

3R+3C+D Symposium 2026

Day 1 | Sunday, 8 November

All talk durations include questions and answers.

12:00-14:00 **Reception**

14:00-14:10 **Opening Remarks**

Hiroyoshi Endo

Intractable Diseases (Nanbyo) Research Foundation

Session 01 14:10-15:40 | Nucleotide Excision Repair

14:10-14:35 25 min	Kaoru Sugasawa	Molecular basis underlying efficient DNA damage recognition in mammalian nucleotide excision repair
14:35-15:00 25 min	Wei Yang	Pre-incision structures reveal principles of DNA nucleotide excision repair
15:00-15:15 15 min	Chikako Nishigori	Present status of Japanese patients with XP and pre-clinical and clinical study for therapy for XP
15:15-15:40 25 min	Jurgen Marteijn	Cellular response to DNA damage-induced transcription stress

15:40-15:55 **Coffee Break**

Session 02 15:55-17:30 | Genome Maintenance and Disease

15:55-16:20 25 min	Ketan J. Patel	Hematopoietic formaldehyde clearance suppresses DNA damage-induced premature ageing
16:20-16:45 25 min	Ross Chapman	Beyond Homologous Recombination: attributing new functionality to BRCA1 in tumour suppression
16:45-17:00 15 min	Junko Murai	Twenty Years After the Discovery of Synthetic Lethality: Revisiting PARP Inhibitor Mechanisms with the PARP1-Selective Inhibitor Saruparib
17:00-17:15 15 min	Noriko Miyake	Severe syndromic growth disorders caused by biallelic TEDC1 variants
17:15-17:30 15 min	Shinichiro Nakada	Genome Excision without Programmed Double-Strand Breaks

17:30-17:50 **Coffee Break**

Session 03 17:50-18:30 | Plenary Lecture

17:50-18:30 40 min	Richard D. Wood	Coordination of Pol θ domain function and regulation of DNA end-joining
-----------------------	------------------------	--

18:40-20:30 **Welcome Reception**

3R+3C+D Symposium 2026

Day 2 | Monday, 9 November | Morning

All talk durations include questions and answers.

Session 04 08:45-10:05 | DNA Damage Responses

08:45-09:00 15 min	Isao Kuraoka	DNA Damage by Scabin Toxin: Targeted Modification that Blocks DNA Synthesis
09:00-09:25 25 min	Martijn Luijsterburg	LEO1 remodels RNAPII to initiate transcription-coupled DNA repair
09:25-09:50 25 min	Philippe Pasero	Signaling Transcription-Replication Conflicts Beyond Cell Boundaries
09:50-10:05 15 min	Makoto Hayashi	Chromosome Fusion-Induced Mitotic Arrest in Mesenchymal Cells Is Driven by a Non-Canonical RAD51-Dependent Homologous Recombination Mechanism

10:05-10:25 **Coffee Break**

Session 05 10:25-11:45 | Replication and Nuclear Organization

10:25-10:50 25 min	Anne Donaldson	Molecular mechanisms controlling DNA replication timing
10:50-11:05 15 min	Hisao Masai	Regulation of replication timing and chromatin architecture by nuclear membrane tethering of Rif1
11:05-11:20 15 min	Ichiro Hiratani	Nuclear compartmentalization at the G1/S transition plays a key role in DNA replication control
11:20-11:45 25 min	Chun-Long Chen	Single-Cell Insights into DNA Replication Dynamics and Genome Instability

11:45-12:05 **Photo Shooting**

12:05-14:05 **Lunch**

3R+3C+D Symposium 2026

Day 2 | Monday, 9 November | Afternoon

All talk durations include questions and answers.

