The Okinawa Institute of Science and Technology Promotion Corporation is an independent administrative institution launched in September 2005 to conduct outstanding research and to prepare for the establishment of a graduate university of science and technology in Okinawa. OIST News is a print publication intended to highlight current activities at OIST.

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Pursuing his childhood interest

In my childhood, I was very weak and often became absent from school. Since there was no television or video games at the time, I used to lie down on my bed and observe the wood grain of the ceiling, or look out the window to watch raindrops making ripples in rain puddles. I was always impressed with the beautiful patterns. In junior high school, I joined the physics club. The former Soviet Union had just launched the world’s first artificial satellite, Sputnik, and I used to explain to my classmates how the satellite revolved around the Earth. I must have enjoyed physics ever since.

A picture is worth a thousand words

In physics, we can accurately predict various phenomena that occur in nature, such as the movements of the sun and the moon, and the trajectory of an artillery shell. What is particularly interesting is that just one law of physics can explain all these phenomena.

Quantum physics, which I first studied in university, is fascinating. In the microscopic world, there are many phenomena that exist beyond common sense notions. When I learned that electrons have both wave and particle natures, I wanted to see one firsthand. At Hitachi’s Central Research Laboratory, which I joined after my undergraduate study, there was Dr. Hiroshi Watanabe, who verified the existence of Bohm-Pines’ plasma oscillation theory with a single picture. During a yearlong fellowship at the University of Tübingen in what was then West Germany in 1973, I worked with Professor Gottfried Mönstedt, who was the first in the world to observe “electron” interference patterns. My encounters with these scientists laid the foundation for my research style – clearly explaining physical phenomena by using one picture taken with an original apparatus.

Electron holography

In our unit, we are delving into the microscopic world with the use of electron holography. Electron holography is a technique for observing electric and magnetic fields, which are on a nano-scale and therefore invisible under an optical microscope. In this technique, a picture of striped patterns produced by interference of electron waves is first photographed on film as a “hologram.” Then, by illuminating this hologram with a laser light, we can produce an actual image of the electric and magnetic fields. While an optical microscope can distinguish two small objects 200 nm apart, an electron microscope has a much higher resolution because the wavelength of electrons is only 0.002 nm. This shorter wavelength enables us to see objects 10,000 times smaller, including cells, viruses, and DNA, as well as atoms and molecules, which make up all matter in the universe.

In our research, we use a pointed needle to produce electron waves. The emitted electrons are accelerated to 80% of the speed of light and passed through a sample to obtain the magnetic and electric...
Achieving first in the world

When I began my research, I realized that inventing a coherent electron beam, like a laser in optics, was indispensable for practical application of the wave nature of electrons. In 1968, I embarked on the development of a holography electron microscope equipped with field-emission electrons, instead of the conventional thermal electrons. By 1978, I had succeeded in producing brighter electron beams by two orders of magnitude. This enabled direct observation of interference fringes, bringing holography electron microscopy into the practical realm.

The technique made experimental verification of theoretical quantum effects possible. In 1986, we verified the Aharonov-Bohm effect, and, in 1989, conducted the double-slit experiment. The coherence of the electron beam was further improved, allowing us to directly observe magnetic vortices inside superconductors in 1989. And in 2000, 17 years after the launch of the electron holography project, I created a 1-million-volt microscope, with which we can distinguish objects as small as 0.05 nm and produce highly coherent electron beams four digits brighter than those available in 1968, both world records.

In the OIST project, we spent the first three years designing and developing a world-class 300-kilo-volt electron microscope for observation of nano-scale magnets. In May 2007, we decided to combine our two laboratories in Okinawa and Saitama to Hitachi’s Advanced Research Laboratory in Saitama, because the site, with firmer ground and free of alternating-current magnetic fields caused by high-voltage lines or trains, was suited for our microscope. We have since focused on conducting interesting experiments through observation of ferromagnetic and superconducting thin films.

