

# MASSIV 1.0

## Final Conference Agenda

January 19-22, 2026 | Vancouver, Canada

Primary venue: UBC Nest - Great Hall A/B

### Notes:

- All times are in Pacific Time (Vancouver).
- Keynote: 40 minutes; Talk: 20 minutes; Short Talk: 15 minutes (all inclusive of Q&A unless otherwise indicated).
- Program may be adjusted for operational needs.

**Last updated:** January 18, 2026

## Day 1 - Monday, January 19, 2026

Time	Session	Speaker / Lead	Loc.
7:30 AM - 9 AM	<i>Poster Session + Breakfast</i>		Great Hall A
9 AM - 9:15 AM	Land Acknowledgments Opening Remarks (JST) Opening Remarks (SCN)	Nozomu Yachie Haruhiko Shiomi Jon Draper	Great Hall A
9:15 AM - 9:55 AM	<b>Keynote: Engineering high-precision, dynamic genetic control systems for cell fate programming</b>	<b>Katie Galloway</b>	Great Hall A
9:55 AM - 10:15 AM	<b>Talk:</b> Repetitive sequence insertion drives artificial heterochromatin formation	Atsuko Shirai	Great Hall A
10:15 AM - 10:35 AM	<b>Talk:</b> Total synthesis of recoded prokaryotic genomes enables new-to-nature functions	Wes Robertson	Great Hall A
10:35 AM - 10:50 AM	Short talk	Furo Yamamoto	Great Hall A
10:50 AM - 11:10 AM	<i>Coffee Break</i>		Great Hall A
11:10 AM - 11:30 AM	<b>Talk:</b> Rational Design of Transmembrane Peptide Assemblies towards Dynamic and Controllable Signaling Systems	Ai Niitsu	Great Hall A
11:30 AM - 11:50 AM	<b>Talk:</b> RNA backbone modifications induced by environmental changes	Tsutomu Suzuki	Great Hall A
11:50 AM - 12:10 PM	<b>Talk:</b> Global embedding and contextualization of over hundreds of millions of single-cell genomic profiles	Nozomu Yachie	Great Hall A
12:10 PM - 12:50 PM	Panel Discussion (Regen Med Topic 1)	Moderator: Ross Jones	Great Hall A
12:50 PM - 2:50 PM	Trainee Collaboration Presentations (Intro) + Lunch		Great Hall A
2:50 PM - 3:10 PM	<b>Talk:</b> Reconstitution of sister chromatid cohesion using purified proteins	Yasuto Murayama	Great Hall A
3:10 PM - 3:30 PM	<b>Talk:</b> From Single Cells to model guided systems bioengineering: A New Integrative Modeling Paradigm	Kenji Kamimoto	Great Hall A
3:30 PM - 3:45 PM	Short talk	Colin Crist	Great Hall A
3:45 PM - 4:05 PM	<i>Coffee Break</i>		Great Hall A

Time	Session	Speaker / Lead	Loc.
4:05 PM - 4:25 PM	<b>Talk:</b> Next-Generation Approaches to Accelerating CAR T Cell Manufacturing	Magdi Elsallab	Great Hall A
4:25 PM - 4:45 PM	<b>Talk:</b> The source of chromosome abnormalities in early embryos	Hirohisa Kyogoku	Great Hall A
4:45 PM - 5 PM	Short talk	Quoc Tran	Great Hall A
5 PM - 5:20 PM	<b>Talk:</b> Engineering immune system development	Peter Zandstra	Great Hall A
5:20 PM - 6 PM	<b>Keynote: Proteomic Signatures of Cell Reprogramming Induced by Therapeutic Extracellular Vesicles</b>	<b>Maryam Tabrizian</b>	Great Hall A
6 PM - 6:10 PM	Housekeeping		Great Hall A
6:10 PM - 10:00 PM	Social Mixer – 1 Drink Ticket (Included in Registration)		Koerner's Pub

