

# CHROMOSOME DYNAMICS 2026

## International Symposium on Chromosome Dynamics: from Structure to Cellular Function

31 May – 3 June 2026

Awaji Yumebutai  
International Conference Center  
Hyogo, Japan

*Organizers:*

Tatsuo Fukagawa (Univ. Osaka)

Toru Hirota (JFCR)

Daniele Fachinetti (Institut Curie)



Biological  
CLUSTER  
学術変革領域研究  
クラスター細胞学

科研費  
KAKENHI

HIA  
Hyogo International Association



公益財団法人  
中内力コンベンション振興財団



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## ABOUT THE MEETING

Chromosomes are important structures that carry the blueprint of life. Understanding how genetic information is stored and read in chromosomes and how it is replicated and transmitted to the next generation of cells is one of the most important issues in biology. From a medical perspective, understanding chromosome dynamics is also important since chromosome aberrations are related to many diseases, including cancer.

Recent advances in cutting-edge technologies from imaging to single-cell omics have greatly advanced biological research. These innovations have provided unprecedented insights into cellular and molecular processes, enabling researchers to explore biological systems with greater resolution and precision than ever before. Given this rapid pace of technological progress and its profound impact on our understanding of cellular mechanisms, it is essential for scientists and scholars to discuss the latest developments in chromosome dynamics research.

At this meeting, more than 20 leading international researchers will participate as invited speakers. Together with presentations by up-and-coming researchers, we will engage in intensive discussions covering different topics related to chromosome dynamics, such as:

- Chromosome Segregation (Mitosis and Meiosis)
- Genome Stability
- Aneuploidy and Cellular Response
- Centrosome Biogenesis
- Genome Structure underlying Epigenetic Regulation
- Structure Biology of Chromosome Components

The main objectives of this meeting are to bring together scientists with distinct and complementary expertise, encourage the exchange of unpublished findings, foster new collaborations and ideas, and, last but not least, engage Ph.D. students and postdoctoral researchers representing the next generation.

## ORGANIZERS



Tatsuo Fukagawa

The University of Osaka  
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Toru Hirota

Japanese Foundation for Cancer  
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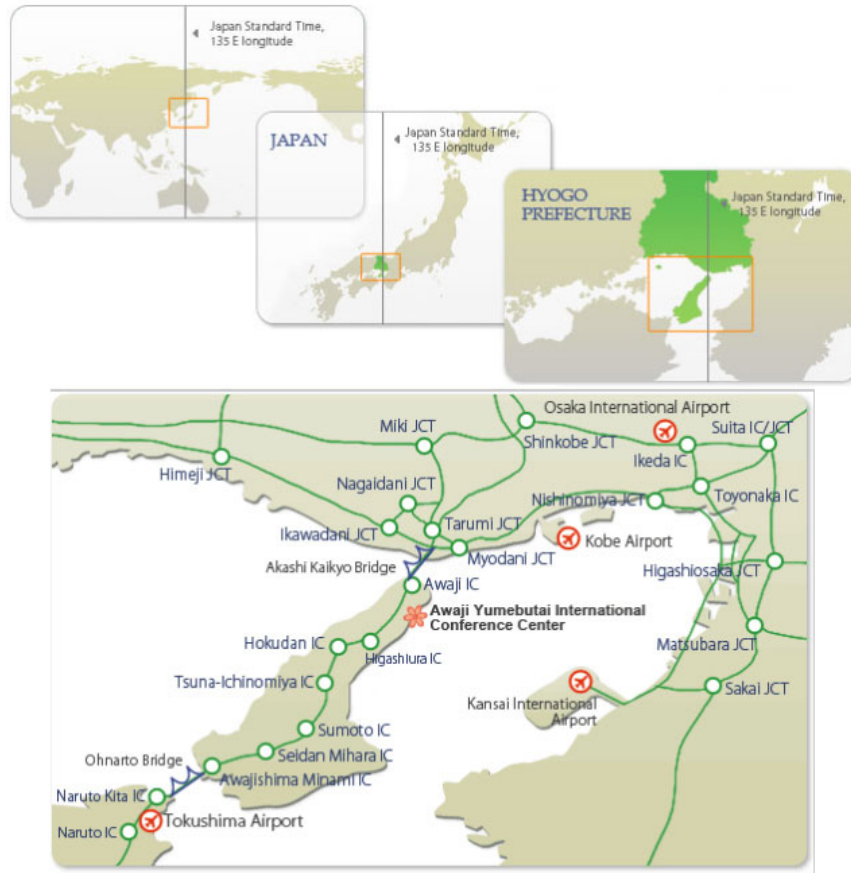
Daniele Fachinetti

