Okinawa Institute of Science and Technology School Corporation

Fiscal Year 2019 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
FY2019 Business Plan

Introduction

In November 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 sustainable development of Okinawa as well as contributing to the advancement of science and technology in Japan and throughout the world. In connection, 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 (BP) has been developed by OIST, discussed with the OIST Board of Councilors and approved by the OIST SC Board of Governors. The BP guides the operations of OIST SC by setting goals and providing action items for the fiscal year (FY) 2019, from April 2019 to March 2020.

Status of OIST at the end of FY2018

In FY2014 OIST published the "Okinawa Institute of Science & Technology Graduate University Framework Document II." This report reviewed the progress OIST had made until that time and outlined the future development toward 300 faculty units with a detailed plan of expanding its size up to 100 faculty units in the 10 years that followed. In July 2015, an external "Peer Review" was conducted to evaluate OIST's progress and expansion plan. The focus of the evaluation was to assess whether OIST Graduate University is on track to become a world-class education and research university capable of generating sustainable development for Okinawa.

The Peer Review Panel unambiguously confirmed that progress across all key measures of excellence has been outstanding. In these measures, OIST was judged to be a par with the 25 universities ranked highest by World University Rankings 2014/2015.

As a central recommendation the Panel endorsed the general plan of growth suggested in the Framework Document II, aiming at a goal, by the mid 2020's, of a) approximately 100 outstanding research groups, with a proper balance among different fields of research, and b) a graduate school of a few hundred students. Further growth of OIST would be deliberated and planned towards the end of the decade of development. The Perspective Council consisting of 6 internationally renowned scientists complemented by 6 leading faculty members met in October 2017 and provided a set of recommendations regarding the future research directions and faculty hiring strategies of the university.

We have started developing a "strategic plan" for OIST, which aims for the future growth and development of OIST in August 2018. As part of its process, task forces have been established

to gather opinions across the university and have in-depth discussions. The task forces have been continuing the discussions.

Key Elements for the Business Plan FY2019

The key elements of the Business Plan for FY2019 follow directly from the recommendations of the Framework II document (July 2014), the Peer Review (July 2015) and the resulting decision of the Japanese Government on the funding of the expansion of OIST, and the recommendation of the Perspective Council (October 2017). These key elements are directly related to the three core missions of OIST: i) International leadership in basic research, with special emphasis on interdisciplinary opportunities ii) outstanding graduate education while training students in transdisciplinary thinking and research in an international environment, and iii) contribution to the development of Okinawa (and Japan) through the establishment of a strong academia-industry-government partnership linked to highly proactive internal programs in patenting and licensing, proof-of-concept research, collaborations with industry, and entrepreneurship and startup support. In addition, OIST is becoming a role model for the development of world leading research centers in Japan (see 5th Science and Technology Basic Plan)

In FY2019, the discussions of the task forces established in FY2018 will be compiled, deliberated at the Board of Councilors and Board of Governors meetings and finalized as "Strategic Plan" for OIST.

With regards to research and education, to discuss the future vision after ten years of the establishment of OIST Graduate University, OIST will once again set up a peer review panel and publish a new future plan.

Furthermore, OIST will have discussion with CAO for its review based on the Article 14 of the supplementary provisions of the OIST School Corporation Act.

Expansion of the university

The plan for the expansion of OIST has been outlined in the Framework Document II and now being updated through the Strategic Planning. This plan includes the construction of new laboratory buildings, the hiring of new staff to support and achieve the increase of the faculty units to 100 by the mid-2020s and an expansion of the number of students.

The Japanese Government established an "act incurring liabilities on the treasury" for the entire construction of Laboratory 5 (FY2018 to FY2022) with a total amount of 10.0 billion yen. The number of faculty units will be increased to 75 in FY2019, further strengthening the University's areas of research competence while maintaining the highest quality standards in the selection. In FY2018 the intake of new Graduate students increased to 35, while, yet again, maintaining the highest quality standards in the selection. The number of students that enroll in FY2019 is expected to be 60. In both areas, the standards will be maintained as world-leading.

Research

OIST will continue publishing world-leading research in high-impact journals. OIST will continue hiring of outstanding faculty members and also support newly hired faculty members for their swift lab start-up and commencement of research at OIST. The Provost will continue international review of the research support facilities which constitute a key to the research strength of OIST. The Provost will also review appropriate number of research support staff linked with increment of OIST faculty members and expansion of research area at OIST and make efforts to secure excellent resourses. Dean of Research will engage in enhancement of networks with Universities and Research institutions in Japan.

Education

The year of 2018 achieved a major milestone with the graduation ceremony for the first students to graduate from PhD program. OIST will continue to develop its strong and innovative PhD program. The enrolment of more students as mentioned above and a strong effort to recruit a larger fraction of Japanese students will be integral part of the "growing university". The addition of new faculty members in FY2019 significantly increases the research opportunities for students and will allow a yet further strengthening of the curriculum.

Okinawa Development

Okinawa Development is the third core element of the OIST mission. The expansion of OIST will further strengthen the interaction of OIST with academic and research institutions and industry in Okinawa and beyond, including the University of the Ryukyus, as well as the governmental sector such as Okinawa Prefecture Government and Onna Village. The main focus areas are: patenting and licensing; collaborations with industry; the "Proof of Concept" (POC) approach to bridge the gap between academic discoveries and commercialization; entrepreneurship education and startup support; and promoting the development of an innovation ecosystem (R&D cluster) centered around OIST. The POC program was expanded in FY2018 to include three distinct phases: innovative technology research (ITR) and pre-commercialization Phase I and II. These programs will be continued in FY2019. In addition, OIST is expanding its support for entrepreneurship by implementing the startup accelerator program and utilizing the incubator facility that was constructed in 2018. OIST will continue to invite world-leading experts to the campus to share their expertise with the research community and to expand and strengthen the strategy for developing an innovation ecosystem in Okinawa. In addition, OIST continues to make important contributions to the elementary and secondary education in Okinawa by collaborating with local schools to inspire young people with scientific activities.

Budget related issues

The total subsidy budget for FY2019 is 19.6 billion yen. This subsidy budget contains 2.1 billion

yen for facilities, including construction of Laboratory 5 and infrastructure work for PFI Housing Construction Project, and 17.5 billion yen for operations. It was expected that OIST would maintain efforts to increase external funds, including incentive measures to apply for and acquire grants. OIST has already taken a number of concrete steps, including grant facilitators program to support young researchers. It will continue to put a major emphasis on this. An additional source of external income is through collaborative research with industry. Here OIST has been very successful and will increase its efforts further. Consistent with becoming a new model for universities in Japan, activities of acquiring donations are to be promoted under the Fund Raising Office following the model of North American universities where private and corporate donations are sought to support the mission of the university. Concerning the construction of Laboratory 4, OIST will complete its fit-out within budget and continue to work for the actual operation.

Governance and Administration

Successful operations of an international graduate university in science and technology require flexible, efficient, and effective administrative management, which will enable it to adjust to the rapid changes in academic and business environment as well as global competitions. Administrative procedures should provide appropriate support for creativity and innovation. A high level of transparency is one of the requirements, as are compliance with the laws and regulations, and accountability to the Japanese taxpayer. 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.   This aim has also been stated in the fifth Science and Technology Basic Plan.

Planning framework and evaluation approach

This Business Plan states the goals of FY2019 and the action items to achieve the next step in the growth of the Graduate University, described above. In accordance with the Cabinet Office Ordinance for enforcement of the OIST School Corporation Act (Cabinet Office Ordinance No. 59 of 2011)), the plan has the following 5 chapters: 1) Education and research, 2) Governance and administrative transparency and efficiency, 3) Finance - External Funding, 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. 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 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, 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 achieving these aims effectively 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.

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 in planning and executing business as a basis for the next step to achieve OIST's objectives. To ensure transparency, the annual report together with the evaluation results will be posted on the OIST web site by the end of June of the following fiscal year.

For a transparent and quantitative monitoring of progress against the plan, metrics will be provided for sub-sections of the Business Plan whenever appropriate. These metrics will also allow for analyses of the growth of OIST Graduate University and international comparison with benchmarked institutions. Most of the metrics should be evaluated in the spirit of achieving the goals described above. Therefore, these metrics themselves are not the objectives. The final judgement of achievements has to come through the process of a Peer review similar to the one in 2015, which laid the groundwork for the current stage of expansion of OIST.

1. Education & Research

1.1 Ph.D. Program

Goal (1)

Using feedback from 2018, refine and improve measures to ensure that student recruitment, admissions, and enrolment proceed smoothly. In practical terms, continue to go to find prospective students around the world, and create a mechanism to recruit PhD students from Research Interns.

Actions (1)

(Courses)

- Continue to develop the curricula, including courses taught by newly recruited faculty, and external courses including online courses. Continue curriculum development process and approvals for new and changed courses.
- Continue to provide the customized Ph. D. program, including pre-thesis research training and laboratory rotations and assignment of 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, research conduct, career development, teaching experience and a program of student-invited visiting

speakers.