## Day 2 - Tuesday, January 20, 2026

Time	Session	Speaker / Lead	Loc.
7:30 AM - 9 AM	<i>Poster Session + Breakfast</i>		Great Hall A
9 AM - 9:10 AM	Housekeeping	Massiv Team	Great Hall A
9:10 AM - 9:50 AM	<b>Keynote: Programmed DNA elimination in the nematode <i>Caenorhabditis auriculariae</i></b>	<b>Asako Sugimoto</b>	Great Hall A
9:50 AM - 10:10 AM	<b>Talk:</b> Designing artificial kinetochores as a tool to prevent errors in oocytes	Tomoya Kitajima	Great Hall A
10:10 AM - 10:30 AM	<b>Talk:</b> Strategies and considerations for precision editing of human hematopoietic stem and progenitor cells and their application to disease modeling	David Knapp	Great Hall A
10:30 AM - 10:50 AM	<b>Talk:</b> Advancing Synthetic Genome Research through Gene Duplication Technologies	Hiroaki Takesue	Great Hall A
10:50 AM - 11:10 AM	<i>Coffee Break</i>		Great Hall A
11:10 AM - 11:30 AM	<b>Talk:</b> Genome Rewiring by TAQing System	Kunihiro Ohta	Great Hall A

Time	Session	Speaker / Lead	Loc.
11:30 AM - 11:50 AM	<b>Talk:</b> Solving cis-regulatory codes with synthetic enhancers and in genome reporter systems	Jennifer Mitchell	Great Hall A
11:50 AM - 12:05 PM	Short talk	Raffael Schumann	Great Hall A
12:05 PM - 1:35 PM	<i>Lunch</i>		Great Hall A
1:35 PM - 1:55 PM	<b>Talk:</b> Emerging technologies for understanding the regulatory genome	Carl de Boer	Great Hall A
1:55 PM - 2:15 PM	<b>Talk:</b> Cryo-EM analysis reveals unique chromatin structures	Kayo Nozawa	Great Hall A
2:15 PM - 2:30 PM	Short talk	Mizuki Tada	Great Hall A
2:30 PM - 2:50 PM	<i>Coffee Break</i>		Great Hall A
2:50 PM - 3:50 PM	Panel Discussion (Editors - Publishing)	Moderator: Nozomu Yachie	Great Hall A
3:50 PM - 4:10 PM	<b>Virtual Talk:</b>	Michael Garton	Great Hall A
4:10 PM - 4:30 PM	<b>Talk:</b> Unraveling the developmental dynamics of genome architecture through single-cell DNA replication profiling	Ichiro Hiratani	Great Hall A
4:30 PM - 4:45 PM	Short talk	Samuel King	Great Hall A
4:45 PM - 5:25 PM	<b>Keynote: From Barriers to Blueprints: Mapping the Regulatory Landscapes of Cell Identity</b>	<b>Samantha Morris</b>	Great Hall A
5:25 PM - 5:35 PM	Housekeeping	Massiv Team	Great Hall A
5:35 PM - 9:05 PM	Dinner Gala presented by United Therapeutics (Plated Gala Dinner)		Great Hall B

### Day 3 - Wednesday, January 21, 2026

Time	Session	Speaker / Lead	Loc.
7:30 AM - 9 AM	<i>Poster Session + Breakfast</i>		Great Hall A
9 AM - 9:10 AM	Housekeeping	Massiv Team	Great Hall A

