

Okinawa Institute of Science and Technology School Corporation

# Fiscal Year 2012 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 FY2012 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) 2012 – from April 2012 to March 2013 – 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 45 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. In September 2012, OIST Graduate University will admit the first students to its 5-year integrated Ph.D. program in Science and Technology.

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 scientists and researchers with the ability to think creatively, reason scientifically, and collaborate effectively across traditional 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 align 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 FY2012 means for OIST Graduate University**

For the OIST Graduate University, the FY2012 is a period to complete the foundation of the university and prepare for its further development. The University has to ensure the completion of the on-going projects from the previous fiscal year, such as the student recruitment and selection for the first intake and the construction of Laboratory 2. 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 FY2012 is important from the following four perspectives:

#### **1) Fully functioning as a graduate university:**

OIST will start fully functioning as a graduate university from September 2012, when opens its PhD program. OIST should take all possible measures to ensure that students join the university smoothly and start taking classes as planned. In addition, aiming at building a reputation in the student recruitment markets in Japan and abroad, OIST should review the first year's recruitment and admission activities appropriately and implement the second year's plan in a strategic manner.

#### **2) Integrating new facilities:**

The capacity of OIST campus will be significantly expanded with the opening of Laboratory 2, Auditorium, and Village Zone facilities. OIST should integrate these new facilities effectively into university operations and take full advantage of them in strengthening research capability and developing the university community.

#### **3) Preparing enhancement of education and research programs:**

The detailed design works for Laboratory 3 will be carried out in the FY2012. OIST should examine the direction of future development, including a faculty recruitment plan with areas of high focus.

#### **4) Working with Okinawa's new development policy:**

A new plan for Okinawa's development will be formulated in FY 2012, following the previous 10-year plan that covers the period until FY2011. While enhancing the collaborative relationships with OPG, industry, and other local entities, OIST should take further actions to contribute to Okinawa's self-sustainable development in the academia-industry-government

partnership. Such actions may include participating in and/or cooperating with new projects that will be launched based on the new development plan. In addition, OIST should continue its efforts in obtaining wide support from the people of Okinawa.

## **Planning framework and evaluation approach**

This Business Plan is to clarify the goals of FY2012 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:

OIST Graduate University will launch its 5-year integrated Ph.D. program from September 2012. We will take all possible measures to ensure that the first 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, taking the matters pointed out in the accreditation assessment into account, and submit an application of additional faculty to MEXT in June 2012.
- Prepare the programs for Professional Development for students including training that focuses on group activities and presentation skills.
- Launch the customized Ph.D. program, including pre-thesis research training and laboratory rotations and assignment of an Academic Mentor for each student. The list of courses and syllabus of each course of the first semester will be published on the OIST website by the end of April.
- Organize the committees for the curriculum and progression to thesis research.
- Provide the opportunities of taking programs to learn English and Japanese communication in laboratories and/or other practical skills to the incoming students.

##### (Educational Environment)

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

##### (Student Support)

- Set up and implement the orientation programs for the incoming students.
- 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: OIST will offer the support package that will include Research Assistantship to be designed with the consideration of the cost of tuition fees. Proper work flows should be established through cooperation among the related administrative sections such as Student Support, HR, and Budget and Accounting.
- Continue to collect and provide information of external scholarship opportunities to the students.
- Consider measures to support career development of students and implement the plan in

steps: the support will include 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.

- Establish student support services (counseling and welfare) to provide medical, physical and psychological support to students and general welfare activities to promote a positive social and psychological environment for students.

**Goal:**

We will 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 student recruitment and admission activities in the first year appropriately. Reflect the results of the analysis in the updated procedures and implement them effectively in a planned manner.
- Conduct the student recruitment activities globally to attract the highest caliber graduate students for the second intake of students arriving in September 2013 as follows:
  - The number recruited: 20 students
  - Admission period: June – August 2012
  - Major recruitment activities: Contact candidates by website, email, domestic and international university visits, hosting booths at academic meetings, 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.

**Actions:**

(Promotion of cross-disciplinary research)

- Promote cutting-edge research in cross-disciplinary fields such as next-generation energy, marine science, imaging, and health, with the FY2012 budget to be funded through the special framework (Okinawa Promotion Education and Research Project). (See Attachment #1-1 for the list of research units as of February 2012 and Attachment #1-2 for the major scientific areas of research.)

