

第 1 回 TRP チャネル研究会

TRP Channel Conference

平成 17 年 7 月 13 日 ~ 14 日
岡崎カンファレンスセンター

July 13, Wednesday

13:00-13:05: Opening Remarks

13:05-14:45: Session I

Chair: Makoto Tominaga

I-1. 13:05-13:30

Thermosensitive TRP Channels

Makoto Tominaga

Sect. Cell Signal, Okazaki Inst. Integ. Biosci, Nat. Inst. Nat. Sci.

I-2. 13:30-13:55

The roles of TRPV1 in cancer pain.

Ozaki N¹, Asai H^{1,2}, Nagamine K^{1,2}, Shinoda M¹, Iwai Tohnai³, Minoru Ueda², Sugiura Y¹. ¹Dept. Func. Anat. & Neurosci., ²Dept. Oral & Maxillofacial Surg., ³Dept. Cell Ther., Nagoya Univ. Grad. Sch. Med.

I-3. 13:55-14:20

Role of TRPV1 in mice with cyclophosphamide-induced cystitis

Nakamura Y¹, Tominaga M², Namiki M³, Higashi T², Moriyama T² and Kawatani M¹.
¹Dept. Neurophysiol., Akita Univ. Sch. Med., ²Okazaki Inst. Integ. Biosci, Nat. Inst. Nat. Sci., ³Dept. Urol., Kanazawa Univ. Grad. Sch. Med. Sci.

I-4. 14:20-14:45

Mechanism of epidermal turnover activation after topical application of glycolic acid

Sumiko Denda, Kei Negishi¹, Nobuharu Kushikata¹, Shingo Wakamatsu¹, Mitsuhiro Denda, Toshihiko Hibino. Shiseido Life Sci. Res. Ctr. ¹Dept. Aesthetic Surg., Tokyo Women's Med. Univ.

14:45-15:00: Break

15:00-17:05: Session II

Chair: Makoto Suzuki

II-1. 15:00-15:25

Regulation of the TRPV2 Channel in Macrophage

Masahiro Nagasawa and Itaru Kojima. Inst. Mol. & Cell. Reg., Gunma Univ.

II-2. 15:25-15:50

Mechanism of myocyte degeneration ~ A novel therapeutic target for muscular dystrophy and cardiomyopathy ~

Yuko Iwata, Yuki Katanosaka, Munekazu Shigekawa and Shigeo Wakabayashi. Dept. Mol. Physiol., Nat. Cardiovasc. Ctr. Res.Inst.

II-3. 15:50-16:15

A novel b-subunit changes the mechanical threshold of TRPV4

Makoto Suzuki,* Masataka Susaki, Hiroshi Todaka, and Atsuko Mizuno. Dept. Mol. Pharmacol., Jichi Med. Sch.

II-4. 16:15-16:40

Functional expression of TRPV4 in cochlear outer hair cells

Jing Shen¹, Narinobu Harada², Nobuo Kubo¹, Makoto Suzuki³, Toshio Yamashita¹, ¹Dept. Otolaryngol., Kansai Med. Univ., ²Harada ENT clinic, ³Dept. Pharmacol., Jichi Med. Univ.

II-5. 16:40-17:05

Does TRPV4 signal give rise to the recruitment of Na,K-ATPase?

Akihiro Imura. HMRO, Grad. Sch. Med., Kyoto Univ.

17:05-17:20: Break

17:20-18:35: Session III

Chair: Shuji Kaneko

III-1. 17:20-17:45

Functional analysis of murine PKD2L1, as a member of TRP family

Murakami, M., Ohba, T., Xu, F., Shida, S., Satoh, E., Ono, K., Miyoshi, I., Watanabe, H., Ito, H., and Iijima, T. Dept. Pharmacol., Akita Univ. Sch. Med.

III-2. 17:45-18:10

A pivotal role of TRPM2 in neuronal cell death

Shuji Kaneko¹, Seiko Kawakami¹, Etsuko Itoh¹, Toshiyuki Minami¹, Yuji Hara³, Minoru Wakamori³, Yuki Takada², Toshiaki Kume², Yasuo Mori³ and Akinori Akaike², ¹Dept. Mol. Pharmacol., Grad. Sch. Pharm. Sci., ²Dept. Pharmacol., Grad. Sch. Pharm. Sci., ³Lab. Mol. Biol., Grad. Sch. Engineer., Kyoto Univ.

