

The 9th NIBB International Practical Course, The 4th NIBB-TLL Joint International Practical Course “Genetics and Imaging of Medaka and Zebrafish”

■ Period: August 18 (Thu) - 31(Wed), 2016

■ Participants: 17 (2 from Argentina, 2 Korea, 2 Singapore, 1 Germany, 1 India, 1 Taiwan, 1 UK, and 7 Japan)

■ Venue: National Institute for Basic Biology, Japan

■ Lecturers:

Dr. Tomonori DEGUCHI (AIST)

Dr. Rie GOTO (Ehime Univ.)

Dr. Masayuki HATTORI (NIBB)

Dr. Shinya KOMOTO (EMBL)

Dr. Akiko KONDOW (Fujita Health Univ.)

Dr. Laszlo ORBAN (TLL)

Dr. Sachihiko SUZUKI (OIST)

Dr. Saori YOKOI (NIBB)

Dr. Goro YOSHIZAKI (TUMSAT)

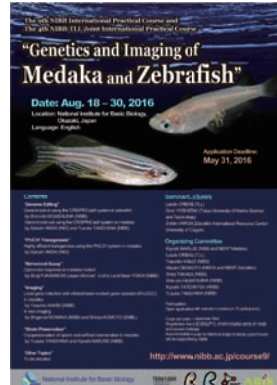
Dr. Zoltán VARGA (Zebrafish International Resource Center/ Univ. of Oregon)

■ Course Staff:

Dr. Yoriko ANDO (NIBB), Dr. Satoshi ANSAI (NIG), Dr. Shoji FUKAMACHI (Japan Women's Univ.), Dr. Akiko KONDOW (Fujita Health Univ.), Dr. Shin-ichi HIGASHIJIMA (NIBB), Dr. Yasuhiro KAMEI (NIBB), Dr. Shinya KOMOTO (EMBL), Dr. Kiyoshi NARUSE (NIBB), Dr. Shigenori NONAKA (NIBB), Dr. Sachihiko SUZUKI (OIST), Dr. Yusuke TAKEHANA (NIBB), Dr. Saori YOKOI (NIBB)

■ Contents of the course:

Gene knock-in using the CRISPR/Cas9 system in zebrafish, Gene knock-out using the CRISPR/Cas9 system in medaka, Highly efficient transgenesis using the PhiC31 system in medaka, Optomotor response in medaka mutant, Local gene induction with infrared laser-evoked gene operator (IR-LEGO) in medaka, in vivo imaging, Cryopreservation of sperm and artificial insemination in medaka



The 9th NIBB International Practical Course - 4th NIBB-TLL Joint International Practical Course was held from August 18 to 30, 2016. We received 28 applications, and 17 (8 males, 9 females) passed the screening process. The participants comprised a group of 7 from Japan and 10 from overseas of 10 regions in 7 countries. Dr. Laszlo Orban, one of the organizers of the program, attended as a special lecturer as well, and we invited other researchers to give special lectures during the course such as Dr. Zoltan Varga, who is the director of the Zebrafish International Resource Center, the University of Oregon, Dr. Rie Goto from Ehime University, and Dr. Goro YOSHIZAKI from Tokyo University of Marine Science and Technology. Moreover we invited 7 lecturers from both Japan and abroad to give seminars. The course was covered the topics “Highly efficient transgenesis using the PhiC31 system”, “Gene knock-in using the CRISPR/Cas9 system in zebrafish as well as medaka”, “Cryopreservation of sperm and artificial insemination in medaka”, “Imaging using light-sheet microscopes”, and “Gene expression induction method by IR-LEGO”.

We managed the course without supporting the travel costs for students, however in spite of having supported travel costs in the past we had just under twice as many applicants for this year's course. It was the first time we hosted participants from South America, of which we had two. We were also pleased that we received students from both EMBL and TLL, two of NIBB's research cooperation institutes.

We plan to continue to conduct NIBB International Practical Courses which feature small fish research with a combination of basic laboratory techniques and the latest technology in the future.

(Kiyoshi Naruse on behalf of the organizing committee)