- Continue to promote interactions and collaborations between researchers in different fields through internal seminars, researchers' retreat, and other occasions.

(Research Support)

- Recruit experienced technical staff, especially in physical science, to provide high quality research support, including support for use of the compact light source to be purchased with the previous fiscal year's special framework budget.
- In April 2012, establish the Marine Sciences Resource Section in charge of management of the Okinawa Coastal Ocean Observing System, which is also funded by the previous fiscal year's special framework budget, and coordination within the University and with other institutions interested in the equipment, with an aim of promoting international partnerships concerning marine research.
- Create common resource spaces in Laboratory 2, as those of Laboratory 1, to promote exchange and collaboration among researchers and achieve optimized use of research resources.
- OIST Open Technology Center will introduce unified equipment/service scheduling, booking, and cost charging system for fair and efficient use of common research resources. In addition, it will facilitate the use of OIST's research facilities by external researchers including those of industry based on appropriate policies.
- Relocate the genome sequencing center to the main campus from the rental facility in Uruma in around August 2012 and start its operation on the campus: this will benefit OIST by increasing efficiency in research activities and enhancing the interaction with other research functions.

(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 the research evaluation system described below.
- Provide accessible information about our research and its results to the general public in Japan and around the world through the OIST web site, press releases, and press conferences.

(Research Evaluation)

- Review research projects 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 FY2012, evaluation of 7 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. We will make necessary preparations for the next round of faculty search to widen the foundation for cross-disciplinary research. At least half of the faculty should be non-Japanese.

**Action:**

- Develop strategies for enhancing education and research programs of the university and present it to the Board of Governors for its discussion: The efforts to create a faculty development plan will be continued in order to identify the scientific areas that will provide the maximum strategic opportunities to OIST Graduate University and determine the feasible number of positions and timing for future recruitment, taking the status of campus development into account. The plan will be developed by the President and Provost in consultation with the current faculty, taking the matters pointed out at the accreditation assessment into account.

### 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 (about 8 international courses/workshops are to be held in FY2012.) In addition, actively support workshops/conferences by external institutes held at OIST.
- Design and host new summer and winter residential courses for undergraduate students in appropriate subjects such as physics, cell biology, and neuroscience.
- Continue to implement the long-term and short-term student programs developed by OIST PC, 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 seminars (hosted by research units)

- Number of participants of courses, workshops, and seminars.
- 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. In 2011, OIST established its first collaborative agreement with industry. We will continue to build collaboration with industry and appropriately manage and utilize the intellectual properties produced by our research.

### Actions:

(Research Exchange and Collaboration)

- Through efforts such as exchange visits of researchers, continue to promote research exchanges and joint research with industry, including both major corporations and venture firms.
- 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 to be held in March 2012. Communicate with industry on OIST's research profiles to match industry needs with OIST research results through various opportunities, including industrial events/conferences such as BioJapan 2012 in October.
- 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 tools on OIST Website etc.. (See 1.2)
- Consider an internship program with high potential researchers in industry.
- Continue the existing three collaborative research projects with venture firms and academic institutions in Okinawa under the "Collaborative Research Project toward Developing Intellectual Cluster" funded by OPG, including research on biological resources of Okinawa. In addition, contribute to academic meetings and symposiums under the project.

(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.
- 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)

- Monitor 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.

### 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:**

- Regular BOG and BOC meetings will be held in May, September and February. In the BOG meeting in May, the performance and achievements of FY2011 will be reported and evaluated. In addition, medium-term strategies for future development will be discussed in the meeting (See 1.3).
- 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.

**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 strengthen the functions necessary for accepting students and expanding research activities, such as academic service and research support functions, and build appropriate organizational structures to cope with the increasing use of information technology while ensuring information security. On an organizational change or establishing a new position in the organization, clarify the roles and responsibilities of the new organization or positions. (See Attachment #2 for the organization chart as of February 2012.)
- 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. In addition to making a monthly report of the budget execution status to the CAO, information such as the status of implementation of the Business Plan will be communicated to the CAO in the Quarterly Meeting started in January 2012.

