

RESEARCH ENHANCEMENT STRATEGY OFFICE



Director
 UENO, Naoto



Vice-Director (Specially
 Appointed Professor (URA))
 NISHIMURA, Mikio

In order to fulfill two goals, to encourage cutting-edge academic research in the field of natural sciences through international joint research, and to contribute to the enhancement of research capabilities of universities etc. in Japan using the world's most advanced research environment for joint utilization and joint research, NINS started in 2013 a research enhancement project with the following four approaches: 1) Support for the promotion of international advanced research, 2) Support for the promotion of joint utilization and joint research in Japan, 3) Dissemination of information and enhancement of public relations in Japan and abroad, 4) Support for researchers, especially young, female or foreign researchers.

The Research Enhancement Strategy Office is aimed at supporting researchers so that NIBB improves its ability as a collaborative research institution, and was restructured in 2013 from the former Strategic Planning Department, the Office of Public Relations, and the Office of International Cooperation which existed from 2005. The Office's activities are mainly carried out by URAs (University Research Administrators) according to the advice of the group adviser chosen from NIBB's professors and in close collaboration with the NINS's Research Enhancement Promotion Headquarters.

Evaluation and Information Group

Associate Professor: KODAMA, Ryuji
 Group Adviser: YOSHIDA, Shosei

This group serves as a central office for assisting the Director General in preparing for NIBB's evaluation procedure and in planning long-range strategies for the institute.

The main activities of the group

1) Management of external evaluation processes

NIBB asks non-NIBB members of the Advisory Committee for Programming and Management to answer a questionnaire on research achievements and collaborative research activities of the institute. Several of the members are further invited to participate in a meeting for the evaluation of these activities and for proposing future directions for the institute. This group manages these processes.

2) Editing of the Annual Report (in collaboration with the Public Relations Group)

This group edits the annual report (this print) which summarizes the annual activities of laboratories and facilities and is used in the evaluation procedures of the institute.

3) Assistance in budget requests and long-range planning of the institute

This group also assists the Director General in preparing long-range plans for building the most advanced research facilities, and in budget requests to the government to realize and implement these plans.

4) Assistance in making the plans and reports of the institute

In addition we assist in drafting NIBB's Medium-term Goals and Plans (for a six-year-period), and in instituting Annual Plans to implement them. The department also assists in preparing Business and Performance Reports for the external evaluation on whether we are meeting the goals set both annually and for the medium-term.

Public Relations Group

Specially Appointed Assistant Professor (URA):
 KURATA, Tomoko
 Technical Assistant:
 OTA, Kyoko
 KAWAGUCHI, Colin
 BAN, Misato
 Group Adviser:
 FUJIMORI, Toshihiko

This group, in order to publicize the activities of NIBB to the widest audience, actively facilitates communication between NIBB and the public, school teachers, and the international community of scientific researchers.

The main activities of the group in 2016

1) Press releases

The group sends news on scientific achievements to newspaper and magazine reporters via leaflets, e-mails and web pages. We also arrange press conferences for some releases.

2) Updating and maintenance of the NIBB web page

3) Editing of publications, production of posters and leaflets

Publication of "NIBB News" (Intra-institutional newsletter, in Japanese). Publication of leaflets introducing the individual researchers of NIBB (in Japanese). Design and distribution of posters of NIBB events.

4) Producing Videos

Creation of videos introducing NIBB and interviews with researchers that are published on the web.

5) Organization of scientific outreach programs

Organizing the Summer Program for university students, and coordinating special classes for middle school students.

INTERNATIONAL COOPERATION GROUP

Specially Appointed Assistant Professor (URA):
TATEMATSU, Kiyoshi
Technical Assistant:
TAKAHASHI, Ritsue
SANJO, Kazuko
NISHIMURA, Akiko
Group Advisor:
UENO, Naoto

NIBB has a mission to continually explore the leading-edge of biology and form research communities that link Japan to the world. For this purpose, NIBB holds scientific meetings including “NIBB Conferences” and “Okazaki Biology Conferences (OBC)”, and educational programs such as “NIBB International Practical Courses”. Further, NIBB is tightly interacting with the European Molecular Biology Laboratory (EMBL, European member states), the Temasek Life Sciences Laboratory (TLL, Singapore) and Princeton University, USA on the basis of cooperative agreements, through exchanging people and techniques and jointly holding scientific meetings. NIBB is also conducting the “NIBB International Collaborative Research Initiative” to promote high-level international collaborations between faculty members of NIBB and researchers around the world. NIBB invites leading-edge researchers from abroad as “Guest Professors” to promote academic exchange with NIBB members and to start new international collaborations.