- Continue to provide the examination for progression to thesis research based on oral examination by prominent external examiner.
- Conduct the final thesis examination based on oral examination by prominent external examiners, and confer degrees on completing students, using procedures refined from previous year's experience.
- Continue to provide 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.
- Increase opportunities for OIST PhD students to learn essential research skills by organizing short courses in identified topics (such as mathematics, computer programming) and special topic courses by visiting researchers.

(Student Support)

- Continue to refine and improve the orientation programs for the incoming students providing information on the educational program, laws and rules, available laboratories for thesis research, and life in Japan.
- 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 conduct the comparative survey of financial support, and will adjust financial support, if necessary, after reviewing the survey results.
- Continue to track the occurrence, response and outcome of incidents involving students, and if such incidents require involvement of OIST, to deal with the incidents in cooperation with the General Counsel Office and the Chief Operating Officer in charge of compliance.
- Continue to collect and provide information of external scholarship opportunities to the students.

- Continue to support career development of students by professional development activities tailored toward a few career types available to PhD graduates. We will do this in collaboration with other divisions such as faculty affairs, Human Resources, and others. We will continue our networking with leaders of universities and research institutions in Japan and around the world to provide information concerning post-doctoral and other job opportunities. Further, we will continue to provide guidance and financial support for company visits to assist job hunting in Japan. Graduate School plans to identify the most effective way to track our graduates. We will work with other divisions to establish networking program.
- Continue to provide clear information and instructions on student financial support, travel support, and welfare support to students and their family members for better understanding on life at OIST and Okinawa.
- Continue to support student travel arrangements such as conference/workshop travel, Educational Institutional visit and career development travel for students to enhance their specialty in scientific fields, career development and networking.
- Continue to provide services to special students such as Special Research Students, Visiting Research Students and Research Interns to quickly adjust to new environment without complications and worries.
- Continue to emphasize dialogue with students by having regular meeting with Student Council and reflect feedback to enhance the Graduate School services.

Goal (2)

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 (2)

- 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. Also effectively convey the appeal of OIST's unique educational program both in and out of Japan.
- 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 2019 as follows:
    - The number recruited: About 60 students
    - Major recruitment activities:
      Continue to develop the graduate school website as a recruiting tool.
      Continue holding OIST Café in major Japanese cities by providing OIST recruiting information and English training.

*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 across Japan and internationally, and events at OIST such as graduate school experience workshops, Skill Pills Plus, and Science Challenge to provide experience of cutting-edge research and OIST graduate school educational experience.

Goal (3)

In order to continue the effective functionality of the Graduate School to support rapidly increasing student population with finite resources, the Graduate School will undergo reorganization.

Action (3)

- The Graduate School will undergo reorganization in FY2019 and will plan effective growth in future years. In practical terms, change the number of sections in the division from 3 to 4 sections by creating a new section dedicated for academic program development to manage curriculum development and course scheduling, and increase efficiency by cutting redundancy (i.e. travel arrangement and student records management consolidated into one section).

Metrics

- Number of excellent 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.
- Career destination of the students after graduation.

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 cross-disciplinary research environment, providing excellent facilities, equipment and research support, 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 the needs of society and industry in Okinawa.

Actions

(Promotion of cross-disciplinary research)

・ We will hire approximately 10 faculty members in FY2019 considering the final outcome of the FY2018 faculty recruiting. We continue to hire in a multitude of fields while encouraging incoming faculty to collaborate broadly.

We will promote inter-disciplinary research through further interaction and research collaboration among the Faculty.

・ We assign incoming faculty to available space on a first-come first-served basis, which automatically leads to a diverse set of faculty in every building. This and the diverse student body that we admit has proved successful in producing multi-disciplinary research. Starting in FY2018, we instituted Faculty Lunch Talks which are short and present broad brushstroke view of faculty research. These germinate new cross-disciplinary research not only among the Faculty, but also across all researchers including students and postdocs.

Common facilities such as large microscopes and machining areas and other such facilities increase interactions between researchers and lead to further cross-disciplinary research.

Administrative work committees bring together faculty from different backgrounds and encourage exchanges of ideas which also lead to multi-disciplinary research. Attachment #1-1 lists the Research Units at OIST as of February 2019. Attachment #1-2 lists the major scientific areas of research.

(Research Support)

・ In order to provide necessary research support for newly recruited faculty as well, Research Support Division will continue to strengthen our research support environment and services. A new support section for terrestrial field work will be launched for promoting ecology and environmental sciences. We will prepare and implement support plan with additional needs on common research equipment for the research activities in Lab 4 building. We will continue promotion of common/shared use of research equipment and tools and also operation of the research equipment re-distribution system to maximize utilization of our research resources, by transferring low use equipment to a new user unit or section.

・ Animal Resources Section will develop the production of genetically modified animals which was started last year. We will investigate new equipment and apparatus for animal care and husbandry in Laboratory V animal facilities with taking into

consideration of robotics. We will prepare and submit documents, and reply to the site visit for continuous full accreditation of AAALAC International. OIST Marine Science Station will be added on Onna-Campus as laboratory animal facilities.

- DNA sequencing section will continue to support research activities using the latest multi-paralleled DNA sequencers, and also will start new service using high throughput single molecule real-time sequencer which was installed in FY2018. Additionally, the section will continue to improve the existing experimental protocols and to develop new protocols for library preparation with a long-term prospective of future needs.

- Mechanical Engineering and Microfabrication Support (MEMS) will further improve services based upon the recommendations of the peer review carried out in FY2018. MEMS will also carry out the expansion of common laboratory spaces in Lab 4 to provide safe and ergonomic X-ray and optical characterization spaces.   In conjunction to this MEMS will plan extensively with the designers of Lab 5 for a larger cleanroom room planned to be included there.

- Scientific computing and Data Analysis Section (SCDA) will continue to promote and provide high-performance computing and research storage to the increasing number of OIST researchers and to their increasing volume of computation, by consolidating the usage of the actual main general purpose cluster, Sango, and the AI-computing oriented cluster, Saion (expanded in FY2018). The consolidation will include improvement of support for tuning of user computation resource parameters, and the deployment of containerized computing.
  The SCDA will also work towards the procurement and delivery of the next generation OIST high-performance scientific computing system.

- We will continue to provide an operating system and information of common research facilities and services, according to the development and expansion of the Research Support Division.

- We will continue to promote research ethics, by organizing research ethics training and seminars.

- Grants and Research Collaborations Section will encourage further collaborations with other sections, such as Faculty Affairs Office, to provide better support on application and management of external research funding for faculties, researchers and student and continue proactive actions to collect grants information and delivery of the information. They will run our KICKS and JUMPS funding programs to promote collaboration.

- Imaging Section will take a peer review by experts from international and domestic universities and/or institutes to promote quality of research support. The light microscopy of the imaging group is now well established and we will maintain its full function to meet the needs of the upcoming new PIs in 2019. The cryoEM group will also become functional to engage fully in the supporting activity of the BINDS project in 2019. Further we want to offer special courses in light and electron microscopy for

the OIST community but also on national and international level to put OIST and Okinawa on the world map of high quality microscopy.

- Instrumental Analysis Section (IAS) will reorganize the service contents, instrument and staff activities so that IAS support can be expanded based on the results of external review. Continue to improve the standard operating procedures of analytical instruments and the training courses for users to provide the lab that can be used by many researchers.   Addition to this, improve the skills of staff so that they can provide enough support for advanced research. IAS will also discuss and cooperate with analytical instrument centers in other universities in order to make effective use of OIST instrument and effective research output using them.

- Okinawa Marine Science Support Section will apply international standard in its management of marine life at the OIST Marine Science Station to enable accreditation by the Association for Assessment and Accreditation of Laboratory Animal Care International (AAALAC International) which promotes the ethical and humane treatment of marine life in science. We will hold an open day for local residents for communication and PR of our research. We will also organize the 4th Okinawa Marine Science Workshop and further enhance our local marine science network.

(Publication and communication)

- Whenever we hear of an important new result from a faculty member, we encourage them to communicate this to our Communications and Public Relations Section.
  Queries from government sources such as MEXT have led us to compile lists of our top publications. These are also used by Nature Communications Index and other such comparative studies.
  We publicize journal publication results in our website and make sure that these are available in the OIST Institutional Repository. We continue to encourage the Faculty to sign the license forms necessary for items in this repository.

- 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, and the OIST social media.
  - Standardize OIST administrative websites on the open source Drupal CMS as much as possible in order to optimize staff training and expertise and avoid being tied to a proprietary CMS owned by a single company. To enable Digital Services staff to focus on design and development of new and enhancement of existing websites, at the end of FY2018, OIST websites were migrated to a cloud hosting vendor with more established tools and processes, better support for updates and maintenance, more mature development tools, and a stronger focus on Drupal CMS. The hosting vendor's expertise with Drupal and the additional maintenance and update support will result in better security: the biggest danger for a public website is outdated

code with well-known security vulnerabilities. Digital Services is a very small team, so this update support will ensure that our main websites are up-to-date and secure. By using a CMS instead of a static website, OIST administrative staff can update the website content related to their duties by themselves, thus reducing cost and increasing the frequency of website updates. This focus on outsourcing low-level infrastructure duties to allow small teams to focus on projects essential to the mission of the university is consistent with changes made by OIST IT. To maximize the effectiveness of content creators outside of CPR, move website support trouble ticketing and manuals to the ServiceNow platform used for IT support and increase face-to-face user training and support resources like help desk and orientation. Move OIST newsletter to an external service to better reach global audience of stakeholders and student and employee recruitment targets without compromising the integrity of the OIST email system and to give CPR more flexibility and control over newsletter contents.