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## SPONSORS

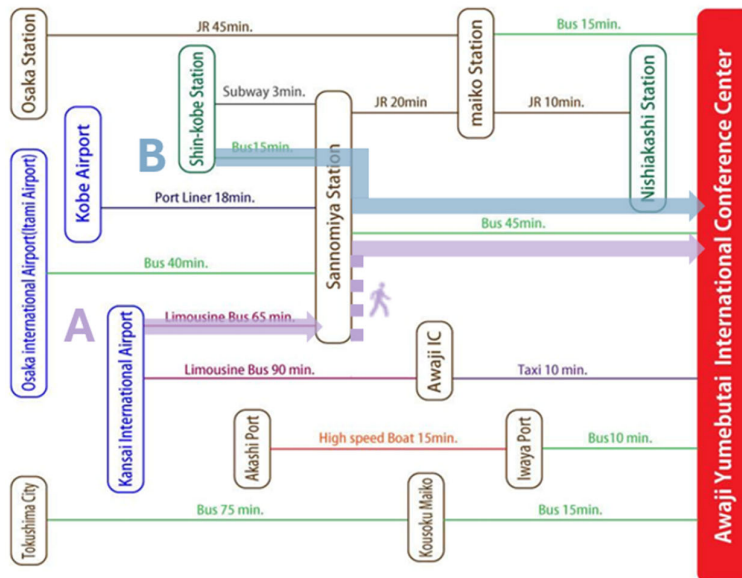


# LOCATION



## Major access

- A Kansai Int'l Airport**  
 – (Bus, 65 min) –  
**Sannomiya Station**  
 – Bus transfer –  
 – (Bus, 45 min) –  
 Awaji Yumebutai  
 (see p.8 for Bus Transfer  
 at Sannomiya Sta)
- B Shin-Kobe Shinkansen Station**  
 – (Bus, 60 min) –  
 Awaji Yumebutai  
 (via Sannomiya Sta)



# A From Kansai Int'l Airport to Yumebutai via Sannomiya



## BUS TIMETABLES Kansai Int'l Airport <--> Awaji Yumebutai (via Sannomiya)

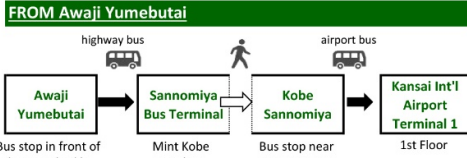
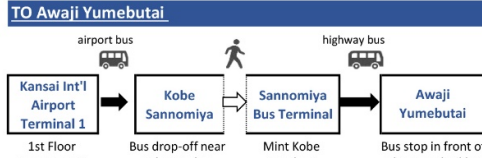
as of Dec 20, 2025

- Available on weekends & national holidays only
- Available on weekdays only
- Available every day

### Ticket Prices (One Way)

Airport Bus (Kansai Int'l Airport to/from Sannomiya): JPY 2,200

Highway Bus (Sannomiya to/from Awaji Yumebutai): JPY 1,100



DEP.	ARR.	DEP.	ARR.
6:20	7:25	8:00	8:48
6:50	7:55		
7:10	8:15	8:30	9:18
7:40	8:45	8:55	9:48
8:00	9:05	9:30	10:18
8:20	9:25		
8:30	9:35		
8:40	9:45	10:00 <sup>△</sup> (bus stop #5)	10:48
9:00	10:05	10:30	11:18
9:20	10:25		
9:40	10:45	11:00 <sup>△</sup> (bus stop #5)	11:48
10:00	11:05		
10:10	11:15	11:30 <sup>△</sup>	12:15
10:20	11:25		
10:40	11:45		
11:00	12:05		
11:20	12:25		
11:30	12:35		
11:40	12:45		
12:00	13:05	13:30	14:18
12:20	13:25		
12:40	13:55		
12:55	14:00		
13:10	14:15	14:30	15:15 15:18
13:25	14:30		
13:40	14:45		
14:00	15:05		
14:15	15:20	15:30	16:15 16:18
14:35	15:40	16:00	16:48
14:55	16:10	16:20	17:08
15:10	16:15		
15:25	16:30		
15:40	16:45	17:00	17:48
15:55	17:00		
16:15	17:20	17:30	18:18
16:35	17:40	17:50	18:38
		18:00	18:48
16:55	18:00		
17:15	18:20	18:30	19:18
17:35	18:40	19:00	19:45

The highway buses below stop at 'Kokudo Yumebutai', not the 'Awaji Yumebutai' bus stop.

DEP.	ARR.	DEP.	ARR.
8:15	9:02	9:20	10:25
8:20	9:07	9:40	10:55
		10:00	11:05
8:55	9:42	10:20	11:25
9:15	10:02		
9:30	10:17	10:40	11:45
9:35	10:22	10:50	11:55
9:45	10:32	11:00	12:05
9:55	10:42	11:20	12:25
10:15	11:02	11:40	12:55
10:35	11:22		
10:45	11:32		
10:55	11:42	12:00	13:05
11:15	12:02	12:20	13:25
		12:40	13:45
11:45	12:32	13:00	14:05
		13:20	14:25
12:50	13:37	13:40	14:45
		14:00	15:05
13:45	14:32	14:20	15:25
14:20	15:07	14:40	15:45
		15:00	16:05
14:45	15:32	15:20	16:25
15:15	16:02	15:40	16:45
		16:00	17:05
15:45	16:32	16:20	17:25
16:15	17:02	16:40	17:45
		17:00	18:05
16:45	17:32	17:20	18:25
17:15	18:02	17:40	18:45
17:35	18:22	18:00	19:05
17:45	18:32	18:20	19:25
18:15	19:02	18:40	19:45
		19:00	20:05
19:15	20:02	19:20	20:25
		20:00	21:05
		20:20	21:25
		20:40	21:45
		21:00	22:05

\*Highway Bus departures after 19:15 are not listed in this schedule.

