Gunma University
Institute for Molecular and Cellular Regulation

The 8th IMCR Symposium on Endocrine and Metabolism:

Beyond the Frontiers of Endocrinology & Metabolism

Program & Abstracts

Date : November 10th (Thu) – 11th (Fri), 2022
Place : Tojo Hall, Gunma University (Showa Campus)
To be held in hybrid format (ZOOM)

November 10th (Thursday)

13:00 - 13:10 Opening Remarks

Minoru Hanaya

(Executive Director of Research and Planning, Vice President, Gunma University)

Session 1 — *Chair: Tadahiro Kitamura*

13:10 - 13:40 Iron is crucial for determining cell fate via epigenetic rewriting

Takeshi Inagaki (Gunma University) (p.1)

13:40 - 14:10 An orally administered FoxO1/Notch inhibitor to induce conversion of enteroendocrine cells into beta-like-cells

Takumi Kitamoto (Chiba University) (p.3)

14:10 - 14:35 An Antisense Transcript Transcribed from *Irs2* Locus Contributes to the Pathogenesis of Hepatic Steatosis in Insulin Resistance

Maya Matsushita (The National Center for Global Health and Medicine) (p.5)

14:35 - 14:50 *Coffee Break*

Session 2 — *Chair: Nobuo Sasaki*

14:50 - 15:20 The role of Elovl6 in the regulation of lipid quality and pathophysiological significance in diabetes

Takashi Matsuzaka (University of Tsukuba) (p.7)

15:20 - 15:50 Metabolomics and disease research: Discovery of biomarkers for chronic kidney disease

Akiyoshi Hirayama (Keio University) (p.9)

Session 3 — *Chair: Miyuki Sato*

15:50 - 16:20 Optical control of cell signaling with red/far-red light-responsive optogenetic tools in *Caenorhabditis elegans*

Kazuhiro Aoki (National Institute for Basic Biology) (p.11)

16:20 - 16:45 Epitranscriptional control of AgRP neurons contributes to neuronal function and energy homeostasis

Daisuke Kohno (Gunma University) (p.13)

16:45 - 17:00 *Coffee Break*

Session 4 — *Chair: Jun Shirakawa*

17:00 - 17:40 Pax4 loss of function alters human endocrine cell development and influences diabetes risk

Adrian Teo (Agency for Science, Technology and Research, Singapore) (p.15)

Session 5 / Special Lecture — *Chair: Yoshio Fujitani*

17:40 - 18:30 Elucidation of the pathogenesis of autoimmune disease: from serology toward molecular biology

Mitsuru Matsumoto (Tokushima University) (p.17)

November 11th (Friday)

Session 6 — *Chair: Takashi Nishimura*

9:00 - 9:25 TANGO1 as an organizer of ER exit sites
Miharu Maeda (Akita University) (p.19)

9:25 - 9:55 Investigation of the mechanisms underlying resistance to carcinogenesis and aging in the longest-lived rodent, the naked mole-rat
Kyoko Miura (Kumamoto University) (p.21)

9:55 - 10:25 Erebosis, a new cell death mechanism during homeostatic turnover of gut enterocytes
Sa Kan Yoo (RIKEN) (p.23)

10:25 - 10:35 *Coffee Break*

Session 7 — *Chair: Tetsuro Izumi*

10:35 - 11:15 Berberine is an insulin secretagogue targeting the KCNH6 potassium channel
Jin-Kui Yang (Capital Medical University, China) (p.25)

11:15 - 11:20 Closing Remarks
Ken Sato
(Director of IMCR, Gunma University)

Workshop / Poster Session — *Chair: Izuho Hatada*

11:20 - 12:20 (p.27)