- In FY2018, OIST continued to receive significant press coverage resulting from proactive media outreach strategies targeting print, broadcast, and Web-based. This will continue in FY2019 to put in place effective media strategies to generate further press coverage, including those by major media outlets in Japan and overseas. As part of this effort, OIST will continue to produce press releases and articles about scientific outcomes, and other research and education activities at the university, which will then be disseminated to local, national, and international media through Japan's press clubs, and electronic clearing houses such as AlphaGalileo and EurekAlert!.
- Continue utilizing social media to disseminate OIST research and education activities. If a new staff dedicated to social and multimedia arrives, these activities will expand to nicely tie into OIST's recruitment and fundraising efforts.
  Delve into the needs of the OIST fundraising team and provide publication materials as needed.
- To establish a firm academic recognition, OIST will provide technical support, relevant documentation and training to OIST staff, researchers and students for them to perform remote meetings and seminars smoothly.

Metrics
- Number of researchers (faculty, postdocs, technicians, and students)
- Number of research publications (by impact factor)
- Number of joint publications between different faculty members.
- Continue disseminating news releases and press announcements about scientific outcomes of OIST's research on a weekly basis. Hold press conferences on major research outcomes, engage in monthly meetings with local reporters, and quarterly press briefing sessions with Tokyo-based journalists throughout 2019.

- Number of research honors.
- Number of awarded research grants (number and amount)
- The number of use of our research facilities by external organizations, etc.

1.3 Faculty Affairs

Goal

The University will continue to recruit international and Japanese scientists, with a mixture of senior scientists with an established record of excellence in research and junior scientists with excellent scholarship and creativity in research, to strengthen leadership in interdisciplinary research and its global presence

Actions

(Appointment)

- In FY2019, we intend to continue to recruit a mixture of international and Japanese scientists as well as senior and junior researchers.

  The number of applicants in FY2018 exceeded 1500. Based on the final number of new hires in FY2018, we will hire approximately 10 faculty members in FY2019 to reach the total of 75 faculty members. In FY2019, we will decide the areas to hire new faculty members from the following 9 areas:

  (1) Computer Science (2) Ecology, Evolution and Environmental Sciences (3) Marine Science (4) Physics and Materials Science (5) Neuroscience (6) Chemistry (7) Life Science (8) Engineering and Applied Science (9) Mathematics

  We are actively pursuing options in specific areas including Mathematics, for instance. Our experience with the FY2018 hiring will be examined to create a more streamlined procedure for FY2019.

(Faculty/Research Evaluation)

- In the new approach mentioned in FY2018, letters will be sought for tenure applicants from external advisers, and we will also conduct an on-site review process akin to the unit reviews that we currently conduct. In exchange for this enhanced review, applicants who do extremely well will be directly appointed as full professors.
- 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 continuation of the research units. In FY2019 we plan to review around 8 faculty.
- In addition to the existing Tenure Review Evaluation Committee (composed of OIST faculty members and an external member), we will implement a new tenure review

system to be assessed by the Committee (all external members) who are world-class prominent scholars and will conduct the review using internationally highest standard. In FY2019, we will conduct tenure review of 3 faculty.

- In the new planned system of Faculty Annual Performance Appraisals, the Dean of Faculty Affairs (and if necessary, the Provost) will review individual faculty research, teaching, and university service, and external grants received, if applicable, as elements of an appraisal. Faculty will be assured that individual (as opposed to aggregated) information will not be made available outside of OIST. In addition, we will check whether faculty members have published on their websites their Annual Reports describing their research publications and other research and teaching activities, and if they have not, we will encourage them to do so.

(Research Productivity Report)
- In order to implement more efficient implementation of the OIST Institutional Repository which started last fiscal year, we will enrich contents (increase the number of research items registered) and enhance support system for Open Access university wide.

(Senior Appointment & Post retirees)
- We expect that in this year that several faculty over the retirement age of 70 will be reviewed to determine whether they merit an extension of their research units for a few years. As part of our faculty searches in FY2018, we are considering several senior applicants who might join OIST as tenured faculty in FY2019.

(Faculty Development)
- We plan to have a Faculty Retreat in FY2019 just like the one planned for February 6, 2018. In these retreats, we will invite speakers with established credentials in delivering soft skills to faculty and other researchers. We will continue to attract inspiring distinguished scientists to the Presidential Lectures at OIST.
  In FY2019, we will begin the planning process for a Center for Teaching and Learning to assist faculty by providing an environment where they have ready access to teaching methods and the ability to exchange teaching materials with their peers.

(Postdoctoral Career Development)
- Our Postdoc Career Development Specialist continues to focus most of her attention on postdoc career development. She has conducted surveys for exiting OIST postdocs and counsels both incoming postdocs as well as at any time during their stay here. She is preparing Research Environment Guidelines which will help create a better atmosphere in our research units. She also provides postdocs with useful career information via talks and other meetings.

Metrics

- Number of research units evaluated

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 joint symposium with universities and institutions, by hosting academic workshop and by receiving interns. OIST will increase 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

- Continue to foster collaboration with other universities involving students; Develop exchange agreements concerning reciprocal student visits. Continue to expand collaborative relationships with other universities and institutes domestically and internationally for improving quality of research support sections. In order to enhance our activities regarding networking a new VP for Research will dedicate a substantial part of his time towards this end.
- 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. Maintain flexible and efficient operation of each workshops by encouraging co-hosting and sharing expenditure with other institute to reduce the cost.   Travel support model for participants and lecturers will be improved for more efficient and economical travel and accommodation procedures in view of wider recognition and reputation of OIST, and to ensure the scalability of staff support for increased number of research units.
- Further develop the Research Internship Program to host top undergraduate and Master's students in residential courses and laboratory placements and create a pipeline to matriculate them into the PhD program as a way to identify qualified students with success potential at OIST.
- Continue to implement special research 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 international courses and workshops
- Number of participants of international courses and workshops
- Number of students accepted from domestic and international universities

2. Governance & Administrative Transparency and Efficiency

2.1 Basic Structure for Governance and Business Operations

Goal (1)

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 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.   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 (1)

(Basic Management)

- Commences the eighth year since the School Corporation began. Regular BOG meetings will be held in May, September/October and February, and regular BOC meetings will be held in May and February 2019. In the BOG meeting in May, the performance and achievements of FY2018 will be reported and evaluated. The results of this assessment are made available to the CAO for public sharing.
- BOG and BOC meetings in May and October will have about one extra day meeting each, in addition to the two-days main meetings, in order to accommodate more discussions focused on the relevant role of each BOG and BOC. BOG and BOC sub-committees will have the opportunity to pre-discuss important issues. The BOG Steering Committee will continue its practice of meeting with the Faculty Council during the pre-meetings.
- 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 and will be provided sufficient information and staffing necessary for conducting their duties. Plan and result of Auditors' audit will be presented at BOG meetings, etc. for recommendations to reflect on business operations.

(Expansion of the University)

・ As a central recommendation the Peer Review Panel 2015 endorsed the general plan of growth suggested in the Framework Document II, aiming at a goal of approximately 100 outstanding research groups, with a proper balance among different fields of research, and a graduate school of a few hundred students in one decade by the mid 2020's. Toward the end of this decade of development, further growth of OIST should be deliberated and planned. In order to plan further future growth of the university, OIST began the strategic planning process, the report will be presented to BOG in May 2019. In November 2019, another External Review by the renowned international scientists is scheduled to be held.

Recruitment of new faculty will continue, under the guidance of the Faculty Development Working Group enriched by the recommendations delivered from the Perspective Council. Construction of Lab 4 will be completed in FY2019, design of Lab 5 will continue and its construction will start. In regards to the Incubator Facility, based on the operational status of the Facility developed in FY2018, future development, etc. will be considered. Regarding accommodation, preparation will start for new on-campus housing, and discussion will be made for future development of off-campus housing.

Goal (2)

OIST Graduate University will continue to build and maintain the administrative organizations by which a world-class international graduate university will be effectively administered. While being autonomous, 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 (2)

・ Continue to hold regular meetings with the President/CEO, Vice CEO, and other executives to prepare major decisions, to share information and review the status of business operations. 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.　Continue to hold meetings of the Salary Review Committee as needed.