III-3. 18:10-18:35

Swelling-induced activation of TRPM7 channel is involved in cell volume regulation

Tomohiro Numata, Takahiro Shimizu, Yasunobu Okada Dept. Cell Physiol., Nat. Inst. Physiol. Sci., Dept. Physiol. Sci., Sch. Life Sci., Grad. Univ. Adv. Studies (Sokendai) & JSPS

19:30:- Get-together and Poster Session

July 14, Thursday

8:30-10:10: Session IV

Chair: Yasuo Mori

IV-1: 8:30-8:55

Up-regulation of TRPC1 in the development of cardiac hypertrophy

Takayoshi Ohba, Hiroyuki Watanabe, Manabu Murakami*, Yoichiro Takahashi, Kyoichi Ono*, Toshihiko Iijima*, and Hiroshi Ito. 2nd Dept. Int. Med., Akita Univ. Sch. Med., *Dept. Pharmacol., Akita Univ. Sch. Med.

IV-2: 8:55-9:20

Amplification of B cell receptor signaling by functional coupling between TRPC3 and PLC γ 2

Takuro Numaga, Yasuo Mori¹. Sch. Life Sci., Grad. Univ. Adv. Studies, ¹Lab. Mol. Biol., Dept. Syn. Chem. & Biol. Chem., Grad. Sch. Engineer., Kyoto Univ.

IV-3: 9:20-9:45

Desensitization and activation of mTRPC5 expressed in HEK cells

Insuk So, Dept. Physiol. & Biophys., Seoul Nat. Univ. Coll. Med.

IV-4: 9:45-10:10

Regulation of TRPC channel by tyrosine phosphorylation

Chihiro Hisatsune¹, Yukiko Kuroda², Kyoko Nakamura³, Takafumi Inoue², Takeshi Nakamura³, Takayuki Michikawa², Akihiro Mizutani², and Katsuhiko Mikoshiba^{1,2,3}.
¹Lab. Dev. Neurobiology, RIKEN, Brain, Sci., Inst. (BSI), ²Dev. Mol. Neurobiology, Inst. Med. Sci., Univ. Tokyo, ³Calcium Oscillation Project, ICORP, JST.

10:10-10:25: Break

10:25-12:30: Session V

Chair: Yuji Imaizumi

V-1: 10:25-10:50

Physiological implications of mechanosensitive potentiation of receptor-activated TRPC6 channel in vascular tone regulation

Ryuji Inoue¹, Lars J. Jensen², Yasuo Mori³ and Yushi Ito². Dept. Physiol., Sch. Med., Fukuoka Univ., ²Dept. Pharmacol., Grad. Sch. Med. Sci., Kyushu Univ., ²Lab. Mol. Biol., Dept. Syn. Chem. & Biol. Chem., Grad. Sch. Engineer., Kyoto Univ.

V-2: 10:50-11:15

Physiological roles of TRP channels and functional coupling with SK channels in brain capillary endothelial cells

Yuji Imaizumi¹, Daiju Yamazaki¹, Hisao Yamamura¹, Susumu Ohya¹, Katsuhiko Muraki², Kiyofumu Asai³. ¹Dept. Mol. & Cell. Pharmacol., Grad. Sch. of Pharmaceut. Sci., Nagoya City Univ., ²Dept. Cell. Pharmacol., Sch. of Pharmacy, Aichi gakuin Univ, ³Dept. Mol. Neurobiol., Grad. Sch. of Med. Sci., Nagoya City Univ.

V-3: 11:15-11:40

Role of Ga_{12/13}-mediated Ca²⁺ signaling in cardiac fibrosis

Motohiro Nishida. Dept. Pharmacol. Toxicol. Grad. Sch. Pharm. Sci., Kyushu Univ.

V-4: 11:40-12:05

TRP channels as therapeutic targets

Yorikata Sano, Kohei Inamura, Hidetsugu Okada, Shinobu Mochizuki. Mol. Med. Res. Labs., Drug Discover Res., Astellas Pharma Inc.

V-5: 12:05-12:30

Stretch-induced Ca increase in endothelial cells

Keiji Naruse. Cell Inform. Med., Grad. Sch. Med., Nagoya Univ.

12:30-12:35: Closing Remarks