #	Speaker	Title
	Izabela Rudzińska	Defect in RNA polymerase III assembly in yeast <i>Saccharomyces cerevisiae</i> results in reprogramming of mRNA expression
	Alexandria Cockrell	Transcription drives rDNA spatial organization and nucleolar morphology in fission yeast
	Jorge Perez-Fernandez	Structure probing with MNase tethered to ribosome assembly factors provides insight into the structure of nascent pre-ribosomal RNA
	Sui Huang	Nucleolar Homeostasis Connects with Nuclear Organization
	Dalen Fultz	Assembly of Arabidopsis NOR sequences using ultra-long DNA sequencing and analysis of patterns of rRNA gene variation
	Emiliana Weiss	Unveiling the variability and organization of the ribosomal RNA gene repeats with long sequencing technologies

11:00 Session 4 (12MT) Christoph Mueller, Chair

Abstract #	Speaker	Title
	Magdalena Boguta	Biogenesis of yeast RNA polymerases III involves co-translational assembly mechanism
	Carlos Fernández-Tornero	The role of RNA polymerase I in ribosomal DNA protection against UV light-induced DNA damage
	Ruth Q. Jacobs	Defining the divergent enzymatic properties of the eukaryotic RNA polymerases

	Akihito Fukudome	Structure of RNA-dependent RNA polymerase 2 and its implications for double-stranded RNA synthesis in RNA-directed DNA methylation
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12:00 Social Hour in Zoom Breakout Rooms

Day 2 (Tuesday, June 15)

7:00 Session 5 (12MT) Finn Werner, Chair

Abstract #	Speaker	Title
	Rachel McNamar	Mammalian PAF49, the ortholog of the nonessential yeast RNA polymerase I subunit RPA34, is essential for rDNA transcription
	Christoph Engel	Structural basis of RNA polymerase I transcription
	Bruce A. Knutson	Molecular Topology of RNA Polymerase I Upstream Activation Factor
	Tomasz W. Turowski	Functional analysis of RNA polymerase I reveals common features of transcription machinery

8:00 Session 6 (3MT) Bruce Knutson, Chair

Abstract #	Speaker	Title
	Nisreen Chahid	Novel strategies for improving <i>Pichia pastoris</i> as an expression platform
	Sebastian Kruse	Purification of native chromatin templates for investigation of RNA polymerase I promoter-specific transcription <i>in vitro</i>
	Laura Martins	Transcriptional regulation of the four putative chromatin remodeling factors, <i>CLSY1-4</i> , in <i>Arabidopsis thaliana</i>
	V. Miguel Palomar	The plastid chromatin organization is determined by protein binding
	Katrin Schwank	Reconstitution of RNA polymerase I to investigate the function of the lobe binding subunits in <i>in vitro</i> assays
	Rebecca Sizer	Using tRNA genes to improve the yield of therapeutic antibodies
	Kanwal Tariq	Noncoding RNAs from human rDNA spacer regulate chromatin organization and accessibility
	Thejaani Udumanne	Characterising changes in rDNA chromatin during malignant transformation

	Guanghai Xu	Identifying novel factors that alter DNA methylation patterns in <i>Arabidopsis</i>
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9:00 Break - Zoom Breakout Rooms

10:00 Session 7 (8MT) Ale Vannini, Chair

Abstract #	Speaker	Title
	Michael Bartlett	Positioning of archaeal general transcription factors TFB and TFE during transcription initiation
	Ewan Ramsay	Structural characterisation of human RNA polymerase III
	Agata Misiaszek	Cryo-EM structures of human RNA polymerase I
	Małgorzata Cieśla	The R3H domain-containing Rbs1 protein and the Upf1 helicase modulate the expression of Rpb10, a small subunit common to RNA polymerases
	Gweny Cackett	African Swine Fever Virus – from transcriptome to mechanism

11:00 Session 8 (12MT) Rich Maraia, Chair

Abstract #	Speaker	Title
	Dina Grohmann	DNA origami-based single-molecule force spectroscopy elucidates RNA Polymerase III pre-initiation complex stability
	Francisco Gutiérrez-Santiago	Bud27 and its role in RNA pol III transcription
	Nayef Jarrous	Coordination of transcription and processing of tRNA in human cells
	Tom Moss	Mechanisms of rDNA promoter recognition and transcription initiation underly the UBTF neuroregression syndrome and the action of CX-5461

