

Okinawa Institute of Science and Technology School Corporation

# Fiscal Year 2015 Business Plan

# Okinawa Institute of Science and Technology School Corporation FY2015 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) 2015 – from April 2015 to March 2016 – 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 51 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 fourth year of students to the program in September 2015.

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 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 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 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 FY2015 means for OIST Graduate University**

For the OIST Graduate University, the FY2015 is a period to take a new 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 FY2015 is important from the following three perspectives:

### **1) Commence Expansion of the University for Achieving Ambitious Goals:**

OIST published “Okinawa Institute of Science & Technology Graduate University Framework Document II” in FY2014. This report reviews the steady progress OIST made so far and anticipates future development toward 300 faculty with a detailed plan of expanding its size up to 100 professors in the next 10 years for achieving OIST’s ambitious goals. Based on Framework Document II, OIST will employ new professors and prepare for the construction of Lab 4 in FY2015 to take a new step toward future expansion. The “Peer Review” will be conducted to objectively evaluate OIST’s progress. The focus of the evaluation will be to assess whether OIST Graduate University is to become a world-class education and research university capable also of generating sustainable development for Okinawa.

### **2) 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 24, 2014, the Cabinet announced the “Basic Policies for Economic and Fiscal Management and Reform” with a call for “the creation of an international ‘Intellectual and Industrial Cluster’ centered upon institutions, such as OIST.” 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 using a hall and constructing an onshore marine science facility. Considering the objectives of R&D cluster –related researches, OIST will effectively and efficiently share results of such researches.

### **3) Enhance OIST Graduate University:**

The fourth round of students will join OIST in FY2015, and some students will be in the middle stage of their doctoral thesis research. OIST will design Lab 4 and necessary land development for campus expansion as well as constructing the Engineering Support Building. At the same time, OIST will continue to strengthen its research support system and enrich welfare support for the OIST community.

## Planning framework and evaluation approach

This Business Plan is to clarify the goals of FY2015 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 2014, refine and improve measures to ensure that the next 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 2015.
- 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.
- Using feedback from 2014, refine and improve the processes for examination for progression to thesis research.
- Continue to 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.
- Continue to maintain and enhance student record systems for monitoring of student progress, grades and completions.
- Continue to 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.
- Relocate graduate school administrative functions and teaching to purpose-built rooms in Lab 3.

##### (Student Support)

- Continue to refine and improve the orientation programs for the incoming students.
- Enhance international student understanding of Japanese culture by organizing cultural visits and provide opportunities for interaction with students in other Japanese universities.
- 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.
- Continue 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 supporting the newly appointed Career Development Coordinator 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.
- Resource Center will continue and enhance its direct support to the students and their family members by (1) proactively engaging potential users through welcome emails to incoming staff and their families, (2) creating and distributing promotional materials (brochures, videos, etc.) detailing our services, and (3) expanding the RC website to include more information on daily life issues and administrative processes.
  - Clinic will open with full-time bilingual members of one doctor, one nurse and one admin staff and cover the students' needs for general health on campus. Ganjuu Wellbeing Service will expand its activities to support in particular psychological health. In addition, a range of seminars on stress management and stress warning signs will be developed and offered.

**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.
- Continue to carry out student recruitment activities globally to attract the highest caliber graduate student candidates for the next intake of students arriving in September 2016 as follows:
  - The number recruited: About 20 students
  - Admission period: June – August 2015 and January - March 2016
  - 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 contest in English for the undergraduate Japanese students to win cutting edge graduate school experience workshop.
    - 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 graduate school experience workshop in FY2014.

**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 is committed to the pursuit of new knowledge through basic science. We are committed to the training of an international community of students. OIST Graduate University will encourage, motivate and support its talented faculty, students and scientists by promoting a collaborative research environment, providing excellent facilities and equipment, and by conducting regular and rigorous peer review.

OIST Graduate University aspires to be responsive and relevant to the needs of society. We believe that the most significant contributions will result from the discoveries made through basic science. Following “Basic Policies for Economic and Fiscal Management and Reform” by the Cabinet, we will continue applying our science and technology to those needs through research related to promoting R&D cluster development in Okinawa.

### Actions:

(Promotion of cross-disciplinary research)

- Success in cross-disciplinary research depends on the strength of the Research Unit, led by our faculty members. To this end, we will continue to recruit the best people to our Faculty. We will actively develop the Research Support Division that supports the common and shared instruments and services for the researchers and students at OIST.
- The architecture of our buildings, the rotation of each new class of graduate students through disciplines outside of their areas of interest and social activities all contribute to promoting joint projects across disciplines.  
Attachment #1-1 lists the Research Units at OIST as of February 2015. Attachment #1-2 lists the major scientific areas of research.

(Promotion of R&D cluster related research)

- R&D cluster related basic research involves a number of different groups (Provost’s Office, Office of the Dean for Faculty Affairs, Office of the Executive Vice President for Sustainable Development of Okinawa) at OIST. Especially, the Executive Vice President for Sustainable Development of Okinawa interacts with our partners outside of OIST and facilitates communication and economic development that may occur as a result of these activities. The Business Development Section and the Technology Licensing Section are under that Office. Here are summaries of the R&D cluster related basic research (listed below).
  - Marine Science  
Okinawa is the most bio-diverse environment in Japan. It is the northern-most reach of corals in Asia. It is also in close proximity to deep ocean thermal vents. It is natural that OIST should develop in this area. We will complete and implement the Marine Laboratory in the commercial port of Seragaki, Onna Village. We will initiate and develop a Marine Centre in Lab Building 3, which will host partners external to OIST who wish to work in the Okinawa environment. These research guests will pay fees for research space and research support.  
The Marine Science program will work with local fisheries associations and environmental groups for the sustainability of food and bio-products from the marine environment and the preservation of that environment as well as its biodiversity. This program will continue to conduct leading research in coastal and benthic ocean circulation, hydrodynamics of ocean currents, and the genomics of marine and preservation of the coral environment. Institutional collaborators



include the Woods Hole Institute of Oceanography, the Marine Biological Laboratory, the University of the Ryukyus, Japan Coastal Guard, and the Churaumi Aquarium. Relevant to these activities is the *Basic Plan on Ocean Policy* (2013, Japanese Government).