\*Airport Bus departures before 9:20 are not listed in this schedule.

Kokudo Yumebutai

17:50	19:05		
18:05	19:10		
18:15	19:20	19:30	20:15
18:35	19:40		
18:45	19:50	20:00	20:45
19:00	20:15		
19:10	20:15	20:30	21:15
19:30	20:35		
19:45	20:50	21:00	21:45
20:00	21:05		
20:15	21:30		
20:35	21:40	21:50	22:35
20:55	22:00		
21:15	22:20		
21:35	22:40	23:00	23:45

\*Airport Bus departures after 21:35 are not listed in this schedule.

**Notes regarding transportation to Awaji Yumebutai from KIX:**  
 (Airport Bus) The 21:35 departure from Kansai Int'l Airport Terminal 1 is the latest airport bus that will arrive in time for the highway bus transfer.  
 (Highway Bus) Before boarding the highway bus, please confirm that it will stop at 'Awaji Yumebutai' (or 'Kokudo Yumebutai' for departures after 19:00).

**Notes regarding transportation to KIX from Awaji Yumebutai:**  
 (Highway Bus) Before boarding the highway bus, please confirm that it will stop at 'Sannomiya'.  
 (Airport Bus) The 19:15 departure from Awaji Yumebutai is the latest highway

TAXI (one way): Kansai Int'l Airport to/from Awaji Yumebutai approx. 90 min., JPY 45,000-50,000.

Telephone number for Kansai Int'l Airport Information Center:

# B From Shin-Kobe (Shinkansen Sta) to Yumebutai

## 新神戸・三宮・高速舞子 ~ 淡路夢舞台前 高速バス時刻表

Timetable from Shin-kobe to (via Sannomiya · Kohsoku Maiko ) Yumebutai bus stop

- ◆ 新神戸・三宮 ⇄ 淡路夢舞台前 片道1,050円(小学生 530円)  
Shin-kobe, Sannomiya ⇄ Awaji Yumebutai-mae / Adult ¥1,050(School Child ¥530)
- ◆ 高速舞子 ⇄ 淡路夢舞台前 片道590円(小学生 300円)  
Kohsoku Maiko ⇄ Awaji Yumebutai-mae / Adult ¥590(School Child ¥300)

2023年4月1日改正  
As of 2023/4/1

新神戸 Shin-kobe →	三ノ宮 Sannomiya →	高速舞子 Kohsoku Maiko →	淡路夢舞台前 Awaji Yumebutai- mae →	国道夢舞台前 Kokudou Yumebutai- mae
● -	-	6:30	6:45	
○ 6:05	6:20	6:50	7:05	
● 6:45	7:00	7:30	7:48	
7:15	7:30	8:00	8:18	
7:45	8:00	8:30	8:45	
8:15	8:30	9:00	9:18	
8:40	8:55	9:30	9:45	
9:15	9:30	10:00	10:18	
○ 9:45	10:00	10:30	10:45	
10:15	10:30	11:00	11:15	
○ 10:45	11:00	11:30	11:45	
11:15	11:30	12:00	12:15	
12:15	12:30	13:00	13:15	
13:15	13:30	14:00	14:18	
14:15	14:30	15:00	15:15	
-	-	15:45	16:03	
15:15	15:30	16:00	16:15	
15:45	16:00	16:30	16:48	
16:05	16:20	16:50	17:05	
16:45	17:00	17:30	17:45	
17:15	17:30	18:00	18:18	
○ 17:35	17:50	18:20	18:35	
17:45	18:00	18:30	18:45	
18:15	18:30	19:00	19:15	
18:45	19:00	19:30	19:45	
19:15	19:30	20:00	-	20:15
19:45	20:00	20:30	-	20:45
20:15	20:30	21:00	-	21:15
20:45	21:00	21:30	-	21:45
21:35	21:50	22:20	-	22:35
22:45	23:00	23:30	-	23:45

