**3S2**  9:00-11:30 [C]

**Nascent chains: the ribosome as a hub for protein quality control**

Organizers: Hideki Taguchi (Tokyo Institute of Technology)  
Toshifumi Inada (Tohoku University)

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<td>Ubiquitylation of Stalled Ribosome Triggers Ribosome Quality Control</td>
<td>Toshifumi Inada (Dept. of Mol. Cell Biol., Grad. Sch. of Pharm. Sci., Tohoku Univ.)</td>
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<td>3S2-2</td>
<td>Structural insights into regulation and failure of eukaryotic translation termination</td>
<td>Roland Beckmann (Gene Center, Munich University)</td>
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**3S3**  9:00-11:30 [C]

**Molecular Basis of Oxidative-Electrophilic Stress Response**

Organizers: Masayuki Yamamoto (Tohoku University)  
Masaaki Komatsu (Niigata University)

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<td>Masaaki Komatsu (Dept. Biochem., Grad. Sch. of Med., Niigata Univ.)</td>
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<td>The regulation of p62-Nrf2-Keap1 axis in dysregulation of lipid metabolism and oxidative stress</td>
<td>Soo han Bae (Severance Biomedical Science Institute, Yonsei Biomedical Research Institute, Yonsei University College of Medicine)</td>
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<td>Redox regulation of magnesium-ion transporter MagEx/CNNNM</td>
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<td>Antioxidant Electrophilic Signaling Regulated by Reactive Sulfur Species and Its Translational Biosynthesis</td>
<td>Takaaki Akaike (Dept. of Health Sci. and Mol. Toxicol., Grad. Sch. Med., Tohoku Univ.)</td>
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### 3S3-5  
**Critical Roles Keap1-Nrf2 System Plays in Stress Response**  
**Masayuki Yamamoto** (Dept. of Med. Biochem., Grad. Sch. of Med., Tohoku Univ.)

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| 11:00 | 3S4 | 3S4-1 | 【9:02】 | "Time in the Cell" ~ Why is the circadian clock suppressed in pluripotent stem cells?~  
Masayuki Yamamoto (Dept. of Med. Biochem., Grad. Sch. of Med., Tohoku Univ.) |
| 9:00-11:30 | 3S4 | 3S4-2 | 【9:25】 | Dynamic expression of Notch ligand Dll1 during development  
Hiromi Shimoto, Hiroshi Kori, Akihiro Isomura, Toshiyuki Ohtsuka, Hitoshi Miyachi, Ryoichiro Kageyama (iCeMS, Kyoto University, IVR, Kyoto University, Dept. of Information Sci., Ochanomizu University) |
| 9:00-11:30 | 3S4 | 3S4-3 | 【9:48】 | An intrinsic buffering mechanism in spermatogonial stem cells controls the timing of mouse spermatogenesis  
Yumiko Saga, Zhi Zhou (NIG) |
| 9:00-11:30 | 3S4 | 3S4-4 | 【10:11】 | Dynamics of stem cell system in intestinal epithelium.  
Toshiro Sato, Yuki Ohita, Mariko Shimokawa, Yoshihiro Nakazato, Kosaku Nanki (Department of Gastroenterology, Keio University School of Medicine) |
| 9:00-11:30 | 3S4 | 3S4-5 | 【10:34】 | Liver polyploidy: Dr Jekyll or Mr Hide?  
Chantal Desdouets (Institut Cochin, Inserm U1016, Paris) |
| 9:00-11:30 | 3S4 | 3S4-6 | 【10:57】 | Cell clock and cell cycle  
Hitoshi Okamura, Hiroshi Kori, Akihiro Isomura, Toshiyuki Ohtsuka, Hitoshi Miyachi, Ryoichiro Kageyama (iCeMS, Kyoto University, IVR, Kyoto University, Dept. of Information Sci., Ochanomizu University) |

