

岡崎フラグメント-不連続 DNA 複製モデル
50周年記念国際シンポジウム

**OKAZAKI Fragment Memorial Symposium:
Celebrating the 50th anniversary of the discontinuous DNA replication
model**

At Nagoya University, Nagoya, Aichi; December 17-18, 2018

December 17, 2018

Opening Remarks

13:00 ~ 13:10 Masahide Takahashi (Regent of Nagoya University)

Session I: Plenary lecture

Chair: Hisao Masai

13:10 ~ 14:00 Peter Burgers (Washington University School of Medicine, USA)

“Fifty Years of Okazaki Fragment Research”

**Session II: History and implication of Okazaki Fragment/Discontinuous
replication model**

Chair: Hisao Masai

14:00 ~ 14:40 Robert Fuller (University of Michigan Medical School, USA)

“From oriC Replication to Studies of VPS13 and Neurodegeneration”

14:40 ~ 15:05 Mitsuru Furusawa (Chitose Laboratory)

“Okazaki fragment drives evolution”

15:05 ~ 15:25 *Coffee Break*

Session III: From Okazaki Fragment to new fields

Chair: Takehiko Kobayashi

15:25 ~ 15:50 Hisao Masai (Tokyo Metropolitan Institute of Medical Science)

“From mechanisms of primer RNA synthesis to revelation of hidden

messages of genome”

15:50 ~ 16:15 Hisao Masukata (Osaka University)

“Replication origin where the first Okazaki fragment initiates”

16:15 ~ 16:40 Hiroshi Masumoto (Kazusa DNA Res Inst)

“Developments of Human Artificial Chromosomes and Chromatin Manipulation Technologies.”

16:40 ~ 17:05 Fuyuhiko Tamanoi (Kyoto University)

“From Okazaki fragments to Patient-derived Tumor Model”

17:05 ~ 17:25 Tsuneko Okazaki

“Discontinuous Mechanism of DNA replication. -How it was investigated.”

17:25 ~ 17:30 **Photo Session**

17:30 ~ 18:00 **Poster Short Presentations**

18:00 ~ 19:00 **Poster Viewing with refreshments**

19:00 ~ 20:45 **Reception Party (Hananoki)**

December 18, 2018

Session IV: Okazaki fragment/ Discontinuous Replication now and beyond

Chair: Peter Burgers

9:00 ~ 9:25 Hisaji Maki (Nara Institute of Science and Technology)

“Collision with duplex DNA renders Escherichia coli DNA polymerase III holoenzyme susceptible to DNA polymerase IV-mediated polymerase switching on the sliding clamp.”

9:25 ~ 9:50 Toshiki Tsurimoto (Kyushu University)

“Roles of PCNA and clamp loaders for leading and lagging DNA synthesis”

9:50 ~ 10:30 Philippe Pasero (Institute of Human Genetics, France)

“Nascent DNA drives inflammation under replication stress conditions”

10:30 ~ 10:50 **Coffee Break**

10:50 ~ 11:15 Yoshizumi Ishino (Kyushu University)

“Replisome structure and its functions in Archaea”

11:15 ~ 11:55 Huilin Li (Van Andel Research Institute, USA)

“Cryo-EM suggests a coupled-sister-replisomes model at the core of the replication factory”

11:55 ~ 13:00 ***Lunch Break***

Session V: The newest trends in DNA replication and related areas after Okazaki Fragment/ Discontinuous replication model

Chair: Katsuhiko Shirahige

13:00 ~ 13:25 Tsutomu Katayama (Kyushu University)

“Mechanisms and regulations in the initiator DnaA and the initiation complex”

13:25 ~ 13:50 Hiroyuki Araki (National Institute of Genetics)

“A novel role of DNA polymerase ϵ at replication forks; its involvement in replication fork pausing at the barriers.”

13:50 ~ 14:15 Takehiko Kobayashi (The University of Tokyo)

“Replication fork arrest induces gene amplification and cellular senescence”

14:15 ~ 14:35 ***Coffee Break***

14:35 ~ 15:00 Katsuhiko Shirahige (The University of Tokyo)

“Transcriptional Regulation by Cohesin loader”

15:00 ~ 15:25 Masato Kanemaki (National Institute of Genetics)

“Revealing a non-canonical DNA replication important for genome maintenance in human cells”

15:25 ~ **Poster Award Presentation**

Concluding remarks

15:35 ~ Hisao Masai