## 2.2 Budget allocation and execution

**Goal:**

On executing the budget including government subsidies, OIST Graduate University will establish a system 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 using the ERP core-system will be stabilized. Each budget supervisor will have access to a monthly statement. 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 the 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.

## **2.3 Efficiency of business operations**

### **Goal:**

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

### **Actions:**

- Continue the efforts made by OIST PC to efficiently 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.
- Constitute an internal project team for systematic review 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 (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.
- Collect reference data comparing prices of supplies and equipment etc. in Japan and abroad and use such data in direct negotiation with manufacturers 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 most use of its facilities and equipment.

### **Actions:**

- Establish the rules (eligibility, rent, etc.) and prepare the services for residents (shop, transportation, etc.) for the opening of Village Zone facilities scheduled from around June.
- Develop the policies for the efficient and proper management of the Auditorium and other facilities and promote external use of those facilities.
- Maintain minimum research facilities in Uruma, taking the progress of campus

development into account: Two facilities other than the Okinawa Technology Research Exchange Center in Uruma will be returned to the owner as soon as completing the relocation and restoring them to the original state.

## 2.4 Personnel management

### Goal:

OIST Graduate University will recruit and retain qualified employees, which are essential for the university to achieve its goals sustainably, by providing internationally 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 make efforts to contain overall personnel costs and keep the employee's salary at a reasonable level consistent with expectations of tax-payers, as well as ensuring accountability in such aspects.

### Actions:

#### (Recruitment)

- Continue to endeavor to recruit and hire qualified persons for the important positions to administer an international university – i.e. Legal Counsel, Chief Information Officer, and Fund Raising Officer.
- Continue to recruit qualified staff necessary to cope with new or expanded functions, such as student affairs and research support. In doing so, properly manage the headcounts and prevent the organization from expanding excessively, taking account of the trend among universities and similar institutions in Japan and abroad, in order to achieve an efficient and streamlined administrative sector.
- Implement the equal opportunity policy to promote diversity at the workplace and to improve the gender balance among all job levels and categories.
- Strengthen the relocation function; establishing a documented procedure and list of services that can be shared with new comers from the time of their enrolment, and networking with schools to increase the opportunities for children education and with potential employers to identify more options for spouse work.

#### (Compensation)

- Continue to consider and introduce an appropriate compensation package that includes the new salary system to be implemented from April 2012. Under the new system, an appropriate salary range will be set for each job category reflecting factors such as salary levels of national government employees and those of academic institutions in and outside of Japan, and the amount of salary will be determined based on individual job performance etc. within the respective range. The new system will properly incorporate the 5 year plan to reduce the salary level, which OIST PC had been implementing. In addition, continue to examine appropriate retirement benefits in view of international standards, financial feasibility, and obtaining public understanding, to introduce a new program as necessary.
- Continue to study appropriate level of the Housing Allowance along with the preparation of use of the houses in the Village Zone on the campus.

#### (Training and evaluation)

- Following training needs analysis made in FY2011, design and implement a new corporate training program in complement to the job specific competency/expertise training plan.
- Initiate a career development plan for administrative staff, including provision of training opportunities and position rotations.
- Implement a performance evaluation system appropriate to the characters of each job category (faculty and administrative staff) while ensuring fairness and transparency. Also, reflect the evaluation results in employee salaries.

**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 establish a system to 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.
- 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.
- 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:**

OIST Graduate University will ensure transparency of academic and administrative operations and will be fully accountable to the general public. In addition, to obtain broad support for OIST Graduate University both from Japan and abroad and to increase worldwide recognition, we will communicate actively with various stakeholders and promote branding of the university.

**Actions:**

- 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 IAIs (Act



- No. 140 of 2001).
- Communicate actively with domestic and international communities through effective means such as the new OIST web site, publications, press releases and press conferences.
- Introduce the database of multimedia resources to allow more flexible searches on the website and efficient management of the resources.
- Publish OIST financial statement after reformatting under the international standards to improve communication with potential donors and other financial institution.
- Publish the library of OIST Policies, Rules and Procedures on the website.

## Chapter 3 Finance

### Goal:

In OIST PC's FY2011 (7 months from April to October 2012), the amount of external revenue reached 280 million yen, which is more than double of FY2010 (increased by 135 percent). OIST Graduate University will continue to broaden its financial basis strategically by increasing the amount of research grants, donations and other sources in 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 based on the principle that to self-financed funds will be a major financial source for such expenses.