12:00 Social Hour in Zoom Breakout Rooms

Day 3 (Wednesday, June 16)

7:00 Session 9 (12MT) Tom Santangelo, Chair

Abstract #	Speaker	Title
	Mathias Girbig	Structural basis of RNA polymerase III transcription

		termination
	Juanjuan Xie	Intrinsic and extrinsic mechanisms cooperate to ensure efficient termination of RNAPIII transcription
	Saurabh Mishra	N terminal-and-Linker domain of the C11 subunit of RNA Polymerase III is necessary and sufficient for termination-associated reinitiation-recycling via interaction with C37/53 heterodimer
	Tom Santangelo	FttA is a CPSF73 homologue that terminates transcription in Archaea

8:00 Session 10 (3MT) Todd Blevins, Chair

Abstract #	Speaker	Title
	Sara Javidnia	Population genetic analyses implicate biogenesis of translation machinery in human ageing
	Cecelia Harold	High-content screen reveals lncRNAs as regulators of nucleolar form and function
	Stephanie L. Cooper	<i>In vitro</i> characterization of RNA polymerase I inhibition by BMH-21
	Wenjun Fan	Widespread germline genetic heterogeneity of human ribosomal RNA genes
	Stephanie Pitts	Identification of an E3 ligase regulating the catalytic subunit of RNA polymerase I
	Neuton Gorjão	POLR1D, a common subunit of RNA polymerase I and III, influences its own expression
	Kristin Watt	RNA Polymerase I and III function in neural crest cell and neuronal development
	Jodie R. Malcolm	Widespread Association of ER α with tRNA genes in MCF-7 cells and primary breast tumors
	Rita Ferreira	RNA polymerase I and II inhibitors act synergistically as cancer therapeutic

9:00 Break - Zoom Breakout Rooms

10:00 Session 11 (8MT) Julie Law, Chair

Abstract #	Speaker	Title
	Abu Musa Md Talimur Reza	Investigation of the effects of tRNA genes knock-out in human cells

	Fabian Blombach	Cbp1 chromatinisation regulates transcription of CRISPR arrays
	Breanna R. Wenck	Archaeal chromatin dynamics regulate the transcription apparatus
	Andrew Loffer	Features of Pol IV-RDR2 dsRNAs dictate alternative DCL3-dicing patterns in the biogenesis of siRNAs guiding RNA-directed DNA methylation
	Feng Wang	23-nt siRNAs function as passenger strands for <i>Arabidopsis</i> AGO4-associated 24 nt siRNAs and are released by slicing
	Dany Sibai	Transcription Termination Factor 1 (TTF1), a multifunctional regulator of ribosomal RNA gene activity and cell growth

11:00 Session 12 (12MT) Olivier Gadal, chair

Abstract #	Speaker	Title
	Joachim Griesenbeck & Herbert Tschochner	The lobe binding subunits of RNA polymerase I cooperate to transcribe efficiently nucleosomal and non-nucleosomal templates
	Ann-Kristin Östlund Farrants	Chromatin changes in the regulation of RNA pol I transcription
	Guillermo Abascal-Palacios	Structural basis of Ty3 retrotransposon targeting of RNA polymerase III-transcribed genes

12:00 Social Hour in Zoom Breakout Rooms

Day 4 (Thursday, June 17)

7:00 Session 13 (12MT) Craig Pikaard, Chair

Abstract #	Speaker	Title
	Todd Blevins	Evolution of Pol IV domains required for the functional docking of transposable element silencing factors
	Andrzej Wierzbicki	Pervasive non-coding transcription as a genome surveillance mechanism
	Julie Law	The CLASSY family controls tissue-specific DNA methylation patterns in <i>Arabidopsis</i>

	Jeffrey Smith	The budding yeast rDNA locus and chromosome III share a common mechanism of condensin and Sir2 recruitment
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8:00 Session 14 (3MT) Christoph Engel, Chair

