

**Reports on the 2<sup>nd</sup> School of Neuroendocrinology by Dr. Yoichi Ueta (Chair, 2<sup>nd</sup> School of Neuroendocrinology) and two of the students (Chiharu Higashida and Siew Hoong Joe Yip) attending the School.**

**Report 1**

The 2<sup>nd</sup> School of Neuroendocrinology, which was supported by the International Neuroendocrine Federation (INF) and the Japan Neuroendocrine Society, was held in Yufuin, Japan (a popular hot spring area in Kyushu) in early August (2<sup>nd</sup> – 4<sup>th</sup> August, 2009). The School included two short practical training courses; the first on *in situ* hybridization histochemistry and the second on whole-cell patch-clamp electrophysiological recording from magnocellular neurosecretory cells *in vitro*. The training courses, which were programmed primarily for students with little experience with these techniques, were held in Dr. Yoichi Ueta's laboratory in the Department of Physiology of the School of Medicine at the University of Occupational and Environmental Health, Kitakyushu on the 4<sup>th</sup> (afternoon) and 5<sup>th</sup> of August. The purpose of these Schools is to encourage and nurture young researchers who are interested in Neuroendocrinology. The 1<sup>st</sup> School of Neuroendocrinology was held in Seillac, France September, 2007. The decision to hold the 2<sup>nd</sup> School in Kyushu, Japan was made with the aim of attracting students from Asia and Oceania. In this regard, twenty young participants who were either PhD students or postdoctoral fellows came from New Zealand, Korea, Pakistan and Japan. Students from Japan included foreign nationals from Thailand and Nepal.

The program on the first two days covered topics from molecular to behavioral to clinical neuroendocrinology. Five lectures (Neuroanatomy by Dr. M. Kawata (Japan), Molecular Approaches by Dr. K. Kim (Korea), Ion Channels and Signal Transduction by Dr. M. Kelly (USA), Function of Neuroendocrinology: From Synapse to Behavior by Dr. M. Ludwig (UK) and New Concepts by Dr. W. Rostene (France). In addition, two round table discussions (Genetic Animal Models & Clinical Translation in Neuroendocrinology and How to Skill Up English for Discussion, Writing Papers, Grant Applications and Letters by Non-native English Speakers) and poster presentations were held. Students with the best posters also presented their work as short oral sessions.

The students, lecturers and instructors enjoyed the entire scientific program. Of course, they also enjoyed Japanese culture and the experience of bathing in a

Japanese hot spring during the School. The significant help/assistance and contributions by the organizing committee and by the staff of the Department of Physiology are appreciated very much.

Submitted by:

**Yoichi Ueta**

**Chair, 2<sup>nd</sup> School of Neuroendocrinology**

Please visit home page: <http://www.uoeh-u.ac.jp/kouza/1seiri/school2009.html>

## **Report 2**

The 2<sup>nd</sup> International School of Neuroendocrinology was held in Yufuin, a famous town for the hot springs in Japan, from the 2<sup>nd</sup> to the 4<sup>th</sup> of August, 2009. Prof. Ueta (Japan) was the organizer of the meeting. Participants were PhD students and young post-docs not only from Japan, but from different countries like Pakistan, New Zealand, Korea, and Thailand. Young researchers interested in Neuroendocrinology from different labs were brought together to discuss with each other and also with distinguished neuroendocrinologists.

There were many interesting lectures about current researches throughout the course. One of the talks that impressed me was given by Dr. Ludwig. He proved that spikes that originated at the soma can travel along dendrites and elicit secretion from dendrites in the hypothalamic oxytocin neurons. He implanted microdialysis probes into SON and measured released oxytocin *in vivo*. He's experiment was simple, but directly showing that oxytocin is actually released from the dendrites.

There were also educational lectures. Prof. Herbison (New Zealand) and Prof. Parhar (Malaysia) gave technical lectures about how to make transgenic and knock out animals. They further explained to us how these approaches are useful and applicable in neuroendocrinological research. In one of the Round Table Discussions, we discussed one of the big problems that non-native speakers usually have, i.e. English. Dr. Ludwig talked about the way to skill up English for discussion, writing papers and grand applications, and for oral presentations.