The microscope is the embodiment of my accumulated experience and expertise. It can readily customize conditions for observation. However, the development of an electron microscope still has leeway for improvement. In theory, we should be able to see objects as small as one-hundredth of an atom with the 1-million-volt microscope. But in reality, we barely manage to observe atoms because we have not fully capitalized on the information carried by electrons from inside a specimen. We must work harder to create, for instance, a composite lens with concave and convex lenses combined.

Our research does not directly result in the development of new devices, but what we verify in basic science can be applied to create new technologies. For example, we have seen in the double-slit experiment that a single electron goes through both slits. By creating a number of such states which a single quantum can have, we can develop a quantum computer that performs parallel computation at an ultra-high speed. We hope to contribute to the advancement of nanotechnology and biotechnology since research in these fields is increasingly looking into the molecular and atomic level.

"Team Japan" effort

When I pursued research in West Germany in the 1970s, most Japanese researchers opted for study in the U.S. since the country was at the peak of its industrial prosperity. The U.S. has led the world in physics since the end of World War II, producing a number of Nobel Laureates in physics. History tells us that the center of scientific research had shifted from Europe, where quantum mechanics and electron microscopy were born, to the U.S., where these studies and technologies have advanced. As the prosperity of one nation does not last forever, I am hoping that it is Asia's turn next, with Japan at the center.

The national budget for promoting science and technology in Japan has significantly increased in recent years. But a S&T policy looking 50~100 years ahead is also crucial for Japan to be acknowledged as a leading nation in the creation of advanced knowledge and technological innovations. I hope OIST can build momentum towards reaching this goal. I also hope that our team will contribute to this purpose.

When I first began experiments with electrons more than 40 years ago, I never dreamed of creating a large device like the 1-million-
volt electron holography microscope. Thanks to the support I have received from various entities over the past 40 years, my research has led to the development of electron beams 20,000 times brighter than those in 1968. In return for this support, now I would like to help promote this effort.

Japan has long been widely known for the development of electron microscopes by the industrial sector and academia. Hitachi’s Central Research Laboratory, and its Advanced Research Laboratory established in 1985, have played a leading role in this field. Mr. Hiroto Kasai, a researcher at the Laboratory’s electron microscope group that has historically handed down technology and expertise from one generation to the next, is one of Dr. Tonomura’s staff who joined the Electron Holography Unit in November 2008. He strives every day to obtain the very image Dr. Tonomura needs for his research. Dr. Yasukazu Murakami, an associate professor at Tohoku University, also joined the unit in November 2008. A key player in the industry-academia research collaboration, Dr. Murakami is referred to by Dr. Tonomura as a scientist not only capable of dexterously operating a microscope, but also conducting very interesting research. With OIST News, Mr. Kasai and Dr. Murakami each talked about their roles in the unit and future aspirations.

Mr. Hiroto Kasai (left)

When I was a child, I used to disassemble toys with a screwdriver, but often ended up crying because I could not put the toy parts back together. In my fifth grade, this curious and naughty boy bought an optical microscope with a small sum of money given by my parents and relatives as a new year’s present, and became fascinated with it. Back then, I never dreamed of pursuing a job that deals with microscopes.

I have been participating in the OIST research project as a secondee from the Hitachi Advanced Research Laboratory. My primary mission is to take beautiful pictures using an electron microscope. An electron microscope uses a convergent electron beam to illuminate a specimen and create a highly-magnified image. However, when placed in an electric or a magnetic field, the electron beam shakes before reaching a specimen, preventing the electron microscope from performing to its full potential. However, the 300-kilo-volt electron microscope operated in our unit is capable of holding down the divergence angle of the beam to an unprecedentedly small degree. At the time of its development, I was one of the technical support staff on the Hitachi side, trying to capture an image that quantitatively showed the ability of this electron microscope. With all my knowledge and skills devoted, I was able to successfully obtain the image just before its due date. Since I later joined the unit, my experiences with this microscope have been extremely useful in my daily research. With this excellent device, I would like to obtain and show to the world an electron microscopic image that even makes me shiver with awe.