### Actions:

(Grants)

- Encourage application for research grants by actively collecting and providing information of research grants in Japan and abroad to researchers.
- Hold seminars on writing competitive grant proposals and introduce internal review and/or consultation of proposals to increase the amount of research funding from competitive grants. Considering the international nature of the university, enhance the support function for non-Japanese researchers in applying for domestic grants, such as by providing information in English.
- Conduct institutional studies to apply for competitive grants to support institutions (for research and/or education) actively.

(Donations)

- Apply for 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.
- Continue to develop medium and long term strategies of fund raising based on the information concerning consultants collected in FY2011. Take measures to utilize a foundation established to receive donation in the United States.

(See 1.5 for measures to collaborate with Industry)

### 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 will be implemented from FY2012. 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)

- Promote cross-disciplinary research through the special framework (Okinawa Promotion Education and Research Project)(See 1.2)
  - Promote collaborative project with local companies. (See 1.5)
  - Monitor 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 collaboration with industry, please refer to 1.5.)

(Networking with local institutions and communities)

- Make institutional efforts in promoting scientific collaboration with academic institutions in Okinawa through joint seminars, sharing seminar information, joint research projects, and co-use of research facilities.
- Encourage group or individual visits from the local community (including companies and associations etc.) to the OIST campus.
- Hold the 3rd Open Campus Day at the OIST Campus.
- 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. In particular, promote the campus visit program for all senior high-schools in Okinawa in close collaboration with the Okinawa Board of Education and individual schools.
- Continue to arrange lectures by OIST faculty for all junior high-school students in Onna-son and talks by BOG members including Nobel Prize laureates for senior high-school students in Okinawa.
- Continue to organize the science school for local elementary school students in collaboration with Onna-son.
- Organize cultural events, including those to be held in the Auditorium, which will be completed in March 2012, to make the campus open to the local community as well as inspire the creativity of scientists.

(Others matters concerning Okinawa development)

- Play an active role in surrounding community development led by OPG, in close

- collaboration with OPG, Onna-son, and other related municipalities.
- Employ talented people from Okinawa wherever possible.
- Endeavor to make clear and understandable explanation about the contribution made by the OIST Graduate University to Okinawa at various occasions.

**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:**

- Start the use of Laboratory 2 and Auditorium. Carry out the detailed design work for Laboratory 3.
- Continue to construct the houses for faculty, students etc. and other facilities in Village Zone, in a planned manner, under a partnership with a private developer. (Scheduled to construct approx. 130 units by spring 2013 in the first construction phase.)
- 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:**

OIST will 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.

**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, providing the information regarding the life in Okinawa and supporting initiatives (OIST Welcome Club etc.) and events organized by staff and families.

(Education and Childcare Services for OIST Family)

- 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.

- Consider an interim plan for the child development facility on campus to start the service as soon as possible. At the responsible section/office for welfare programs, collect data and analyze various needs of OIST faculty, staff, and students to strengthen the service further.

(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:**

- Develop a risk management plan to help to deal with the variety of risks concerning university operations.
- Identify necessary safety trainings for employees and students and implement them.
- Enhance the sustainability of the campus under natural disasters in collaboration with Onna-son, and continue to study a possibility to 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 plan to prevent red soil run off.
- Manage campus facilities and landscaping to preserve natural balance and protect indigenous species.