Therefore, OIST will pursue academic oriented research as well as proceeding with technology transfer which can be expected to benefit marine, pharmaceutical and biotechnology-related industries.

- Energy

Self-sustainability in energy is of utmost importance to island communities like Okinawa and Japan. Through R&D cluster related basic research OIST Graduate University is developing power-generating technology based on wave and current energy, this is potentially more stable than wind power and solar power. This program is also improving the next generation of solar energy technology, which is more efficient. We are also developing more intelligent systems for small communities through an experimental micro-grid system utilizing our faculty and staff housing units. This intelligently manages the distribution of energy among housing units according to need and supply.

- 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. This R&D cluster related basic research is aimed at assessing and tracking biodiversity on land in Okinawa. Sampling the flora and fauna, as well as developing better methods for genomic analyses are some aspects of this project. In additions, this project is developing technologies and software such as X-ray CT automated image recognition, which can effectively quantify and identify collected samples and images.

- Advanced Medical Devices

OIST Graduate University is contributing to National health efforts in particle therapy technology, including accelerator and imaging technologies. Improving instrument effectiveness and efficiency are important. OIST specialists in accelerator and imaging technology are establishing collaborative research in this project with the University of the Ryukyus, National Institute of Radiological Science, University of Tsukuba, KEK and Stanford University.

#### (Research Support)

- The Research Support Division has undergone a restructuring. The nine Sections of the Division now have one or more faculty members advising and leading the Sections with the RSD Section Leaders. As a result, the Common Resources Advisory Committee (CRAC) has closed as a formal Committee and the Section Leaders of RSD will perform the past work of CRAC.

We will replace the Vice Provost for Research position with a Dean of Research position. This position will lead the RSD. With this position we will have three Deans leading the dominant pillars of the academic sector at OIST Graduate University: the Dean of the Graduate School, the Dean for Faculty Affairs, and the Dean of Research.

As OIST grows, recruitment of excellent professional staff into each Section will continue. One new Section in the RSD is the Engineering, Technology and Nanofabrication Section. This important area will enable technology development and advancements that will support both our research and teaching. It will be housed in the planned Engineering Support Building, planned for the FY2015.

- Continue the completion, development and improvement of the Research Equipment

Database and Reservation System for effective management and use of common research resources.

- Install a second Okinawa Coastal Ocean Observing System (OCOOS), south of the current OCOOS that was installed in FY2014. Train researchers to use these systems, establish a prioritized and equitable management and scheduling plan for the OCOOS for OIST and other researchers. Promote these instruments to marine scientists around the world.
- Enable the use of OIST research facilities by external academic and industrial users, while ensuring prioritized access by internal users.
- Utilize a high-performance-computing cluster and DNA sequencers facility to support the R&D Cluster-related and other research at OIST.
- We will strike a Committee for the Promotion of Proper Research Conduct in the Provost's Office. This will encompass the breadth of activities relevant to promoting the understanding of proper research design, conduct, and the use of research funds.

(Publication and communication)

- Continue to promote publication of research results in international science journals with the highest quality of research 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, brochures, TV programs and the OIST social media. To do this, we will:
  - Finish moving the OIST websites to a responsive design to enhance usability for users on mobile devices, work which began in FY2014. Continue to 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 electronic clearing houses such as Alpha Galileo and Eureka! Alert and through Japan's press clubs.
  - Strengthen the media presence by creating and maintaining a global network of press officers with other universities and journalists.
  - Streamline the working skills of science writers by regularly providing professional courses in collaboration with other universities.
  - Overhaul the regular OIST brochure design and distribute them to a selected audience at the right timing.
  - Leverage social media to increase visibility of and support for OIST.
- Increase the number of meetings with other institutes by improving the technical support.

(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. The evaluation results will be used in judgments of promotion of faculty members and continuation of the research units. (In FY2015 evaluation of up to 8 units is planned.)
- Continue to publish the summary of research evaluation expeditiously 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
- Number of press announcements and/or conferences about research results
- Number of research honors
- Number of research units evaluated

### 1.3 Faculty Recruitment

**Goal:**

Following the recent recruitment campaigns, OIST Graduate University has demonstrated its ability to compete successfully against internationally leading Universities for the highest caliber faculty. As the University grows, the next campaign will continue to recruit international and Japanese scientists, with a mixture of senior scientists with an established record of outstanding disciplinary research and junior scientists with an emerging record of excellence in research and a strong interdisciplinary focus. A balance of international and Japanese faculty will be sought.

**Actions:**

- Taking account of the expansion of the University on the basis of Framework Document II, searches will be initiated to strengthen and broaden the OIST research portfolio, with the aim of attracting at least 7 faculty members (including replacement of retired/resigned members) during FY 2015 toward 55 research units, particularly in the fields of biology, computer science, marine science and physics.
- Provide suitable space in Lab 3 or elsewhere that accommodates faculty members' research programs to promote smooth relocation of new faculty members. Achieve this by holding a proportion of Lab 3 space in reserve, and by strategic assignment of space in other buildings when faculty leave OIST.