Last year, my son worked on burning a paper with magnifying glass and the sun for his summer holiday homework. It was very heartwarming to see him experience science. Some say children these days do not enjoy studying science, but I would like to achieve research results that raise the interest of younger generation in science, while also pursuing advanced science and research as an OIST researcher.

2. Ferromagnetic materials: A ferromagnetic substance, made up of iron, cobalt and nickel, is strongly attracted by a magnet. In some ferromagnetic substances, the magnetism persists even when the external magnetic field is removed.

3. Magnetic vortices: When a superconductor is placed in a magnetic field, magnetic lines penetrate the superconducting material. The penetrating lines are called magnetic vortices.

4. Bohm-Pines’ theory: In 1965, Dr. Hiroshi Watanabe of Hitachi’s Central Research Laboratory produced experimental evidence of the Bohm-Pines’ plasma oscillation theory with a simple picture showing plasma excitation in metal electrons.

Promising Stars

Mr. Hiroto Kasai  Dr. Yasukazu Murakami

Dr. Yasukazu Murakami (right)

In my graduate study, I studied material science and engineering with an emphasis on the shape memory effect of alloys. While there are several basic crystal structures in shape memory alloys, I was able to obtain a very unique research result on a structural phase transition that was newly discovered back then. At one international conference where I made an oral presentation on this result, I made connections with many researchers, a fortunate experience that further deepened my interest in research. Because of this experience, I decided to pursue a Ph.D. program and became a scientist. In 1996, I became an assistant professor at Tohoku University and began research using an electron microscope. One of the targets of my research was manganese oxide, a chemical compound that has long been the subject of study in many fields, including physics and electronics. Interested in its ability to easily pass electricity when placed in a magnetic field, I investigated the microscopic mechanisms of manganese oxide. Unlike an optical microscope that uses glass lenses, an electron microscope uses a magnetic field to enlarge an image. However, the magnetic field itself modifies the magnetic domain structure of the specimen that we are interested in. With the 300-kilo-volt electron microscope, developed by the unit for the OIST project, one can control the magnetic field at the specimen position. In addition, the new device allows precise control of the temperature of the specimen to an extremely low temperature. These functions are highly useful when studying material science, especially the relationships between nanostructure and magnetic properties. In this regard, it is possible to say that this OIST electron microscope is one of the "best in the world." My role in the unit is to use this device to unveil the reasons behind the behaviors and specific functions of a specimen, which appear when it is placed in a particular environment, such as a magnetic field and an extremely low temperature.

Dr. Tonomura is a pioneer of electron holography, who has achieved outstanding research results. I feel very fortunate to have the opportunity to learn firsthand various aspiring experiment approaches from him.
Okinawa Institute of Science and Technology School Corporation Act

The Okinawa Institute of Science and Technology School Corporation Act was enacted on July 10, 2009, clearing the way for the OIST Graduate University to apply for accreditation to open in 2012. From the perspective of respecting the autonomy and the management flexibility of the school, the Act stipulates the establishment of the Graduate University as an independent special school corporation.

The Act was based on the Blueprint, a set of recommendations finalized by the Board of Governors for the establishment and submitted to then Minister for Okinawa Affairs Fumio Kishida at the end of the 6th BOG meeting on July 28-30, 2008 in Okinawa and Tokyo. During the 7th BOG meeting on February 17, 2009 in Tokyo, the Cabinet Office presented a summary of the Act to the BOG members. The bill was submitted to the Diet, following its approval by the cabinet of Prime Minister Taro Aso on March 3, 2009.

