

Okinawa Institute of Science and Technology School Corporation

Fiscal Year 2014 Business Plan



OIST

OKINAWA INSTITUTE OF SCIENCE AND TECHNOLOGY GRADUATE UNIVERSITY
沖縄科学技術大学院大学

Okinawa Institute of Science and Technology School Corporation FY2014 Business Plan

Introduction

In November 1, 2011, the Okinawa Institute of Science and Technology School Corporation Act (OIST SC Act) came into effect, with the objectives of contributing to the promotion and self-sustainable development of Okinawa as well as contributing to the advancement of science and technology in Japan and throughout the world. In connection with the enforcement of this Act, and with the prior authorization by the Minister of Education, Culture, Sports, Science and Technology, the Okinawa Institute of Science and Technology School Corporation (OIST SC) was established as a school corporation to operate the Okinawa Institute of Science and Technology Graduate University (OIST Graduate University) which conducts world-class education and research in science and technology.

This Business Plan has been developed, with an approval of the OIST SC Board of Governors, to guide the operations of OIST SC by setting goals and providing action items for the fiscal year (FY) 2014 – from April 2014 to March 2015 – based on the Article 9 of the OIST SC Act.

Visions of OIST Graduate University

Excellence in research

Broadening the boundaries of human knowledge is a key role of the academic community. With the successful operations of the OIST Promotion Corporation (OIST PC) since its establishment in September 2005, a highly international and cross-disciplinary research environment has been created in the modern and well-equipped facilities on the OIST campus located in Onna, Okinawa. Currently, world-class research is being conducted by 47 research units led by outstanding faculty members.

We will make every effort to develop the research foundation further to become a leader in scientific research. The best mix of talented scientists in a range of scientific fields including the life sciences, the physical sciences and mathematics, the absence of departmental barriers, and the strong emphasis on creativity and collaboration will promote truly cross-disciplinary research to achieve new scientific discoveries.

Best opportunities for students

Educating outstanding scientists and researchers is another critical function which we are expected to perform as a fully functioning educational institute. OIST Graduate University opened its 5-year integrated Ph.D. program in Science and Technology in September 2012, and will admit the third year of students to the program in September 2014.

We will provide the best graduate students recruited from around the world with the opportunities of working side-by-side with world-class faculty for their Ph.D. degrees. The education and research are conducted entirely in English. The program is customized to each student through its flexible curricula that include Laboratory Rotations. The Rotations provide a variety of experience in different laboratories that will broaden the students' understanding of different disciplines, techniques, and ways of thinking. Through this internationally unique Ph.D. program, OIST Graduate University will provide the next

generation of scientists and researchers with the ability to think creatively, reason scientifically, and collaborate effectively across traditional academic boundaries.

Our graduates will play a leading role in the best research institutes throughout the world or at the forefront of emerging industries and contribute to the welfare and prosperity of citizens of the world. In addition, contributing to the advancement of science and technology in the world, educating world-class scientists and sending them to the world from Okinawa, aligns with the direction of Okinawa development policy. By fostering the basis of future human networks, OIST Graduate University will contribute in achieving one of Okinawa's goals; realizing "Bankoku Shinryo" (a phrase, meaning a bridge among nations, carved on the bell at the Ryukyu Kingdom's castle in Shuri) in the 21st Century.

Contribution to enhancing the competitiveness of Okinawa and Japan

Being at the crossroad of Asia and Pacific regions, Okinawa has great geographic potential as well as the historical and cultural background to develop into an international hub where diverse people and ideas interact with each other in the fields of science and technology. Okinawa has the potential to become a gateway for Japan, open toward the international community. To realize this, OIST Graduate University will work closely with academic and research institutions in Okinawa, including the University of the Ryukyus, as well as the governmental sector such as Okinawa Prefecture Government (OPG) and Onna Village (Onna-son).

Innovation and entrepreneurship are key factors today for regions that aim to be globally competitive. We will share the goal of creating an international Intellectual and Industrial Cluster (R&D cluster) in Okinawa, which will contribute to enhancing Japan's competitiveness, with relevant parties. To achieve this, a strong academia-industry-government partnership must be established. We will continuously and aggressively participate in the collective efforts by creating intellectual capital collaborating with the industry both on and outside of the island, and bringing our research results to the market. In addition, we recognize that we can make important contributions to the elementary and secondary education in Okinawa by collaborating with local schools to inspire young people with scientific activities.

Our success relies on the understanding and continuous support by the tax-payers in Japan, especially the people in Okinawa. We will make every effort to meet the expectations of the Okinawan people and to become an institution they will be proud of.

High flexibility, efficiency and transparency

Successful operations of an international graduate university in science and technology require flexible, efficient, and effective administrative management, which will enable us to adjust to the rapid changes in academic and business environment as well as global competitions. Administrative procedures should not be obstacles to creativity and innovation, but should provide appropriate support for them. Ensuring a high level of transparency is one of the statutory requirements for the OIST SC. We are committed to continue to comply with the pertinent laws and regulations and demonstrate accountability to the general public. In addition, we will globally and locally communicate strategically with our various stakeholders.

Financially, while OIST Graduate University will have to depend largely on the subsidy from the Japanese Government during the initial period, it will steadily broaden and diversify its

financial basis. In the long-term perspective, we will endeavor to achieve sufficient financial independence at the earliest possible time in the future. Systematic efforts will be made to encourage and support our researchers to apply for research grants. We will also seek other funding opportunities worldwide.

OIST Graduate University aims to provide a new model for universities in Japan not only in science and education, but also in approaches to the administration and financing of an international university.

What FY2014 means for OIST Graduate University

For the OIST Graduate University, the FY2014 is a period to take next step toward future expansion. The University has to ensure the completion of the on-going projects from the previous fiscal year. At the same time, we have to make sufficient preparation for the next phase of development for the University, while properly reviewing the past efforts. More specifically, the FY2014 is important from the following three perspectives:

1) Accelerate Activities Related to promoting R&D cluster development in Okinawa:

OIST continues to take various actions to expand its activities in the area of Academia-Industry-Government cooperation, with the goal of creating new sustainable development in Okinawa. At the same time, on June 14, 2013 the Cabinet announced the “Basic Policies for Economic and Fiscal Management and Reform” with a call for “the development of an industrial cluster with the Okinawa Institute of Science and Technology (OIST) etc., at the center, with OIST carrying out advanced, interdisciplinary research aimed to be at the highest level in the world”. With the incentive, OIST will accelerate activities for promoting R&D cluster development in Okinawa, such as promoting related researches, collaboration with industry and enhancing organizational functions, including constructing a hall and an onshore marine science facility. Following that FY2014 budget is considerably increased from that of FY2013, OIST will effectively and efficiently share results of its research.

2) Enhance OIST Graduate University:

The third round of students will join OIST in September 2014, and some students accelerate doctoral thesis researches. In addition, OIST will construct Laboratory 3 and the permanent Child Development Center. At the same time, OIST will continue to strengthen its research support system and enrich welfare support for the OIST community.

3) Planning Future Expansion of the University for Achieving Ambitious Goals:

The 2003 “Proposed Framework of the University” document stated “Ideally, that of 300 (PIs), equivalent to California Institute of Technology, will allow plenty of flexibility to adapt to future changes in society and academia”. The 2008 “Blueprint of the New Graduate University” document further stated “The ideal size ultimately pursued by the university in the long term is around 300 PIs, with graduate schools and majors to be determined”. Following the concept, OIST will have a Planning Committee to discuss the plan for future development toward 300 faculty for achieving OIST’s ambitious goals. This will be done in the context of an update to the Framework Document.

Planning framework and evaluation approach

This Business Plan is to clarify the goals of FY2014 and to identify a list of action items to achieve the vision described above. The plan has the following 5 chapters in accordance with the Cabinet Office Ordinance (Ordinance for enforcement of the OIST School Corporation Act (Cabinet Office Ordinance No. 59 of 2011)); 1) Education and research, 2) Governance and administrative transparency and efficiency, 3) Finance, 4) Contribution to self-sustainable development of Okinawa, and 5) University campus and community development; safety and environment protection. Each chapter has subchapters consisting of Goals and Actions.

Every fiscal year, the CEO/President works together with the Vice CEO/Provost and the other executive officers of the university to compile and propose the annual Business Plan. Based on the Bylaws of the OIST SC, the draft Business Plan will be submitted to the Board of Councilors (BOC) for their review and to the Board of Governors (BOG) for their final approval. The plan will be submitted to the Prime Minister for its approval based on the OIST SC Act. The government will provide financial support to the OIST SC based on the assumption that the OIST SC will implement the approved Business Plan appropriately.