### 1.4 Global Networking

**Goal:**

OIST Graduate University will continue to create strong networks with the international science community. It will do this, for example, by increasing collaborative agreements with universities and institutions, by hosting academic workshop. OIST spreads its reputation as an International Graduate Research University committed to the betterment of society through conducting leading basic research and training the best scientists.

**Actions:**

- Enable and 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 FY2015 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 international courses and workshops
- Number of students accepted from domestic and international universities

## **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)

- Commences the fourth year since the School Corporation began. Both the BOG and BOC have renewed members with three-year terms. 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 FY2014 will be reported and evaluated. The results of this assessment are made available to the CAO for public sharing.
- BOG and BOC have 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 and Future Planning. 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.

(Commence Expansion)

- The Framework Document II, an extensive and detailed plan for OIST's future, was adopted by the BOG. CAO has been supportive of OIST's action to establish the future vision.  
In addition, the site Master Plan was commissioned and completed in 2014. This new Master Plan will also form guidance for future expansion of the University. The ad-hoc Future Planning sub-committee of the BOG will continue to guide such efforts.
- The "Peer Review" will be conducted to objectively evaluate OIST's progress. The focus of the evaluation will be to assess whether OIST Graduate University is to become a world-class education and research university capable also of generating sustainable development for Okinawa.

**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:**

- 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. Continue to hold the bi-monthly information sharing meeting between the Executive and the Faculty Assembly to improve the flow of information between senior management and the Faculty.
- Maintain close communication with CAO through the Vice President in charge of governmental relations. Specifically, continue the Quarterly Meeting to share information such as the status of implementation of the Business Plan. In addition, start discussion with CAO on business sketch and budget requests for FY2016 well in advance and hold meetings more closely with CAO for the purpose.
- Start necessary preparation for university evaluation conducted by a MEXT-certified independent evaluation organization.
- A new ERP system will be purchased and implemented as a central tool for managing the HR and Finance systems at OIST Graduate University. This will be the most significant administrative change since OIST began as a university.  
The Information Technology, or IT, at OIST serves both the University as well as the academic core, through the Scientific Computing and Data Analysis Section of the RSD.

Continuous improvements in a wide range of services are being implemented. These include processes as well as new infrastructure.

- Ensure IT provides an excellent quality of support service, in alignment with the goals of the University and the business plan. Specifically, ensure that support processes critical to research and educational productivity such as on-boarding, account creation and authorization changes are as automated and efficient as possible.
- Ensure that clear and concise documentation and education programs exist to allow users to capitalize on IT resources and services.
- Identify, evaluate, design, deploy and maintain infrastructure to support the business of the University, ensuring that infrastructure deployed can scale with the growth of OIST.
- Best position the University within relevant local and global IT initiatives to enhance and support the research and administrative activities of the University, and best promote Okinawa.

## 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.
- Continue to reinforce the budget allocation and reporting process by collaboration with 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 of all funds including the Subsidy for Facilities. In addition, report the budget execution status to CAO on monthly basis.
- An enhanced system of Research Plans has been implemented. All faculty members have been asked to fill out the Research Plans that contain plans for the science, with appropriate summaries as well as requests for resources. Resource requests will cover human, operational expense and instruments and other capital needs. The Research Plan covers five years.

Together with the peer reviews, as appropriate, decisions about budget allocations will be made.

Mid-year review in September and another review in January, at the beginning of the fourth quarter will be conducted. These are points where all the research-related budgets are balanced between surpluses and over-expenditures. This fine tunes the expenditures to optimize spending. The mid-year review is also when checks are made to ensure capital purchases are in line for delivery and acceptance by the end of the Fiscal Year.

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 Dean of 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.
- While the CRAC has closed as a formal Committee, a group newly established by Section Leaders and faculty members will consider proposals of common and shared research resources and efficient use of the 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 FY2015 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 especially of research supplies and reagents which are usually used by price negotiation as well as general purchases.
- Reduce costs of research equipment maintenance by compiling the maintenance contracts by manufacturers, by reviewing the methods of maintenance, and by price negotiation.
- Improve the Internal supply store operation for supporting research activities efficiently and effectively.
- 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. Conduct properly and monitor revised procedures which were established in the last fiscal year.
- Study for the direct purchasing from abroad, considering the price correction of Japanese market.
- 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. And mitigate price increases caused by recent devaluation of JPY.

**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 October 7,2014)."

**Actions:**

(Recruitment)

- Continue to consider the recruiting and hiring of qualified persons for the important positions to administer an international university – i.e. CIO, VP for Finance Management, Dean of Research, and Dean of Faculty Affairs. The Dean of Research will lead the Research Support Division as well as support the R&D cluster -related activities while the Dean of Faculty Affairs will strengthen the management and hiring of new Faculty members in the upcoming years.
- 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.
- Appoint a Vice President for Gender Equality to promote gender equality in all aspects of university management, especially to support female researchers and female administrative staff to promote human and career development along with the Recommendation from Task Force and the counsel of Gender Equality Committee.
- Promote hiring people with disabilities 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)

- Continue to manage the annual review and job grade systems, referring to competitiveness factors such as salary levels of national government employees and those of academic institutions in and outside of Japan. In addition, embodying and implementing actions following “On the Salary of Officers and Employees of Special Public Corporations, etc. (by Administrative Reform Promotion Taskforce Secretariats in Cabinet Secretariat on October 7, 2014).”
- As the more people, both employees and non-employee members, students and their family members, are coming in, new systems will be considered for near-future expansion of service coverage, including the ongoing Registration Desk program. (refer 5.2)
- As the Village Housing facilities are developed, review the village rental charges, etc. as necessary, to ensure that users are responsible for an appropriate portion of the cost. An overall revision of charges is planned for FY2015, once construction of the Campus Phase 1 housing program is completed.