On May 8, an urgent general meeting of the Okinawa People’s Council for the Promotion of OIST, chaired by Okinawa Governor Hirokazu Nakaima, took place to call for early enactment of the bill. In the meeting, OIST Executive Director Dr. Robert Baughman made presentation on the progress of the project, while BOG member Dr. Hiroko Sho read out an Urgent Appeal for Support of the Opening of the OIST, signed by Nobel Laureates and other renowned scientists around the world. At the end of the meeting, the members unanimously adopted a resolution.

On May 15, the members of the House of Representatives Special Committee on Okinawa and Northern Territories Affairs held an urgent town hall meeting in Onna Village also held an urgent town hall meeting on May 15 to promote early opening of the Graduate University. Representing the OIST community, Dr. Kenji Doya of the Neural Computation Unit delivered a speech, seeking continued support by the local residents toward the opening of the Graduate University.

On May 27, the members of the House of Representatives Special Committee on Okinawa and Northern Territories Affairs visited OIST to see firsthand the ongoing preparation for the establishment of the Graduate University, including the construction of the campus in Onna Village and research activities in Uruma City. At the outset of the visit, OIST President Dr. Sidney Brenner welcomed the lawmakers in a meeting, which was also attended by many other guests, including Dr. Sho and Onna Mayor Fumiyasu Shikiya. The lawmakers then moved to the campus site and to the OIST Research Laboratory in Uruma City, where Dr. Noriyuki Satoh of the Marine Genomics Unit and Dr. Jeff Wickens of the Neurobiology Research Unit each made a presentation on their research.

The bill was passed unanimously in the House of Representatives on June 11 and the House of Councillors on July 3. As part of the legislative deliberations, Dr. Brenner appeared as a guest speaker in the House of Councillors Special Committee on Okinawa and Northern Territories Affairs on June 19. He answered questions including those on the progress and future prospects, including the formation of an intellectual cluster with the Graduate University at the center.

The full text of the Act is available on our Website: http://www.oist.jp/doc/OISTSC_Act_20090713.pdf

Following the enactment of the Act, OIST has begun an international search for the president of the OIST Graduate University. The details of the announcement for the search can be seen on our Website. http://www.oist.jp/doc/career/200908_OIST_President_Ad_En.pdf

Message from OIST Executive Director Dr. Robert Baughman

We, the members of OIST P.C., deeply appreciate the enactment of the Okinawa Institute of Science and Technology School Corporation Act. We wish to thank the citizens of Okinawa and all other parties concerned for their understanding and support, which was important to achieve this. We take the expectations of the public in Okinawa and Japan very seriously, and we will continue to make our best efforts toward the successful opening of the Graduate University.
International Workshop on "Fundamentals of Quantum Mechanics and Its Applications"

Participants of the International Workshop

The International Workshop on "Fundamentals of Quantum Mechanics and Its Applications" took place on May 13-15, 2009, at the OIST Seaside House. The workshop brought together leading scientists and engineers from all over the world to explore future possibilities in fundamental issues of quantum mechanics unveiled by new advanced technologies. For young students and researchers, it was an opportunity to engage in discussion with world-leading scientists including three Nobel Laureates, and to present their research in a poster session. The workshop was organized by four renowned scientists including Dr. Akira Tonomura of OIST. With OIST News, the Nobel Laureates shared part of their career and advice for OIST.

International Workshops and Seminars

OIST has been hosting international workshops and seminars to enhance cooperation with research institutions at home and abroad. These workshops and seminars also help introduce the vision of establishing a graduate university in Okinawa to the worldwide scientific community. Below is a list of workshops, seminars and lectures that took place between February and June 2009.