#### Cell and Time

**Organizers:** Hitoshi Okamura (Kyoto University), Yumiko Saga (National Institute of Genetics)

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Kazuhiro Yagita (Dept. of Physiol. and Syst. Biosci., Grad. Sch. of Med., Kyoto Pref. Univ. of Med.) |
| 9:00-11:30 | 3S4 | 3S4-2 | 【9:25】 | Dynamic expression of Notch ligand Dll1 during development  
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| 9:00-11:30 | 3S4 | 3S4-3 | 【9:48】 | An intrinsic buffering mechanism in spermatogonial stem cells controls the timing of mouse spermatogenesis  
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| 9:00-11:30 | 3S4 | 3S4-4 | 【10:11】 | Dynamics of stem cell system in intestinal epithelium.  
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#### Discussion

**Conclusion**

**Yumiko Saga** (National Institute of Genetics)

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### 3S14  
**Customizing cells and organisms using genome editing**

**Organizers:** Takashi Yamamoto (Hiroshima University), Akitsu Hotta (Kyoto University)

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Takashi Yamamoto (Dept. of Math. Life. Sci. Grad. Sch. of Sci., Hiroshima Univ.) |
| 9:00-11:30 | 3S14 | 3S14-2 | 【9:10】 | Structural basis for molecular mechanisms of CRISPR-Cas9  
Osamu Nureki (Dept. of Bioph. and Bioch. Grad. Sch. of Sci., Univ. of Tokyo) |
### BMB2015

#### 3S14-3
**Genome-editing technologies in HIV research**
Hirotaka Ebina, Shuhei Ueda, Yuka Kanemura, Naoko Misawa, Yoshio Koyanagi (Institute for Virus Research, Kyoto Univ.)

#### 3S14-4
**Improved PITCH systems: enhancing convenience, efficiency, and applicability of MMEJ-mediated gene knock-in**
Tetsushi Sakuma, Shota Nakade, Yuto Sakane, Ken-ichi Suzuki, Takashi Yamamoto (Dept. of Math. and Life Sci., Grad. Sch. of Sci., Hiroshima Univ.)

#### 3S14-5
**Genome Editing in Stem Cells, Animals, and Plants**
Jin-soo Kim¹² (¹Dept. of Chemistry, Seoul National Univ., ²Center for Genome Engineering, Institute for Basic Science)

#### 3S14-6
**Generation of genetically modified pigs by genome editing**
Hiroshi Nagashima (Meiji University International Institute for Bio-Resource Research)

#### 3S14-7
**The genome editing technologies in marmoset for creating new primate models**
Erika Sasaki¹² (¹Dept. of App. Dev. Biol., Central Institute for Experimental Animals, ²Keio Advanced Research Center, Kio Univ.)

#### 3S15
**Genetic/Epigenetic Regulation and Reconstitution In Vitro of Germ Cell Development**
Organizers: Mitinori Saitou (Kyoto University) Katsuhiko Hayashi (Kyushu University)

#### 3S15-1
**Stochasticity and hierarchy of spermatogenic stem cells**
Shosei Yoshida (Natl. Inst. Basic Biology)

#### 3S15-2
**Sex Chromosomes and Mammalian Infertility**
James MA Turner (Francis Crick Institute, Mill Hill Laboratory, London, UK)

#### 3S15-3
**Intrinsic and age-related sources of aneuploidy in eggs**
Tomoya Kitajima (RIKEN CDB)

#### 3S15-4
**Reconstitution of mouse oogenesis in vitro**
Katsuhiko Hayashi¹, Orie Hikabe¹, Nobuhiko Hamazaki¹, Norio Hamada¹, Yasuyuki Ohkawa² (¹Dept. of Stem Cell Biol., Faculty of Med., Kyushu Univ., ²Dept. of Advanced Medical Initiatives, Faculty of Med., Kyushu Univ.)

#### 3S15-5
**Towards Understanding and Reconstitution In Vitro of Human Germ Cell Development**
Mitinori Saitou¹²³⁴ (¹Dept. of Anat. Cell Biol., Grad. Sch. of Med., Kyoto Univ., ²JST, ERATO, ³iCeMS, Kyoto Univ., ⁴CiRA, Kyoto Univ.)