Weekly meetings of the President, Executive Vice President, COO and Provost should facilitate a smooth coordination between the individual executives

- Maintain close communication with CAO and continue the periodical meeting to share information such as the implementation status of the Business Plan. In addition, prepare business sketch and budget requests for FY2020 well in advance through close discussion with CAO.
- Provide a high quality of IT service, in alignment with the missions of the University.
- Continue to 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. Ensure that support infrastructures for research and education are as automated and efficient as possible. Work to create a more flexible and secure network environment, in response to growing demand for isolated research networks.
- Ensure the alignment of IT with the business through the development of an IT strategic plan. Ensure the alignment of the plan with the business and best practice through an external review of IT.
- Continue to develop or assist in the specification of enterprise systems and services that support the research and administrative activities of the University. Work to develop systems that will increase the quality of the student experience, and lead to increased student retention and success.
- 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.
- Further standardize the operating environment provided to the administration, simplifying operation while reducing operating costs and increasing security.
- Continue to increase information security through increased information security education, multiple factor authentication and device-based access control. Further enhance existing monitoring capabilities, allowing for the detection of malicious software or activity which may reduce the integrity of OIST networks or systems.
- Provide legal advice in connection with legal issues arising at the relevant divisions at OIST, and ensure legally appropriate operation of the OIST SC by providing overall legal support in drafting, negotiation and execution of the agreements handled by relevant divisions at OIST.
- Defend OIST SC from claims in and out of court and avoid financial damage and reputational risk.
- In order to prevent any misconduct in and out of OIST, all employees, faculties and students will be required to take a program on Japanese laws and rules annually (especially on drug restrictions, drinking and driving, carrying weapons, criminal procedure/deportation, OIST discipline).

2.2 Budget Allocation and Execution

Goal:

On executing the budget including government subsidies, OIST Graduate University will make appropriate and effective allocation and execution of budget, by reviewing the cost performance, to fulfill its accountability to the government, sponsors, and general public. In particular, under the prevailing severe fiscal circumstances, the university will make efforts to improve cost efficiency to maintain and develop research and education.

Actions

- By holding Resource Allocation Committee, formulate high-level budget allocation and reallocations proposals of the university resources, such as Personnel budget, Operational budget, Equipment budget, and Space. For the purpose of appropriate allocation of the university resources, the proposals will be reviewed by the Executive Committee and then approved by the President/CEO.
- 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.
- For new faculty member's swift lab start-up, we will support confirmation of resource requirement for lab start-up.   For unit review, we will continue to provide resources summary to external peer reviewers to obtain advice on appropriateness of resource allocation.
- Mid-year review in September and another review in January, at the beginning of the fourth quarter will be conducted. These are the time when all the research-related budgets are reviewed and adjusted when needed. This fine-tunes the expenditures to optimize spending. The reviews provide opportunities to check and to ensure capital purchases are in line for delivery and acceptance by the end of the Fiscal Year.
- Continue to implement the procedures to comply with laws and University policy and rules – the procedure in budget execution includes reviews by the person in charge of compliance when individual budget expenditures exceed a predetermined threshold.
- Conduct internal audit, 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.
- In order to ensure proper implementation, a committee consisting of external experts

will review contracts concluded by the University, taking into consideration whether appropriate procedures have been applied to and whether competitiveness and transparency have been ensured. At the same time, the University will seek comments from the committee concerning measures for improvement of procurement procedures. In addition, exert efforts in ensuring fair and transparent procurement through measures such as establishing a committee including external experts and having their review on specifications of large research tools/equipment for each purchase based on the University's policy and rules.

- The RSD Section Leaders will organize users group meeting to discuss with users about effective use of core facilities and its upgrade.

2.3 Efficiency of Business Operations

Goal (1)

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

Actions (1)

- Support research activities, such as utilizing the methods of unit price contracts, bulk purchase for research materials and reagents, and multi-year contracts.
- Reduce costs of system and research equipment maintenance by reviewing the methods of maintenance etc.
- Increase the number of the available items at the Internal Supply Store 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. Monitor procedure for negotiated contract continuously. At the same time, review procurement policy, rules and procedures continuously from the perspectives of efficiency and simplicity. Continue streamlining the segregation and procedures related to procurement for the future expansion of the University.
- Based on the fruit of the previous investigations on price differences between Japanese and international markets, continue to take actions to decrease the said differences and to promote cost-saving.
- Based on the collected reference data comparing prices of supplies and equipment etc. in Japan and abroad, provide information for internal users on how to negotiate prices effectively with manufactures/agents/vendors to improve cost efficiency of purchasing.
- Take necessary actions in preparation for the change of consumption tax.
- Support those efforts for administrative internationalization made by national universities and other institutions through conducting a training program at OIST to

their staff members and enhance administrative efficiency by absorbing their knowledge and experience on university operation and management.

Metrics
- Reduction of costs by unit-price contracts, 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 (2)

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

Actions (2)
- Continue efforts for optimization of use of academic and administration spaces, and research equipment through regular survey of current spaces in the existing buildings, close coordination with Research Support Division, and meeting and interviews with the research units to understand their needs.
- Continue repairs a of the Seaside House facilities and optimization of the use of the available space.

2.4 Personnel Management

Goal

OIST Graduate University will continue to improve the HR system toward a more effective organizational structure to provide better competitive compensation and benefits. It aims at hiring qualified employees, who have internationalized mind-sets and capabilities for the university operation. At the same time, as a corporation operated with the largely financial support from the Japanese Government, OIST Graduate University will continue to make efforts to contain overall personnel costs and to set the proper range of compensation. Moreover, the standard of employees' salary will follow the statement established by "Review of Salary Level of Independent Administrative Institutions, Special Public Corporations, etc. (distributed in Related Ministers' Meeting in December 2012)." The University will use the standard along with the Government's goal for the University in ensuring accountability by embodying actions following "On the Salary of Officers and Employees of Special Public Corporations, etc. (by Management Bureau, Ministry of Internal Affairs and Communications on November 17, 1017).

Actions

(Recruitment)
- Establish the HR plan considering the prospective view. We also continue to maintain a

timely and fair recruiting process in accordance with the Personnel Budget Sub Committee's decisions. In addition, we continue to operate the HEART system as an alternative to the ERP system for the productive HR operation.

- As the university expands, administration growth is expected. We will continue to make efforts to simplify and streamline administrative functions and operational processes as well as supporting professional development of employees, including job transfer, etc. It may include reassignment of employees among divisions, particularly for those who are categorized to the revision of the employee contract, converting fixed-term employees to a new category of non-fixed term employment ensured by the Japanese employment contract laws.

- Review available information on applicants, interviewees and offers for candidates to ensure equal access for all persons in accordance with OIST policies.
  Analyze the current ratio of gender balance among all job levels and categories
  Identify strategies to improve the balance

- Consolidate available data and perform gap analysis on necessary data required for developing and implementing evidence-based strategies to accomplish the Taskforce Goals
  Promote gender equality in all aspects of university management through diverse methods
  Review best practices in developing a Gender Policy Code of Conduct in order to design one for OIST employees
  Ensure the OIST Gender Policy Code of Conduct and other gender policies, rules and procedures are properly incorporated into the PRP document
  Deliver unconscious bias and gender equality training for all managers who assess employees
  Provide high quality sensitivity training for harassment and discrimination and educate all OIST staff on the process for reporting incidents through the OIST hotline and other communication mediums
  Collaborate with Buildings and Facilities Management Division to plan, design and outfit appropriate, world-class facilities for pregnant women and working parents in each OIST building
  Continue to offer networking opportunities for female OIST employees
  Determine an appropriate assessment methodology of all prior collaborative programs/projects with Okinawa Prefecture and universities in promoting science to middle/high school girls; build on previous successes by further developing relationships and implementing more high-quality programs/projects

- Collaborate with appropriate stakeholders (e.g., Occupational Health Section) to develop and implement policies to promote the health and safety of persons with disabilities at OIST by the revision of Act on Employment Promotion etc. of Persons with Disabilities scheduled for 2018. Provide counsel and input on removing barriers for

providing equal working opportunities, as appropriate
- Improve data collection process in the Resource Center to identify opportunities to improve service to OIST stakeholders

Collaborate with staff at the Medical Center and Ganjuu to further improve service-related functions for OIST employees

Develop and implement an effective Children's Development Center staffing model to ensure continuous high-quality child care services

Evaluate CDC budget and spending history to streamline processes and reduce expenses

Identify, plan and deliver more robust after-school STEM programming to increase opportunities for K-12 children of OIST employees

Continue to provide with the service-related function, information, and facilities possessed under OIST to the faculty, employee, student, their family members, and external employees for the short-term accommodation. To achieve the goal, the HR service-related function will be reinforced through child-care services, family support, food services, health/medical services, and living needs

The Health Center will establish the rule and the method with which OIST can provide its employees/students with the health checks based on the rational standards which fulfill the legal requirements. The clinic on campus will be re-opened.

(Compensation)
- Referring to salary levels of national government employees and those of academic institutions in and outside of Japan, embody and implement actions following "On the Salary of Officers and Employees of Special Public Corporations, etc. (by Administrative Management Bureau, Ministry of Internal Affairs and Communications on November 17, 2017).

(Career development, training and evaluation)
- Deliver competency-based learning programs and management planning tools to support management succession planning and professional development.
- Establish a menu of online and in-person learning modules and provide learning guidelines to strengthen selected workforce group competencies. Evaluate each learning program effectiveness.
- In line with OIST's PRP directive, continue to provide a monthly orientation to new incoming staff. Orientation will consist of general orientation about the university, its procedures and Japanese laws along with practical orientation on OIST administrative systems/rules for administrative staff.
- In FY2019 OIST will continue to maintain 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 Annual Performance Evaluation system based on the set

objectives/metrics of each fiscal year. In addition, implement the Competency-based goal setting and performance evaluation defined to match its desired behaviors for each job grade and enhance Annual Performance Evaluation for its future improvement activities. Furthermore, through quarterly review, self-assessment and review by the reviewer, ensure to reflect the evaluation results in employee salaries, through fair and transparent evaluation and a reliable process with the advice from the Salary Review Committee. In addition, implement training on a regular basis to provide newly promoted managers as well as newly hired employees, with necessary updates to the process.