Abstract #	Speaker	Title
	Alicja Armatowska	The connection between Maf1, a negative regulator of RNA polymerase III, and translation in yeast
	Hitha Gopalan Nair	RNA polymerase III inhibition affects cytotoxic and tumour promoting effects of TNF α
	Aneta Jurkiewicz	MAF1 is involved in the regulation of RNA polymerase III activity in macrophages upon LPS treatment
	Christopher Schächner	A system to study yeast RNA Polymerase I pre-initiation complex assembly <i>in vivo</i> – A “mini” story of cis-elements and transcription factors
	Tamara Potapova	Anticancer compound library screen identifies Cdk inhibitors as novel inducers of nucleolar stress
	Adriana Coke	Transcription by the Chloroplast-encoded RNA Polymerase May Determine Structural Organization of the Chloroplast Nucleoid
	Hazel Mangan	NEAT; The combined power of NOR editing and chromosome transfer to study RNA polymerase I transcription, rRNA processing and human nucleoli
	Anastasia McKinlay	Determination of ribosomal RNA gene repeat organization within Arabidopsis Nucleolus Organizer Regions by long-range sequencing and dotplot puzzle fitting

9:00 Break - Zoom Breakout Rooms

10:00 Session 15 (8MT) Kate Hannan, Chair

Abstract #	Speaker	Title
	Jessica Finlay-Schultz	A novel progesterone receptor-RNA polymerase III association represses estrogen-dependent growth in breast tumor patient-derived xenografts
	Ian Willis	System-wide changes in the metabolism of <i>Maf1</i> KO mice
	Kevin Van Bortle	A cancer-associated RNA polymerase III identity drives expression of SNAR-A noncoding RNA
	Trine Mogensen	Roles of POL III in antiviral defenses to varicella zoster virus and SARS-CoV2

	Alan C. Kessler	A dual function Pol III-dependent tRNA-gene and activation pathways of the cellular innate immune system
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11:00 Session 16 (12MT) Craig Cameron, Chair

Abstract #	Speaker	Title
	Shuping Zhong	The role and mechanism of pAMPK α -mediated dysregulation of Brf1 and RNA Pol III genes
	Ashley Knox	RNA polymerase III transcribed gammaherpesvirus non-coding RNAs interact with host proteins and drive pathogenesis
	Emilio Merheb	Defective myelination in an RNA polymerase III mutant leukodystrophic mouse
	Stefanie Perrier	POLR3-related leukodystrophy: Defining novel phenotypes from very mild to extremely severe

12:00 Social Hour in Zoom Breakout Rooms

Day 5 (Friday, June 18)

7:00 Session 17 (12MT) David Schneider, Chair

Abstract #	Speaker	Title
	Elaine Sanij	Inhibition of RNA Polymerase I Transcription Activates the DNA Damage Response and Demonstrates Therapeutic Efficacy in Ovarian Cancer
	Paul Trainor	Ribosomopathies: congenital disorders of craniofacial and peripheral nervous system development and the potential for their prevention
	Steven Zheng	SOD1 Regulates Ribosome Biogenesis in KRAS Mutant Non-Small Cell Lung Cancer
	Katherine Hannan	Development of 2nd generation RNA Polymerase I inhibitors for cancer therapy

8:00 Session 18 (12MT) Jennifer Gerton, Chair

Abstract #	Speaker	Title
	Steve Bell	Chromosome Archae-tecture

	Carson J. Bryant	High-throughput global analysis of miRNA drivers of ribosome biogenesis
	Olivier Gadal	RNA polymerase I mutant affect ribosomal RNA processing and impact ribosomal DNA stability
	Brian McStay	The formation and internal organisation of human nucleoli, revealed one NOR at a time

9:00 Break - Zoom Breakout Rooms

10:00 Session 19 (8MT) Achim Griesenbeck, Chair

Abstract #	Speaker	Title
	Abigail Huffines	Investigating the regulation of RNA polymerase I by the transcriptional activator Hmo1
	Soma Dash	Novel roles for RNA Polymerase I and associated factors in neural crest cell colonization of the gut and in the pathogenesis of Hirschsprung disease
	Duy Khanh Phung	Structure, function and evolution of archaeal NusA paralogues
	Kristin Scott	The Transcriptome-wide Distribution of Methyl-5 Cytosine in the Hyperthermophilic Archaeon, <i>Thermococcus kodakarensis</i>
	Craig Marshall	Structural requirements for Eta-mediated archaeal transcription termination

11:00 Session 20 (12MT) Linda Van Dyk, Chair

Abstract #	Speaker	Title
	Nazif Alic	Odd Pols in fruit fly ageing
	Ellen Busschers	A novel role for MAF1 and RNA pol III-dependent transcription in osteoblast differentiation and bone biology
	Damian Graczyk	Manipulation of MAF1 levels affects pro-inflammatory functions of mouse macrophages

11:45 Closing Remarks Ross Hannan

12:00 Social Hour in Zoom Breakout Rooms