# Uptdated on 15 November 2016

# Program for Stensen 4

On 29th November, evening, Welcome Pizza at Ciro in Toyohashi.

Overseas participants. Meeting at new Grand Hotel at 17.00

Start from Higashi-Okazaki at 17.35 by Meitetsu train and Toyohashi at 18.03 by JR train and taxi from Futakawa to Ciro.

Returning taxi direct to Toyohashi Stn.

#### The first day (30th November 2016)

# **Opening**

9.00-9.10 Masataka Murakami (Okazaki): Development of salivological view through the Stensen symposia for 20 years.

### Session I. From Basic Research to Clinical Application.

- 9.10-9.45 Andy Wolff (Tel-Aviv): Medication-induced salivary gland dysfunction.
- 9.45-10.20 Jörgen Ekström (Göteborg): Experimental studies on secretory effects of some atypical antipsychotics with special reference to the clozapine-induced sialorrhea.
- 10.20-10.40 Coffee Break
- 10.40-11.15 Shmuel Muallem (Bethesda): Sjögren's syndrome and autoimmune pancreatitis: Fixing the duct fixes the acini.
- 11.15-11.50 Min Goo Lee (Seoul): Bicarbonate permeation through anion channels.
- 11.50-13.10 Lunch

### Session II. Protein secretion

- 13.10-13.45 Massimo Castagnola (Rome): The application of mass spectrometry to the study of the intact human salivary proteome.
- 13.45-14.20 Junko Fujita-Yoshigaki (Matsudo): Mechanism for selective transport of secretory proteins into secretory granules of parotid acinar cells.
- 14.20-14.45 Osamu Katsumata-Kato (Matsudo): The role of membrane microdomains for granule maturation in the rat parotid gland. (also P-12)
- 14.45-15.15 Coffee break

# Session III. Electrolyte and Fluid secretion

15.15-15.50 Martin Steward (Manchester): Computational modelling of epithelial ion transport - is it worth the trouble?

- 15.50-16.25 Yoshiro Sohma (Tokyo): What two direct observation methods show us in membrane transport physiology: CARS microscopy and high-speed AFM.
- 16.25-17.00 Tetsuji Nakamoto (Matsumoto): Analysis of electrolyte and water transport by the ex vivo mouse submandibular gland perfusion technique in genetically modified mice.

#### 18.00-20.30 Dinner

#### The second day: on 1st December 2016

# Session IV. Purinergic Signals

- 9.00-9.35 Ivana Novak (Copenhagen): Purinergic signaling in pancreas in health and disease.
- 9.35-10.10 Kishio Furuya (Nagoya): Real-time imaging of ATP release induced by alveolar inflation in the rat lung ex-vivo.

### Session V. Regeneration of salivary gland.

- 10.10-10.35 Toru Hayashi (Sagamihara): Dynamics of 5-methylcytosine and 5-hydroxymethylcitosine in fetal submandibular gland development. (also P-11)
- 10.35-11.10 Matthew Hoffman (Bethesda): Fibroblast Growth Factor Receptor function in salivary gland progenitor populations during development.
- 11.10-11.25 Coffee Break
- 11.25-11.50 Tetsuya Akamatsu (Tokushuma): Sexual difference in the regeneration model of the rat submandibular gland. (also P-15)
- 11.50-12.25 Yuichi Kadoya (Sagamihara): Basement membrane dynamics in developing salivary gland. (also P-10)

#### 12.25-13.25 lunch

#### Session VI. Posters

- 13.25-14.55 10-min talks on the posters P1-P9.
- P-1. Rei Nakao (Fujisawa): PKCε regulates MEK/ERK signaling pathway in fibroblasts.
- P-2. Chenjuan Yao (Tokushima): Induced expression of a subtilisin-like proprotein PACE4 in the regulation model of rat submandibular gland.
- P-3. Makoto Yamaguchi (Nagoya): Simulation of intracellular pH change caused by NH<sub>4</sub><sup>+</sup> and AcO pulses in pancreatic duct cell.
- P-4. Yoshinori Sahara (Morioka) V-ATPase a<sub>3</sub> subunit KO mouse shows decreased salivation.

