

# 54th NIBB Conference New Frontiers for the Medaka Model – Genome, Bioresources and Biology

Organizing Chair : Minoru Tanaka

February 28 (Thu)-29 (Fri), 2008

The medaka is an emerging model vertebrate and is beginning to aid the exploration of new fields of biology. The symposium was the first international symposium after the core facility of NBRP medaka was transferred to and established at NIBB and the entire genomic sequence of medaka was published. The symposium focused on not only a variety of biological studies but also on the genome and bioresources. First rate scientists from Japan, Asia, Europe and America gathered at the symposium and surveyed the biology of medaka, the novel skills that support the biology, the genomic information infrastructure and a variety of medaka resources, and discussed the future of such studies. Although the symposium did not set up a poster presentation for young scientists and students, more than 100 researchers participated in the conference.

The presentations on the basic sciences covered wide areas of biology, from the fundamental issues of development, evolution and genome research to the analysis of behavior. This represents one feature of medaka biology, together with its application to environmental assessment and toxicology. It is noteworthy that most of these studies were based on or were closely associated with genomic infrastructures and

novel technologies that have recently become available for the researchers.

The symposium attracted considerable attention from a wide audience and was reported in the May issue of “nature DIGEST”, vol.5 2008. Several speakers from the symposium were interviewed by a reporter in the article.

Lastly, I'd like to briefly mention that this was the first NIBB conference that accepted donations from several overseas companies. An unexpectedly wide and high level of attention to and interest in biology using medaka in the scientific community was indicated by the response.

(Minoru Tanaka)



## Speakers

CHENG, Shuk Han (City Univ. Hong Kong, China SAR), CZERNY, Thomas (Univ. Applied Sciences, Austria), HONG, Yunhan (NUS, Singapore), JOLY, Jean Stephane (INRA/CNRS, France), SCHARTL, Manfred (Univ. Wuerzburg, Germany), TSAI, Huai-Jen (National Taiwan Univ., Taiwan), WESTERFIELD, Monte (Univ. Oregon, USA), WINKLER, Christoph (NUS, Singapore), WINN, Richard N. (Univ. Georgia, USA), WITTBRODT, Joachim (Univ. Heidelberg / EMBL, Germany)

HAMAGUCHI, Satoshi (Niigata Univ., Japan), IWANAMI, Norimasa (Univ. Tokushima, Japan), KAWAMURA, Shoji (Univ. Tokyo, Japan), KIKUCHI, Kiyoshi (Univ. Tokyo, Japan), KUDO, Akira (Tokyo Inst. Tech., Japan), MORISHITA, Shinichi (Univ. Tokyo, Japan), NAGAHAMA, Yoshitaka (NIBB, Japan), NARUSE, Kiyoshi (NIBB, Japan), NISHINA, Hiroshi (Tokyo Med. & Dental Univ., Japan), OKAMOTO, Hitoshi (RIKEN BSI, Japan), OKUBO, Kataaki (NIBB, Japan), SASADO, Takao (Nagahama Inst. Bio-Sci. & Technology, Japan), TAKEDA, Hiroyuki (Univ. Tokyo, Japan), TAKEUCHI, Hideaki (Univ. Tokyo, Japan), TANAKA, Minoru (NIBB, Japan), TANIGUCHI, Yoshihito (Kyoto Univ., Japan), WAKAMATSU, Yuko (Nagoya Univ., Japan), YAMASHITA, Masakane (Hokkaido Univ., Japan), YAMAZAKI, Yukiko (NIG, Japan)

# 55th NIBB Conference Frontiers of Plant Science in the 21<sup>st</sup> Century

Organizing Chair : Kiyotaka Okada

September 13 (Sat)-15 (Mon), 2008

For three days in mid-September 2008, from the 13th to the 15th, 147 people gathered in the Okazaki Conference Center and discussed the present and future of Plant Science under the title of “Frontiers of Plant Science in the 21<sup>st</sup> Century”. The topics ranged from cellular, developmental, and genetic biology to systems biology, evolutionary biology and engineering. The program of the conference can be found on our home page at <http://www.nibb.ac.jp/conf55>. We had a special panel discussion on the afternoon of the 14th, which was organized and held by a group of our graduate students

as part of their Graduate Student Education Program sponsored by the Graduate University for Advanced Studies (SOKENDAI).