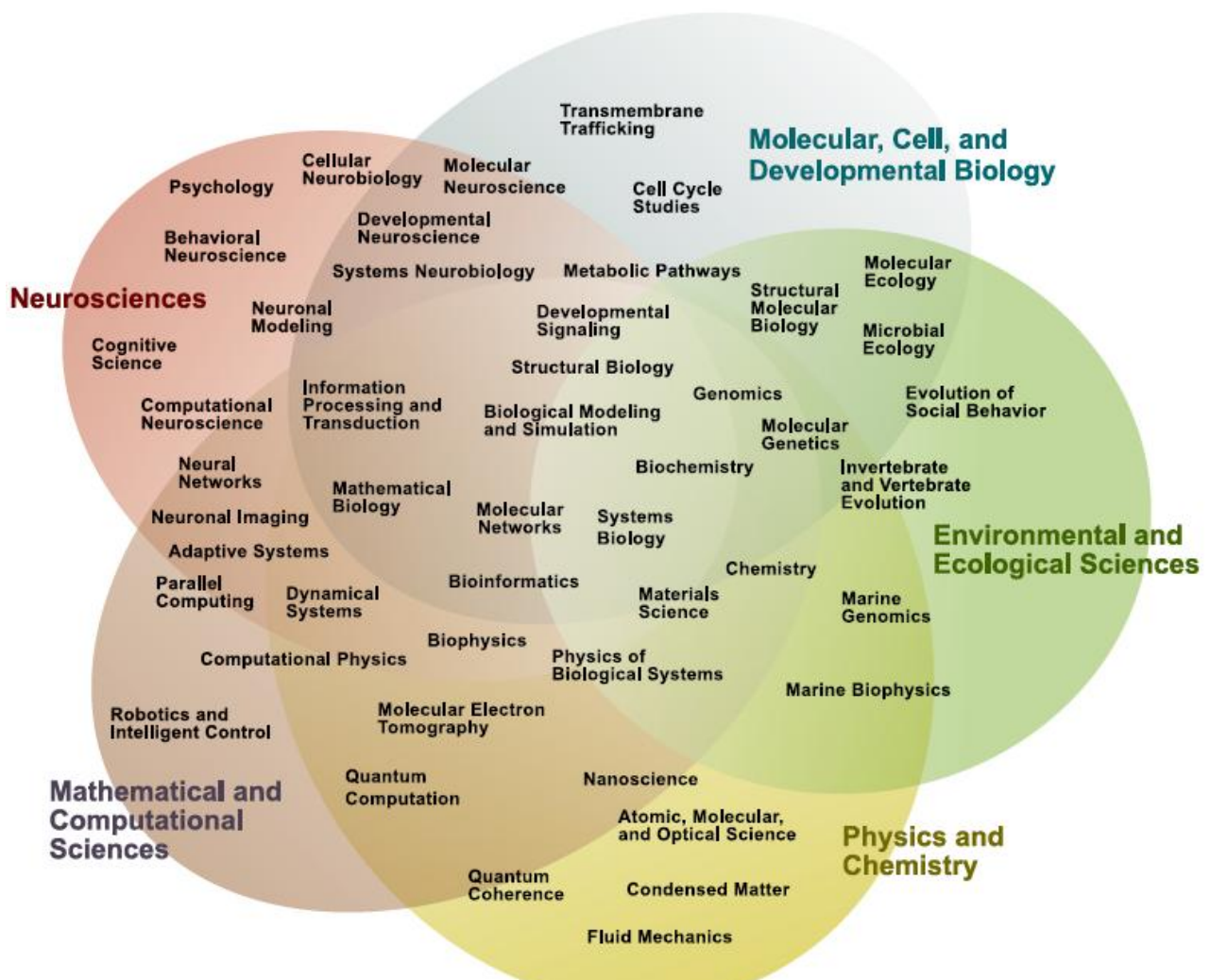
## Research Units (as of February 1, 2012)

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	Chemistry and Chemical Bioengineering Unit	Dr. Fujie Tanaka
5	Collective Interactions Unit	Dr. Mahesh Bandi
6	Cellular and Molecular Synaptic Function Unit	Dr. Tomoyuki Takahashi
7	Computational Neuroscience Unit	Dr. Erik De Schutter
8	Cell Signal Unit	Dr. Tadashi Yamamoto
9	Developmental Neurobiology Unit	Dr. Ichiro Masai
10	Developmental Signalling Unit	Dr. Mary Ann Price
11	Ecology and Evolution Unit	Dr. Alexander Sergeevich Mikheyev
12	Electron Microscopy Unit	Dr. Akira Tonomura
13	Energy Materials and Surface Sciences Unit	Dr. Yabing Qi
14	Fluid Mechanics Unit	Dr. Pinaki Chakraborty
15	Formation and Regulation of Neuronal Connectivity Unit	Dr. David Van Vactor
16	Femtosecond Spectroscopy Unit	Dr. Keshav Dani
17	Genomics and Regulatory Systems Unit	Dr. Nicholas M. Luscombe
18	G0 Cell Unit	Dr. Mitsuhiro Yanagida
19	Human Developmental Neurobiology Unit	Dr. Gail Tripp
20	Information Processing Biology Unit	Dr. Ichiro Maruyama
21	Integrative Systems Biology Unit	Dr. Tatiana Marquez-Lago
22	Light-Matter Interactions Unit	Dr. Sile Nic Chormaic