Time	Session	Speaker / Lead	Loc.
9:10 AM - 9:50 AM	<b>Keynote: Engineering and Safeguarding Synthetic Genomes</b>	<b>Patrick Cai</b>	Great Hall A
9:50 AM - 10:10 AM	Talk: TBD	Sanjay Srivatsan	Great Hall A
10:10 AM - 10:30 AM	<b>Talk:</b> Skin Tissue Engineering: Translating Benchside Innovation to Bedside Care	Véronique Moulin	Great Hall A
10:30 AM - 10:45 AM	Short talk	Arman Adel	Great Hall A
10:45 AM - 11:05 AM	<i>Coffee Break</i>		Great Hall A
11:05 AM - 11:25 AM	<b>Talk:</b> Building Synthetic Cell Motility from the Bottom Up	Hideaki Matsubayashi	Great Hall A
11:25 AM - 11:45 AM	<b>Talk:</b> Cohesin Subtype–Specific Regulation of Higher-Order Chromatin Architecture	Tomoko Nishiyama	Great Hall A
11:45 AM - 12:25 PM	<b>Keynote: Cell-free synthesis of the <i>Escherichia coli</i> kernel genome and its booting</b>	<b>Masayuki Su'etsugu</b>	Great Hall A
12:25 PM - 2:25 PM	Meet with Experts + Lunch		Great Hall A
2:25 PM - 3:15 PM	Panel Discussion (Regen Med Topic 2)	Moderator: Sanchit Chopra	Great Hall A
3:15 PM - 3:35 PM	<b>Talk:</b> Development of a Sustainable and Programmable Protein Translation System Using mRNA	Hiroshi Abe	Great Hall A
3:35 PM - 3:55 PM	<b>Talk:</b> Cell fusion as a tool to manipulate cell identity	Tomomi Tsubouchi	Great Hall A
3:55 PM - 4:10 PM	Short talk	Juan Camilo Burckhardt	Great Hall A
4:10 PM - 4:30 PM	<i>Coffee Break</i>		Great Hall A
4:30 PM - 4:50 PM	<b>Talk:</b> Raman2RNA: Non-destructive label-free prediction of single-cell expression profiles by Raman microscopy	Koseki Kobayashi	Great Hall A
4:50 PM - 5:10 PM	<b>Talk:</b> Polymeric mechanism of promoter-enhancer cooperativity in transcriptional burst	Tetsuya Yamamoto	Great Hall A
5:10 PM - 5:25 PM	Short talk	Sebastian Castillo-Hair	Great Hall A
5:25 PM - 6:05 PM	<b>Keynote: Artificial cell reactor technology</b>	<b>Hiroyuki Noji</b>	Great Hall A

Time	Session	Speaker / Lead	Loc.
6:05 PM - 6:15 PM	Housekeeping		Great Hall A

### Day 4 - Thursday, January 22, 2026

Time	Session	Speaker / Lead	Loc.
8:30 AM - 9:30 AM	<i>Poster Session + Breakfast</i>		Great Hall A
9:30 AM - 9:40 AM	Housekeeping		Great Hall A
9:40 AM - 10:20 AM	<b>Keynote: Writing, shuffling and augmenting mammalian genomes</b>	<b>Sudarshan Pinglay</b>	Great Hall A
10:20 AM - 10:40 AM	<b>Talk: TBD</b>	Jason Moffat	Great Hall A
10:40 AM - 11 AM	<b>Talk: Reconstitution of mammalian life cycle in vitro</b>	Nobuhiko Hamazaki	Great Hall A
11 AM - 11:20 AM	<i>Coffee Break</i>		Great Hall A
11:20 AM - 11:40 AM	<b>Talk: In situ gene therapies to rescue severe monogenic epithelial diseases</b>	Sarah Hedtrich	Great Hall A
11:40 AM - 12 PM	<b>Talk: Engineering multicellular behaviours in stem cell systems</b>	Nika Shakiba	Great Hall A
12 PM - 12:15 PM	Short talk	Abdul Muntakim Rafi	Great Hall A
12:15 PM - 1:15 PM	<i>Lunch</i>		Great Hall A
1:15 PM - 2:25 PM	Trainee Pitch Presentations		Great Hall A
2:25 PM - 2:45 PM	<b>Talk: Artificial cells with reaction-diffusion waves</b>	Sakura Takada	Great Hall A
2:45 PM - 3 PM	Short talk	Rawin Poonperm	Great Hall A
3 PM - 3:20 PM	<i>Coffee break - Pitch Award Deliberation</i>		Great Hall A

Time	Session	Speaker / Lead	Loc.
3:20 PM - 4 PM	<b>Keynote: Conserved principles of genetic networks revealed through global mapping of genetic interactions in yeast and human cells</b>	<b>Brenda Andrews</b>	Great Hall A
4 PM - 4:20 PM	Awards Session (Poster / Short Talk / Pitch)		Great Hall A
4:20 PM - 4:30 PM	Closing Remarks	Nozomu Yachie	Great Hall A