#### (Career development, training and evaluation)

- 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.
- From FY2015, a new training road map will be developed to further design corporate training programs. The new road map will aim to better identify required training courses for different levels of employees, trying to match knowledge requirements of staff at different career levels. Based on a series of small staff surveys in FY2014, new focus will be on training for newly promoted managers, in addition to initial management training for all current managers.
- Harassment issues will have a renewed focus with the introduction of an online sexual harassment. Power harassment and other stress related matters will also be addressed. For OIST’s diverse organization better intercultural communication seminars will be conducted. HR Training will support OIST’s focus on wellness and other work-related issues with external and internal offerings.
- From FY2015, the content of the staff orientation will be re-focused on giving appropriate content to the different categories of staff. In addition to the general orientation, orientations and practical training into OIST tools for administrators will be enhanced, and a new program for newly promoted managerial staff will be developed. During FY2015, guidelines and checklists for onboarding will be developed to help hiring managers and receiving units/sections better integrate incoming staff into the workplace.
- In FY2015 OIST will increase the number of language courses given to staff and family members. There is a very strong demand for language training and the ability to communicate in English and Japanese is a foundation of the success of the University.

- Continue to manage the new performance evaluation system with job grade and salary ranges, including 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 newly promoted 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 regulations and laws.
- To prevent mismanagement of research funds, take various measures, including enhanced inspection activities when receiving goods.
- We will strike a Committee for the Promotion of Proper Research Conduct in the Provost's Office. This will encompass the breadth of activities relevant to promoting the understanding of proper research design, conduct, and the use of research funds. (Repeated. See 1.2)

## 2.6 Information Disclosure and Public Relations

### Goal:

The fast growth of the Graduate University requires OIST to guarantee 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 expansion of 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 Graduate School Website, publication database, and News Center to facilitate retrieval of information about the OIST Ph.D. program and publications by OIST researchers, and to encourage use of OIST photos, videos and other multimedia.
- Increase effective use of social media such as Facebook, Twitter and YouTube to propagate excitement about the OIST Graduate University.
- Maintain and improve the library of OIST Policies, Rules and Procedures on the website.

## Chapter 3 Finance

### Goal:

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. This will be from two main sources, namely external competitive grants and from fundraising.

### Actions:

(Grants)

- The number of awarded grants has increasing by 30 percent in the last 18 months. These include: KAKENHI, JST Strategic Basic Research Programs (CREST, PRESTO), and the Human Frontier Science Program. As new junior faculty join OIST Graduate University, we will continue our grant-writing workshops to help them succeed in Japanese competitive grant opportunities. These workshops will be given in both languages and there will be language support for grant preparation.  
The Sponsored Research Section of the RSD will continue to collect information about grant opportunities in Japan and abroad and communicate these on a regular basis to members of our research community.
- In addition to regularly checking sources of funding agencies in Japan and abroad, we will collect information about any precursory activities leading to announcements of new grants, such as from advisory boards of MEXT.
- Encourage applications for industrial grants to support development of new businesses based on OIST research.

(Donations)

- We will recruit an International Director of Fundraising and initiate an Office of Fundraising under the President's Office.  
We will work with two established fundraisers, one in North America and one in Japan. The combined efforts will start our fundraising at OIST Graduate University.

**Metrics:**

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

## Chapter 4 Contribution to Self-sustainable Development of Okinawa

**Goal:**

Japan's "Basic Policies for Fiscal Management and Reform 2014" aims to foster sustainable economic development in Okinawa and includes measures to promote the creation of an international "intellectual and industrial" cluster (R&D cluster) centered upon OIST and other institutions.

OIST established the Office of the Executive Vice President for Sustainable Development of Okinawa in FY2014 to reflect the university's commitment to its founding objective to contribute to the sustainable development of Okinawa, as stipulated in the OIST SC Act, and to promote the development a R&D cluster. The Office will continue to identify, patent, and promote discoveries in the OIST research laboratories and to build a R&D Cluster in Okinawa. We will continue to expand collaborative R&D projects with established industry partners and to foster the development of entrepreneurial spin off companies based on OIST intellectual property. In addition to the existing foundation of Japanese partners, international relationships will be expanded. 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:**

(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.
- Continue the entrepreneurship education workshop, building on the previous successful programs. Include research trainees from other universities in Okinawa and OIST staff.
- Consider establishing an Industry Fellowship Program to enhance knowledge transfer and establish links between OIST and industry as a foundation for future long-term relationships.
- Continue the existing four collaborative research projects with venture firms and academic institutions in Okinawa under "The project for development of human resources with OIST," "The Incubation Project for Start-Up Venture," "Coral Reef Restoration Project" and "The promotion project of Knowledge-based Industrial Clustering" 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)

- Continue to foster invention disclosure procedures that complement and protect the basic research mission of OIST. Expand international external expert advisors for efficient and strategic management of intellectual property and recommendations on patent filing. Enhance quality of the Invention Evaluation Committee with the expanded pool of external experts.
- Implement patent administration, including ones by the third party, through a new IP management system, which will be used to manage information of such as negotiations in progress with potential licensees.
- Implement intellectual property training to provide opportunities to faculty, postdocs, students, and staff to increase awareness of the possibilities, procedures and importance of acquisition and protection of intellectual property.