Metrics:
・ Number of employees (by job categories, nationalities, and gender)
・ 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
・ 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.
・ Continue to establish and revise policies, rules and   procedures appropriately in cooperation with the General Counsel Office 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. Provide legal advice to each policy owner division in drafting and revising the policies, rules and procedures.
・ Continue to 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.
・ Handle personal information properly based on the Act on the Protection of Personal Information held by Incorporated Administrative Agencies etc. (Act No. 59 of 2003), the Act on the Use of Numbers to Identify a Specific Individual in the Administrative Procedure (Act No. 27 of 2013) and the University policy and rules that are developed

accordingly. In addition, awareness on personal information is to be improved through obligation for faculty and employees to observe the University policy and rules including maintenance of a ledger or etc. that manages retained personal information.

- Through Auditors' audit and internal audit, 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".
- Review of research protocols by review boards and professional staff will continue to ensure that our research activities are compliant with pertinent regulations and laws.
- For proper management of competitive research funds including KAKENHI (Grants-in-Aid for Scientific Research), we will continuously and thoroughly implement proper management to the researchers through posting Misconduct prevention plan.

    In addition, to prevent misconduct of research funds, various measures will be taken, including initiatives for ensuring through familiarization of all faculty members and researchers with rules of use of research funds, and increasing the awareness of thereof from the time they decided to join OIST. We will explain about our rules of use of research funds to new faculty members at the preliminary meeting before their start. Also after their arrival, we will explain the rules in more details.
- All OIST researchers and students will be required to take research ethics education in order to promote responsible conduct of research. (See1.2).
- We will continue to manage research data archiving at research unit closing or at resignation of a researcher.
- Through the Shohei Suzuki Research Safety Fund which was established in November 2017, we will promote research safety awareness and training at OIST and enable students and junior researchers or technicians from OIST to undertake fieldwork while developing the necessary skills including research safety training. We will also continue the Safety Enhancement Month in November and make enforcement of measurement for health and safety at OIST. Also, strict review of field work plan by the Field Work Safety Committee continues in FY2019. We will continue the revision of Field Work Safety Manual toward safer field work, and enhance on-site inspection of field work by site inspection of marine research field by newly hired Diving Safety Officer.

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 website 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).
- Digital Services in the CPR division maintains OIST's internal and external web functions at the highest level. There are three staff positions in the section; two positions are currently open to replace two staff who resigned in 2018.
- -Continue organizing press briefing sessions and press conferences in Okinawa and on the mainland, and generate press visits to OIST, in order to maintain consistently positive press coverage of the Graduate University.
  -Continue working with other Japanese universities and research institutions through initiatives of the Japanese Association for Communication in Science and Technology (JACST) and organizers of Japan Science Forum (JSF). In so doing, continue enhancing OIST's presence in the academia and among journalists in Japan and overseas.
- -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 on Flickr, videos in Vimeo, and other multimedia.
- -Continue increasing effective use of social media including Facebook, Twitter, Flickr, Vimeo, and Instagram to propagate excitement about the OIST Graduate University and to generate followers and fans of OIST, which include potential Ph.D. students, scientists, faculty, industry collaborators and donors.
- Continue to maintain and improve the library of OIST Policies, Rules and Procedures on the website.
- In case of any incident, consult the General Counsel Office and the Chief Operating Officer to release duly and timely information in consideration of reputation risk.

3. Finance - External Funding

Goal:

Based on the OIST Mid-Term Strategy for External Funding revised in FY2018, OIST Graduate University will continue to broaden its financial basis strategically by proactively increasing the amount of research grants, donations, and other income sources for more independent operation in the future.

Actions

(Grants)

- (a) Increase opportunities to deliver grant information,   available application support, importance of networking etc. to OIST researchers through Grants and Research Collaborations Section's website and visit to their offices.

  (b) Make effort to recruit more external grant facilitators according to the research field where more OIST scientists wish to receive advice from the facilitators.

  (c) Under the leadership of Dean of Research, we strive to strategically prepare applications for the large-scale subsidiary program in which collaboration with domestic research institutions is indispensable.

- The Grants and Research Collaborations Section 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, the section will actively visit major funding agencies to collect information about any precursory activities leading to announcements of new grants.

- Encourage researchers to apply for private sector and industry-related grants and provide proactive application support such as translation, editing, and budgeting.

- We anticipate healthy proportional increase of third party income hoping for added income encouraged through incentive systems.

(Donations)

- OIST has started to establish a Development Office to manage gift and donation solicitation including representation in the USA. This office will expand its function by adding a representation in Japan.

Metrics

- Increase of the number of application for external research grants
- Increase of the number of awarded research grants (number and amount)
- Increase in third party income

4. Contribution to Self-Sustainable Development of Okinawa

Goal:

The Cabinet Office "Basic Policy on Economic and Fiscal Management and Reform 2017" includes measures to develop Okinawa as a driving force in stimulating the Japanese economy and advocates support for the formation of a global intellectual and industrial cluster in Okinawa. The Technology Development & Innovation Center (TDIC) reflects the university's commitment to national policy and to its founding objective to contribute to the self-sustaining development of Okinawa, as stipulated in the OIST School Corporation Act of 2010.

The mission of the Technology Development & Innovation Center is to foster innovation at OIST and in Okinawa by promoting the transfer of discoveries made in the research laboratories to industry for societal and economic benefit. TDIC proactively supports proof-of-concept research, inventions and patents, collaborations with industry, entrepreneurship and start-ups, and partnerships with other public and private organizations that promote innovation in Okinawa

In FY2019, TDIC will continue to implement the following broad measures:

(a) Identify, protect, and market research discoveries with the aim of promoting innovation and technology transfer

(b) Manage the proof-of-concept program to support innovative technology research and drive inventions towards commercialization

(c) Foster entrepreneurship and the creation and incubation of startup companies with the aim of developing an innovation ecosystem (R&D cluster) in Okinawa

(d) Expand collaborations with industry as a mechanism to develop new technologies and promote technology transfer

(e) Strengthen regional, national, and international partnerships with innovative public and private organizations with the aim of developing an innovation ecosystem (R&D cluster) in Okinawa

(f) Understand the components and indicators of successful innovation in science and technology and measure their socio-economic impact on Okinawa

Self-sustaining development of Okinawa also depends on the dynamic, inclusive, and diverse engagement and participation of local citizens. To this end, OIST cares deeply about its social impact on Okinawa and engages with the local community through campus tours, science festivals, and educational events. The university also strives to develop its campus as a center for cultural and community activities.

Actions

(a) Identify, protect, and market research discoveries with the aim of promoting innovation and technology transfer

- Ensure that invention disclosure procedures capture the intellectual assets of OIST while complementing its basic research mission by proactively engaging with faculty and researchers.
- Expand the panel of international external experts for efficient and strategic management of the university's intellectual property. Enhance quality of the Invention Evaluation Committee and patent filing with the expanded panel of external experts.
- Utilize an intellectual property assets evaluation platform on which industrial partners, competing technologies and infringement risks are periodically reviewed to effectively

protect the intellectual property assets and accelerate technology transfer activities.

- Expand awareness of inventions and protection of intellectual property throughout the university by organizing training courses, seminars, and workshops for students and researchers.
- Hold an international conference to increase visibility of the university as a center of technology development and innovation in Asia.

(b) Manage the Proof-of-Concept Program to support innovative technology research and to drive inventions towards commercialization.

- Manage and support ongoing POC projects by continuing to provide funding, market reports and analysis, hands-on project management, educational courses and events, and access to industry experts. Maintain connections to completed POC projects to ensure continued commercialization efforts.
- Expand and strengthen the panel of industry reviewers, experts, and mentors for the POC Program by attending industry conferences to identify experts, coordinating meetings with POC project teams, and organizing networking events.

(c) Foster entrepreneurship and the creation and incubation of startup companies with the aim of developing an innovation ecosystem (R&D cluster) in Okinawa.

- Support entrepreneurs and startups in the Startup Accelerator Program, including providing access to facilities and equipment, assisting fundraising, and making connections to commercialization experts. Form partnerships with business, legal, and financial organizations in support of startups.
- Continue the entrepreneurship education workshop, with a focus on supporting the commercialization of technologies in the Proof-of-Concept (POC) Program and other technologies at OIST. Open the workshop to students and researchers from other universities in Okinawa to promote entrepreneurship in the prefecture. Expand the workshop by training instructors to provide the courses in Japanese.
- Operate space in the Technology Development Labs (Lab 3 Level A) to nurture new technologies and proof-of-concept research towards commercialization.
- Market and operate the incubator facility to serve as a launchpad for startups and a collaboration space for OIST researchers and industry partners to foster collaboration and seed an innovation ecosystem centered around OIST. The incubator will support entrepreneurs, startups companies, companies collaborating with OIST, POC projects, mentors etc.