After the conference, we asked several attendants to give us a frank review of the aims and execution of the conference. The comments and advice that we received will be a great help to us in improving future NIBB conferences and can be found below.

(Kiyotaka Okada)



## Invited Speakers

BEEMSTER, Gerrit T.S. (Ghent Univ., Belgium), CAUSIER, Barry (Univ. Leeds, UK), COLLINS, Richard M. (Univ. Leeds, UK), COPPENS, Frederik (Ghent Univ., Belgium), COUPLAND, George M. (Max Planck Inst., Germany), GIAKOUNTIS, Antonis (Max Planck Inst., Germany), GONEHAL, Venugopala Reddy (UC, Riverside, USA), ITO, Toshiro (Temasek Life Sciences Lab., Singapore), KEPINSKI, Stefan (Univ. Leeds, UK), KNOX, Paul (Univ. Leeds, UK), MICOL, Jose Luis (Univ. Miguel Hernandez, Spain), PEREZ-PEREZ, Jose M. (Univ. Miguel Hernandez & Inst. Bioingenieria, Spain), SAIJO, Yusuke (Max Planck Inst., Germany), SCHULZE-LEFERT, Paul (Max Planck Inst., Germany), SUN, Bo (Temasek Life Sciences Lab., Singapore)

ASHIKARI, Moto (Nagoya Univ., Japan), BREUER, Christian (RIKEN Plant Sci. Center, Japan), EZURA, Hiroshi (Univ. Tsukuba, Japan), HARA-NISHIMURA, Ikuko (Kyoto Univ., Japan), HASEBE, Mitsuyasu (NIBB, Japan), KAKUTANI, Tetsuji (NIG, Japan), KAWAGUCHI, Masayoshi (Univ. Tokyo, Japan), MACHIDA, Yasunori (Nagoya Univ., Japan), MATSUBAYASHI, Yoshikatsu (Nagoya Univ., Japan), NISHIMURA, Mikio (NIBB, Japan), OKADA, Kiyotaka (NIBB, Japan), SHIMAMOTO, Ko (NAIST, Japan), TAKEDA, Seiji (NAIST, Japan), TANAKA, Yoshi (Suntory Ltd, Japan), TSUKAYA, Hirokazu (Univ. Tokyo / NIBB, Japan), YAMAGUCHI, Takahiro (NIBB, Japan)

## Organizing Committee

OKADA, Kiyotaka (NIBB), TSUKAYA, Hirokazu (Univ. Tokyo / NIBB), NISHIMURA, Mikio (NIBB), HASEBE, Mitsuyasu (NIBB), YAMAGUCHI, Takahiro (NIBB)

### Comments from the participants

#### Dr. Antonis Giakountis

##### Max Planck Institute for Plant Breeding Research, Germany.

The organizers did an excellent job, on multiple levels, of preparing the NIBB55 conference. The invited speakers were certainly chosen wisely and in such a way that all of the sessions were interesting. In terms of timing the conference was also successful and there were no significant deviations from the schedule. One suggestion would be to offer the opportunity to selected poster presenters to take 20 minutes instead of 15 minutes for their talks, especially since the discussion was also included in that time. Perhaps the starting talk of each session could be reduced to 30-35 minutes instead of 40 minutes so as to provide this extra time. I appreciated and enjoyed the politeness of the hosts and the

Japanese students a lot and there were many opportunities for social interaction at the conference. Furthermore it was a very interesting idea to have a

panel discussion conducted exclusively by young scientists on topics that the students themselves had selected. This certainly made this session very current and up-to-date. An additional suggestion would be to perhaps split future panel discussions up over two days or to move them to morning sessions so as to stimulate even more discussion. In conclusion, it was a very successfully and fruitful meeting which highlighted research opportunities in Japan as being very attractive.