Session 06 14:05-15:00 | DNA Repair and Cancer Therapy

14:05-14:30 25 min	Benu Brata Das	Arginine Methylation Regulates Topoisomerase 1 cleavage complexes (Top1cc) Repair to Prevent Genomic Instability
14:30-14:45 15 min	Kouji Hirota	PARP1 Safeguards Nascent DNA from SMUG1-dependent Processing of 5-hmdU: Targeting Genome Maintenance Defects by Nucleoside Analogs Opens up a Novel Cancer Chemotherapy
14:45-15:00 15 min	Hiroyuki Sasanuma	PARP Trapping Drives G1 Apoptosis as a Pan-Cell-Cycle Vulnerability in BRCA2 Deficiency
15:00-15:15	Coffee Break	

Session 07 15:15-16:20 | DNA Repair and Genome Stability

15:15-15:40 25 min	Susan M. Gasser	Base oxidation and the conversion of nicks to double strand breaks: when BER goes bad
15:40-15:55 15 min	Tatsuro Takahashi	Replication fork responses to O6-methylguanine
15:55-16:20 25 min	Petr Cejka	Mechanism of trinucleotide repeat expansion by MutS β -MutL β -MutL γ
16:20-16:40	Coffee Break	

Session 08 16:40-17:20 | Short Talks I

16:40-17:20	08A International Conference Hall	DNA Repair and Genome Surveillance
16:40-17:20	08B Room 2-3	Replication Stress and Fork Protection
16:40-17:20	08C Room 4-5	DNA Repair and Transcription

Three parallel sessions. Speaker details: page 4.

17:30-19:30	Poster Session
17:30-18:30	Odd-numbered posters: presenters at their posters
18:30-19:30	Even-numbered posters: presenters at their posters

Day 2 | Monday, 9 November 2026 | 16:40-17:20

Three parallel sessions. Each speaker has 10 minutes, including questions and answers.

16:20-16:40 Coffee Break		
International Conference Hall	Room 2-3	Room 4-5
Session 08A DNA Repair and Genome Surveillance	Session 08B Replication Stress and Fork Protection	Session 08C DNA Repair and Transcription
16:40-16:50 Felipe Cortés-Ledesma Decoding DNA double-strand break repair using functional genomics	16:40-16:50 Leonid Novokreshchenov The Investigation of the Role of CHK1 in Replication and Tissue Homeostasis	16:40-16:50 Syota Matsumoto Structural insights into UV-induced DNA repair machinery in nucleotide excision repair
16:50-17:00 Ryotaro Nishi PARP1-DHX9 axis regulates DNA double-strand break repair via DNA-RNA hybrid dynamics	16:50-17:00 Taichi Igarashi PrimPol Toggled by ATR Modulates Fork Slowing and Repriming under Oncogenic KRAS-induced Replication Stress	16:50-17:00 Huasong Lu Mechanisms of CSB Recruitment to Lesion-Stalled RNA Polymerase II
17:00-17:10 Yohei Sugimoto Tuning CRISPR-Cas9 activity enables efficient engineering of multicopy extrachromosomal DNA	17:00-17:10 Maria Spies Modulation of the DNA replication fork reversal by the fork structure, ssDNA binding protein RPA and DNA repair protein RAD52	17:00-17:10 Marco Muzi-Falconi RNA:DNA Hybrid Remodeling by Pol η Enables Bypass of Transcription-Replication Conflicts Under Replication Stress
17:10-17:20 Fumiko Esashi Centromere-based surveillance governs quiescent cell fate.	17:10-17:20 Denitsa Yaneva Mechanistic basis of DNA lesion processing by FANCDJ	17:10-17:20 Ken Takashima Nucleolus dysfunction generates ribosomal DNA-derived RNA-DNA hybrid that prime innate immune response

17:30-19:30 Poster Session

Presenters at their posters: odd-numbered posters 17:30-18:30; even-numbered posters 18:30-19:30.

3R+3C+D Symposium 2026

Day 3 | Tuesday, 10 November | Morning

All talk durations include questions and answers.

Session 09 08:45-10:20 | DNA Replication

08:45-09:10 25 min	John Diffley	How the DNA Damage Checkpoint Maintains Replication Fork Stability
09:10-09:25 15 min	Hironori Kawakami	Regulated ssDNA binding by budding yeast ORC for faithful replication origin selection
09:25-09:50 25 min	Christian Speck	Loading of the human MCM2-7 helicase is highly regulated to ensure complete genome replication.
09:50-10:05 15 min	Yasunori Noguchi	Molecular mechanism of human MCM2-7 double hexamer phosphorylation by DDK during DNA replication initiation
10:05-10:20 15 min	Masato Kanemaki	RECQL4 and MCM10 cooperatively and redundantly activate the replicative CMG helicase