As a corporation established on the basis of special legislation and largely funded by the government, we recognize that it is our responsibility to implement the Business Plan steadily and to demonstrate accountability for our activities, including status of implementation of the Business Plan, to the general public. A key to achieve these is the relationship between the BOG as an overseeing body and the CEO/President executing daily operations. The BOG is responsible for overseeing the CEO/President's implementation of the Business Plan, and the CEO/President is responsible for reporting the status of implementation of the Business Plan to the BOG. In addition, the Auditors of OIST SC will supplement this relation by conducting independent and rigorous auditing on all aspects of operations including the status of implementation of the Business Plan.

Results will be appropriately utilized in operation in future years. After the end of each fiscal year, the organizational performance will be reported to and evaluated by the BOG and the BOC. The evaluation results will be utilized appropriately in planning and executing business in a constructive way as a basis for the next step to achieve our objective of being one of the best educational institutions in the world. In addition, the annual report together with the evaluation results will be posted on the OIST web site to ensure transparency by the end of June of the following fiscal year.

For effective and transparent monitoring of progress against the plan, metrics will be provided for sub-sections of the Business Plan whenever appropriate. These metrics will also help conduct time series analyses of the growth of OIST Graduate University and international comparison with bench-marked institutions. Most of the metrics should be evaluated in the long run in the spirit of achieving the goals described above. We are aware of the importance of quality of our outputs, and these metrics themselves should not be the objectives.

Chapter 1 Education & Research

1.1 Ph.D. Program

Goal:

Using feedback from 2013, refine and improve measures to ensure that the third class of students join the university smoothly and start their research training as planned.

Actions:

(Courses)

- Continue to develop the curricula including courses taught by newly recruited faculty, and submit an application of additional faculty teaching to MEXT in June 2014.
- Continue to provide the customized Ph.D. program, including pre-thesis research training and laboratory rotations and assignment of an Academic Mentor for each student.
- Continue to provide the programs for Professional Development for students including training that focuses on group activities and presentation skills.
- Implement the examination for progression to thesis research.
- Further develop the Gap period training in language and research experience for incoming students, especially those who graduate from Japanese universities in March.

(Educational Environment)

- Continue to enhance collaborative relationships with other universities by developing exchange agreements concerning interns, course credits, TA opportunities, and other exchange opportunities.
- Maintain and enhance student record systems for monitoring of student progress, grades and completions.
- Enhance teaching support systems to manage laboratory classes, teaching materials, lecture and tutorial rooms, AV support, computer labs, and liaison between teaching faculty and academic services section.

(Student Support)

- Refine and improve the orientation programs for the incoming students.
- Continue to provide an environment for the students entering our Ph.D. program in which they will be able to concentrate in their research activities under the living standard comparable to that of the students of the best universities in the world that we are competing with.
- Establish an incident reporting system to track the occurrence, response and outcome of incidents involving students.
- Continue to collect and provide information of external scholarship opportunities to the students.
- Implement measures to support career development of students by appointing a Professional Develop and Career Advisor to coordinate professional development activities including arranging of TA opportunities at other universities and colleges, promotion of networking with leaders of universities and research institutions in Japan and around the world, active provision of the information concerning post-doctoral and other job opportunities, and support to entrepreneurial activities including interning at venture firms in Okinawa.
- Resource Center will continue and enhance its direct support to the students and their family members.
- Clinic and Counseling Room will be set up in April to cover the students needs for

physical and mental health. Staff will be bilingual to cover both non-Japanese and Japanese students and employees. In addition, a range of seminars on stress management and stress warning signs will be developed and offered.

- Improve the environment by increasing opportunities for sport and recreation.

Goal:

We will continue to attract and select the graduate students for our Ph.D. program from amongst the best available worldwide in science and technology. At least half of the students will be non-Japanese.

Actions:

- Review previous student recruitment and admission activities. Reflect the results of the analysis in the updated procedures and implement them effectively in a planned manner.
- Carry out student recruitment activities globally to attract the highest caliber graduate student candidates for the fourth intake of students arriving in September 2015 as follows:
 - The number recruited: About 20 students
 - Admission period: June – August 2014 and January - March 2015
 - Major recruitment activities:
 - Continue to develop the graduate school website as a recruiting tool. In addition, print a concise and well edited student recruitment brochure.
 - Continue holding OIST Café in major Japanese cities by providing OIST recruiting information and English training.
 - Hold a science video contest in English for the undergraduate Japanese students to win an English presentation training at OIST.
 - Send OIST faculty members to several targeted countries to hold a seminar about OIST.
 - Print specially targeted brochures, i.e. physics, neuroscience, to recruit applicants from those disciplines.

*Particular attention and effort will continuously be made to advertise OIST's unique educational opportunities to Japanese undergraduates. Increase participation by Japanese students through a range of targeted approaches, via holding briefing sessions in some universities and events such as a video contest in FY2013, etc..

Metrics:

- Number of A grade applicants for the Ph.D. program (Japanese and non-Japanese)
- Number of admitted students (Japanese and non-Japanese)
- Caliber of incoming students (list of institutes from which the students received degrees, etc.)
- Increase of students receiving external scholarships, etc.

1.2 Scientific Research

Goal:

OIST Graduate University will continue to conduct world-class research in cross-disciplinary fields of science. OIST Graduate University will encourage, motivate and support its talented faculty by promoting a collaborative research environment, leveraging cutting-edge facilities and equipment, and through systematic and rigorous research review.

In addition, following “Basic Policies for Economic and Fiscal Management and Reform” by the Cabinet, OIST Graduate University accelerates research related to promoting R&D cluster development in Okinawa, with leveraging OIST strength, such as the proximity to diverse marine environment.

Actions:

(Promotion of cross-disciplinary research)

- Continue to promote interactions and collaborations between researchers in different fields through accessed to shared instrumentation and trained technical staff. Continue to recruit experienced technical staff for the research support operations in new areas including physics and marine sciences. (See Attachment #1-1 for the list of research units as of February 2014 and Attachment #1-2 for the major scientific areas of research.)
- Continue to expand the formal and informal opportunities for researchers to interact and develop collaborations through research and social activities.

(Promotion of R&D cluster related research)

- Under the Provost who administers academic programs, promote R&D cluster related basic research (listed below) with proper management based on research plans. To further contribute to R&D cluster development, coordinate with related University sections such as Business Development. (See also 1.5)
 - Marine science
Toward long-term utilization and reservation of marine environment which is Okinawa’s advantage such as coral reef and mangrove with world-leading biodiversity, OIST utilizes its facilities including “Onshore Marine Science Facility” which will be newly developed and “Marine Science Center” in Laboratory 3 comprehensively. OIST proceeds to strengthen marine environment observation / monitoring, and aiming to learn marine life of adjacent sea and usability, OIST will pursue academic result as well as proceed technology transfer which can be expected to apply to marine related industry, pharmaceutical industry, and biotechnology industry. OIST conducts collaborative research with excellent marine scientists in the world and disseminate research result on “OIST and Okinawa Ocean” to the world. In addition, OIST will continue to promote activities in areas such as coastal and benthic ocean circulation, hydrodynamics of ocean currents, genomics of marine species, marine biology, biodiversity, biological imaging, informatics and computational biology, via networking and collaborating with the Woods Hole Oceanographic Institution, Marine Biological Laboratory, the University of the Ryukyus, Japan Coastal Guard, Churaumi Aquarium, etc., and while following “Basic Plan on Ocean Policy”, decided in 2013 by Japanese Government.
 - Energy
Stable supply of electricity is very important point for proceeding to attract industries to Okinawa including isolated islands. OIST will develop power-generating technology by utilizing Kuroshio current near Okinawa, which is expected to be more stable than wind power and solar power. OIST also proceeds basic prototyping of next generation energy technology which is suitable to Okinawa, by developing solar cell materials with less loss of power generation, and developing intellectual electric system to implement distributed power management, and obtain research result to lead commercialization.
 - Environment and Biology
For dealing with a global challenge to conserve biodiversity, it is critical to collect

samples continuously, widely and finely, and to develop technologies for quick analyses. Focusing on technologies for observation and analysis of terrestrial biodiversity which affect coral reef and water quality in adjacent sea, OIST will implement sampling with establishing systems which implement field research more automatically on multiple observing points including mangrove colony, and also will develop technologies such as X-ray CT automated image recognition software which can effectively quantify and visualize collected samples.

- Advanced Medical Devices

For particle therapy technology, a nation-wide project, it is quite important to downsize its equipment and facility. Mainly by specialists in accelerator and imaging technology, OIST will establish collaborative research on R&D of technologies with the University of the Ryukyus, National Institute of Radiological Science, University of Tsukuba, KEK and Stanford University etc., and will make efforts to contribute to the nation-wide project. OIST will have a role in research and development for competitive accelerator and imaging technologies.