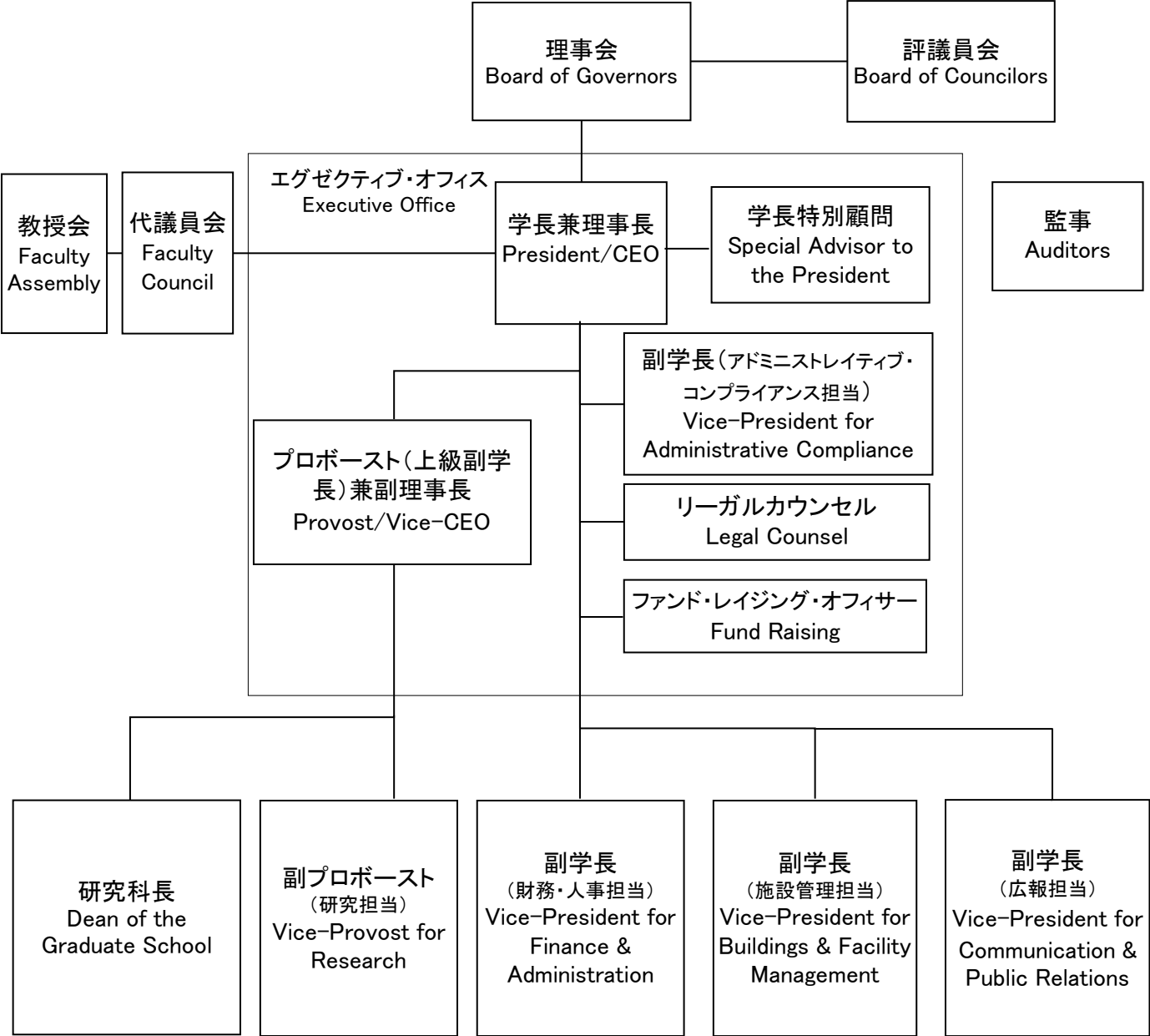
Unit Name		Faculty
23	Marine Biophysics Unit	Dr. Satoshi Mitarai
24	Mathematical Biology Unit	Dr. Robert Sinclair
25	Microbiology and Biochemistry of Secondary Metabolites Unit	Dr. Holger Jenke-Kodama
26	Molecular Cryo-Electron Microscopy Unit	Dr. Matthias Wolf
27	Molecular Genetics Unit	Dr. Sydney Brenner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