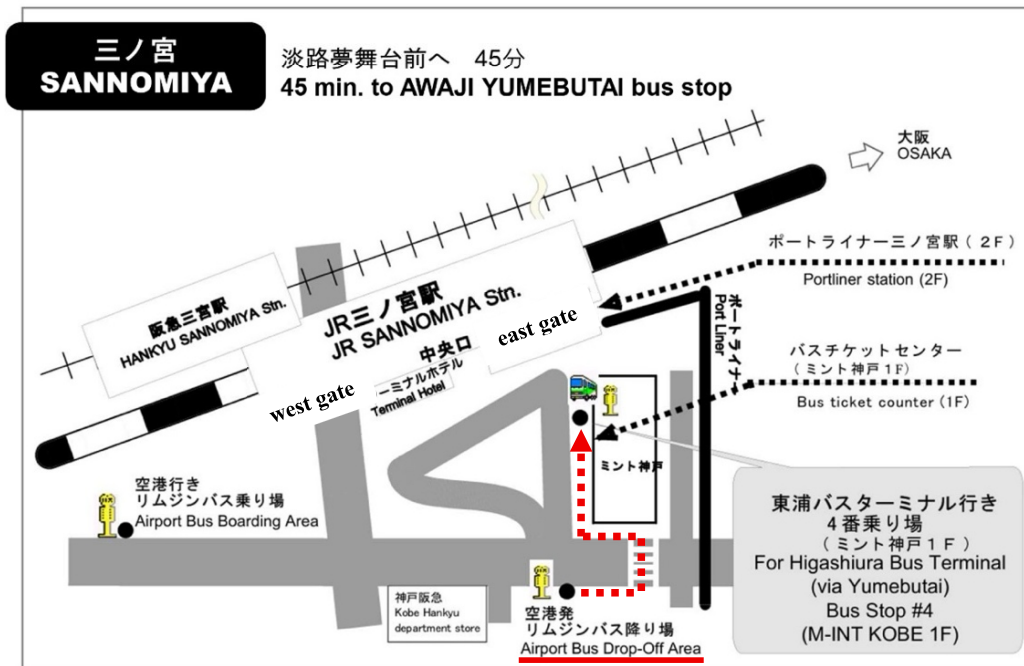
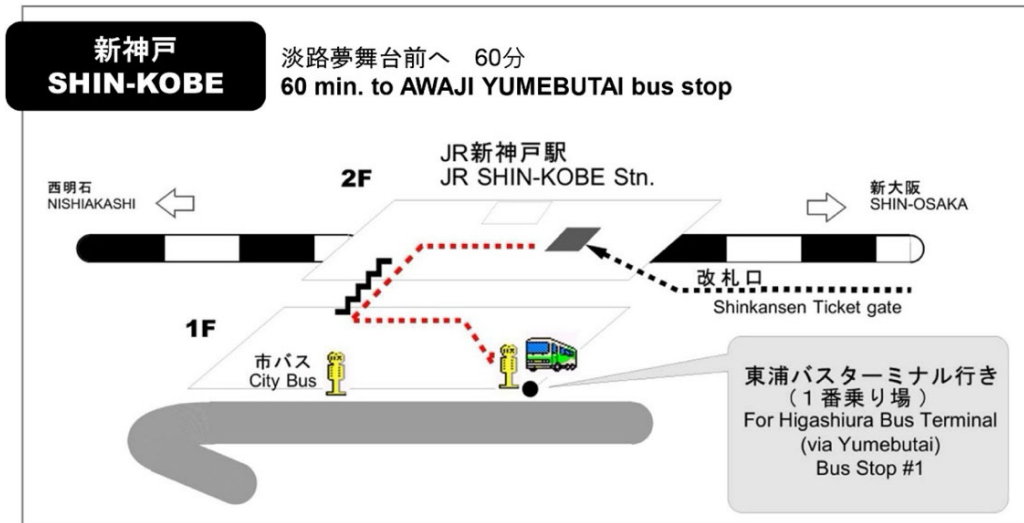
淡路夢舞台前 Awaji Yumebutai- mae →	高速舞子 Kohsoku Maiko →	三ノ宮 Sannomiya →	新神戸 Shin-kobe
○ 8:15	8:31	8:58	9:08
● 8:20	8:36	9:03	9:13
8:55	9:15	9:42	9:52
9:15	9:31	9:58	10:08
○ 9:30	9:46	10:13	10:23
● 9:35	9:51	10:18	10:28
○ 9:45	10:01	10:28	10:38
● 9:55	10:11	10:38	10:48
10:15	10:35	11:02	11:12
○ 10:35	10:51	11:18	11:28
● 10:45	11:01	11:28	11:38
○ 10:55	11:11	11:38	11:48
11:15	11:31	11:58	12:08
11:45	12:01	12:28	12:38
12:50	13:06	13:33	13:43
13:45	14:01	14:28	14:38
14:20	14:40	15:07	15:17
14:45	15:01	15:28	15:38
15:15	15:35	16:02	16:12
15:45	16:01	16:28	16:38
16:15	16:35	17:02	17:12
16:45	17:01	17:28	17:38
○ 17:15	17:31	17:58	18:08
● 17:35	17:55	18:22	18:32
○ 17:45	18:05	18:32	18:42
18:15	18:35	19:02	19:12
● 18:45	19:05	-	-
19:15	19:35	20:02	20:12
20:15	20:31	20:58	21:08
21:15	21:31	21:58	22:08
21:55	22:11	22:38	22:48
22:35	22:51	23:18	23:28

● 平日のみ運行 on weekday only  
○ 土・日・祝日のみ運行 on weekends & holidays only

本四海峡バス 0799-74-0600  
西日本JRバス(平日9:00~17:45) 0570-00-2424

## Highway bus boarding @Shin-Kobe (bus stop #1) and @Sannomiya (bus stop #4) to Awaji Yumebutai

Take the bus bound for Higashi-Ura Bus Terminal.