(Research Support)

- Continue the recruitment and training of expert technical staff to provide support for the shared and common resources in all areas including physics and marine science.
- Continue the improvement and enrichment of the Research Equipment Database and Reservation System for effective management and use of common research resources, including the usage status.
- Manage and tune up the Okinawa Coastal Ocean Observing System (OCOOS) installed in FY2013. Train researchers to use the system, establish a prioritized and equitable management and scheduling plan for the OCOOS for OIST and other researchers.
- Plan new common research facilities in Laboratory 3.
- Promote the use of the OIST research facility by external academic and industrial users through the Open Technology Center, while ensuring prioritized access by internal users.
- Establish advisory committees for electron microscopy, mass spectroscopy, etc., for reviewing their operations and planning new instruments and services.
- Install a new high-performance-computing cluster and DNA sequencing facility to support the R&D Cluster related research.

(Publication and communication)

- Continue to promote publication of research results in international science journals with high impact factors and participation in international conferences by encouraging researchers through publicity of research results and rigorous research evaluation.
- Continue to provide accessible information about OIST research and its results to the scientific community and to the general public in Japan and overseas through OIST Web articles, press releases, press conferences, OIST newsletter (e-mail news letter), brochures, TV programs and the OIST social media. To do this, we will
 - Optimize the OIST Website and maintain the high percentage bilingual content.
 - Employ a proactive media strategy by organizing press visits and press briefing sessions in Okinawa and on the mainland.
 - Disseminate OIST's research results to local, national and international media via email and through Japan's press clubs.
 - Utilize the social media to increase the number of OIST fans.
- Increase the number of meetings with other institutes by improving the technical support and video conferencing equipment.

(Research Evaluation)

- Continue the evaluation of research units by external committees consisting of world-class prominent scholars at the internationally highest standard – the committees will rigorously evaluate the achievements, uniqueness, future possibilities, and other elements of the research unit with fair and transparent standards, as was implemented under the operations of OIST PC. The evaluation results will be utilized in judgments of promotion of faculty members and continuation of the research units. (In FY2014 evaluation of 8 units is planned.)
- Publish the summary of research evaluation expeditiously after the utilization of the results in order to fulfill the accountability to the public in using public expenses for the research projects.

Metrics:

- Number of researchers (faculty, postdocs, technicians, and students)
- Number of research publications (by impact factor)
- Number of press announcements and/or conferences about research results
- Number of research honors
- Number of research units evaluated

1.3 Faculty Recruitment

Goal:

The results of our recent recruitment demonstrate that OIST Graduate University can compete successfully against the best worldwide institutions for the highest caliber faculty. The next stage of recruiting will target outstanding international and Japanese scientists, including senior scientists that have established a track record of disciplinary research and junior scientists that show promise of strength in interdisciplinary research. A balance of international and Japanese faculty will be sought.

Actions:

- Based on the discussion of future expansion, consider the next series of faculty recruitment taking into account areas that offer particular opportunities for interdisciplinary research and the balance of the academic program as pointed out in the accreditation assessment.
- Provide suitable space in Laboratory 3 or elsewhere that accommodates faculty's research programs to promote smooth relocation of new faculty members.

1.4 Global Networking

Goal:

OIST Graduate University will continue to create strong networks with the international science community and increase worldwide reputations by making agreements with universities and research institutions, hosting academic workshops, etc.

Actions:

- Enhance collaborative relationships with other universities by developing exchange agreements concerning interns, course credits, and other exchange opportunities. (Repeated. See 1.1)
- Continue to host international courses and workshops at the highest level in the world and provide students and young researchers with the opportunities of learning

forefront science and interacting with outstanding peers. In addition, invite world-class international conferences to OIST venue to increase opportunities for the OIST researchers and students to establish networks with other researchers through academic and social events. The number of such events will further increase in 2014 in response to demand from newly arrived faculty. The CPR Division will keep ensuring a reduction of cost for each workshop by reducing the travel support for the workshop participants, obtaining funding support from other institutes and more efficient travel and accommodation procedures.

- Continue to host top undergraduate students in residential courses in laboratory placement with appropriate subjects such as physics, cell biology, and neuroscience.
- Continue to implement the long-term and short-term student programs, and through those programs, accept students from universities in Japan and around the world for practical trainings in research units.

Metrics:

- Number of collaboration agreements with universities and research institutions
- Number of international courses and workshops
- Number of participants of courses and workshops
- Number of students accepted from domestic and international universities

1.5 Collaboration with Industry

Goal:

OIST Graduate University will endeavor to advance research results to the market and thus to enrich the society. After the first collaborative agreement in 2011, we could initiate a new collaboration with another major company in FY2013. We have been expanding collaborative activities with industry, through collaborative R&D projects on energy, nano technology, drug discovery etc.. We will continue to build collaboration with industry and appropriately manage and utilize the intellectual properties produced by our research. These activities also contribute to promotion of R&D cluster development in Okinawa.

Actions:

(Research Exchange and Collaboration)

- Through efforts such as exchange visits of researchers and analysis of market and industry demand, continue to promote research exchanges and joint research with industry, including both major corporations and venture firms.
- Foster entrepreneurial activities based on invention developed by OIST researchers.
- Establish rules and regulations in order to establish an environment that incentivizes entrepreneurial and patenting activities without compromising the focus on basic research.
- Implement “open entrepreneurship education workshop” in collaboration with other Okinawa relevant institutions including the University of the Ryukyus, Okinawa National College of Technology, Okinawa Colleges of Agriculture, OPG etc..
- Continue to promote shared use of OIST’s cutting-edge research facilities and tools with researchers of other universities or companies by providing the information of available facilities and clarifying their conditions of use on OIST Website etc.. (See 1.2)
- Determine priority industrial sectors and develop/implement a communication plan targeted towards these sectors, taking into account the findings from the 2nd international workshop on R&D cluster development in Okinawa held in March 2012, International Symposium on Open Energy System held in January 2014, and opinions of other external specialists.

- Enhance network of external specialists that provide assistance on business planning and development related to inventions made by OIST researchers.
- Maintain communication with industry to match industry needs with OIST research results through targeted companies or global opportunities, including industrial events/conferences such as BioJapan 2014 and Nanotech Japan 2015.
- Consider mutual internship programs with high potential researchers in industry.
- Promote research project with industrial partners under “START” Program funded by MEXT to support feasibility studies to establish a startup.
- Continue the existing five collaborative research projects with venture firms and academic institutions in Okinawa under the “Collaborative Research Project toward Developing Intellectual Cluster” , “Bio - Industry Promotion Support Program”, and “R&D Program for Subtropical Island Energy Platform” funded by OPG, including research on biological resources of Okinawa and on new energy supply system. In addition, contribute to academic meetings and symposiums under the projects.
- Propose and renew collaboration opportunities under Okinawa collaborative research programs.

(Intellectual Property Management)

- Utilize external expertise effectively for efficient and strategic management of intellectual property – this will include the establishment of a committee including external expert members to review OIST in house inventions and make recommendation on patent filing and selecting patent attorneys that allow direct filing in English language and in the different fields relevant to OIST.
- Enhance effective patent administration through a new IP management system.
- Continue to provide training opportunities to faculty and postdocs to increase awareness of the importance of appropriate acquisition and protection of intellectual property.

(R&D Cluster Development)

- In regarding to R&D cluster related basic research under the Provost (see also 1.2), enhance the oversight function for budget and research execution following advices by each research group’s steering committee. In addition, strengthen functions for communicating and coordinating among stakeholders regarding to policies and programs related to R&D cluster development.
- Monitor and accelerate the implementation status of the recommendations made at the international workshops on R&D cluster development in Okinawa and share it with stakeholders in Okinawa such as local industry associations. Following anticipation coming from “Basic Policies for Economic and Fiscal Management and Reform” and the result of the international symposium that OIST will play a key role in promoting international R&D cluster development in Okinawa, OIST continues to provide secretariat of and lead discussion in Task Force for the Establishment of an R&D Cluster Promotion Organization for Okinawa as in FY2013, while the taskforce consists of stakeholders in academia, industry and government, and specialists related to R&D cluster development.
- Following two previous R&D cluster workshops, and technology promotion symposium, organize industry/government/academic workshops/symposium centered on specific themes relevant to Okinawa and OIST.

Metrics

- Number of collaborative projects with companies (collaboration agreements, joint research projects, commercialization of intellectual property, etc.)