February 2 Seminar at the Bo Center
"Larval dispersal in the turbulent coastal ocean: Dynamics and Impacts"
Speaker: Dr. Satoshi Miura, UC Santa Barbara
February 3 Seminar at the Bo Center
"Neural mechanisms of decisions based on preference"
Speaker: Dr. Michael Campos, California Institute of Technology
February 4 Seminar at the Bo Center
"Neural network dynamics of perceptual decision-making"
Speaker: Dr. Kong Hei Woon Lin, Princeton University
February 5 Seminar at the Bo Center
"Circuits, differentiation and homestasis in genetic regulatory networks"
Speaker: Dr. Paul Rueu, CNS
Organizer: Dr. Robert Siciliano, OIST
February 6-7 Lecture at Kibara Junior High School & Yonaguni Junior High School
"Let’s Learn from DNA!"
Lecturer: Dr. Mary Ann Price, OIST
February 9 Seminar at the Seaside House
"From Macro Scale to Macro Data in Physics and Engineering"
Speaker: Dr. Alexander Yakov, Lomonosov Moscow State University
Organizer: Dr. Jonathan Miller, OIST
February 11 Seminar at the Bo Center
"Understanding the chemical language of insects using mass spectrometry"
Speaker: Dr. Joanne Yew, Harvard Medical School
February 12 Seminar at the Research Laboratory
"Behavioral state-dependent change of granule-to-mitral inhibition in the rat olfactory bulb"
Speaker: Mr. Yukiko Tanou, Graduate Student, University of Tokyo
Organizer: Dr. Kenji Doya, OIST
February 13 OIST-IRP Internal Seminar at the Research Laboratory
"Dopaminergic modulation of striatal spike-timing-dependent plasticity in adult mice"
Speaker: Dr. Tomoyo Shindou, OIST
February 13 OIST-IRP Internal Seminar at the Research Laboratory
"Striatal interneurons in dissociated culture"
Speaker: Dr. S. Schock and Dr. K. John-Dela, University of Ottawa
February 15 Talk at Science Film Show 2009
Speaker: Dr. Kenji Doya, OIST

February 17 Seminar at the Seaside House
"Methods of theory of dynamical systems and partial differential equations in the problem of compression of discrete signals"
Speaker: Dr. Maxim Korenev, Samsung Electronics Ltd. Korea
Organizer: Dr. Jonathan Miller, OIST
February 18 Lecture at Nakadori Junior High School
"Introduction of the research in the Stiefel Unit"
Lecturer: Dr. Kauai Sefie, OIST
February 19 Seminar at the Research Laboratory
"Functional States in the Dynamics of Striatum Cell Assemblies"
Speaker: Dr. Luis Alberto Carillo Rea, National University of Mexico
Organizer: Dr. Gordon Arbuthnott, OIST
February 20 Seminar at the Research Laboratory
"Capacity of a single spiking neuron for temporal and rate coding"
Speaker: Dr. Shiro Ideka, the Institute of Statistical Mathematics
Organizer: Dr. Kenji Doya, OIST
February 23 Seminar at the Research Laboratory
"The Road to the Synapse: Kinesin-based transport of neuronal receptors"
Speaker: Dr. Gualtiero Laurent, the University of Tokyo
Organizer: Dr. Tomoyuki Takahashi, OIST
February 25 Seminar at the Research Laboratory
"Diffusional barriers in neurons: From synapses to dendrites"
Speaker: Dr. Riedel Sanurama, the University of Tokyo at San Antonio
Organizer: Dr. Erik De Schutter, OIST
February 26 Seminar at the Research Laboratory
"Multielectrode arrays and the study of neuronal firing patterns in vitro"
Lecturer: Dr. Stephen Third, University of Dusseldorf, Germany
Organizer: Dr. Gordon Arbuthnott, OIST
March 2 Seminar at the OISTC
"Regulation of gom formation by chondroitin sulfate proteoglycan, and characterization of molecule involved in neuronal gene expression in C.elegans"
Speaker: Dr. Yohachi Sato, RIKEN Kobe Institute
Organizer: Dr. Ichiro Matayama, OIST
March 6 Seminar at the Research Laboratory
"On the nature of neuronal branching"
Speaker: Dr. Hermann Curti, University College London
Organizer: Dr. Erik De Schutter, OIST
March 9 Seminar at the Seaside House
"Improving Constraint-Based Solvers"
Speaker: Dr. Horst Sameloviz, Microsoft Research, UK
Organizer: Dr. Jonathan Miller, OIST
March 13 OIST-IRP Internal Seminar at the Research Laboratory
"Using Neurofitter to fit a Purkinje cell model to experimental data"
Speaker: Mr. Werner Van Gest, OIST
Dr. Chen Ning Yang
Tsinghua University
1957 Nobel Prize in physics for his work on parity nonconservation of weak interaction