#### (Technology Transfer and Development)

- Develop entrepreneurial opportunities based on inventions and intellectual property created at OIST by participating in more business matching events or setting up more follow up meetings after such events. For promising cases, promote organizational support upon discussion in the Business Potential Evaluation Committee on whether and how OIST will support them.
- Strengthen business knowledge of priority industrial sectors and build plan to target these sectors, taking into account findings from high-level meetings such as R&D cluster workshops, open energy systems workshops, and others.
- Support communications and relationships with industry by participating in well recognized industrial workshops and conferences nationally and internationally, such as BIO International Convention, BioJapan, Nanotech Japan, and others.
- Continue building a visible structure for business development by developing internal expertise in global business and marketing of S&T, and implementing guidelines on participation of OIST employees in industry sponsored research projects and commercial activities.
- Set rules and regulations, and implement a Proof of Concept (POC) program to provide competitive internal funding to carry out specific experiments to produce data that will enhance the commercialization of OIST IP.
- Dedicate space in the new Lab 3 to house the OIST Technology Transfer Center as a co-laboratory where OIST researchers and their external academic and industrial collaborators can conduct feasibility studies to transform OIST technologies into practical applications.
- Enable the use of OIST research facilities by external academic and industrial users, while ensuring prioritized access by internal users. (Repeated. See 1.2)
- Explore the need and feasibility for an OIST research park and incubator facility proximal to the campus to house startup ventures based on OIST IP.

#### (R&D Cluster Development)

- Incorporate the R&D Cluster Hall into seminar, workshop, symposium, and related activities in conjunction with the OIST Auditorium to foster R&D opportunities and exchange.
- Towards implementing the recommendations made at the international workshops on R&D cluster development in Okinawa, OIST will continue to provide secretariat of and lead discussion in the Task Force for the Establishment of an R&D Cluster Promotion Organization for Okinawa as in FY2014. Based on the process of Task Force which includes such as the Cabinet Office and Okinawa Prefectural Government, OIST will coordinate the efforts so that specific actions to prepare for the establishment of the

R&D Cluster Promotion Organization will start in FY2015 or as soon as possible.

- Organize an international symposium on the theme of developing R&D clusters based on science and technology, to promote the establishment of the R&D Cluster Promotion Organization.
- Begin an analysis of the science and technology capabilities and potential at OIST and in Okinawa, along with an analysis of global market needs, in order to understand gaps and inform OIST strategy for R&D cluster development. In doing so, develop measurement tools to analyze the impact of innovation in science and technology.

(Networking with local institutions and communities)

- Coordinate interactions with other institutions in Okinawa that encourage the development of an R&D cluster community for the Prefecture. This includes the Okinawa University Consortium, science, technology and industry promotion programs of the OPG, related roundtables, and other organizations.
- Continue exchange programs by holding science lectures with local core medical institutions such as Chubu Hospital and Nanbu Medical Center and Medical Department of the University 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.
- Hold the 6th 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 FY2015.
- 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 6th 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.
- 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. OIST will continue to work with the U.S. Consulate and the OPG to organize the science event for the high school students' research for enterprise, "SCORE," which is becoming one of the major science education competitions on the island.
- 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 official contacts with companies, with the view of future collaborations.
- Number of collaborative projects with companies (collaboration agreements, joint research projects, commercialization of intellectual property, etc.).
- The number of use of our research facilities by external organizations, etc.
- OIST intellectual property (number of invention disclosures, patents filed and awarded, etc.).
- Number of symposiums, meetings, workshops organized or hosted by OIST around topics related to industry development and R&D cluster development.
- Number of participants in entrepreneurial education workshops and seminars.
- Number of applied research projects (proof of concept, feasibility, etc.) supported by OIST POC program and other related programs.
- 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)
- Number of externally organized international conferences and workshops and number of the participants at the OIST venue.

## **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, facilities and campus roads.
- Design and construct the planned Engineering Support Building.
- Commence planning for expansion of the campus, including design of the necessary civil works and Lab 4.
- Complete design and construct the planned Onshore Marine Science Facility.
- Complete development of the Campus Phase 1 Village facilities under partnership with the private development consortium. (Phase 3-2: 54 units will be completed in FY2015.)
- Based on the Act for Promoting Proper Tendering and Contracting for Public Works (Act No. 127 of 2000), continue to promote disclose 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 Child Development Center (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 at HR/RC and Ganjuu Wellbeing Service, enhancing the internal communication site, providing the information regarding the life in Okinawa and supporting initiatives (OIST Welcome Club etc.) and events organized by HR/RC/GWS.
- The OIST Clubs Steering Group, which manages the applications for club status, expects many more applications in FY2015. The Steering Group examines each application and either accepts, denies, or more usually asks for changes before accepting. There are now 17 clubs.  
The clubs plays an essential role in the social cohesion of the university.
- After in depth in FY2014 discussion and study of other similar activities in other universities and laboratories, a proposal was presented to OIST executives to set up what will be called “The Registration Desk” which will be the first stop for all visiting researchers and students. The staff of the Registration Desk will ensure the growing number of visiting researchers are correctly registered and integrated into university data bases and procedures. It is envisaged that the Registration Desk will open on April 1, 2015. The Registration Desk will make an important contribution to consolidating and improving the activities of several different groups that currently take responsibility for visiting researchers.