10:20-10:40 **Coffee Break**

Session 10 10:40-11:45 | DNA Damage Tolerance

10:40-11:05 25 min	Helle D. Ulrich	Regulation of replicative DNA damage bypass by the ubiquitin system
11:05-11:30 25 min	Dana Branzei	DNA damage tolerance pathway choice is coordinated by a Ctf4-centered replisome hub
11:30-11:45 15 min	Yasukazu Daigaku	Flexible and complementary usage of replicative and error-prone DNA polymerases in human genome replication

11:45-13:45 **Lunch**

3R+3C+D Symposium 2026

Day 3 | Tuesday, 10 November | Afternoon

All talk durations include questions and answers.

Session 11 13:45-15:15 | Chromatin and Replication

13:45-14:10 25 min	Niels Mailand	Histone biogenesis and genome maintenance
14:10-14:35 25 min	Yuanliang Zhai	Molecular mechanism of chromatin replication
14:35-15:00 25 min	Constance Alabert	Chromatin assembly at replication forks enables differentiation of human iPSCs
15:00-15:15 15 min	Makoto Tachibana	Dynamic regulation of H3K9 methylation drives mouse minor zygotic genome activation
15:15-15:35	Coffee Break	

Session 12 15:35-16:30 | Chromosome Organization

15:35-16:00 25 min	William Earnshaw	Unexpected insights into condensin dynamics
16:00-16:15 15 min	Yasuto Murayama	Direct visualization of the chromosomal Smc5/6 complex bound to DNA
16:15-16:30 15 min	Kei-ichiro Ishiguro	Oocyte-specific OMC1 is required for maintaining REC8 cohesin during meiosis
16:30-16:50	Coffee Break	

Session 13 16:50-17:30 | Short Talks II

16:50-17:30	13A International Conference Hall	DNA Repair and Recombination
16:50-17:30	13B Room 2-3	Chromatin Organization and Regulation
16:50-17:30	13C Room 4-5	DNA Replication and Chromosome Organization

Three parallel sessions. Speaker details: page 7.

17:40-19:40	Poster Session
17:40-18:40	Odd-numbered posters: presenters at their posters
18:40-19:40	Even-numbered posters: presenters at their posters

Day 3 | Tuesday, 10 November 2026 | 16:50-17:30

Three parallel sessions. Each speaker has 10 minutes, including questions and answers.

16:30-16:50 Coffee Break		
International Conference Hall	Room 2-3	Room 4-5
Session 13A DNA Repair and Recombination	Session 13B Chromatin Organization and Regulation	Session 13C DNA Replication and Chromosome Organization
16:50-17:00 James Haber Replication Fork-Associated Checkpoint Mediator Mrc1/Claspin Acts in Mec1/ATR-independent, Tel1/ATM-dependent Double-Strand Break Repair	16:50-17:00 Kiyoe Ura Chromatin structure-dependent regulation of the histone H3K36 methyltransferase NSD2	16:50-17:00 Lucía Márquez-Thibaut Alternative molecular architectures preserve a conserved mechanism of MCM ring closure in eukaryotes
17:00-17:10 Keita Kameda Mechanisms of double-strand break control in C. elegans meiosis	17:00-17:10 Kosuke Yamaguchi Regional DNA Methylation Vulnerability Governed by UHRF1 Localisation	17:00-17:10 Kimberly Quillilan Sister chromatid co-entrapment at the replication fork
17:10-17:20 Neil Hunter Essential roles of BRCA2 in spermatogenesis and oogenesis	17:10-17:20 Jonathan Humbert 3D organisation of the nascent genome	17:10-17:20 Cheng-Sheng Lee Cohesin-mediated loop extrusion facilitates homologous repair of DSBs
17:20-17:30 Valerie Borde Single molecule sequencing of DSB repair synthesis reveals hidden properties of homologous recombination	17:20-17:30 Shoin Tei Dual Roles of Cohesin in Transcriptional Regulation	17:20-17:30 Haidao Zhang Investigating Human SMC5/6 functions using super-resolution microscopy
17:40-19:40 Poster Session Presenters at their posters: odd-numbered posters 17:40-18:40; even-numbered posters 18:40-19:40.		