Chapter 2 Governance & Administrative Transparency and Efficiency

2.1 Basic structures for governance and business operations

Goal:

The Board of Governors (BOG), which consists mainly of non-executive members based on the OIST SC Act and the OIST Bylaws unlike the case of most Japanese traditional institutions, takes ultimate responsibility for operation of the OIST SC and OIST Graduate University. The Board of Councilors (BOC) reviews the operations of the corporation with broad views of the society, including those of the local community. These two boards will play key roles together in ensuring effective and transparent governance of the OIST SC in accordance with pertinent Japanese laws and the OIST SC Bylaws. The CEO/President will continue to provide the leadership in the execution of the Business Plan and accountable to the BOG and the BOC. The governance of OIST SC especially features the appropriate relationship between these boards and the CEO/President. Auditors of the corporation will conduct rigorous audits to ensure appropriateness and efficiency of the operations of the corporation.

Actions:

(Basic Management)

- Regular BOG meetings will be held in May, September and February, and regular BOC meetings will be held in May and February. In the BOG meeting in May, the performance and achievements of FY2013 will be reported and evaluated. In the end of October, many BOG and BOC members and Auditors' term will expire, then discuss and take proper procedures for appointing new/continuous members, considering qualification and contribution to OIST management.
- BOG and BOC has established subcommittees to ensure effectiveness of their functions. Activities of these subcommittees will receive sufficient administrative support (Subcommittees of the BOG: Steering, Business and Finance, Research and Academics, Audit and Compliance, and (Ad-hoc) Community Relations. Subcommittees of the BOC: University Management, Budget and Finance, Academics and Research and Sustainable Development for Okinawa.). A web or telephone conference system will continue to be utilized for the BOG and BOC meetings to enhance efficiency as well as promote active participation of governors and councilors who are in distant locations.
- The CEO/President will continue to exercise leadership in all matters of daily operation of the OIST SC and the OIST Graduate University and ensure steady implementation of the Business Plan.
- Auditors will continue to conduct rigorous regular audits of all aspects of business operations, including budget execution, tendering and contracts, and the status of compliance, based on the Auditing Plan developed in advance while coordinating with internal audits and accounting audits, and conduct special audits in addition when deemed necessary. While keeping appropriate independence, Auditors will continue to maintain effective communications with the university management through the Vice President in charge and will be provided sufficient information and staffing necessary for conducting their duties. Result of Auditors' audit will be reflected in future operations through their reporting at BOG meetings, etc..

(Planning for Future Expansion)

- Framework document will be prepared by BOG aimed at near- and long-term expansion of academic, research and educational activities towards 300 faculty.
- Planning Committee, constituted by BOG members and some OIST executives, will discuss a new Site Master Plan towards 300 faculty. OIST will request external experts to support making the plan.

Goal:

OIST Graduate University will continue to build and maintain the administrative organizations by which a world-class international graduate university will be effectively administered. OIST Graduate University will keep close contact with the Cabinet Office (CAO) to be accountable for its budget execution and business operations to the Japanese Government.

Actions:

- The necessary infrastructure for student recruiting, academic support, and research support will be further enhanced. Development of the IT resources for both research and administration will be continued. Operation of the Information Services Section will be coordinated with the IT Service and Support Committee. Policies for IT purchases, support, and security will be reviewed and modified to provide improved service and cost effectiveness. Improved help desk service will be instituted. ERP operation and reporting will be improved to enhance budget tracking and management.
- Continue to hold regular (i.e. monthly, weekly and daily) meetings with the President/CEO, Provost/Vice CEO, Vice Presidents, and Chairperson of Faculty Assembly etc. to share information and review the status of business operations. In addition, hold all-hands meetings as necessary.
- Maintain close communication with CAO through the Vice President in charge of governmental relations. Specifically, continue a monthly report of the budget execution status and the Quarterly Meeting to share information such as the status of implementation of the Business Plan. In addition, start discussion with CAO on budget requests for FY2015 well in advance and hold meetings more closely with CAO for the purpose, and share information with CAO timely on discussion of the future expansion of OIST towards 300 faculty.

2.2 Budget allocation and execution

Goal:

On executing the budget including government subsidies, OIST Graduate University will continue efforts for improving cost efficiency and level, especially for general administrative expenses, by utilizing procedures and systems to enable appropriate and effective allocation and execution of budget to fulfill its accountability to the government, sponsors, and general public.

Actions:

- Continue to have budgetary units, which are the allocation/execution unit, consistent with the organizational structure of the university and allocate the necessary budget to implement the Business Plan to each budgetary unit.
- The budget allocation and reporting process will be reinforced by continuously providing training to the budget analyst assigned in each division. The status of budget

execution will be reported monthly to the President/CEO at the monthly Budget Review Meeting in order to ensure appropriate and integrated budget management including the Subsidy for Facilities. In addition, report the budget execution status to CAO on monthly basis.

- Continue to properly manage competitive research funds including KAKENHI (Grants - in - Aid for Scientific Research) in accordance with the rules provided to each grant under the Vice Provost for Research while coordinating with the Budget and Accounting Section.
- Continue to implement the procedures to comply with laws and University policy and rules – the procedure in budget execution includes reviews by the Vice President in charge of compliance when individual budget expenditures exceed a predetermined threshold.
- Conduct internal audit under the Vice President in charge of compliance, as well as develop human resources through sending our staff to training courses provided by government agencies, etc. on regular basis, to ensure proper contract, procurement and accounting procedures.
- A committee consisting of external experts will review of contracts concluded by the University in order to ensure proper implementation of tendering. In addition, exert efforts in ensuring fair and transparent procurement through measures such as establishing a committee including external experts and having their review on specifications of large research tools/equipment for each purchase based on the University's policy and rules.
- The common resources advisory committee (CRAC) will continue to evaluate the proposals of common and shared research resources and make recommendations to the President for the most efficient use of common resource budget.
- Utilize and manage cautiously the leasing contracts to acquire large and leading edge research equipment. Leasing contracts are limited to 4 years. (New leasing contracts in FY2014 will be carefully considered from the perspective of cost performance etc. upon procurement.)

2.3 Efficiency of business operations

Goal:

OIST Graduate University will continue its efforts to improve efficiency in its business operations.

Actions:

- Support research activities, such as promoting common/shared use of research equipment and tools (See 1.2) and utilizing the methods of unit price contracts and bulk purchase for research materials and reagents.
- Reduce costs of research supplies and reagents which are usually used by price negotiation.
- Reduce costs of research equipment maintenance by compiling the maintenance contracts by makers, by reviewing the methods of maintenance, and by price negotiation.
- Confirm the internal team in charge of review and improvement of administrative processes to identify sources of inefficiencies and streamline the administrative operations – among the goals; creating clear and easily accessible communication tools between administration and its users (bilingual operating manuals, training, etc.), strengthening administrative functions through better work organization and workload

- sharing, and reducing overtime hours
- Contracts of the University shall be based on the principle of ensuring sufficient transparency and competitiveness, and in case of making a negotiated contract, thorough information disclosure will be ensured, such as by disclosing the reason for the negotiated contract. At the same time, review procurement policy, rules and procedures regularly from the perspectives of efficiency and simplicity. Efficiency of procedures in negotiated contracts should be improved in this fiscal year.
- Conduct appropriate actions for adapting sufficient procedures of OIST staff to the change of consumption tax, etc..
- Collect reference data comparing prices of supplies and equipment etc. in Japan and abroad and use such data in direct negotiation with manufacturers/agents/forwarders to improve cost efficiency of purchasing.

Metrics:

- Reduction of costs by unit-price contracts and bulk purchase
- Increase of use of the internal supply store
- Ratio of purchase contracts concluded through tendering or other competitive processes (number of contracts and amount)

Goal:

OIST Graduate University will make the best use of its facilities and equipment.

Actions:

- Manage and monitor operation of Auditorium and other facilities, and continue to promote external use of those facilities.

2.4 Personnel management

Goal:

OIST Graduate University will continue to attract, hire and retain qualified employees, which are essential for the university to achieve its goals sustainably, by providing globally competitive compensation and benefits as well as training opportunities. At the same time, as a corporation operated largely with the subsidy from the Japanese Government, OIST Graduate University will continue to make further efforts to contain overall personnel costs, with strong efforts to keep the employees' salary at a reasonable level consistent with expectations of tax-payers, as well as ensuring accountability in such aspects, by implementing continuous actions following "Review of Salary Level of Independent Administrative Institutions, Special Public Corporations, etc. (distributed in Related Ministers' Meeting in December 2012)" and embodying actions following "On the Salary of Officers and Employees of Special Public Corporations, etc. (by Administrative Reform Promotion Taskforce Secretariats in Cabinet Secretariat on November 22, 2013)".