(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 CDC with a new larger and modern facility for the preschool. The CDC Governing Board will continue to meet quarterly with separate meetings of the CDC Finance Committee, which will keep a strict eye on the budget of the school.
- 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.
- In FY2015 OIST will increase the number of language courses given to staff and family members. There is a very strong demand for language training and the ability to communicate in English and Japanese is a foundation of the success of the University.  
(Repeated. See 2.4)

(Student Support)

- Establish student support services and general welfare activities to promote a positive social and psychological environment for students. (See 1.1)
- Improve the environment by increasing opportunities for sport and recreation.

### **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 with facility development, provide sufficient measures such as installation of turbid water treatment plants to prevent red soil run off.
- Manage campus facilities and landscaping to preserve natural balance and protect indigenous species.

Research Units (as of February 1, 2015)

Attachment 1-1

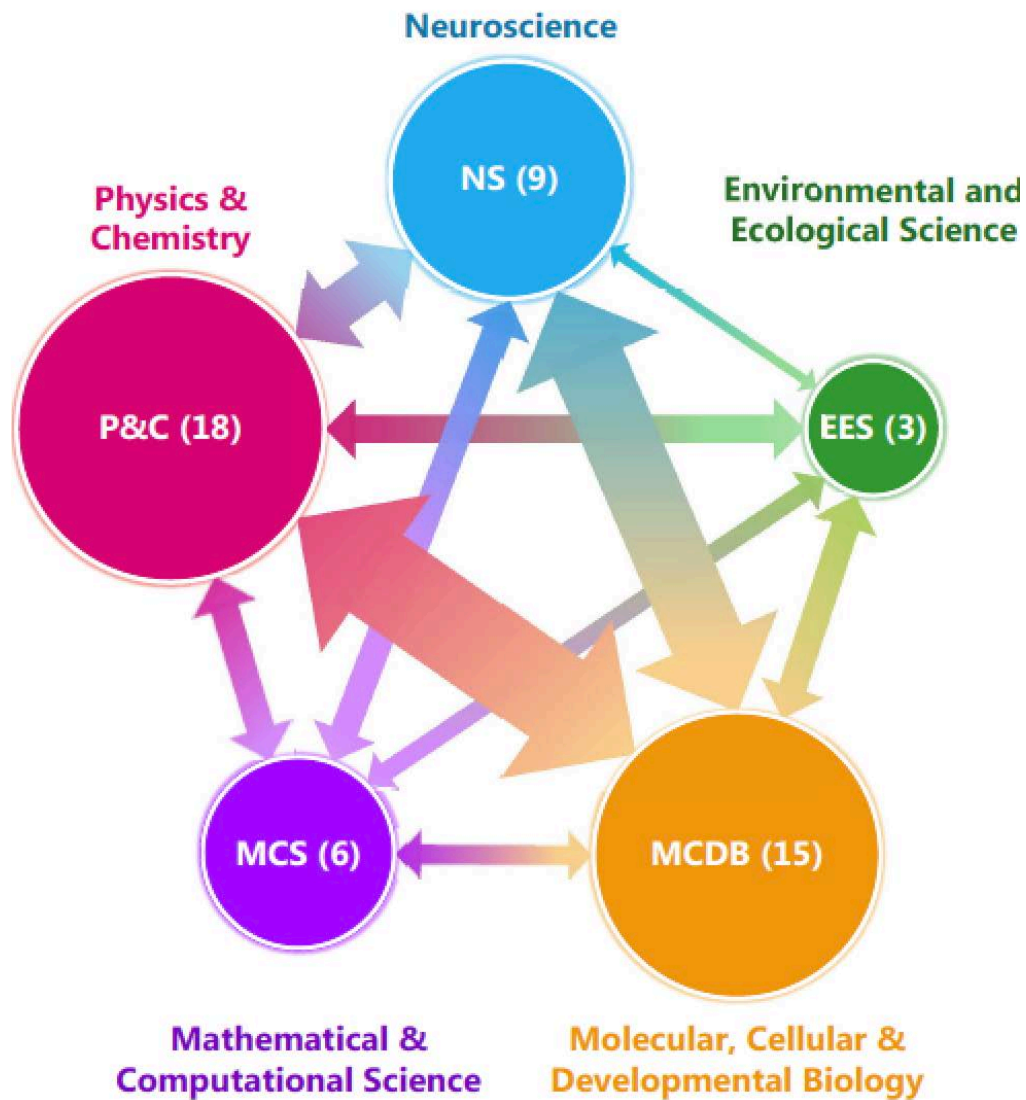
Unit Name		Faculty
1	Biodiversity and Biocomplexity Unit	Dr. Evan P.Economio
2	Brain Mechanism for Behavior Unit	Dr. Gordon Arbuthnott
3	Biological Systems Unit	Dr. Igor Goryanin
4	Biological Physics Theory Unit	Dr. Greg Stephens
5	Cell Signal Unit	Dr. Tadashi Yamamoto
6	Cellular and Molecular Synaptic Function Unit	Dr. Tomoyuki Takahashi
7	Chemistry and Chemical Bioengineering Unit	Dr. Fujie Tanaka
8	Collective Interactions Unit	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 Sergeyeovich 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
25	Marine Biophysics Unit	Dr. Satoshi Mitarai

Unit Name		Faculty
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
48	Coordination Chemistry and Catalysis Unit	Dr. Julia Khusnutdinova
49	Molecular Genetics Unit	Dr. Daniel Rokhsar
50	Nucleic Acid Chemistry and Engineering Unit	Dr. Yohei Yokobayashi
51	Advanced Medical Instrumentation Unit	Dr. Hirotaka Sugawara

### 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. 51 Research Units (as of February 2015 ) 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.