Dr. Peter Grünberg
Forschungszentrum Jülich GmbH
2007 Nobel Prize in physics for his discovery of giant magnetoresistance

My interest in physics grew in 1938, when I was studying the subject for an entrance exam for university admission in my home country of China. In my long career as a physicist, I have come to know a number of young researchers, who are very serious about their work, including Dr. Yonemura whom I first met in 1981. I am glad that OIST is nurturing the enthusiasm of such researchers. I am confident that OIST, surrounded by Okinawa’s beautiful nature, will grow into a great institute in a few years.

Dr. Klaus von Klitzing
Max-Planck Institute
1985 Nobel Prize in physics for his discovery of the integer quantum Hall effect

I was first interested in astronomy. But when my physics teacher taught me that the Sun’s gravity keeps planets in their orbits, I turned to physics because I wanted to know answers for many phenomena in nature. In addition to attending international conferences in Japan since 1987, I have stayed in Sendai, Miyagi Prefecture and Tsukuba, Ibaraki Prefecture for seven months as a visiting professor. It is important for a society, including the academic society, to try new things and go new ways on a long term. And that is what I see here at OIST.

"Crystalization of membrane proteins"
Speaker: Dr. Vladimir Mescherelyak, OIST
March 17-18 Seminar at the Research Laboratory
"Activity-dependent plasticity of hippocampal interneurons" (March 17)
"Large-scale computational modeling of the normal and epileptic dentate gyms" (March 17)
Speaker: Dr. latch, University of California, Irvine
Organizer: Dr. Klaus Stro, OIST
March 18 Lecture at the English Education Forum
"The Importance of English in a Global Society"
Speaker: Dr. Gal Trupp, OIST
March 19 Seminar at the OIST
"The Broadest Panel of Kinase Solutions for Characterization, Profiling & Screening"
Speaker: Dr. Tetsu Chen, Decovixx Corporation
Organizer: Dr. Ichiro Matsumura, OIST
April 7 Seminar at the Research Laboratory
"Migration of Epithelia: The Mechanobiology of Cells and Tissues"
Speaker: Professor Tai Matsushati, National University of Singapore
Organizer: Dr. Ichiro Matsumura, OIST
April 10 OIST-IRP Internal Seminars at the Research laboratory
"Pi-calculation and RNA interference"
Speaker: Dr. Masahiro Hamano, OIST
"Non-saturation of postsynaptic glutamate receptors by a single vesicular transmitter content"
Speaker: Kohaku Ejuchi, OIST
April 21 Seminar at the Research Laboratory
"Expression and structure analysis of malaria circumsporozoite protein using E.coli for drug and vaccine development"
Speaker: Dr. Young-Ho Yoon of Tachwama City University
Organizer: Dr. Reda Samy, OIST
April 23 Seminar at the Research Laboratory
"Neurally distinct vocal pattern generation in African clawed frog"
Speaker: Dr. Ayako Yamaguchi, Boston University
Organizer: Dr. Mary Ann Price, OIST
April 24 Seminar at the Research Laboratory
"Seeing what the nose tells the brain - Active sensing and odor coding imaged in the awake rat and mouse"
Speaker: Dr. Matthew Wachowiak, Boston University
Organizer: Dr. Mary Ann Price, OIST
May 11 Seminar at the Research Laboratory
"The physics of whole genome sequences and its implications for genome growth and evolution"
Speaker: Professor H.C. Paul Lee, National Central University, Taiwan
Organizer: Dr. Jonathan Miller, OIST
May 15 OIST-IRP Internal Seminars at the Research laboratory