Actions:

(Recruitment)

- Continue to consider the recruiting and hiring of qualified persons for the important positions to administer an international university – i.e. CIO and Business Development Person. Specially, because of the position's importance, immediately establish structure for raising external funds and managing Marine Science Center which is planned to be established in this fiscal year.
- Continue to recruit qualified staff necessary to cope with new or expanded functions, while recognizing and utilizing the internal human resources. Specially, establish

structure and recruit staff for promoting R&D cluster development centered by OIST etc..

- At the same time, manage the headcounts within the range decided in budget and with use of external funds to prevent the organization from expanding excessively in the use of subsidy funds. Take account of the trend among universities and similar institutions in Japan and abroad, in order to achieve an efficient and streamlined administrative sector.
- Continue to enforce the equal opportunity policy to promote diversity at the workplace and to improve the gender balance among all job levels and categories.
- Hold the Committee for Diversity/Gender Equality continuously to promote gender equality in all aspects of university management, especially to support female researchers and female administrative staff. Establish a task force and submit a set of recommendations on diversity to BOG.
- Promote hiring person with disability to by removing barriers for providing equal working opportunity.
- Continue to strengthen the employee service related function, both for new and current employees as well as students, such as child-care services, family support, food services, health/medical services and living needs support on basis of feedback from users and changing needs as the campus population grows. Continue to network with schools to increase the opportunities for children education. Network with OPG, Employment Service Centers (Hello-Work), and potential employers to identify more options for spouse work.

(Compensation)

- Revisit and re-develop the salary system and annual review and job grade systems, continuing to refer to factors such as salary levels of national government employees and those of academic institutions in and outside of Japan. In addition, embody and implement actions following “On the Salary of Officers and Employees of Special Public Corporations, etc. (by Administrative Reform Promotion Taskforce Secretariats in Cabinet Secretariat on November 22, 2013)”.
- As the more people, both employees, students and their family members, are coming in, new systems will be considered for near-future expansion of service coverage, including Visitor Support program. (refer 5.2)
- As the Village Housing facilities are developed, review the rental charges, etc. as necessary, to ensure that users are responsible for an appropriate portion of the cost.

(Training and evaluation)

- Following the road map based upon training needs analysis made in FY2011, continue to design and implement new corporate training programs in complement to the job specific competency/expertise training plan.
- Continue to develop a career development plan for administrative staff, including provision of training opportunities and position rotations, and implement a backup and succession planning.
- Expand employee orientation beyond one day session to an onboarding process involving support for receiving units/section on orientation.
- Continue to offer excellent language training to OIST staff and students.
- Continue to manage a performance evaluation system, including values/competencies evaluation and performance evaluation based on goals proposed in the beginning of the term, appropriate to the characters of each job category while ensuring fairness and transparency via self-assessment and reviewers’ evaluations. Also, reflect the

evaluation results in employee salaries, while continuing to ensure a quality in evaluation and a reliable process with advices from the Salary Review Committee. In addition, implement training on regular basis to provide new managers and updates on the process.

Metrics:

- Number of employees (by job categories, nationalities, and gender), by seniority
- Ratio of staff in administrative divisions to the total headcounts
- Ratio of labor costs to the total operational budget
- Salary Level of employees (average salary by job category)
- Number of employees taking training programs

2.5 Compliance

Goal:

OIST Graduate University will ensure compliance in all aspects of the university operations.

Actions:

- The Vice President for Administrative Compliance will continue to review the budget execution status and contracts exceeding a predetermined threshold as well as new and revised policies, rules and procedures from a view point of compliance.
- Establish and revise policies, rules and procedures appropriately at the right time in response to revision of relevant laws and regulations or changing situation, and hold the PRP review committee periodically to maintain consistency in policies, rules and procedures as a whole.
- Ensure appropriate creation, management and retention of documents concerning decision making and its processes in the operation, based on the Act concerning the Management of Public Documents (Act No. 66 of 2009) and University policy and rules that are developed accordingly.
- Through audits by Auditors and internal audits carried out under the Vice President for Administrative Compliance, provide rigorous review of the status of compliance including the implementation of the policies and rules, and reflect the result as necessary.
- To facilitate evaluation of situations that may give rise to conflicts of interest, formal written disclosure of external activities and commitments is required of all University officers and employees each year, based on the PRP Section 22.3.1 in “Avoiding Conflicts of Interest & Commitment”.
- Continue to ensure that our research activities are compliant with pertinent laws and regulations by implementing relevant rules under the Vice Provost for Research.

2.6 Information Disclosure and Public Relations

Goal:

The fast growth of the Graduate University and the increased budget in FY2014 requires OIST to guarantee even more transparency of academic and administrative operations, and accountability to the general public. In order to obtain broad support for OIST both from Japan and overseas, and to enhance worldwide recognition of the Graduate University, we will communicate actively with various stakeholders and promote OIST.

Actions:

- Continue to disclose the information appropriately on the OIST web site etc. to comply with the School Education Act (Act No. 26 of 1947) and the Act on Access to Information held by IAs (Act No. 140 of 2001).
- Continue development and expand the OIST Website to maintain its position as one of the leading and truly bilingual Japanese /English academic websites in Japan.
- Continue organizing press briefing sessions and press conferences in Okinawa and on the mainland, and also generate press visits to OIST, in order to maintain consistently positive press coverage of the Graduate University.
- Continue improving the OIST News Center to enhance the use of OIST photos, videos and other multimedia.
- Continue working an increased use of social media such as Facebook, Twitter and YouTube and e-mail news letter (OIST newsletter) to propagate excitement about the OIST Graduate University.
- Consider publishing OIST financial statement after reformatting under the international standards to improve communication with potential donors and other financial institution.
- Maintain and improve the library of OIST Policies, Rules and Procedures on the website.

Chapter 3 Finance**Goal:**

In FY2013 (10 months from April 2013 to January 2014), the amount of external revenue reached 385 million yen, slightly decreased by 3.5 percent from that of FY2012. Noteworthy is that number of awarded projects is increasing by 30 percent. The decrease in the total amount is attributed to two events in large grants, i.e. termination of one project, and change of budget allocation in multi-year project. Following Mid-term Strategy for External Funding, OIST Graduate University will continue to broaden its financial basis strategically by increasing amount of research grants, donations, and other sources aim of becoming more financially independent in the future . In particular, for the expenses such as student support, which require exceptional treatment during the initial years in funding including support from direct government funds, we will increase the ratio of external funding.

Actions:**(Grants)**

- Strengthen organizational functions for acquiring external grants and collaboration with industry.
- Continue to provide information about research grants, both basic knowledge and timely opportunities in Japan and abroad, through the Sponsored Research internal web site and e-mails, with translations into English when necessary .
- Continue to hold seminars about different grants, such as KAKENHI, JST's Strategic Basic Research Programs (CREST, PRESTO), and Human Frontier Science Program. Also hold practical seminars and workshops on how to write competitive grant proposals.
- Strengthen the assistance services for improving applications, such as reviewing and polishing of the drafts by Sponsored Research Section (SRS) staff and relevant researchers. When required, SRS will provide translation of the abstract or the entire

- application into Japanese for non-Japanese applicants.
- In addition to regularly checking web sites of funding agencies in Japan and abroad, we will collect information about any precursory activities leading to announcement of a new grant, such as advisory boards of MEXT.
- Encourage applications for industrial grants to support development of new businesses based on OIST research.
(See also 1.5 for measures to collaborate with Industry)

(Donations)

- Communicate the status of a Specified Public Service Corporation (for tax-deductible contributions. This is the Japanese version of US 501(c) organization) by MEXT and the designated donation program operated by the Promotion and Mutual Aid Corporation for Private Schools of Japan, so that donors will be eligible for preferential treatments equivalent to that for donations to the national universities.
- Discuss the establishment of Fund Raising Advisory Committee and begin implementation of the Mid-term Strategy for External Funding.
- Continue the efforts for fundraising in any opportunity. Take measures to utilize a foundation established to receive donation in the United States.

Metrics:

- Increase of application for research grants
- Increase of awarded research grants (number and amount)
- Increase of the external funding (total amount and breakdown)

Chapter 4 Contribution to Self-sustainable Development of Okinawa

Goal:

The new Okinawa development policy was implemented from FY2012. In addition, “Basic Policies for Economic and Fiscal Management and Reform” by Japanese Government calls for the development R&D cluster which OIST plays an important role. OIST Graduate University will contribute to the promotion and self - sustainable development of Okinawa through strong academia - industry - government partnership and various activities to achieve one of its objectives stipulated in the OIST SC Act. In addition, OIST will work closely with academic institutions in Okinawa, such as the University of the Ryukyus and the Okinawa National College of Technology. Also, OIST will continue to enhance collaboration and communication with the local community and local schools and develop the campus as a center for cultural and community activities.