## OIST Research Collaboration Diagram



(The number of units are shown in parentheses)

FY2015 Income and expenditure budget statement

( Unit : K yen )

Revenues		Expenses	
Items	Budget Amounts	Items	Budget Amounts
Subsidy for Operations	15,662,380	Personnel Expense	6,121,835
Subsidy for Facilities	1,063,927	Academic related Expense	1,501,205
Other Revenues	609,160	Education & Research related Expense	3,813,545
		Common Resource Expense	3,860,740
		Administrative Expense	974,215
		Construction Expense	1,063,927
<b>Total</b>	<b>17,335,467</b>	<b>Total</b>	<b>17,335,467</b>

Note: Subsidy amounts in Revenues might have to be modified later when a request for budget carry-over from FY14 to FY15 is made.

## Balance Sheets

As of March 31, 2015

(Unit : K Yen)

(1) Assets			
(2) I Noncurrent assets			
(3) 1 Properties, plants, and equipment			
(4) Land		1,659,667	
(5) Buildings	37,345,464		
(6) Accumulated depreciation	<u>△ 5,349,444</u>	31,996,020	
(7) Structures	6,342,864		
(8) Accumulated depreciation	<u>△ 897,896</u>	5,444,968	
(9) Machineries	200,503		
(10) Accumulated depreciation	<u>△ 123,280</u>	77,223	
(11) Equipment	11,384,145		
(12) Accumulated depreciation	<u>△ 6,894,344</u>	4,489,801	
(13) Books		1,479	
(14) Vehicles and transportation equipment	18,856		
(15) Accumulated depreciation	<u>△ 15,322</u>	3,534	
(16) Lease assets	1,761,915		
(17) Accumulated depreciation	<u>△ 733,633</u>	1,028,282	
(18) Construction in progress		<u>184,478</u>	
(19) Total properties, plants, and equipment		44,885,452	
(20)			
(21) 2 Intangible assets net of amortization			
(22) Patents		3,114	
(23) Trademark rights		793	
(24) Softwares		108,659	
(25) Patents (in the process of filing)		21,292	
(26) Others		<u>35,555</u>	
(27) Total intangible assets, net		169,413	
(28)			
(29) 3 Investments and other assets			
(30) Security deposits		3,514	
(31) Long-term prepaid expenses		1,500	
(32) Lease investment assets (Long-term)		<u>2,974,866</u>	
(33) Total investments and other assets		2,979,880	
(34) Total noncurrent assets			48,034,745
(35)			
(36) II Current assets			
(37) Cash and cash equivalents		5,242,161	
(38) Accounts receivable		2,797,295	
(39) Supplies		5,000	
(40) Prepaid expenses		6,342	
(41) Lease investment assets (Short-term)		<u>148,922</u>	
(42) Total current assets			<u>8,199,720</u>
(43) Total assets			<u>56,234,465</u>
(44)			
(45) Liabilities			
(46) I Noncurrent liabilities			
(47) Encumbrance for assets - subsidy for operation		11,637,694	
(48) Encumbrance for assets - donation		51,300	
(49) Encumbrance for assets - donated by Japan government		103	
(50) Allowance-retirement benefits		98,535	
(51) Long-term accrued amounts payable		2,983,710	
(52) Long-term lease obligations		<u>603,482</u>	
(53) Total noncurrent liabilities			15,374,824
(54)			
(55) II Current liabilities			
(56) Advance received		4,000	
(57) Deposits received - subsidy for operation			
(58) Deposits received - subsidy for operation	68,000		
(59) Deposits received-subsidy for facility	<u>89,000</u>	157,000	
(60) Deposits received - donation		10,598	
(61) Deposits received - Kakenhi		63,385	
(62) Deposits received - others		64,248	
(63) Accounts payable		5,217,450	
(64) Short-term lease obligations		445,015	
(65) Accrued expenses		<u>51,963</u>	
(66) Total current liabilities			<u>6,013,659</u>
(67) Total liabilities			<u>21,388,483</u>
(68)			
(69) Equities			
(70) I Contributions			
(71) Contributions from government		<u>24,317,682</u>	
(72) Total contributions			24,317,682
(73)			
(74) II Additional paid-in contributions			
(75) Additional paid-in contributions		16,157,620	
(76) Accumulated depreciation - directly deducted from equity		<u>△ 5,879,918</u>	
(77) Total additional paid-in contributions			10,277,702
(78)			
(79) III Retained earnings			
(80) Voluntary reserve funds			
(81) Special reserve funds		80,533	
(82) Accumulated net income		<u>170,065</u>	
(83) (Net income/(△)loss) for FY2013	( 0 )		
(84) Total retained earnings			<u>250,598</u>
(85) Total equities			<u>34,845,982</u>
(86) Total liabilities and equities			<u>56,234,465</u>

Projected income statement  
FY2014

( Unit : K yen )

(A)	(B)
Items	Amount
(1) Ordinary Revenues	13,751,870
(2) Revenue from Tuition etc.	40,860
(3) Revenue from Subsidy for Operations etc.	11,333,894
(4) Revenue from Donation etc.	13,199
(5) Revenue from Sponsored Research	195,917
(6) Revenue from Joint Research	40,651
(7) Reversal of Assets Offsetting Subsidy for Operations etc.	1,934,801
(8) Reversals of Assets Offsetting Contributions	28,679
(9) Reversals of Assets Offsetting Donated Assets	52
(10) Revenue from Proeprty Rent for Domitory etc.	7,401
(11) Land and Building Rent Revenue	6,444
(12) Financial Income	69,147
(13) Miscellaneous gains	80,826
(14)	
(15) Ordinary Expenses	13,751,870
(16) Operating Expenses	4,921,649
(17) General Administrative Expenses	1,464,473
(18) Personnel Expenses	4,899,239
(19) Depreciation	2,391,882
(20) Financial Charges	74,628
(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)	