- P-5. Yoshiyuki Shibukawa (Tokyo) The expression patterns of clock genes in rat submandibular acinar and ductal cells.
- P-6. Muxin Wei (Nanjing) Effects of Chinese herb HQ on salivary fluid secretion by isolated and perfused rat submandibular glands.
- P-7. Sadamitsu Hashimoto (Tokyo): Visualization of microcirculation and paracellular pathway in the perfused submandibular gland.
- P-8. Akihiko Nezu (Tobetsu): Simultaneous monitoring of Ca<sup>2+</sup> response and salivary secretion reveals the threshold level of intracellular Ca<sup>2+</sup> concentration for salivary secretion in rat submandibular gland.
- P-9. Takao Morita (Tobetsu): Enhancement of salivary secretions and gene expressions in the submandibular gland and the brain by preadministration of pilocarpine.

The following posters are also displayed.

- P-10. Yuichi Kadoya (Sagamihara): Basement membrane dynamics in developing salivary gland.
- P-11. Toru Hayashi (Sagamihara): Dynamics of 5-methylcytosine and 5-hydroxymethylcitosine in fetal submandibular gland development.
- P-12. Osamu Katsumata-Kato (Matsudo): The role of membrane microdomains for granule maturation in the rat parotid gland.
- P-13. Sandra Derouiche (Okazaki): Functional interaction between TRPV4 and TMEM16A/ to stimulated saliva and tear secretion.
- P-14. Keitaro Satoh (Mizuho): Involvement of MARCKS phosphorylation and translocation in amylase release in exocrine gland acinar cells.
- P-15, Tetsuya Akamatsu (Tokushuma): Sexual difference in the regeneration model of the rat submandibular gland.

14.55-16.00 Poster viewing session

16.00-17.00 Kyogen "Fukuroh" (Owl)

17.30-20.00 Dinner

The third day: on 2nd December (afternoon: moving to Tokyo)

### Session VII. Calcium hometostasis and further linkage to secretion

- 9.00-9.40 Indu Ambudkar (Bethesda): Plasma membrane Ca<sup>2+</sup> entry in regulation of salivary gland function and dysfunction.
- 9.40-10.20 James W. Putney (Research Triangle Park): Physiological functions of

store-operated calcium channels in exocrine glands.

10.20-10.40 Coffee Break

10.40-11.05 Sandra Derouiche (Okazaki): Functional interaction between TRPV4 and TMEM16A/ to stimulated saliva and tear secretion. (also P-13)

11.05-11.30 Keitaro Satoh (Mizuho): Involvement of MARCKS phosphorylation and translocation in amylase release in exocrine gland acinar cells. (also P-14)

11.30-12.00 Hiroshi Sugiya (Fujisawa) NF-κB regulates MEK/ERK signaling pathway in fibroblasts.

12.00-13.30 lunch

### Session VIII. How to break a bottleneck

13.30-14.10 Akihiko Tanimura (Tobetsu): Roles of muscarinic receptors on the functions of salivary glands.

14.10-14.35 Masataka Murakami (Okazaki) Microcirculation and paracellular fluid secretion in the isolated perfused submandibular gland of rat.

14.35-14.40 Closing by Masanori Kashimata.

Farewell to Domestic Participants.

For Overseas participants after Stensen 4 on 2<sup>nd</sup> December.

15.30 After finishing check-out, we will go to Higashi-Okazaki station.

16.17 Departure from Higashi Okazaki

16.47 Change to Shinkansen "Hikari" to Tokyo at Toyohashi

18.10 arrival at Tokyo

(You may send your luggage on Thursday from Okazaki New Grand Hotel to The Keio Presso Inn Ohtemachi in Tokyo)

20.00-22.00 Dinner at Genkai-Fugu in Kanda