Actions:

(Repeated items concerning promotion of research and development of R&D cluster)

- Under the Provost who administers academic programs, promote R&D cluster related basic research (listed below) with proper management;
Marine, Energy, Environment and Biology, Advanced Medical Devices. (See 1.2)
- Continue to promote interactions and collaborations between researchers in different fields through accessed to shared instrumentation and trained technical staff. (See 1.2)
- With enhancing analysis of market and industry demand, continue to promote collaborative project with local companies, such as in health, biological resource and energy area. (See 1.5)

- Monitor and accelerate the implementation status of the recommendations made by the R&D Cluster Workshops and share it with stakeholders in Okinawa. (See 1.5)
(For other items to promote research and collaboration with industry, please refer to 1.2 and 1.5.)

(Networking with local institutions and communities)

- As OIST made cooperative agreements and memoranda of understanding and promoting collaboration with several Okinawan institutions and organizations, including the University of the Ryukyus, Okinawa National College of Technology, Japan Coast Guard and OPG, OIST continues to build collaboration among Okinawan institutions with expanded seminar programs, joint research projects, exchange of students, interns, and faculty.
- To promote exchange programs with local higher educational institutions, conduct the visit programs with the University of the Ryukyus, Meio University, Okinawa National College of Technology and Education Center of OPG.
- Start new exchange programs by holding science lectures with local core medical institutions such as Chubu Hospital and Nanbu Medical Center and Medical Department of the Univ. of the Ryukyus.
- Support large number of visitors (including companies and associations etc.) to the campus whilst making sure that the volume of visitors does not disturb the academic and research goals of the University.
- The Visitors Center facility will be upgraded and provide the visitors with the proper information about OIST.
- Hold the 5th OIST Open Campus Day at the OIST Campus.
- Continue to invite school children in Okinawa to the OIST campus to give them the opportunities to see and learn about cutting-edge research facilities, with the aim of increasing their interests in academic and professional careers in science and technology. Continue the campus visit program for all senior high-schools in Okinawa in close collaboration with the Okinawa Board of Education and individual schools and host 20 local senior high schools within FY2014.
- Continue and strengthen visits program for mainland Super Science High Schools, which provide advanced science and technology education programs in collaboration with OPG and tourism organizations.
- OIST will maintain as series of talks to all levels of school children given by faculty and other well-known scientific figures.
- Organize the 5th Onna/OIST Children's School of Science in collaboration with Onna Village.
- Organize a series of cultural events such as demonstrations, science fairs, concerts and exhibitions both in the Auditorium and other facilities, to attract the local population to the University.
- Assist local schools to enhance children's English ability and cross-cultural understanding by participating in meetings on English education hosted by local boards of education and facilitating OIST community's contribution to English programs at local schools.

(Other matters concerning Okinawa development)

- Continue to employ talented people from Okinawa wherever possible.
- Implement "open entrepreneurship education workshop" in collaboration with other Okinawa relevant institutions including the University of the Ryukyus, Okinawa National College of Technology, Okinawa Colleges of Agriculture, OPG etc. (See also 1.5)

- As we participated such as Okinawa Sangyo Matsuri, Okinawa MICE Contents Trade Show and others, we will continue to have OIST representation at major cultural, industrial or academic events in Okinawa. Also we continue the science event for the high school students' research for enterprise, "SCORE" with OPG and US Consulate General.
- Increase the number of externally organized international conferences and workshops at the OIST venue in collaboration with OPG and the Okinawa Convention and Visitors Bureau.

Metrics:

- Number of collaborative projects with local institutions
- Number of visits and visitors (including visitors on the Open Campus Day)
- Number of local students who visited the campus
- Number of lectures and talks for local students
- Number of employees from Okinawa (researchers and staff)

Chapter 5 University Campus and Community Development; Safety and Environment Protection

5.1 Campus Development

Goal:

OIST Graduate University will continue to develop the campus as planned.

Actions:

- Operate and maintain the completed campus buildings and facilities. Continue construction of Laboratory 3.
- Continue construction of the permanent Child Development Center.
- Construct a hall, which will contribute to R&D cluster development by enhancing collaboration with academia and industry.
- Design and begin construction of the Onshore Marine Science Facility at the Seaside Campus.
- Continue development of the Campus Village facilities in line with demand, under partnership with private development consortium. (Phase 3-1: 24 1LDK units will be completed in FY2014, with construction of the final Phase 3-2 to commence during the year, for completion in FY2015)
- Based on the Act for Promoting Proper Tendering and Contracting for Public Works (Act No. 127 of 2000), continue to promote disclosure of pre- and post- tendering and contract information such as tendering schedule and result, etc. to ensure transparency.

5.2 University Community and Education/Childcare Services

Goal:

Continue to facilitate the development of the University community that includes staff,

students, and their families, which is an important factor for the success of the University operation. OIST Graduate University will improve the education and childcare environment available to OIST employees by enhanced people and services with the Resource Center and the new CDC building in the summer.

Actions:

(Developing the University Community)

- Continue to take measures to enhance wellbeing of the OIST community including staff and their families, such as by implementing welfare programs, enhancing the internal communication site, providing the information regarding the life in Okinawa and supporting initiatives (OIST Welcome Club etc.) and events organized by staff and families.
- OIST has now established several clubs, soccer, martial arts, Japanese culture, etc. to encourage social interaction. With appropriate management by OIST Club Steering Group, more clubs will be formed in FY2014.
- Review and start a “Visitor Support” program which covers services to people not on payroll, such as long/short term visitors and their family members.

(Education and Childcare Services for OIST Family)

- Continue to provide high quality and fully bilingual Preschool and Afterschool/Holiday program for OIST families with appropriate user fees through the Child Development Center (CDC) with a new larger and modern facility for the preschool. The number of children in care and services will be enhanced around summer. CDC Governing Board has been established to guide the further development of the CDC, which will hold quarterly meetings.
- Continue the efforts to improve the educational environment for children of employees and students by increasing the opportunities of taking classes in English, in collaboration with OPG, Onna-son and other surrounding communities.
- A collaborative program with Onna elementary School provides English education for OIST children within the Japanese national system.
- English and Japanese courses will continue to be provided to staff and students.

(Student Support)

- Establish student support services and general welfare activities to promote a positive social and psychological environment for students. (Repeated. See 1.1)

5.3 Safety and Environment Protection

Goal:

OIST Graduate University will take necessary measures to control risks, prevent disasters and protect the safety of employees, students and visitors.

Actions:

- Continue risk management planning.
- Continue safety training for employees and students.
- Enhance the sustainability of the campus under natural disasters in collaboration with Onna-son, and offer the campus to local residents for evacuation under disasters.

Goal:

OIST Graduate University will conduct its business in an environmentally friendly manner.

Actions:

- Promote use of recyclable products.

- Continue to monitor and optimize operations to minimize volume of greenhouse gas emission and energy consumption.
- Minimize environmental impact on surrounding waters through providing measures such as enhancing the proper use and management of the water recycling system. In addition, prevent impact to local aquifers.
- For various construction works associated to facility development, provide sufficient measures such as installation of turbid water treatment plant to prevent red soil run off.
- Manage campus facilities and landscaping to preserve natural balance and protect indigenous species.