"Emergence of heterogeneous mating strategies in embodied evolution"
Speaker: Dr. Stefan Tilman, OIST
"The mechanism of partial proteolysis of the Hedgehog signalling effector Ci and its evolutionary conservation"
Speaker: Dr. Mary Ann Price, OIST
May 19 Seminar at the Research Laboratory
"Systems biology: current status and future perspectives"
Speaker: Dr. Igor Gelein, The University of Edinburgh
May 25-26 Joint workshop on nano-computing and bioinformatics at the Seaside House
"Colossal ultracooling and super-colossal ultracooling"
Invited Speaker: Dr. Jonathan Miller, OIST
May 27 Seminar at the Research Laboratory
"Coupled Exclusion Processes for the Modeling of Intracellular Particle Transport"
Speaker: Dr. Konstantinos Tselevas, Rios University, USA
Organizer: Dr. Jonathan Miller, OIST
May 28 Seminar at the Research Laboratory
"Full-Azimuth Direction-of-Arrival Estimation with Successive-Selection Technique"
Speaker: Dr. Eddy Talletter, Fujitsu, Osaka, Japan
June 6 Seeds and Needs for Large-Scale Computing Workshop at the Seaside House
"Large-scale modeling in neuroscience: from signalings networks to neural networks"
Speaker: Dr. Erik De Schutter
"Bayesian sampling methods in neuroscience: from synapses to behaviors"
Speaker: Dr. Kenji Doya, OIST
June 10 Seminar at the Research Laboratory
"Full-Azimuth Direction-of-Arrival Estimation with Successive-Selection Technique"
June 15 July 2 Okinawa Computational Neuroscience Course (OCNC) 2009 at the Seaside House
Organizers: Drs. Erik De Schutter, Kenji Doya, Klaus Stro, Jeff Widmer, OIST
June 21-25 The 5th International Tunicate Meeting at the Okinawa Industry Support Center
Organizers: Dr. Noriyuki Sato, OIST et al.
URL: http://www.ocn.oum.pl/tunicatemeting/index.php
June 26 Seminar at the Research Laboratory
"Deep-sea chemosynthetic endosymbiosis: emerging models for embiogenesis"
Speaker: Dr. Francois H. Lallie, PMC Univ, Paris 6 & CNRS UMR
Organizer: Dr. Noriyuki Sato, OIST
OIST Volunteer Activity

As part of community involvement, OIST researchers have begun to volunteer at Miyazato Elementary School in Okinawa City in the English conversation club and in classrooms. On June 10, Japanese researchers and staff from the Human Developmental Neurobiology Unit and the Developmental Signalling Unit each helped a teacher mark math and kanji drills. On July 1, Dr. Jeff Wickens, Principal Investigator of the Neurobiology Research Unit, and Dr. Mary Ann Price, Principal Investigator of the Developmental Signalling Unit, as well as Dr. Zacharie Taoufiq of the Information Processing Unit took part in the English club together with volunteers from the U.S.military.

Visit by Participants of Japan-China S&T Policy Seminar

On April 15, participants of the 6th Japan-China Science and Technology (S&T) Seminar visited OIST. The annual seminar, which took place April 13-17 in Okinawa, brought together S&T policy makers from Japan and China for policy planning, promotion of S&T foundation building, and enhancement of a bilateral network through an opinion exchange. Among the Japanese delegates who visited the campus construction site etc. was Dr. Akito Arima, the co-chair of the OIST Board of Governors.

Campus Update

Construction of Laboratory 1 and the Center Building is almost complete, with the interior fit-out work being carried out. The initial use of the facilities is expected for early next year.

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