This group supports and coordinates NIBB’s activities related to international research collaborations, through organizing the various above-mentioned international scientific meetings and technical courses, coordination of dispatching NIBB’s researchers to international conferences, and support of researchers visiting from the institutes mentioned above. This group also supports NIBB internship students visiting from foreign countries, and the dispatching of graduate students of SOKENDAI (the Graduate University for Advanced Studies) to international conferences, which are aimed at nurturing the next generation of researchers in biology. This group, cooperating with the Okazaki Administration Office and International Affairs Division, City of Okazaki, also supports researchers and students who visit NIBB.

The main activities of the group in 2016

1) Coordination of the International Conferences and the International Practical Course

This group coordinated the following International Conference hosted by NIBB:

The 64th NIBB Conference “Evolution of Seasonal Timers” Okazaki, Japan, April 22 - 24, 2016 (p. 93)

The 9th NIBB International Practical Course and the 4th NIBB-TLL Joint International Practical Course “Genetics and Imaging of Medaka and Zebrafish” Okazaki, Japan, August 18 - 31, 2016 (p. 94)

2) Support of visiting researchers to NIBB

This group supported visits of foreign researchers related to the following events:

One Guest Professor coming from Academia Sinica,

Taiwan (March) with the financial support of NINS and two researchers coming from EMBL, Germany (July) and Princeton University, USA (September)

3) Support of education related programs

This group supported hosting students participating in the following student-related activities of NIBB:

NIBB Internship Program 2016 (p. 98)

Collaborative Research Group

Specially Appointed Associate Professor (URA):
SHIGENOBU, Shuji
KAMEI, Yasuhiro
Technical Assistant:
ICHIKAWA, Mariko
ICHIKAWA, Chiaki
Group Adviser:
YOSHIDA, Shosei

Specially appointed associate professors of this group belong to the NIBB core research facilities and are responsible for managing collaborative research projects and practical courses taking advantage of their expertise in their field, through which this group explores further promotion of information exchange and collaboration among scientific communities, and also supports the development of new equipment and methods.

In 2016, this group hosted a total of 114 collaboration projects. Through these collaborations, 28 research papers were published. A noteworthy achievement was the award-winning publication by Prof. Wakabayashi (Tokyo Institute of Technology) and his colleagues on the phototactic response of the green alga *Chlamydomonas reinhardtii*. Through the close collaboration, the NIBB team analyzed the genome of an alga mutant by using next-generation sequencing technology resulting in the identification of the gene responsible for the phenotype.

- Ide, T., Mochiji, S., Ueki, N., Yamaguchi, K., Shigenobu, S., Hirono, M., and Wakabayashi, K. (2016). Identification of the *agg1* mutation responsible for negative phototaxis in a “wild-type” strain of *Chlamydomonas reinhardtii*. *Biochem. Biophys. Rep.* 7, 379-385.
- Ueki, N., Ide, T., Mochiji, S., Kobayashi, Y., Tokutsu, R., Ohnishi, N., Yamaguchi, K., Shigenobu, S., Tanaka, K., Minagawa, J., Hisabori, T., Hirono, M., and Wakabayashi, K. (2016). Eyespot-dependent determination of the phototactic sign in *Chlamydomonas reinhardtii*. *Proc. Natl. Acad. Sci. USA* 113, 5299-5304.

Gender Equality Promotion Group

Associate Professor: TSUBOUCHI, Tomomi
Group Adviser: TAKADA, Shinji

This group supports the improvement of the research environment for female researchers in both research and daily life. This includes our research support system for childbirth and childcare, etc., aiming at promoting the employment of female researchers.

In 2016, this group contributed to the management of the research support system covering childbirth and childcare and to establishing a network between female researchers.