Instruction to Chairs and Presenters

Arrival

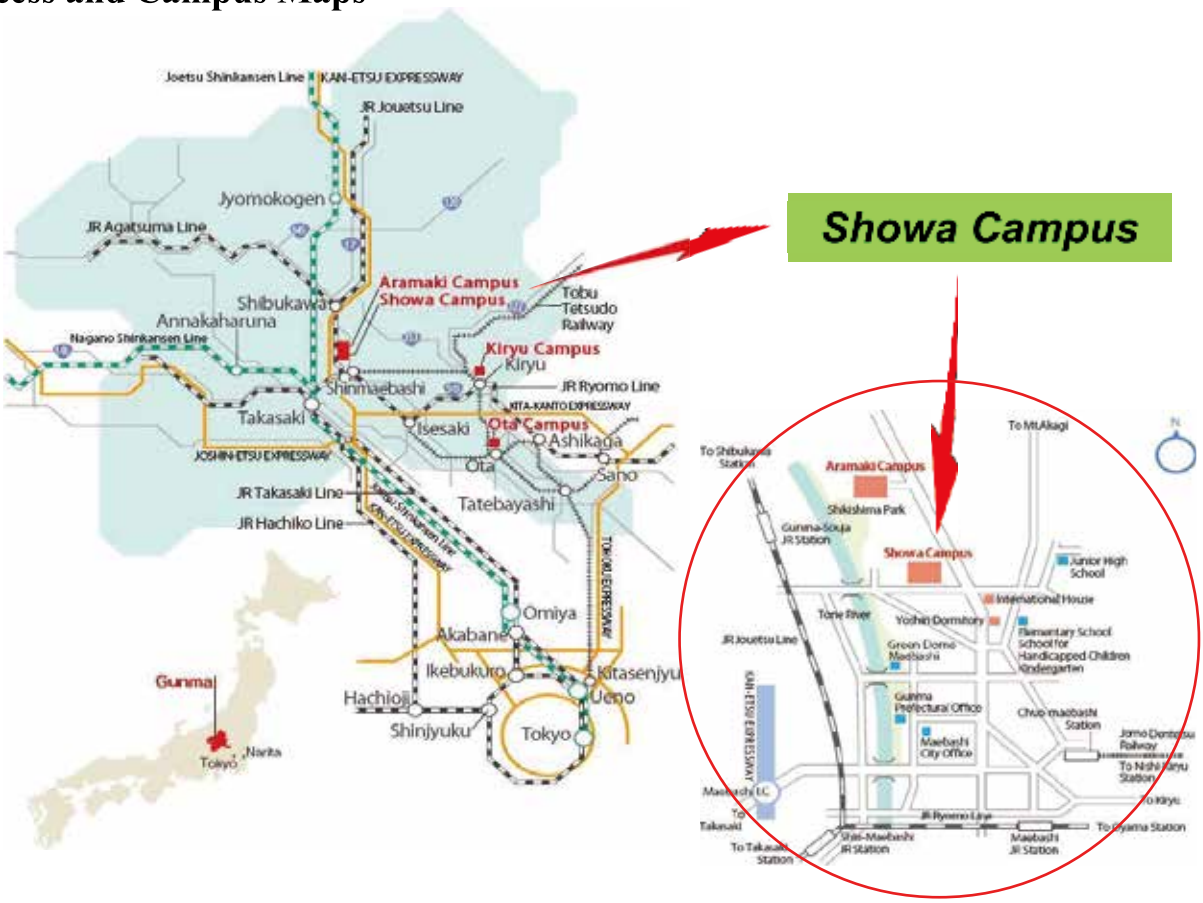
Please come to the “Time keeper’s desk” at the left-front of the room and let the staff know by 15 minutes before the starting time.

Process and Timing

Chairs are expected to ensure that all presentations start and finish punctually as scheduled.
Time allocation for each presentation is as follows. Staff will assist with timing by bell signal.

Total	Presentation	Discussion	1 ring	2 rings	3 rings
25 min.	20 min.	5 min.	3 min. left to the end of presentatin	End of presentation	End of discussion
30 min.	25 min.	5 min.	3 min. left to the end of presentatin	End of presentation	End of discussion
40 min.	35 min.	5 min.	3 min. left to the end of presentatin	End of presentation	End of discussion
50 min. Special Lecture	40 min.	10 min.	3 min. left to the end of presentatin	End of presentation	End of discussion

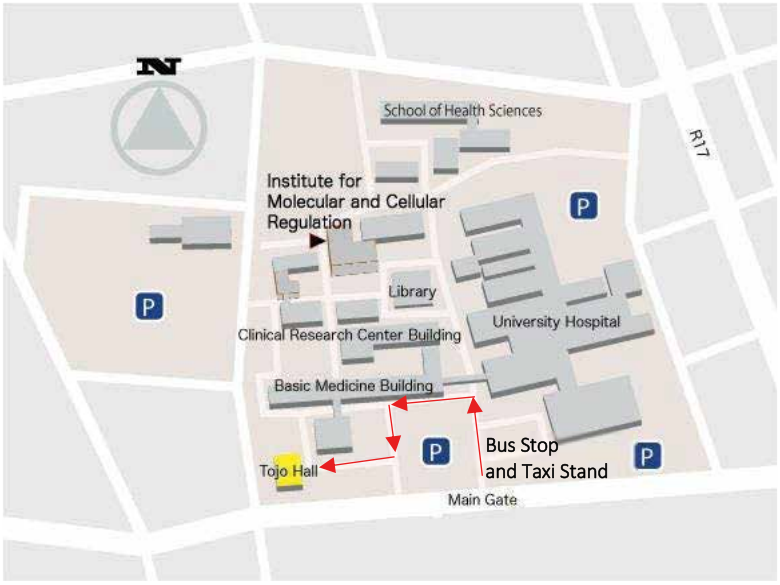
Access and Campus Maps



By JR	Take the Joetsu Sinkansen Line train to Takasaki. From there about 30 min by taxi. Alternatively, change at Takasaki to the Ryomo Line and go to Maebashi Station. From Maebashi station about 4 km in the north direction. About 15 min by bus or 10 min by taxi. Or take the Joetsu Line train at Takasaki station to Shin-Maebashi station. From there north 5 km about 10 min by taxi.
By car	Take the Kan-Etsu Tollway to Maebashi Interchange. From there about 15 min on the ordinary road.

Showa Campus Layout

3-39-15, Showa-machi,
Maebashi, Gunma,
371-8512, JAPAN



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http://www.imcr.gunma-u.ac.jp/