## 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. 44 Research Units 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.



沖縄科学技術大学院大学学園組織図  
OIST School Corporation Organizational Chart



FY2012 Income and expenditure budget statement

( Unit : K yen )

Revenues		Expenses	
Items	FY2012 Budget Amounts	Items	FY2012 Budget Amounts
Subsidy for Operations	9,683,890	Personnel Expense	3,313,119
Subsidy for Facilities	694,000	Academic related Expense	456,576
Other Revenues	270,000	Education & Research related Expense	3,349,128
		Common Resource Expense	2,157,420
		Administrative Expense	677,647
		Construction Expense	694,000
<b>Total</b>	<b>10,647,890</b>	<b>Total</b>	<b>10,647,890</b>

Projected Balance Sheet  
(March 31, 2012)

(Unit: thousand jpy)

Assets			
I Fixed assets			
1 Tangible fixed assets			
Land		1,659,667	
Buildings	20,135,688		
Accumulated depreciation on Buildings	△ 399,588	19,736,100	
Structures	5,603,788		
Accumulated depreciation on Structures	△ 81,569	5,522,219	
Machinery	367,166		
Accumulated depreciation on Machinery	△ 16,034	351,132	
Equipment	5,632,210		
Accumulated depreciation on Equipment	△ 642,915	4,989,295	
Libraries		6,250	
Vehicle and transportation equipment	8,721		
Accumulated depreciation on Vehicle and transportation equipment	△ 1,211	7,509	
Construction in progress		7,844,372	
Tangible fixed assets total		40,116,545	
2 Intangible fixed assets			
Patents		10,973	
Software		90,231	
Patents in the process of filing		5,511	
Other intangible assets		46,423	
Intangible fixed assets total		153,138	
3 Investment and other assets			
Others		5,650	
Investment and other assets total		5,650	
Fixed assets total			40,275,334
II Current assets			
Cash & deposit		2,387,224	
Accounts receivable		4,144,388	
Inventories-Stock		3,236	
Prepaid expense		2,514	
Accrued revenue		0	
Prepaid expense(out of pocket expense)		500	
Current assets total			6,537,861
Assets total			46,813,195
Liabilities			
I Fixed liabilities			
Encumbrance for assets-Subsidy for operation		6,620,143	
Encumbrance for assets-Donation		41,804	
Encumbrance for assets-Donation by National government		38,209	
Encumbrance for construction in progress-subsidy for operation	7,844,372		
Encumbrance for patent-subsidy for operation		3,921	
Allowance-Retirement benefits		64,942	
Fixed liabilities total			14,613,391
II Current liabilities			
Advances received		0	
Advances received(Kaken-hi:Grand-in-aid for scientific research)		0	
Deposits received-Subsidy for operation		0	
Deposits received-Donation		9,490	
Deposits received-Others		31,233	
Accounts payable		5,995,542	
Accrued expenses		36,169	
Corporate taxes payable		0	
Consumption tax payable		0	



Allowance-Bonuses	17,332		
Other current liabilities	0		
Current liabilities total		6,089,767	
Liabilities total			20,703,158
Net assets			
I Contributions			
Contribution from national government	24,317,681		
Contributions total		24,317,681	
II Additional paid-in capital			
Additional paid-in capital	1,802,289		
Accumulated depreciation-directly deducted from equity	△ 9,934		
Additional paid-in capital total		1,792,356	
III Retained earnings			
Unappropriated retained earnings	0		
(Current gross income (gross loss))	( 0 )		
Retained earnings total		0	
Net assets total			26,110,037
Liabilities and net assets total			46,813,195