Buses arriving before 19:45 will go directly to Awaji Yumebutai, the bus stop in front of the Grand Nikko Awaji (your Hotel).

After 20:15, get off the bus at **Kokudo Yumebutai**. The bus stop is a 5 min-walk from the hotel, as instructed below.



① 国道夢舞台バス停(降車場所)  
Kokudo Awaji Yumebutai bus stop  
(Drop-off area)



② 歩道(左側:山 右側:海)  
Sidewalk  
(Left: mountains / Right: sea)



③ 横断歩道  
Crosswalk



④ 歩道(夢舞台敷地内)  
Sidewalk  
(Yumebutai grounds)

※国道夢舞台バス停から淡路夢舞台国際会議場、  
グランドニッコー淡路までは、  
徒歩約5分です。

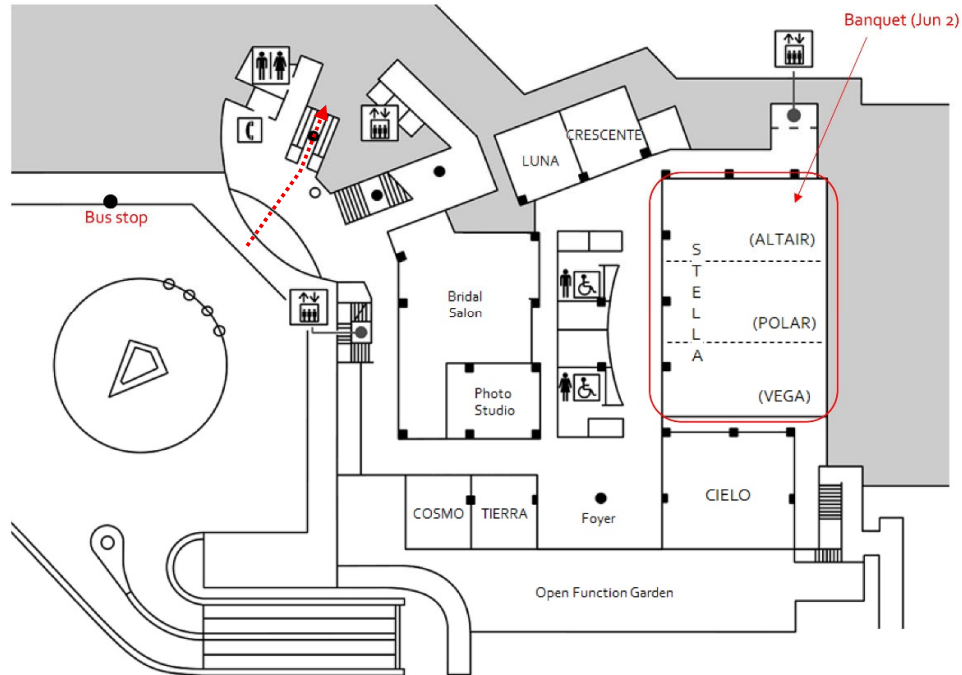
*Awaji Yumebutai International Conference Center &  
Grand Nikko Awaji are about a 5-min. walk  
from the Kokudo Yumebutai bus stop.*

On the final day, a chartered bus for Sannomiya Sta will leave the hotel **at 13:00** (estimated driving time: 45 min). For other options, please check the timetable on pages 6 and 7.

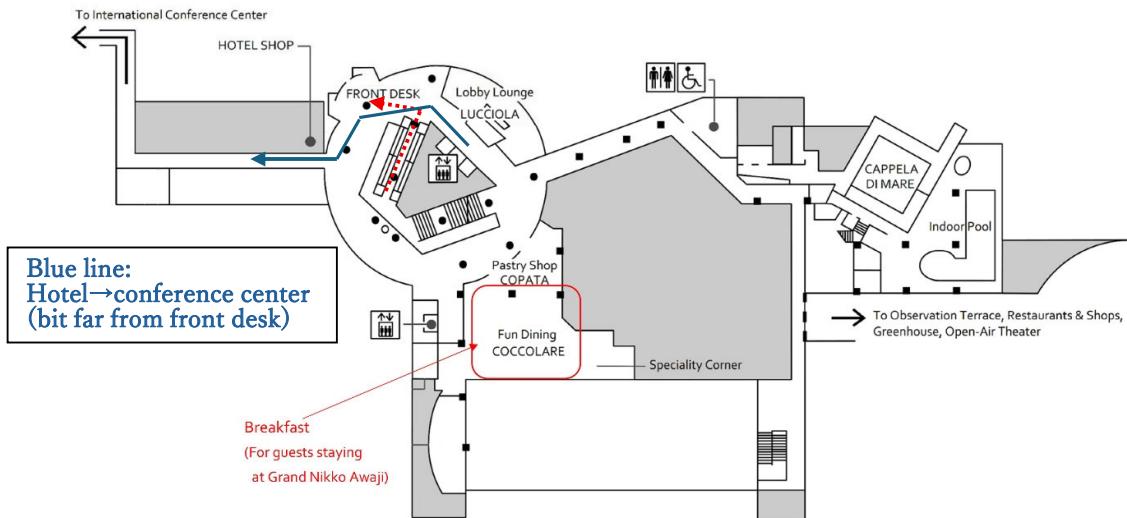
# HOTEL MAP

The lobby (front) is located on the second floor. Please take the escalator to reach it.

