RIKEN Symposium

RNA Sciences in Cell and Developmental Biology III

Cosponsored by

Grant-in-Aid for Scientific Research on Innovative Areas
Ministry of Education, Culture, Sports, Science and Technology (MEXT)

"Functional machinery for non-coding RNAs"

"Diversity and asymmetry achieved by RNA program (RNA Regulation)"

Saturday, Dec 7 8:30 am–17:25 pm RIKEN Center for Developmental Biology C-1 Auditorium

The aim of this meeting is to bring leading scientists from all over the world with a common interest in the regulation of gene expression through "RNA molecules" to share ideas and concepts and discuss the future direction of this exciting research field.

8:30 am— Registration

9:00 am–9:05 am Opening Remarks by Yukihide Tomari

Session 1

Chair: Toshifumi Inada

9:05 am-9:30 am

The domino of life: How the embryo begins zygotic development Antonio J. GIRALDEZ (Yale Univ, USA)

9:30 am-9:50 am

Segregation of germ layer fates by nuclear migration-dependent localization of Not mRNA to the PIP3-rich side of the cell Naohito TAKATORI (Tokyo Metropolitan Univ, Japan)

9:50 am-10:15 am

Mechanisms and patterns of eukaryotic post-transcriptional gene control

Thomas PREISS (Australian Natl. Univ, Australia)

10:15 am-10:35 am

Misregulation of RNA splicing in RNA diseases

Naoyuki KATAOKA (Kyoto Univ, Japan)

10:35 am-10:50 am Coffee Break

Session 2

Chair: Shinichi Nakagawa

10:50 am-11:15 am

Structure of Argonaute and implications for small RNA loading lan J. MACRAE (Scripps Res. Inst., USA)

11:15 am-11:35 am

Combinatorial system approach to analyze inflammatory gene expression network at RNA level.

Hiroshi ASAHARA (Tokyo Medical and Dental Univ, Japan)

11:35 am-11:55 am

A novel role of poly(A) specific ribonuclease in plants.

Takashi HIRAYAMA (Okayama Univ, Japan, / RIKEN, Japan)

11:55 am–13:30 pm *Lunch*

Session 3

Chair: Yuji Kageyama

13:30 pm-13:50 pm

RNA modifications as naturally-selected chemical diversity involved in various biological processes

Tsutomu SUZUKI (Univ of Tokyo, Japan)

13:50 pm-14:10 pm

RNAi-mediated depletion of hnRNP C revealed a novel surveillance mechanism of proper mRNP formation

Mutsuhito OHNO (Kyoto Univ, Japan)

14:10 pm-14:35 pm

The genomic binding sites of IncRNAs

Matthew SIMON (Yale Univ, USA)

14:35 pm–14:50 pm Coffee Break

Session 4

Chair: Yukihide Tomari

14:50 pm-15:10 pm

Regulation of mRNA Export by Retrotransposon Insertions and Nuclear Noncoding RNA 4.5S RNA $_{\rm H}$

Shinichi NAKAGAWA (RIKEN, Japan)

15:10 pm-15:35 pm

Biogenesis of germline small RNAs for genome defense

Ramesh PILLAI (EMBL, France)

15:35 pm-15:55 pm

piRNA biogenesis in Drosophila

Mikiko SIOMI (Univ of Tokyo, Japan)

15:55 pm-16:10 pm

Coffee Break

Session 5

Chair: Tsutomu Suzuki

16:10 pm-16:35 pm

Antagonistic and stimulative roles of ADAR1 in RNA silencing

Kazuko NISHIKURA (Wistar Institute, USA)

16:35 pm-17:00 pm

Structural insights into CCR4-NOT recruitment by Tristetraprolin and miRISC

Marc R. FABIAN (McGill Univ, Canada)

17:00 pm-17:20 pm

Quality control systems for aberrant mRNAs and proteins

Toshifumi INADA (Tohoku Univ, Japan)

17:20 pm–17:25 pm Closing Remarks by Shinichi Nakagawa