

IRB-SIG 2016 Program - Friday, July 8

7:30 a.m. - 8:30 a.m. Registration

SESSION 1

RNA PROCESSING

08:30 - 08:40

Opening notes

08:40 - 09:15

Invited speaker: Christine Mayr. *3'UTR-mediated protein complex formation determines protein functions*

09:15 - 09:30

Michael Hamilton. *Alternative and differential polyadenylation detection from single molecule long sequencing*

09:30 - 09:45

Alina Selega. *Statistical modelling of protein-RNA binding time series reveals widespread control of mRNA degradation in stress response*

09:45 - 10:00

Meredith Corley. *An RNA structure mediated post-transcriptional model of α -1-antitrypsin deficiency*

10:00 - 10:15

Steven Brenner. *Polysome fractionation analysis reveals nonsense-mediated mRNA decay targets are monosomal and supports model That 3' UTR length is a weak predictor of NMD*

10:15 - 10:45

Coffee Break

SESSION 2

RNA IN DIFFERENTIATION, CELL FUNCTION, AND DISEASE

10:45 - 11:00

Yi Xing. *SURVIV: Survival Analysis of mRNA Isoform Variation*

11:20 - 11:35

Jorge Vaquero. *A new view of transcriptome complexity and regulation through the lens of local splicing variations*

11:35 - 11:50

Elena Sotillo. *Alternative Splicing of CD19 in relapsed B-cell acute lymphoblastic leukemia*

11:30 - 11:45

Benjamin Cieply. *Multiphasic and dynamic changes in alternative splicing during induction of pluripotency are coordinated by numerous RNA binding proteins*

11:45 - 12:20

Invited speaker: Simon (Hualin) Xi. *From Genome Biology to Drug Discovery: Integrative Mining of Human Transcriptomics Data for Novel Therapeutic Targets*

12:30 - 13:45

Lunch

SESSION 3

CHARACTERIZATION OF RNA SEQUENCE AND STRUCTURE

13:45 - 14:00

Steve Mount. *Nano-exon discovery*

14:00 - 14:15

Jeffrey Zuber. *Precision in RNA secondary structure prediction: A sensitivity analysis of the folding nearest neighbor parameters*

14:15 - 14:30

Tamir Tuller. *Multiple roles of local RNA folding along the coding region in gene expression regulation*

14:30 - 14:45

Katrina Kutchko. *Identifying conserved RNA structures in alphaviruses: An integrated approach*

14:45 - 15:20

Invited speaker: Hagen Tilgner. *Getting the entire message: Coordination of variable sites on RNA transcripts*

15:30 - 16:00

Coffee Break (and start of poster session)

16:00 - 17:30

Poster Session

SESSION 4

RNA REGULATION IN NORMAL AND DISEASE CONDITIONS

17:30 - 17:45

Azim Dehghani-Amirabad. *Why asking for miRNA-gene interactions is wrong: A new paradigm for miRNA target prediction with expression data*

17:45 - 18:20

Invited speaker: Olga Troyanskaya *Integrative, genome-wide characterization of the human disease landscape*

18:20 - 18:35

Concluding notes, poster prize announcement

19:30

IRB-SIG dinner (Il Mulino, Walt Disney World Swan Resort)