#### Dr. Stefan Kepinski

##### Centre for Plant Sciences, University of Leeds, UK.

I thought the meeting was a wonderful success. Firstly, the selection of speakers and the quality of the presentations were excellent, making the meeting extremely satisfying scientifically and intellectually. The broad theme of "Frontiers of plant science in the 21<sup>st</sup> century" worked very well and I imagine drew wide interest from across the diverse research activity of NIBB. If you were to consider more focused meetings in the future then I would suggest themes that still allow wide participation across your institute and throughout Japan. Examples could be 'Systems biology and quantitative modeling' or 'Single-cell-level biology' or 'Next generation sequencing' because although they are focused on particular approaches, they are useful in showing how these new approaches can boost the research capacity of a whole range of groups.

I thought that it was an excellent idea to let the younger students organize the presentation and discussion session on the future of plant research and I very much enjoyed participating in the discussions. I also enjoyed the fact that there was time to chat with other scientists both at coffee breaks and at the poster sessions. The only thing you might follow up on is that the younger participants felt there was enough time to 'pluck up the courage' to approach the speakers to talk about their work. At interesting meetings like this it can often be the case that the

speakers and senior scientists are so engaged with the science and talking to their colleagues that it can be difficult for the younger scientists to find the time to talk to them.

With respect to enhancing opportunities for younger researchers to interact with most established PIs and visiting speakers, the only suggestion I can make is that you could consider setting up a lunch where each PI dined with a small group of, say, 4-5 students to allow them time to talk about life in science and research in general. As alluded to above, it can often be daunting for early career scientists to approach older colleagues and this might be a useful way of helping them overcome any shyness in this regard. Having such an event early in the meeting would probably be most useful as it would allow them to get to know the visiting and senior scientists straight away and make them feel more confident about continuing discussions throughout the meeting.

All in all it was a really very enjoyable and stimulating meeting. It was very well organized and ran very smoothly. I'd like to thank you and the organizers again for both the invitation and your excellent hospitality while we were with you in Okazaki.



#### Dr. Jose Manuel Perez-Perez

##### Universidad Miguel Hernandez, Spain.

The 55th NIBB Conference Arabidopsis Workshop 2008 entitled "Frontiers of Plant Science in the 21<sup>st</sup> Century" was held in Okazaki during September 13th-15th and chaired by NIBB Director Prof. Okada and others. The workshop consisted of 25 conferences (15 of which were from foreign researchers invited from outside Japan) arranged in 9 scientific sessions covering most plant topics. Fifty-two posters from Japanese researchers were presented, with nine of them being selected for oral discussions. The location of the posters (opposite the conference hall) helped encourage discussion with the authors at any time and not only during the poster sessions. About 130 participants, most of them in the initial stages of their careers (PhD students and postdocs), attended the meeting, which was nicely organized and properly scheduled at the Okazaki conference centre (OCC). The meeting was the right size to allow for a fruitful flow of information and to encourage eventual collaborations. I personally find it very useful for the young PhD students to attend and participate in this kind of meeting because it provides them with a good overview of the latest plant research and allows them plenty of time to discuss their favorite research topic with their colleagues. The conference hall was very appropriate for the presentations, with very comfortable chairs and good facilities. Lunch at the conference centre was quite diverse and copious with enough refreshment time after each scientific session. Furthermore, get-together dinners with our Japanese hosts (PhD and postdocs in one case and Professors in the others) were very enjoyable, not only for the food but also for the relaxed and friendly

environment. In this 55th NIBB edition, the students organized a session about the future of plant research that began after short introductions by the invited young researchers. Although the aim of this panel discussion was to enhance participation from the young students in the audience, it was mostly the senior PIs who participated. In my opinion, the topic list chosen by the students was too broad. Maybe focusing only on a few hot topics (the future of transgenic plants, climate change, etc.) and building a real debate table around them would have helped to improve audience participation. Although most of the talks I attended were not related to my main research topic (leaf development in Arabidopsis), all of the presentations were clear and concise with a definite time for enough questions too. Maybe it would help the students if they were able to ask their questions in Japanese first, with an English translation afterwards. I really liked that most of the speakers presented unpublished or ongoing work from their laboratories, which gives a good impression about the kind of science that's being performed nowadays in Japan. The travel and accommodation for the invited speakers was handled very efficiently, and I did not have to worry at all about flight tickets, etc., since everything was arranged in advance from Japan. This meeting has been my first contact with Japanese culture and as far as I can say the most interesting one. I am looking forward to the opportunity to come back again in 2010!

