**Shinkishi Hatai International Marine Biology Course, 5–13th July 2017**

The Research Center for Marine Biology (RCMB), Tohoku University is going to hold the Shinkishi Hatai International Marine Biology Course from July 5th to July 13th, 2017.

The course is open to undergraduate and graduate students who are majoring in or plan to major in biology, life science, and related fields, with particular focus on marine biology to provide experiences with basic experiments and practices. Half of the participants will be Japanese students; therefore, it will be a good opportunity to deepen exchanges with each other. We regard this course as a unique opportunity for participants to learn about marine biology and specific techniques. Experience with handling marine organism is not necessary, but welcome.

**Overview:**

A marine biology station is the ideal environment to observe live marine organisms and to begin studying marine biology. The marine biology course held at our marine biology station, RCMB, on the coast of Mutsu Bay, provides hands-on experience in handling organisms (echinoderms and ascidians) and exploring the often-overlooked invertebrate taxa living in the sand interstices (meiobenthos). The first half of the course will introduce the participants to three fields, developmental biology of echinoderms, developmental biology of ascidians, and meiobenthology. In the latter half of the course, participants will conduct projects supervised by instructors of each field, and their results will be presented on the last day. Specific projects will be arranged prior to the course.

**Projects:**

Course in Meiobenthology

Drs. Reinhardt Møbjerg Kristensen (Natural History Museum of Denmark, University of Copenhagen) & Shinta Fujimoto (RCMB)

Beakers vs Breakers: Mechanisms of Development and Protection in Sea Urchin Embryos

Dr. Amro Hamdoun (Cell and Developmental Biology, Scrips Institute of Oceanography)

Supporting RCMB staff: Drs. Takuya Minokawa and Keiichiro Kyozuka (RCMB)

Developmental Biology of Ascidians

Dr. Alex McDougall (Developmental Biology Laboratory, Villefranche-sur-mer)

Supporting RCMB staff: Drs. Ayaki Nakamoto and Keiichiro Kyozuka (RCMB)

**Venue:**

Research Center for Marine Biology, Tohoku University (for details see our website: For Users > Access)

**Schedule:**

5th July: Registration

15:30 Keynote lecture by Dr. Motonori Hoshi (Professor Emeritus, Tokyo Institute of Technology)

18:00 Welcome reception

6th July: “Course in meiobenthology” by Drs. R.M. Kristensen and S. Fujimoto

Lecture & lab work

7th July: “Beakers vs breakers: Mechanisms of development and protection in sea urchin embryos” by Dr. A. Hamdoun

Lecture & lab work

8th July: “Handling of gametes and observation of ascidian embryos” by Dr. A. McDougal

Lecture & lab work

9th July: Excursion and preparation for individual projects

10–11th July: Advanced courses for each project

12th July:

15:00 Presentations of each project

18:00 Farewell party

13th July: Leaving Asamushi

**Qualifications:**

The course is open for undergraduate and graduate students (approx. 15 in total) from any institute, who major in or have an interest in biology and related fields. If the number of applicants exceeds our hosting capacity, we may have to decline applications. Experience in handling marine animals is not necessary, but welcome. Accommodations and meals are available at a reasonable rate at the center’s dormitory (for details see center’s website: For Users). We are unable to support your travel expenses; however, we will work to assist you in obtaining travel subsidies.

**Registration:**

1. Please send an e-mail to the following address with your intention to participate in the course and the specific project you want to participate in by 31st March 2017. An early notice of your intention to participate will optimize in preparing for individual projects.

E-mail address: **shimbc2017**(at)**grp.tohoku.ac.jp [**Please change (at) to @]

1. When we receive your e-mail, we will send an application form with additional information about the course, accommodations, and so on.

**Organizing committee:**

Dr. Keiichiro Kyozuka (Chairperson)

Dr. Gaku Kumano

Dr. Shinta Fujimoto