## Balance Sheets

As of March 31, 2016

(Unit:K Yen)

(1) Assets			
(2) I Noncurrent assets			
(3) 1 Properties, plants, and equipment			
(4) Land		1,659,667	
(5) Buildings	38,777,082		
(6) Accumulated depreciation	<u>△ 6,857,332</u>	31,919,750	
(7) Structures	6,943,241		
(8) Accumulated depreciation	<u>△ 1,182,997</u>	5,760,244	
(9) Machineries	200,503		
(10) Accumulated depreciation	<u>△ 149,145</u>	51,358	
(11) Equipment	13,667,144		
(12) Accumulated depreciation	<u>△ 9,076,994</u>	4,590,150	
(13) Books		1,479	
(14) Vehicles and transportation equipment	18,856		
(15) Accumulated depreciation	<u>△ 17,391</u>	1,465	
(16) Lease assets	1,761,915		
(17) Accumulated depreciation	<u>△ 1,183,543</u>	578,372	
(18) Construction in progress		<u>26,535</u>	
(19) Total properties, plants, and equipment		44,589,020	
(20)			
(21) 2 Intangible assets net of amortization			
(22) Patents		2,268	
(23) Trademark rights		681	
(24) Softwares		69,231	
(25) Patents (in the process of filing)		21,292	
(26) Others		<u>31,652</u>	
(27) Total intangible assets, net		125,124	
(28)			
(29) 3 Investments and other assets			
(30) Security deposits		3,514	
(31) Long-term prepaid expenses		1,500	
(32) Lease investment assets (Long-term)		<u>4,383,819</u>	
(33) Total investments and other assets		4,388,833	
(34) Total noncurrent assets			49,102,977
(35)			
(36) II Current assets			
(37) Cash and cash equivalents		6,620,764	
(38) Accounts receivable		100,000	
(39) Supplies		5,000	
(40) Prepaid expenses		6,342	
(41) Lease investment assets (Short-term)		<u>261,629</u>	
(42) Total current assets			<u>6,993,735</u>
(43) Total assets			<u>56,096,712</u>
(44)			
(45) Liabilities			
(46) I Noncurrent liabilities			
(47) Encumbrance for assets - subsidy for operation		14,805,536	
(48) Encumbrance for assets - donation		25,116	
(49) Encumbrance for assets - donated by Japan government		52	
(50) Allowance-retirement benefits		114,535	
(51) Long-term accrued amounts payable		4,397,803	
(52) Long-term lease obligations		<u>348,988</u>	
(53) Total noncurrent liabilities			19,692,030
(54)			
(55) II Current liabilities			
(56) Advance received		4,000	
(57) Deposits received - subsidy for operation			
(58) Deposits received - subsidy for operation	50,000		
(59) Deposits received-subsidy for facility	<u>89,000</u>	139,000	
(60) Deposits received - donation		10,598	
(61) Deposits received - Kakenhi		63,385	
(62) Deposits received - others		64,248	
(63) Accounts payable		1,200,000	
(64) Short-term lease obligations		425,290	
(65) Accrued expenses		<u>103,688</u>	
(66) Total current liabilities			<u>2,010,209</u>
(67) Total liabilities			<u>21,702,239</u>
(68)			
(69) Equities			
(70) I Contributions			
(71) Contributions from government		<u>24,317,682</u>	
(72) Total contributions			24,317,682
(73)			
(74) II Additional paid-in contributions			
(75) Additional paid-in contributions		17,310,971	
(76) Accumulated depreciation - directly deducted from equity		<u>△ 7,484,778</u>	
(77) Total additional paid-in contributions			9,826,193
(78)			
(79) III Retained earnings			
(80) Voluntary reserve funds			
(81) Special reserve funds		80,533	
(82) Accumulated net income		<u>170,065</u>	
(83) (Net income/(△loss) for FY2013)	( 0 )		
(84) Total retained earnings			<u>250,598</u>
(85) Total equities			<u>34,394,473</u>
(86) Total liabilities and equities			<u>56,096,712</u>

Projected income statement  
FY2015

( Unit : K yen )

(A)	(B)
Items	Amount
(1) Ordinary Revenues	15,781,962
(2) Revenue from Tuition etc.	51,660
(3) Revenue from Subsidy for Operations etc.	12,854,437
(4) Revenue from Donation etc.	55,000
(5) Revenue from Sponsored Research	131,750
(6) Revenue from Joint Research	50,500
(7) Reversal of Assets Offsetting Subsidy for Operations etc.	2,426,260
(8) Reversals of Assets Offsetting Contributions	26,183
(9) Reversals of Assets Offsetting Donated Assets	52
(10) Revenue from Proeprty Rent for Domitory etc.	8,141
(11) Land and Building Rent Revenue	7,242
(12) Financial Income	92,688
(13) Miscellaneous gains	78,050
(14)	
(15) Ordinary Expenses	15,781,962
(16) Operating Expenses	6,177,309
(17) General Administrative Expenses	950,315
(18) Personnel Expenses	5,649,577
(19) Depreciation	2,905,411
(20) Financial Charges	99,351
(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)	