(d) Expand collaborations with industry to facilitate development of new technologies and promotion of technology transfer

- Promote collaborative research with industry by proactively identifying potential

partners, building long-term relationships, and hosting company visits and exchanges.

・ Pursue new OPG funded projects that are aligned with the Okinawa Science and Technology Roadmap. Monitor and support existing OPG projects by contributing to meetings and symposia to enhance knowledge and technology transfer.

・ Promote OIST technologies and strengthen relationships with industry by participating in industrial exhibitions, workshops, and conferences nationally and internationally.

・ Expand external funding by identifying relevant sources of public and private-sector funding, encouraging researchers to apply, and supporting the application process.

・ Enhance business development activities by strengthening internal expertise in business and marketing of science and technology by encouraging staff participation in professional development courses.

・ Work closely with the Office of the General Counsel to build university expertise in negotiating and administering complex agreements with industry, including non-disclosure agreements, materials transfer agreements, collaborative/sponsored research agreements, licenses, consulting agreements, and MOUs.

(e)   Strengthen regional, national, and international partnerships with innovative public and private organizations with the aim of developing an innovation ecosystem (R&D cluster) in Okinawa

・ Proactively coordinate interactions with local and national organizations that encourage innovation and technology transfer.

・ Develop a long-term strategic plan for how the incubator facility, Startup Accelerator Program, and other entrepreneurial programs will contribute to the development of an innovation ecosystem centered around OIST. Host global experts in entrepreneurship to advise on strategy to accelerate startup activity in Okinawa.

・ Work closely with the Cabinet Office, Okinawa Prefectural Government, and other key entities on actions to establish an innovation ecosystem in Okinawa.

・ Organize international seminars, workshops, and symposia on the theme of innovation, entrepreneurship, and R&D cluster development to increase global awareness of Okinawa and to strengthen local expertise in international relationships.

(f)   Understand the components and indicators of successful innovation in science and technology and measure their socio-economic impact on Okinawa.

・ Establish partnerships necessary to advance analysis of innovation indicators at OIST and in Okinawa.   Establish methods that produce and aggregate statistical data to develop indicators of technological innovation in Okinawa and analyze their impact.

(Networking with local institutions and communities)
・ Organize joint science and technology research seminars and meetings for information exchange with other organizations and universities in Okinawa.

- Support large number of visitors (including companies and etc.) to the campus.
- Hold the 10th OIST Science Festival (Open Campus Day) at the OIST Campus. Promote the involvement by school students and local residents.
- 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. Also invite the elementary and junior high school students.
- 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 10th Onna/OIST Children's School of Science in collaboration with Onna Village.
- Organize a series of cultural events such as concerts and exhibitions both in the Auditorium and other facilities, to attract the local population to the University.
- OIST will continue to assist local schools to enhance their English language initiatives and cross-cultural understanding by participating in meetings on English education hosted by local Education Boards.
  OIST will also continue to work with the Onna elementary school to provide an international classroom environment for non-native Japanese speakers, including regular meetings between OIST University Community Services staff and senior management at Onna elementary school.

(Other matters concerning Okinawa development)
- Continue to employ talented people from Okinawa by holding community-based job fairs and participating in an information session regarding job opportunities for the students of the National Institute of Technology, Okinawa College.
- As we participated in events such as Okinawa Sangyo Matsuri 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.
- Elaborate the plan of OIST FAN Club, and establish and provide to the club members information of OIST, chance to join the events, and help OIST staff.
- Continue internship program with University of the Ryukyus and other universities in Okinawa, and provide the chance to work at CPR, OIST and promote the exchange with OIST students.

- Continue the science classes in remote islands of Okinawa with the help of OIST young researchers and students.
- 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, in addition to the support programs for MICE Ambassador program sponsored by JNTO. This will strengthen the academic reputation and networking of OIST researchers and students, thus contributing to the recruiting of new faculty etc. These MICE events will bring in direct impact to Okinawan economy as well as increased opportunity of STEM outreach activities by visiting researchers.

Metrics
- Number of official contacts with companies, with the view of future collaborations and licensing
- Number of collaborative projects with companies. (collaboration agreements, joint research projects, commercialization of intellectual property, 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 innovation, technology development, and R&D cluster development
- Number of participants in events, courses, symposia, meetings, workshops, and seminars on topics related to innovation, technology development, and R&D cluster development
- Number of POC projects, including Phase 1, 2 and Innovative Technology Research (ITR)
- Number of entrepreneurial projects supported by the Startup Accelerator Program, incubator facility, and entrepreneurship programs
- Number of visits and visitors (including visitors on the Science Festival 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

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

・ Continue study and updating of 2014 Master Plan based on phased expansion of OIST.

・ Complete design of Lab 5 Building and plan the construction and identification of contractors for the building.

・ Complete design of the infrastructure and civil works necessary for construction of Lab 5 and plan construction work for infrastructure.

・ Continue feasibility study and cost analysis of infrastructure and civil work for the future R&D Zone and on-campus housing.

・ Continue preparation of the site, programming of the future incubator facility, and planning the infrastructure work.

  Programming of future incubator buildings will be based on successful operation of the 500m^2 incubator building.

・ Operate and maintain the completed campus buildings, facilities.

・ 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 including staff, students and their families, which is important to the overall success of the University operation. The OIST Graduate University will continue to work to enhance the educational and childcare environments available to OIST employees, the availability of recreation and sporting facilities, and the availability of appropriate housing.

- To achieve successful recruitment and retention of faculty, OIST needs to pay attention to the provision of international recognized schooling.

- The University will investigate the development of recreation and sporting facilities on and off campus.

- The University will discuss and plan new housing on/off campus for increasing number of staff, students and their families.

Actions

(Developing the University Community)

・ -Continue to improve data collection process in the Resource Center to identify opportunities to improve service to OIST stakeholders

  -Increase the number of programs conducted onsite by the Resource Center to provide daily living information to stakeholders

  -Continue to collaborate with staff at the Medical Center and Ganjuu to further improve service-related functions for OIST employees

-Continue to develop and implement an effective Children's Development Center staffing model to ensure continuous high-quality child care services
-Continue to evaluate CDC budget and spending history to streamline processes and reduce expenses
-Identify, plan and deliver more robust after-school programming to increase opportunities for K-12 children of OIST employees
-Extend collaboration between the Resource Center and HR to ensure the smooth and effective on-boarding of OIST employees and their families through the provision of accurate information regarding accommodation, child-care services, family support, medical services and daily living needs.

- Continue to develop oversight procedures for OIST clubs and activities to ensure that there are no contraventions of university rules and regulations. The Director of Recreation Services oversees OIST community engagement activities.
- The Resource Center will continue to provide support for staff who provide services to visiting researchers and invited guests. They will ensure that visiting researchers and invited guests are registered and they will continue to maintain this registration data in the database.
- Continue construction of site work and infrastructure for the additional on-campus housing at the existing PPP residential area and the new PFI housing. Continue discussions with Onna-son on planning of off-campus housing at the old military site at Onna-son.

(Education and Childcare Services for OIST Family)
- Continue efforts to improve the educational environment of children of OIST employees and students by increasing opportunities for children taking classes in English, in collaboration with OPG, Onna-son and other surrounding communities.
- Continue to provide a high quality, fully bilingual (English and Japanese) Pre-school and School-aged (Afterschool/Holiday) programs through the CDC and developing the School-aged program/classrooms. The CDC Governing Board will continue to meet quarterly with separate meetings of the CDC Finance Committee, which will carefully monitor the CDC's budget. Enrollment in these programs is anticipated to continue its steady growth. Complete necessary work to move the Afterschool program into the same physical complex as the CDC.
- Continue to develop appropriate educational opportunities for the children of OIST staff and students such as the International classroom at Onna Elementary school. Conduct a survey of the educational needs (preschool and schoolage) of OIST staff and students, including the need for international education. Undertake a study of current opportunities for International Education in Okinawa and a review of International school polices and procedures in Japan.
- In FY2019 OIST will maintain 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.

(Student Support)
- Continue to enhance student support services and general welfare activities to promote a positive social and psychological environment for students.
- Continue efforts to improve opportunities for sport, recreation and social activities for the OIST community (students, staff, and family members). The Director of Recreation Services oversees OIST community engagement activities.

5.3 Safety

Goal
The Emergency Response and Business Continuity Plans will be further rehearsed with training exercises. Improved new staff safety training and hands on safety training will be delivered.

Actions
- The Emergency Response and Business Continuity Plans will be further rehearsed with training exercises.
- Improve staff safety training and enhance hands on safety trainings.
- 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.