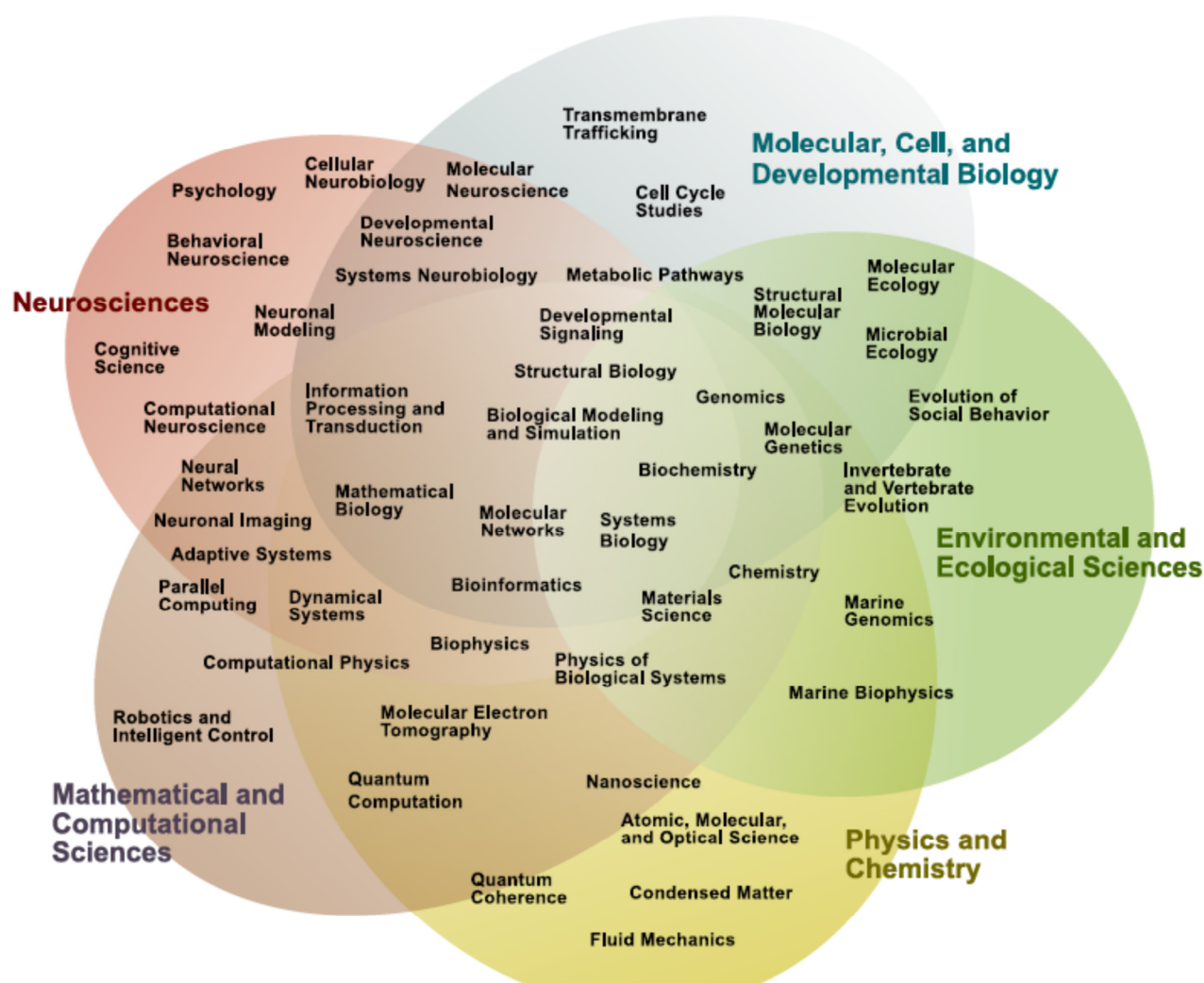
Research Units (as of Feb 1, 2014)

Unit Name		Faculty
1	Biodiversity and Biocomplexity Unit	Dr. Evan P.Economo
2	Brain Mechanism for Behavior Unit	Dr. Gordon Arbuthnott
3	Biological Systems Unit	Dr. Igor Goryanin
4	Biological Physics Theory Unit	Dr. Greg Stephens
5	Cell Signal Unit	Dr. Tadashi Yamamoto
6	Cellular and Molecular Synaptic Function Unit	Dr. Tomoyuki Takahashi
7	Chemistry and Chemical Bioengineering Unit	Dr. Fujie Tanaka
8	Collective Interactions Unit	Dr. Mahesh Bandi
9	Computational Neuroscience Unit	Dr. Erik De Schutter
10	Continuum Physics Unit	Dr. Gustavo Gioia
11	Developmental Neurobiology Unit	Dr. Ichiro Masai
12	Developmental Signalling Unit	Dr. Mary Ann Price
13	Ecology and Evolution Unit	Dr. Alexander Sergeyevich Mikheyev
14	Energy Materials and Surface Sciences Unit	Dr. Yabing Qi
15	Fluid Mechanics Unit	Dr. Pinaki Chakraborty
16	Formation and Regulation of Neuronal Connectivity Unit	Dr. David Van Vactor
17	Femtosecond Spectroscopy Unit	Dr. Keshav Dani
18	Genomics and Regulatory Systems Unit	Dr. Nicholas M. Luscombe
19	G0 Cell Unit	Dr. Mitsuhiro Yanagida
20	Human Developmental Neurobiology Unit	Dr. Gail Tripp
21	Immune Signal Unit	Dr. Hiroki Ishikawa
22	Information Processing Biology Unit	Dr. Ichiro Maruyama
23	Integrative Systems Biology Unit	Dr. Tatiana Marquez-Lago
24	Light-Matter Interactions Unit	Dr. Sile Nic Chormaic

Unit Name		Faculty
25	Marine Biophysics Unit	Dr. Satoshi Mitarai
26	Mathematical Biology Unit	Dr. Robert Sinclair
27	Microbiology and Biochemistry of Secondary Metabolites Unit	Dr. Holger Jenke-Kodama
28	Molecular Cryo-Electron Microscopy Unit	Dr. Matthias Wolf
29	Molecular Genetics Unit	Dr. Sydney Brenner
30	Marine Genomics Unit	Dr. Noriyuki Satoh
31	Mathematical and Theoretical Physics Unit	Dr. Shinobu Hikami
32	Mathematical Soft Matter Unit	Dr. Eriot Fried
33	Micro/Bio/Nanofluidics Unit	Dr. Amy Shen
34	Neural Computation Unit	Dr. Kenji Doya
35	Nanoparticles by Design for Nanotechnology and Biomedical Applications Unit	Dr. Mukhles Ibrahim Sowwan
36	Neuronal Mechanism for Critical Period Unit	Dr. Yoko Yazaki-Sugiyama
37	Neurobiology Research Unit	Dr. Jeff Wickens
38	Open Biology Unit	Dr. Hiroaki Kitano
39	Optical Neuroimaging Unit	Dr. Bernd Kuhn
40	Physics and Biology Unit	Dr. Jonathan Miller
41	Plant Epigenetics Unit	Dr. Hidetoshi Saze
42	Quantum Dynamics Unit	Dr. Denis Konstantinov
43	Quantum Systems Unit	Dr. Thomas Busch
44	Quantum Wave Microscopy Unit	Dr. Tsumoru Shintake
45	Structural Cellular Biology Unit	Dr. Ulf Skoglund
46	Trans-Membrane Trafficking Unit	Dr. Fadel Samatey
47	Theory of Quantum Matter Unit	Dr. Nic Shannon

Overview of Scientific Research at the OIST Graduate University

The OIST graduate education and research program is cross-disciplinary and aims to be at the leading edge of research in science and technology, including the Life Sciences, the Physical Sciences, and Mathematics. 47 Research Units (as of February 2014) have been launched so far, with research in five major areas of Neuroscience, Molecular, Cell, and Developmental Biology, Mathematical and Computational Sciences, Environmental and Ecological Sciences, as well as Physics and Chemistry.



FY2014 Income and expenditure budget statement

(Unit : K yen)

Revenues		Expenses	
Items	FY2014 Budget Amounts	Items	FY2014 Budget Amounts
Subsidy for Operations	19,125,287	Personnel Expense	5,606,805
Subsidy for Facilities	3,825,138	Academic related Expense	1,080,511
Other Revenues	482,860	Education & Research related Expense	4,875,658
		Common Resource Expense	6,886,389
		Administrative Expense	1,158,784
		Construction Expense	3,825,138
Total	23,433,285	Total	23,433,285

*The budget amounts of subsidies include estimated carry-over from the previous year.

Projected Balance Sheet

(March 31, 2014)

(Unit:K yen)