3R+3C+D Symposium 2026

Day 4 | Wednesday, 11 November

All talk durations include questions and answers.

Session 14 08:45-10:15 | Chromosome Stability

08:45-09:10 25 min	Frank Uhlmann	Why does a chromosome look like a chromosome?
09:10-09:35 25 min	Madhusudhan Srinivasan	DNA catenation is essential for Sister Chromatid Cohesion
09:35-09:50 15 min	Takehiko Kobayashi	SIRT6 Maintains rDNA Stability in Human Cells
09:50-10:15 25 min	Jennifer L. Gerton	Repetitive DNA and the evolution of the human karyotype

10:15-10:35 **Coffee Break**

Session 15 10:35-11:40 | DNA Replication and Repair

10:35-10:50 15 min	Tsutomu Katayama	Mechanical principle underlying bidirectional replication: regulations for interdependent helicase translocation in E. coli oriC
10:50-11:15 25 min	Huilin Li	Evolutionary Solutions to DNA Sliding Clamp Loading onto Minimal DNA Gaps
11:15-11:40 25 min	Michael M. Cox	Rapid recombinational DNA repair of post-replication gaps in Escherichia coli

11:40-19:00 **Excursion**

19:00-21:00 **Banquet**

3R+3C+D Symposium 2026

Day 5 | Thursday, 12 November

All talk durations include questions and answers.

Session 16 08:40-10:10 | Meiotic Recombination

08:40-09:05 25 min	Bernard de Massy	The formation of DNA double-strand breaks during meiosis: from in vivo to in vitro approaches
09:05-09:30 25 min	Scott Keeney	Making and repairing double-strand breaks in meiosis
09:30-09:55 25 min	Matthew Neale	Transcription directs Holliday junction branch migration
09:55-10:10 15 min	Miki Shinohara	DNA-mediated interaction between the Zip3 C-terminal domain and MutSy regulates meiotic crossover in budding yeast
10:10-10:25	Coffee Break	

Session 17 10:25-11:30 | Homologous Recombination

10:25-10:50 25 min	Pierre-Henri Gaillard	SLX4's Balancing Act in Genome Stability
10:50-11:15 25 min	Stephen West	Repairing broken chromosomes: Mechanistic insights from AlphaFold and cryo-EM
11:15-11:30 15 min	Akira Shinohara	The molecular mechanism and regulation of RAD51/DMC1/RecA-mediated homology search and strand exchange

11:30-11:40 **Invitation to the Next 3R Meeting 2028**

Miki Shinohara

11:40-11:50 **Closing Remarks**

13:00-15:00 **Public Lecture**

Living with Rare Diseases

Learning from the UK Multidisciplinary Team

BENEX Nagasaki Brick Hall, Conference Hall

Doors open 12:30. Full programme and speakers: page 10.

Public Lecture

Living with Rare Diseases

Learning from the UK Multidisciplinary Team

Thursday, 12 November 2026 | 13:00-15:00 | Doors open 12:30

BENEX Nagasaki Brick Hall, Conference Hall

2-38 Morimachi, Nagasaki 852-8104

Free admission. Open to everyone. No registration required.
Japanese/English simultaneous interpretation.

Programme

13:00	Opening remarks
13:05	Rare genetic disease care in Japan
13:20	Rare genetic disease care in the UK
14:20	Questions and answers
14:30	Amy and Friends From the perspective of patients and families
14:45	Patient groups in Japan From the perspective of patients and families
14:55	Closing remarks

Speakers

Nagoya University

Seiji Mizuno	Clinical Geneticist
UK National CS/TTD Service, Guy's and St Thomas' NHS Foundation Trust	
Adesoji Abiona	Consultant Pediatrician
Julia Kenny	Consultant Pediatric ID / Immunology
Mike Harrison	Consultant Pediatric Dentist
Phillipa Sellar	Nurse Practitioner
Paula Sullivan	Nurse Practitioner

Patient Groups

Amy and Friends UK CS / TTD patient group	Jayne Hughes (Founder); Meg Simpson (Family Support Manager)
Japan CS Network	Yukiko Sato
Japanese National Network of XP Family Associations	Toshihito Kimura
Rothmund-Thomson Syndrome Family Association, Japan	Yuko Yamaguchi