## The Grand Nikko Awaji 1F

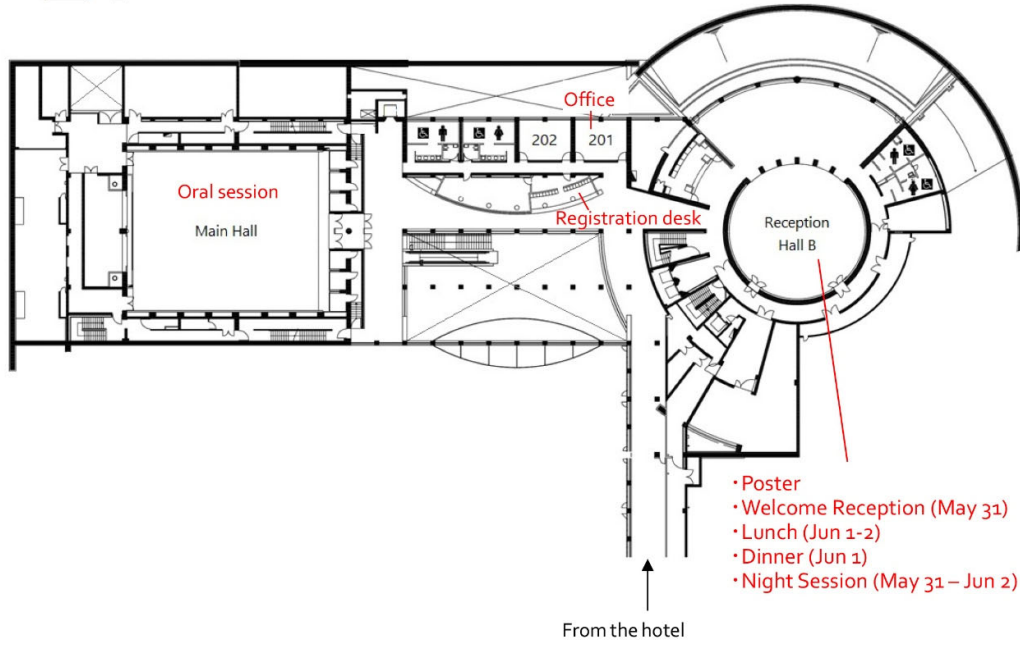


## The Grand Nikko Awaji 2F

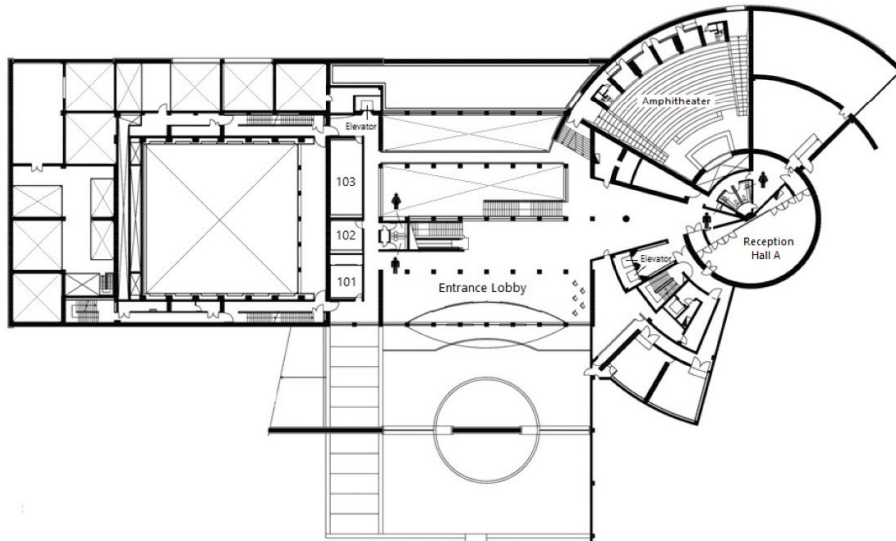


# CONFERENCE CENTER MAP

## 2 F



## 1 F



# PROGRAM

<b>Day 1 - 31 May 2026</b>		
12:00-14:00	Registration	
14:00	Welcome and Introduction	<b>The Organizers</b>
<b>Session 1: Chromosome Segregation I</b>		<b>Chair: Sue Biggins</b>
14:15-14:40	Epigenetic compartmentalization of human centromeres	<b>Aaron Straight</b>
14:45-15:10	Focusing in on centromeric chromatin	<b>Ben Black</b>
15:15-15:30	Mechanisms of size-dependent chromosome arrangement on the spindle	<b>Kozo Tanaka</b>
15:30-15:45	CCAN forms the spherical shell-like structure in interphase centromeres	<b>Yuji Sakai</b>
15:45-16:10	<b>Coffee break</b>	
16:15-16:40	Do nucleosomes hold the key to genomic stability?	<b>Jon Pines</b>
16:45-17:10	Molecular Determinants and Evolutionary Outcomes of Centromere-Targeted Transposition	<b>Barbara Mellone</b>
17:15-17:30	A Phosphorylation-encoded System of Mitotic Memory	<b>Esther Feng Ying Ng</b>
17:30-17:45	Organization of Centromere Architecture by SMC Complexes	<b>Carlos Sacristan</b>
17:45-18:00	Mitotic chromosome scaling in cleavage-stage mouse embryos	<b>Marina Makharova</b>
18:00	<b>Dinner</b>	
<b>Keynote lecture</b>		<b>Chair: Tatsuo Fukagawa</b>
20:00-21:00	Dis-solving the mechanisms of mitotic chromosome formation	<b>Bill Earnshaw</b>
21:00	<b>Drinks (Night session, Reception Hall B)</b>	

<b>Day 2 - 1 June 2026</b>		
<b>Session 2: Genome Stability</b>		<b>Chair: Ben Black</b>
09:00-09:25	An electrostatic repulsion model of centromere organization	<b>Daniel Gerlich</b>
09:30-09:55	Structure and Dynamics of Rad51 filament during homology search in living cells	<b>Angela Taddei</b>
10:00-10:15	How are centromeres in human artificial chromosomes formed, and maintained across species?	<b>Junichiro Ohzeki</b>
10:15-10:30	Chromosomal instability drives adaptive convergence and tumor evolution	<b>Minji Jo</b>
10:30-11:00	<b>Coffee break</b>	
11:00-11:25	Mechanisms of extrachromosomal DNA inheritance and chromosomal reintegration	<b>John Maciejowski</b>
11:30-11:55	Single-stranded DNA damage induces i-loops and eccDNA from repetitive elements	<b>Ylli Doksani</b>
12:00-12:15	Replication Stress and DNA Damage shape centromere fragility	<b>Annapaola Angrisani</b>
12:15-12:30	Are different routes to induce whole genome duplication having different outcomes?	<b>Simon Gemble</b>
12:30-13:00	<b>10 highlighted flash talks for poster session 1</b>	<b>The Organizers</b>
13:00-14:00	<b>Lunch</b> Luncheon seminar "Research Integrity and how everyone can contribute to it"	