5.4 Environment Protection

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

Actions
- Continue promoting use of recycled 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.
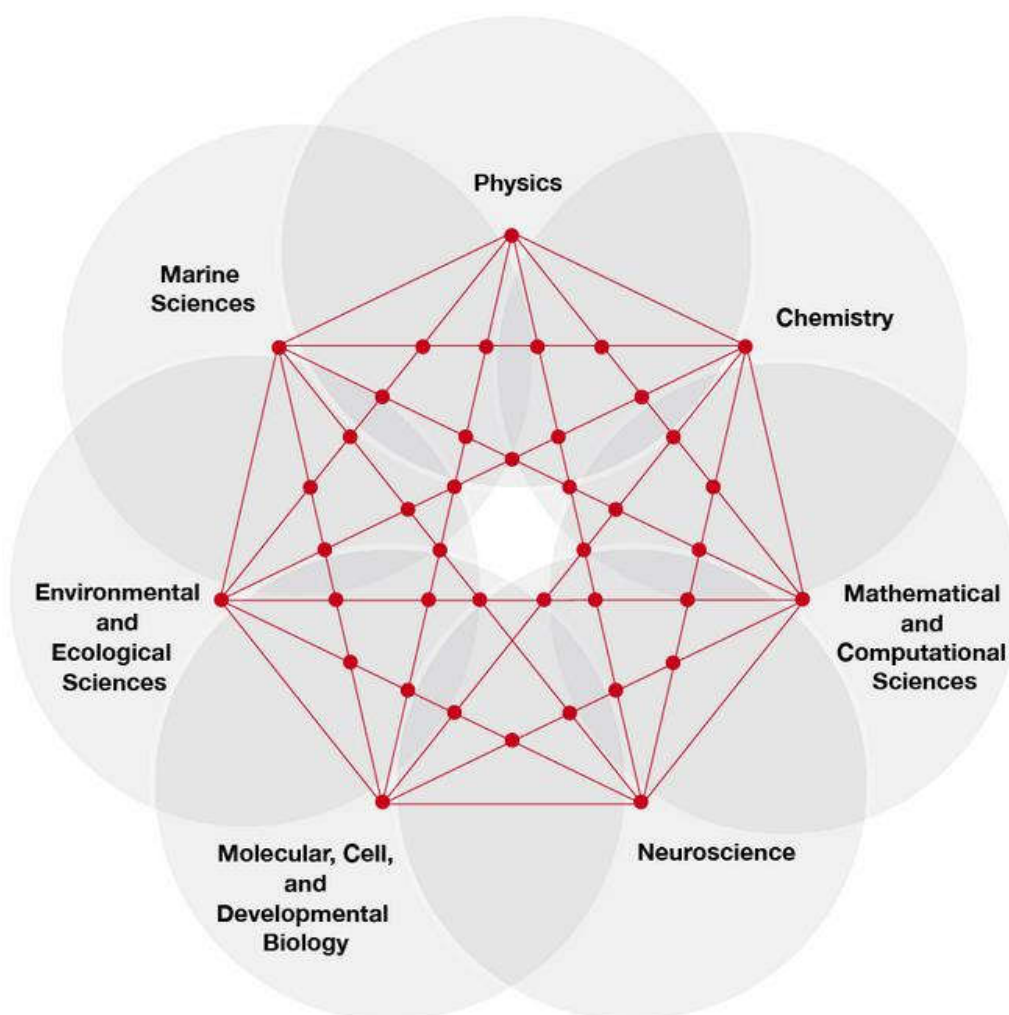
	Unit Name	Faculty
1	Biodiversity and Biocomplexity Unit	Dr. Evan P. Economo
2	Brain Mechanism for Behavior Unit	Dr. Gordon W. Arbuthnott
3	Biological Systems Unit	Dr. Igor Goryanin
4	Biological Physics Theory Unit	Dr. Greg Stephens
5	Cell Signal Unit	Dr. Tadashi Yamamoto
6	Cellular and Molecular Synaptic Function Unit	Dr. Tomoyuki Takahashi
7	Chemistry and Chemical Bioengineering Unit	Dr. Fujie Tanaka
8	Collective Interactions Unit	Dr. Mahesh Bandi
9	Computational Neuroscience Unit	Dr. Erik De Schutter
10	Continuum Physics Unit	Dr. Gustavo Gioia
11	Developmental Neurobiology Unit	Dr. Ichiro Masai
12	Ecology and Evolution Unit	Dr. Alexander Sergeyevich Mikheyev
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	Immune Signal Unit	Dr. Hiroki Ishikawa
21	Information Processing Biology Unit	Dr. Ichiro Maruyama
22	Light-Matter Interactions Unit	Dr. Sile Nic Chormaic
23	Marine Biophysics Unit	Dr. Satoshi Mitarai
24	Molecular Cryo-Electron Microscopy Unit	Dr. Matthias Wolf
25	Marine Genomics Unit	Dr. Noriyuki Satoh
26	Mathematical and Theoretical Physics Unit	Dr. Shinobu Hikami
27	Mathematics, Mechanics, and Materials Unit	Dr. Eliot Fried
28	Micro/Bio/Nanofluidics Unit	Dr. Amy Shen
29	Neural Computation Unit	Dr. Kenji Doya
30	Nanoparticles by Design for Nanotechnology and Biomedical Applications Unit	Dr.Mukhles Ibrahim Sowwan
31	Neuronal Mechanism for Critical Period Unit	Dr. Yoko Yazaki-Sugiyama
32	Neurobiology Research Unit	Dr. Jeff Wickens
33	Integrated Open Systems Unit	Dr. Hiroaki Kitano
34	Optical Neuroimaging Unit	Dr. Bernd Kuhn
35	Physics and Biology Unit	Dr. Jonathan Miller
36	Plant Epigenetics Unit	Dr. Hidetoshi Saze
37	Quantum Dynamics Unit	Dr. Denis Konstantinov
38	Quantum Systems Unit	Dr. Thomas Busch
39	Quantum Wave Microscopy Unit	Dr. Tsumoru Shintake
40	Structural Cellular Biology Unit	Dr. Ulf Skoglund
41	Theory of Quantum Matter Unit	Dr. Nic Shannon
42	Coordination Chemistry and Catalysis Unit	Dr. Julia Khusnutdinova
43	Molecular Genetics Unit	Dr. Daniel Rokhsar
44	Nucleic Acid Chemistry and Engineering Unit	Dr. Yohei Yokobayashi
45	Bioinspired Soft Matter Unit	Dr. Ye Zhang
46	Membrane Cooperativity Unit	Dr. Akihiro Kusumi
47	Evolutionary Neurobiology Unit	Dr. Hiroshi Watanabe
48	Sensory and Behavioural Neuroscience Unit	Dr. Izumi Fukunaga
49	Quantum Gravity Unit	Dr. Yasha Neiman
50	Neuronal Rhythms in Movement Unit	Dr. Marylka Yoe Uusisaari
51	Evolutionary Genomics Unit	Dr. Thomas Bourguignon
52	Electronic and Quantum Magnetism Unit	Dr. Yejun Feng
53	Topology and Geometry of Manifolds Unit	Dr. Anastasiia Tsvietkova
54	Protein Engineering and Evolution Unit	Dr. Paola Laurino
55	Cognitive Neurorobotics Research Unit	Dr. Jun Tani
56	Biological Complexity Unit	Dr. Simone Pigolotti
57	Quantum Transport and Electronic Structure Theory Unit	Dr. Fabian Pauly
58	Quantum Materials Science Unit	Dr. Yoshinori Okada
59	Membranology Unit	Dr. Keiko Kono
60	Gravity, Quantum Geometry and Field Theory Unit	Dr. Reiko Toriumi
61	Organic and Carbon Nanomaterials Unit	Dr. Akimitsu Narita
62	Neural Coding and Brain Computing Unit	Dr. Tomoki Fukai
63	Neural Circuit Unit	Dr. Yutaka Yoshida
64	Atomic Scale Correlations and Dynamics Unit	Dr.Freek Massee
65	Applied Topology Unit	Dr. Dmitry Feichtner-Kozlov

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. 65 Research Units (as of February 2019) have been launched so far, with research in the following 7 major areas:

- Physics
- Chemistry
- Mathematical and Computational Sciences
- Neuroscience
- Molecular, Cellular, and Developmental Biology
- Environmental and Ecological Sciences
- Marine Science

Research Collaboration Across Traditional Disciplinary Boundaries

FY2019 Income and expenditure budget statement

(Unit：K yen)

Revenues		Expenses	
Items	Budget Amounts	Items	Budget Amounts
Subsidy for Operations	17,507,331	Personnel Expense	6,916,262
Subsidy for Facilities	2,114,757	Academic related Expense	1,414,624
Other Revenues	1,723,482	Education & Research related Expense	4,561,970
		Common Resource Expense	5,357,741
		Administrative Expense	980,216
		Construction Expense	2,114,757
Total	21,345,570	Total	21,345,570

Note: Subsidy amounts in Revenues might have to be modified later when a request for budget carry-over
      from FY18 to FY19 is made.