After the lectures in Yufuin, we went to Prof. Ueta's lab to take one of two training courses. One was *in site* hybridization histochemistry and the other one was electrophysiology (whole-cell recording). We had one afternoon for the course, but if

we wished, we could stay for one more day. I took the electrophysiology course. We prepared brain slices of through the region of SON region and tried whole-cell recording.

Overall, I enjoyed the School so much. It provided us, young researchers, a great opportunity to meet many people from different labs and exchange ideas. Prof. Plant (USA) mentioned in his concluding remarks that some people requested for the school to be longer. I also agreed with that request.

Submitted by: **Chiharu Higashida – Graduate School of Medical Science, Kanazawa.**

The 2<sup>nd</sup> School of Neuroendocrinology 2009 was held in Yufuin, located in the North-East of Kyushu Island, Japan on the 2<sup>nd</sup>-4<sup>th</sup> of August 2009. This was followed by training courses in the Department of Physiology, University of Occupational and Environmental Health (UOEH), Kitakyushu, Japan on the 4<sup>th</sup>-5<sup>th</sup> of August 2009. The meeting included a series of lectures given by Instructors from all over the world, 2 round table discussions, a poster session and an oral presentations. The training courses, on the other hand covered *in situ* hybridization histochemistry and whole-cell patch clamp recording. These combinations provided a great learning experience in terms of communication skill, social skill, presenting skill as well as practical skill. The meeting provided me an excellent opportunity to meet eminent neuroendocrinologists and fellow students. Being that the number of the attendants were limited to approximately 40, this highly promoted instructor-student and student-student interactions, which proved invaluable in establishing future collaborations. Moreover, I was also able to exchange my research interest via oral and poster presentation to other young scientists in similar area of neuroendocrinology. During the lecture sessions, current experimental approaches in neuroendocrinology were emphasized allowing us to learn new techniques and the possible application of these techniques to our research. In addition, there were also free discussion sessions on how to improve skills for oral presentation and writing papers, particularly for non-native English speakers like most of the student participants such as myself. The discussion also revealed problems encountered in publishing research papers from the students' perspective, which gave a good forecast to other students about the matter.

On the other hand, the training courses provided in the Department of Physiology, UOEH have given me a great value in my on-going research. The training

courses were demonstrated by the highly experienced Department of Physiology, UOEH staff and were conducted in a small group of students to allow hands on experience. The great passion and enthusiasm of the staff made the learning process easy and efficient for a beginner like myself.

Apart from the scientific concepts discussed at the School, I also learnt and experienced the local cultures in Japan. The friendly, warm and welcoming hospitality by the UOEH staff made my whole stay in Japan a very comfortable one. I also managed to visit around Yufuin and experienced the local highlighted spot, "Onsen" the hot spring spas. We also tried the Japanese traditional style dinner and had a taste of the Yufuin local brewed beer.

The 2<sup>nd</sup> School of Neuroendocrinology 2009 was indeed a very successful meeting from my point of view. It provided a fundamental experience for young scientists in preparation for a larger scale conferences. Apart from that, it also created a bonding between the participants, which hopefully will promote future collaboration. The training courses also gave an immediate benefit to most of the ongoing researches as well as influencing future research activities. However, I would also like to see some aspects of the meeting to be improved for the next School of Neuroendocrinology. For example, a longer duration for the meeting may allow more interactions and knowing each other more. Also, perhaps assigning a practical research topic for group discussion would be a good way to bring out the potential of each student and give an opportunity for students to learn to work in a team basis.

I would like to take this opportunity to acknowledge the Division of Health Sciences, University of Otago, the International Neuroendocrine Federation and the Japan Neuroendocrine Society for supporting my travel funding, Professor Yoichi Ueta for organizing this wonderful meeting and all the Department of Physiology, UOEH staff including Dr. Yokoyama, Dr. Fujihara, Dr. Otsubo and Dr. Obuchi for their great effort in teaching the practical courses. Thank you.

Submitted by **Siew Hoong Joe Yip (PhD Student)-University of Otago, New Zealand.**