(1)	Assets	(A)	(B)	(C)	(D)	(E)
(2)	I Fixed assets					
(3)	1 Tangible fixed assets					
(4)	Land			1,659,667		
(5)	Buildings		29,223,798			
(6)	Accumulated depreciation on Buildings		△ 3,112,611	26,111,187		
(7)	Structures		5,698,457			
(8)	Accumulated depreciation on Structures		△ 519,672	5,178,785		
(9)	Machinery		197,641			
(10)	Accumulated depreciation on Machinery		△ 82,206	115,435		
(11)	Equipment		7,584,587			
(12)	Accumulated depreciation on Equipment		△ 4,054,961	3,529,626		
(13)	Libraries			1,240		
(14)	Vehicle and transportation equipment		15,406			
(15)	Accumulated depreciation on Vehicle and transportation equipment		△ 9,385	6,021		
(16)	Lease asset		1,530,651			
(17)	Accumulated depreciation on Lease asset		△ 346,360	1,184,291		
(18)	Construction in progress			2,462,318		
(19)	Tangible fixed assets total			40,248,570		
(20)						
(21)	2 Intangible fixed assets					
(22)	Patents			4,454		
(23)	Trademark			970		
(24)	Software			64,600		
(25)	Patents in the process of filing			12,762		
(26)	Other intangible assets			41,735		
(27)	Intangible fixed assets total			124,521		
(28)						
(29)	3 Investment and other assets					
(30)	Security deposit			3,726		
(31)	Lease investment asset			2,566,873		
(32)	Investment and other assets total			2,570,599		
(33)	Fixed assets total				42,943,690	
(34)						
(35)	II Current assets					
(36)	Cash & deposit			1,284,815		
(37)	Inventories-Stock			1,300		
(38)	Prepaid expense			620		
(39)	Prepaid expense(out of pocket expense)			479		
(40)	Lease investment asset			51,967		
(41)	Current assets total				1,339,181	
(42)	Assets total					44,282,871
(43)						
(44)	Liabilities					
(45)	I Fixed liabilities					
(46)	Encumbrance for assets-Subsidy for operation			5,822,328		
(47)	Encumbrance for assets-Donation			44,100		
(48)	Encumbrance for assets-Donation by National government			184		
(49)	Long-term accounts payable			2,571,086		
(50)	Long-term lease liability			806,946		
(51)	Allowance-Retirement benefits			89,638		
(52)	Fixed liabilities total				9,334,282	
(53)						
(54)	II Current liabilities					
(55)	Advances received			15,000		
(56)	Deposits received-Subsidy					
(57)	Deposits received-Subsidy for operation		107,954			
(58)	Deposits received-Subsidy for facility		2,366,364	2,474,318		
(59)	Deposits received-Donation			11,641		
(60)	Advances received(Kaken-hi:Grand-in-aid for scientific research)			51,192		
(61)	Deposits received			53,722		
(62)	Accounts payable			1,050,000		
(63)	Short-term lease liability			379,983		
(64)	Accrued expenses			54,616		
(65)	Current liabilities total				4,090,472	
(66)	Liabilities total					13,424,754
(67)						
(68)	Net assets					
(69)	I Contributions					
(70)	Contribution from national government			24,317,681		
(71)	Contributions total				24,317,681	
(72)						
(73)	II Additional paid-in capital					
(74)	Additional paid-in capital			9,758,413		
(75)	Accumulated depreciation-directly deducted from equity			△ 3,478,339		
(76)	Additional paid-in capital total				6,280,074	
(77)						
(78)	III Retained earnings					
(79)	Voluntary reserve fund					
(80)	Special reserve fund			80,532		
(81)	Unappropriated retained earnings			179,830		
(82)	(Current gross income (gross loss))			(0)		
(83)	Retained earnings total				260,362	
(84)	Net assets total					30,858,117
(85)	Liabilities and net assets total					44,282,871

Projected income statement
FY2013

(Unit : K yen)

(A)		(B)
Items		Amount
(1)	Ordinary Revenues	11,461,816
(2)	Revenue from Tuition etc.	24,030
(3)	Revenue from Subsidy for Operations etc.	8,946,832
(4)	Revenue from Donation etc.	19,933
(5)	Revenue from Sponsored Research	177,521
(6)	Revenue from Joint Research	35,342
(7)	Reversal of Assets Offsetting Subsidy for Operations etc.	2,066,535
(8)	Reversals of Assets Offsetting Contributions	25,003
(9)	Reversals of Assets Offsetting Donated Assets	6,390
(10)	Revenue from Proeprty Rent for Domitory etc.	4,958
(11)	Land and Building Rent Revenue	3,179
(12)	Financial Income	59,658
(13)	Miscellaneous gains	92,435
(14)		
(15)	Ordinary Expenses	11,461,816
(16)	Operating Expenses	4,215,485
(17)	General Administrative Expenses	749,116
(18)	Personnel Expenses	4,215,920
(19)	Depreciation	2,216,766
(20)	Financial Charges	64,529
(21)	Miscellaneous loss	0
(22)		
(23)	Ordinary Profit	0
(24)		
(25)	Extraordinary Profit	0
(26)	Extraordinary Loss	0
(27)		
(28)	Net profit for the year	0
(29)		

Projected Balance Sheet

(March 31, 2015)

(Unit :K yen)

	(A)	(B)	(C)	(D)	(E)
(1) Assets					
(2) I Fixed assets					
(3) 1 Tangible fixed assets					
(4) Land			1,659,667		
(5) Buildings		32,641,455			
(6) Accumulated depreciation on Buildings		△ 4,514,470	28,126,985		
(7) Structures		5,915,760			
(8) Accumulated depreciation on Structures		△ 758,979	5,156,781		
(9) Machinery		197,641			
(10) Accumulated depreciation on Machinery		△ 107,356	90,285		
(11) Equipment		14,088,837			
(12) Accumulated depreciation on Equipment		△ 6,266,626	7,822,211		
(13) Libraries			2,474		
(14) Vehicle and transportation equipment		15,406			
(15) Accumulated depreciation on Vehicle and transportation		△ 12,272	3,134		
(16) Lease asset		1,655,232			
(17) Accumulated depreciation on Lease asset		△ 754,506	900,726		
(18) Construction in progress			96,554		
(19) Tangible fixed assets total			43,858,817		
(20)					
(21) 2 Intangible fixed assets					
(22) Patents			3,608		
(23) Trademark			858		
(24) Software			191,880		
(25) Patents in the process of filing			12,762		
(26) Other intangible assets			37,832		
(27) Intangible fixed assets total			246,940		
(28)					
(29) 3 Investment and other assets					
(30) Security deposit			5,000		
(31) Lease investment asset			3,042,661		
(32) Investment and other assets total			3,047,661		
(33) Fixed assets total				47,153,418	
(34)					
(35) II Current assets					
(36) Cash & deposit			1,989,260		
(37) Inventories-Stock			1,300		
(38) Prepaid expense(out of pocket expense)			400		
(39) Lease investment asset			70,039		
(40) Current assets total				2,060,999	
(41) Assets total					49,214,417
(42)					
(43) Liabilities					
(44) I Fixed liabilities					
(45) Encumbrance for assets-Subsidy for operation			10,333,323		
(46) Encumbrance for assets-Donation			22,646		
(47) Encumbrance for assets-Donation by National government			132		
(48) Long-term accounts payable			3,048,361		
(49) Lease liability			900,382		
(50) Allowance-Retirement benefits			112,638		
(51) Fixed liabilities total				14,417,482	
(52)					
(53) II Current liabilities					
(54) Advances received			15,000		
(55) Deposits received-Subsidy					
(56) Deposits received-Subsidy for operation		47,095			
(57) Deposits received-Subsidy for facility		61,458	108,553		
(58) Deposits received-Donation			11,000		
(59) Advances received(Kaken-hi:Grand-in-aid for scientific research)			51,385		
(60) Deposits received			68,764		
(61) Accounts payable			1,305,086		
(62) Short-term lease liability			411,128		
(63) Accrued expenses			69,908		
(64) Current liabilities total				2,040,824	
(65) Liabilities total					16,458,306
(66)					
(67) Net assets					
(68) I Contributions					
(69) Contribution from national government			24,317,681		
(70) Contributions total				24,317,681	
(71)					
(72) II Additional paid-in capital					
(73) Additional paid-in capital			13,178,291		
(74) Accumulated depreciation-directly deducted from equity			△ 5,000,223		
(75) Additional paid-in capital total				8,178,068	
(76)					
(77) III Retained earnings					
(78) Voluntary reserve fund					
(79) Special reserve fund			80,532		
(80) Unappropriated retained earnings			179,830		
(81) (Current gross income (gross loss))			0)		
(82) Retained earnings total				260,362	
(83) Net assets total					32,756,111
(84) Liabilities and net assets total					49,214,417

Projected income statement
FY2014

(Unit : K yen)

(A)		(B)
Items		Amount
(1)	Ordinary Revenues	15,125,166
(2)	Revenue from Tuition etc.	40,860
(3)	Revenue from Subsidy for Operations etc.	12,387,138
(4)	Revenue from Donation etc.	31,000
(5)	Revenue from Sponsored Research	105,500
(6)	Revenue from Joint Research	43,000
(7)	Reversal of Assets Offsetting Subsidy for Operations etc.	2,363,856
(8)	Reversals of Assets Offsetting Contributions	21,454
(9)	Reversals of Assets Offsetting Donated Assets	51
(10)	Revenue from Property Rent for Dormitory etc.	4,958
(11)	Land and Building Rent Revenue	3,588
(12)	Financial Income	65,661
(13)	Miscellaneous gains	58,100
(14)		
(15)	Ordinary Expenses	15,125,166
(16)	Operating Expenses	5,512,500
(17)	General Administrative Expenses	1,135,776
(18)	Personnel Expenses	5,606,805
(19)	Depreciation	2,798,996
(20)	Financial Charges	71,089
(21)	Miscellaneous loss	0
(22)		
(23)	Ordinary Profit	0
(24)		
(25)	Extraordinary Profit	0
(26)	Extraordinary Loss	0
(27)		
(28)	Net profit for the year	0
(29)		