		<b>Inke Nathke</b>
14:00-16:00	<b>Poster session 1</b>	
<b>Session 3: Aneuploidy and Cellular Response</b>		<b>Chair: Renata Basto</b>
16:00-16:25	Control of Chromosome Segregation by Spatially Distinct Aurora A Pools	<b>Arshad Desai</b>
16:30-16:55	Not too early, not too late - linking checkpoint silencing with mitotic memory to control accurate cell proliferation	<b>Helder Maiato</b>
17:00-17:15	Impact of whole-genome doubling on cancer cell behavior	<b>Tomonori Matsumoto</b>

17:15-17:30	Centrosomes as Error-Correction Machines	<b>Marin Barisic</b>
17:30-18:00	<b>Coffee break</b>	
18:00-18:25	A new mechanism for cell cycle entry	<b>Alexis Barr</b>
18:30-18:55	Consequences of Chromosome Segregation Errors on Cell Physiology	<b>Stefano Santaguida</b>
19:00	<b>Dinner + Drinks (Night session, Reception Hall B)</b>	

<b>Day 3 - 2 June 2026</b>		
<b>Session 4: Epigenetics Regulation</b>		<b>Chair: Alexis Barr</b>
09:00-09:25	Mechanism of chromatin assembly during DNA replication	<b>Francesca Mattioli</b>
09:30-09:55	An atlas of eukaryotic centromere architecture reveals cyclical evolutionary dynamics	<b>Ian Henderson</b>
10:00-10:15	Chromosome-specific DNA methylation dynamics at human centromeres during germ cell epigenetic reprogramming	<b>Liyang Shi</b>
10:15-10:30	Genetic and epigenetic architecture of tandem repeats influences CENH3 re-establishment and drift in Arabidopsis	<b>Sota Yamaguchi</b>
10:30-11:00	<b>Coffee break</b>	
11:00-11:25	Mechanical and soft matter properties of the nucleus in genome integrity & function	<b>Yekaterina Miroshnikova</b>
11:30-11:55	Chromosome-end protection in stem cells	<b>Jerome Dejardin</b>
12:00-12:15	Genome-wide detection and characterization of de novo loss of heterozygosity events using single-cell haplotype-resolved sequencing	<b>Dmitrii Olisov</b>
12:15-12:30	Phase separation-driven repulsion ensures Aurora B centromere fidelity during cell division	<b>Xuebiao Yao</b>
12:30-13:00	<b>10 highlighted flash talks &amp; poster session 2</b>	<b>The Organizers</b>
13:00-14:00	<b>Lunch</b>	
14:00-16:00	<b>Poster session 2</b>	
<b>Session 5: Structures Achieving Chromosome Segregation</b>		<b>Chair: Aaron Straight</b>
16:00-16:25	Cnn1 strengthens kinetochore-microtubule attachments via Stu2	<b>Sue Biggins</b>
16:30-16:55	Balancing Act: Centromere Recruitment of Counteracting Enzymatic Activities	<b>Jeyaprakash Arulanandam</b>
17:00-17:15	Structural basis of the CPC interaction with Sgo1 and architecture of the ternary complex CPC-(Sgo1) <sub>2</sub> -PP2A	<b>Dario Segura-Peña</b>