Projected income statement  
FY2011

( Unit : K yen )

Items	Amount
Ordinary Revenues	3,613,058
Revenue from Subsidy for Operations etc.	2,755,615
Revenue from Donation etc.	0
Reversal of Assets Offsetting Subsidy for Operations	675,650
Reversals of Assets Offsetting Contributions	4,068
Reversals of Assets Offsetting Donated Assets	9,856
Financial Income	0
Miscellaneous gains	38,252
Ordinary Expenses	3,613,058
Operating Expenses	1,590,327
General Administrative Expenses	175,709
Personnel Expenses	1,157,448
Depreciation	689,574
Financial Charges	0
Miscellaneous loss	0
Ordinary Profit	0

Projected Balance Sheet  
(March 31, 2013)

(Unit: thousand jpy)

Assets

I Fixed assets

1 Tangible fixed assets

Land			1,659,667	
Buildings	28,157,835			
Accumulated depreciation on Buildings	△ 1,519,004	26,638,831		
Structures	6,211,976			
Accumulated depreciation on Structures	△ 303,942	5,908,034		
Machinery	367,166			
Accumulated depreciation on Machinery	△ 63,554	303,612		
Equipment	7,008,516			
Accumulated depreciation on Equipment	△ 2,644,771	4,363,745		
Libraries		21,250		
Vehicle and transportation equipment	15,883			
Accumulated depreciation on Vehicle and transportation equipment	△ 4,715	11,168		
Construction in progress		313,225		
Tangible fixed assets total		39,219,533		

2 Intangible fixed assets

Patents			26,449	
Software		69,912		
Patents in the process of filing		5,511		
Other intangible assets		42,734		
Intangible fixed assets total		144,605		

3 Investment and other assets

Others			5,650	
Investment and other assets total		5,650		
Fixed assets total			39,369,788	

II Current assets

Cash & deposit			2,505,698	
Accounts receivable		0		
Inventories-Stock		3,236		
Prepaid expense		2,514		
Accrude revenue		0		
Prepaid expense(out of pocket expense)		500		
Current assets total			2,511,948	
Assets total				41,881,736

Liabilities

I Fixed liabilities

Encumbrance for assets-Subsidy for operation			7,470,302	
Encumbrance for assets-Donation		46,575		
Encumbrance for assets-Donation by National government		14,554		
Encumbrance for construction in progress-subsidy for operation		313,225		
Encumbrance for patent-subsidy for operation		3,921		
Allowance-Retirement benefits		79,520		
Fixed liabilities total			7,928,098	

II Current liabilities

Advances received			0	
Advances received(Kaken-hi:Grand-in-aid for scientific research)		0		
Deposits received-Subsidy for operation		0		
Deposits received-Donation		0		
Deposits received-Others		31,233		
Accounts payable		864,824		
Accrued expenses		36,169		
Corporate taxes payable		0		
Consumption tax payable		0		

Allowance-Bonuses	17,332		
Other current liabilities	0		
Current liabilities total		949,559	
Liabilities total			8,877,657
Net assets			
I Contributions			
Contribution from national government	24,317,681		
Contributions total		24,317,681	
II Additional paid-in capital			
Additional paid-in capital	8,886,860		
Accumulated depreciation-directly deducted from equity	△ 200,462		
Additional paid-in capital total		8,686,398	
III Retained earnings			
Unappropriated retained earnings	0		
(Current gross income (gross loss))	( 0 )		
Retained earnings total		0	
Net assets total			33,004,080
Liabilities and net assets total			41,881,736

Projected income statement  
FY2012

( Unit : K yen )

Items	Amount
Ordinary Revenues	10,277,726
Revenue from Subsidy for Operations etc.	7,861,234
Revenue from Donation etc.	0
Reversal of Assets Offsetting Subsidy for Operations	2,113,073
Reversals of Assets Offsetting Contributions	9,763
Reversals of Assets Offsetting Donated Assets	23,655
Financial Income	0
Miscellaneous gains	24,544
Ordinary Expenses	10,277,726
Operating Expenses	4,256,265
General Administrative Expenses	561,850
Personnel Expenses	3,313,119
Depreciation	2,146,492
Financial Charges	0
Miscellaneous loss	0
Ordinary Profit	0