Balance Sheets

As of March 31, 2019

(Unit：K Yen)

(1)	Assets		
(2)	I　Noncurrent assets		
(3)	1　Properties, plants, and equipment		
(4)	Land	1,659,667	
(5)	Buildings	51,938,224	
(6)	Accumulated depreciation	-11,636,510	40,301,713
(7)	Structures	7,071,514	
(8)	Accumulated depreciation	-1,873,500	5,198,013
(9)	Machineries	235,769	
(10)	Accumulated depreciation	-190,289	45,479
(11)	Equipment	23,795,244	
(12)	Accumulated depreciation	-17,034,995	6,760,250
(13)	Books		6,629
(14)	Ships and vessels	2,004	
(15)	Accumulated depreciation	-1,681	323
(16)	Vehicles and transportation equipment	27,426	
(17)	Accumulated depreciation	-23,407	4,019
(18)	Lease assets	1,721,082	
(19)	Accumulated depreciation	-1,718,935	2,146
(20)	Construction in progress	561,975	
(21)	Total properties, plants, and equipment	54,540,215	
(22)			
(23)	2　Intangible assets net of amortization		
(24)	Patents	56,383	
(25)	Trademark rights	494	
(26)	Softwares	504,839	
(27)	Patents (in the process of filing)	150,279	
(28)	Others	23,235	
(29)	Total intangible assets, net	735,229	
(30)			
(31)	3　Investments and other assets		
(32)	Investments in securities	5	
(33)	Security deposits	2,121	
(34)	Lease investment assets (Long-term)	4,196,133	
(35)	Total investments and other assets	4,198,259	
(36)	Total noncurrent assets		59,473,703
(37)			
(38)	II　Current assets		
(39)	Cash and cash equivalents	1,987,121	
(40)	Accounts receivable	1,062,252	
(41)	Supplies	66,694	
(42)	Prepaid expenses	10,085	
(43)	Lease investment assets (Short-term)	119,849	
(44)	Total current assets		3,246,001
(45)	Total assets		62,719,704
(46)			
(47)	Liabilities		
(48)	I　Noncurrent liabilities		
(49)	Encumbrance for assets - subsidy for operation	12,639,858	
(50)	Encumbrance for assets - donation	85,851	
(51)	Encumbrance for assets - donated by Japan government	150	
(52)	Allowance-retirement benefits	130,459	
(53)	Long-term accrued amounts payable	4,215,966	
(54)	Long-term lease obligations	1,469	
(55)	Total noncurrent liabilities		17,073,752
(56)			
(57)	II　Current liabilities		
(58)	Advance received	-5,273	
(59)	Deposits received - subsidy for operation		
(60)	Deposits received - subsidy for operation	212,031	
(61)	Deposits received-subsidy for facility	492,479	704,510
(62)	Deposits received - donation	98,847	
(63)	Deposits received - Kakenhi	30,487	
(64)	Deposits received - others	100,454	
(65)	Accounts payable	2,165,884	
(66)	Short-term lease obligations	792	
(67)	Accrued expenses	70,865	
(68)	Total current liabilities		3,166,566
(69)	Total liabilities		20,240,318
(70)			
(71)	Equities		
(72)	I　Contributions		
(73)	Contributions from government	24,317,681	
(74)	Total contributions		24,317,681
(75)			
(76)	II　Additional paid-in contributions		
(77)	Additional paid-in contributions	29,608,967	
(78)	Accumulated depreciation - directly deducted from equity	-11,983,951	
(79)	Total additional paid-in contributions		17,625,016
(80)			
(81)	III　Retained earnings		
(82)	Voluntary reserve funds		
(83)	Special reserve funds	80,533	
(84)	Accumulated net income	456,157	
(85)	（Net income/(△loss) for FY17)	(-29,206)	
(86)	Total retained earnings		536,690
(87)	Total equities		42,479,387
(88)	Total liabilities and equities		62,719,704

Projected income statement
FY2018

（Unit：K Yen）

Items	Amount
Ordinary Revenues	19,031,603
Revenue from Tuition etc.	77,760
Revenue from Subsidy for Operations etc.	14,331,721
Revenue from Subsidy for facility	822
Revenue from Sponsored Research	301,078
Revenue from Joint Research	90,142
Revenue from Donation etc.	28,398
Revenue from Subsidy for other	16,239
Revenue from Property Rent for Dormitory etc.	11,692
Land and Building Rent Revenue	13,297
Reversal of Assets Offsetting Subsidy for Operations etc.	3,815,786
Reversals of Assets Offsetting Donated Assets	44,048
Financial Income	104,199
Miscellaneous gains	196,419
Ordinary Expenses	19,060,732
Personnel Expenses	7,171,974
Operating Expenses	7,040,937
General Administrative Expenses	797,377
Depreciation	3,936,484
Financial Charges	113,242
Miscellaneous loss	719
Ordinary Loss	-29,129
Extraordinary Loss	76
Net Loss for the year	-29,206

Balance Sheets

As of March 31, 2020

(Unit：K Yen)

(1)	Assets			
(2)	I Noncurrent assets			
(3)	1 Properties, plants, and equipment			
(4)	Land		1,659,667	
(5)	Buildings	51,938,224		
(6)	Accumulated depreciation	-13,677,397	38,260,827	
(7)	Structures	7,346,734		
(8)	Accumulated depreciation	-2,174,098	5,172,636	
(9)	Machineries	235,769		
(10)	Accumulated depreciation	-200,428	35,341	
(11)	Equipment	26,240,176		
(12)	Accumulated depreciation	-20,160,180	6,079,996	
(13)	Books		8,200	
(14)	Ships and vessels	2,004		
(15)	Accumulated depreciation	-1,995	9	
(16)	Vehicles and transportation equipment	27,426		
(17)	Accumulated depreciation	-25,580	1,846	
(18)	Lease assets	1,721,082		
(19)	Accumulated depreciation	-1,719,613	1,469	
(20)	Construction in progress		2,401,512	
(21)	Total properties, plants, and equipment		53,621,502	
(22)				
(23)	2 Intangible assets net of amortization			
(24)	Patents		54,896	
(25)	Trademark rights		372	
(26)	Softwares		297,915	
(27)	Patents (in the process of filing)		151,073	
(28)	Others		19,238	
(29)	Total intangible assets, net		523,494	
(30)				
(31)	3 Investments and other assets			
(32)	Investments in securities		5	
(33)	Security deposits		2,121	
(34)	Lease investment assets (Long-term)		4,073,288	
(35)	Total investments and other assets		4,075,413	
(36)	Total noncurrent assets			58,220,409
(37)				
(38)	II Current assets			
(39)	Cash and cash equivalents		2,618,382	
(40)	Accounts receivable		416,252	
(41)	Supplies		45,539	
(42)	Prepaid expenses		10,439	
(43)	Lease investment assets (Short-term)		122,846	
(44)	Total current assets			3,213,458
(45)	Total assets			61,433,867
(46)				
(47)	Liabilities			
(48)	I Noncurrent liabilities			
(49)	Encumbrance for assets - subsidy for operation		11,645,908	
(50)	Encumbrance for assets - donation		47,853	
(51)	Encumbrance for assets - donated by Japan government		150	
(52)	Allowance-retirement benefits		153,610	
(53)	Long-term accrued amounts payable		4,098,405	
(54)	Long-term lease obligations		791	
(55)	Total noncurrent liabilities			15,946,718
(56)				
(57)	II Current liabilities			
(58)	Advance received		-4,813	
(59)	Deposits received - subsidy for operation			
(60)	Deposits received - subsidy for operation	212,826		
(61)	Deposits received-subsidy for facility	2,016,619	2,229,445	
(62)	Deposits received - donation		98,847	
(63)	Deposits received - Kakenhi		39,683	
(64)	Deposits received - others		103,985	
(65)	Accounts payable		2,242,008	
(66)	Short-term lease obligations		678	
(67)	Accrued expenses		73,355	
(68)	Total current liabilities			4,783,188
(69)	Total liabilities			20,729,906
(70)				
(71)	Equities			
(72)	I Contributions			
(73)	Contributions from government		24,317,681	
(74)	Total contributions			24,317,681
(75)				
(76)	II Additional paid-in contributions			
(77)	Additional paid-in contributions		29,879,183	
(78)	Accumulated depreciation - directly deducted from equity		-13,998,239	
(79)	Total additional paid-in contributions			15,880,944
(80)				
(81)	III Retained earnings			
(82)	Voluntary reserve funds			
(83)	Special reserve funds		80,533	
(84)	Accumulated net income		424,803	
(85)	(Net income/(△loss) for FY18)		(-31,354)	
(86)	Total retained earnings			505,336
(87)	Total equities			40,703,961
(88)	Total liabilities and equities			61,433,867

Projected income statement
FY2019

(A)	(B)
Items	Amount
Ordinary Revenues	19,784,284
Revenue from Tuition etc.	101,700
Revenue from Subsidy for Operations etc.	15,052,743
Revenue from Sponsored Research	261,271
Revenue from Joint Research	95,830
Revenue from Donation etc.	52,000
Revenue from Subsidy for other	150,390
Revenue from Proeprty Rent for Dormitory etc.	7,963
Land and Building Rent Revenue	7,500
Reversal of Assets Offsetting Subsidy for Operations etc.	3,617,680
Reversals of Assets Offsetting Donated Assets	37,997
Financial Income	101,450
Miscellaneous gains	297,759
Ordinary Expenses	19,815,638
Personnel Expenses	7,907,831
Operating Expenses	7,267,210
General Administrative Expenses	846,597
Depreciation	3,685,391
Financial Charges	108,608
Ordinary Profit	-31,354
Net profit for the year	-31,354