17:15-17:30	Structural and evolutionary insights into KNL2 variants involved in plant centromere function and kinetochore assembly	<b>Inna Lermontova</b>
17:30-18:00	<b>Coffee break</b>	
18:00-18:25	Structural features of nucleosomes in human chromosomes	<b>Yasuhiro Arimura</b>
18:30-18:55	How to exercise proper restraint when (not) segregating your chromosomes	<b>Kyle W Muir</b>
19:20-21:00	<b>Gala Dinner (STELLA)</b>	
21:00-	<b>Drinks (Night session, Reception Hall B)</b>	

<b>Day 4 - 3 June 2026</b>		
<b>Session 6: Centrosome Biogenesis</b>		<b>Chair: Jon Pines</b>
09:00-09:25	De novo centriole assembly in human cells	<b>Daiju Kitagawa</b>
09:30-09:55	A novel mechanism for centrosome expulsion ensures metabolic activity in polyploid cells	<b>Renata Basto</b>
10:00-10:15	Light-induced spindle assembly (LISA) through Aurora A clustering	<b>Sachin Kotak</b>
10:15-10:30	Ectopic KIFC1 accumulation at interphase centrosomes causes monopolar spindles by inhibiting centrosome separation in medaka early embryos	<b>Takahiro Yamamoto</b>
10:30-11:00	<b>Coffee break</b>	
11:00-11:25	Center of the microtubule universe: dissection and reconstitution of the building blocks of the centrosome	<b>Anna Akhmanova</b>
11:30-11:55	Spindle pole proteins are repurposed as chromosome glue during female meiosis	<b>Jeff Woodruff</b>
12:00-12:30	<b>Closing remarks</b>	<b>The Organizers</b>
<b>Departure</b>		

## POSTER INFORMATION

Please display your poster throughout the meeting at **Reception hall B**. Your presentation day is assigned based on your poster board number, as shown on the following page.

Odd : Poster session 1 (Day 2 – 1 June) 14:00-16:00

Even : Poster session 2 (Day 3 – 2 June) 14:00-16:00

## Poster Board Number

P01	Akira Matsura	P02	Ai Hoshikawa
P03	Ananya Dodamani	P04	Anderson Frank
P05	Anneloes Keijzer	P06	Alba Abad Fernandez
P07	Chang Liu	P08	Chihiro Horigome
P09	Diana Romero Zamora	P10	Dmitry Mylarshchikov
P11	Eesin Chen	P12	Elias Weiler
P13	Haruto Takahashi	P14	Hiroshi Yokota
P15	Ines Cardial Dias	P16	Ishin To
P17	Junichi Sawada	P18	Kan Yaguchi
P19	Kanako Hori	P20	Keishi Shintomi
P21	Kenji Iemura	P22	Koya Yoshizawa
P23	Louis Pak Hei Yu	P24	Kurumi Nishimagi
P25	Marica Rosaria Ippolito	P26	Maria Stavrou
P27	Mariko Ariyoshi	P28	Masashi Hada
P29	Masashi Tachikawa	P30	Masatoshi Hara
P31	Midori Ishii	P32	Masaya Inoko
P33	Miho Sakuma	P34	Motoko Takahashi
P35	Mridula Nambiar	P36	Mustafa Alaabo
P37	Muhammad Hamzah	P38	Nana Kamakura
P39	Naoki Horikoshi	P40	Natsumi Yamaguchi
P41	Placide Niyonshuti	P42	Pratiti Nanda
P43	Purva	P44	Qijiao Wang
P45	Rei Izumi	P46	Ryusuke Nozawa
P47	Saho Matsui	P48	Satoru Ide
P49	Shunya Kosaka	P50	Sayantan Banerjee
P51	Takuya Hidaka	P52	Tetsuya Hori
P53	Tokuko Haraguchi	P54	Tong Li
P55	Veronique Marthiens	P56	Yasuhiro Hirano
P57	Yaoyi Zhou	P58	Yasushi Hiraoka
P59	Yasuto Murayama	P60	Yen Thi Hai Huynh
P61	Yoshiharu Kusano	P62	Yusuke Takenoshita
P63	Yutaka Mahana	P64	Zofia Pukalo

# Poster board location

## Reception hall B (2F)

