

Divisional Major Achievements (Academic Year 2007)

Divisions	Achievements
Graduate School / Faculty of Arts and Letters	The Abe Jiro Memorial Prize for Essays by a Young People was inaugurated for the Centenary Anniversary of Tohoku University. Associate Professor Kyoko Haga was awarded the Herend Prize 2007 by Collegium Mediterrainstrum. Four International COE Symposiums on "Social Stratification and Inequality" were held.
Graduate School / Faculty of Education	"Toward Improving Academic Competencies in Asian High Schools :Japan, Korea, Taiwan, Singapore and Mongolia" in the International Symposium.
Graduate School / School of Law	7 th World Congress of IACL (Athens) by Science Council of Japan COE International Symposium of Gender Equality and Social Diversity Rapport aux 7emes Journées Franco-Japonaises (Paris) Conclusion on the Yokohama Round Table of IACL.
Graduate School of Economics and Management / Faculty of Economics	We started a program "Promoting Human Resources on Innovation in Service Industries (sponsored by JSPS)". "Graduate Program on Environmental Frontiers (sponsored by JSPS)" started by cooperating with Graduate School of Environmental Studies.
Graduate School / Faculty of Science	Prof. Eiji Ohtani was awarded N.L.Bower Award 2007, for his pioneering work on the physical and chemical properties of earth materials, under deep earth conditions. Prof. Mitsuo Kira was awarded the Purple Ribbon Medal for his research in organosilicon chemistry. Prof. Takakiyo Nakazawa was awarded the Miyake Award and the Shimadzu Award, for his excellent achievement in greenhouse gas research. Associate Professor Tateo Moroi was awarded the Nishinomiya-Yukawa Memorial Award, for his research on the effects of gravitino on the evolution of the universe. Assistant Professor Yoshikata Kida was awarded the Inoue Research Award for Young Scientist for his study of the mapping class group from the viewpoint of measure equivalence theory.
Graduate School / School of Medicine	Identification of translational suppressor 4E-BP1 as a factor promoting pancreatic β cell survival. Symposium on Local Medical System #4 Building up the doctors' career design. Train the doctors in community. Tohoku Foster Plan for Cancer Specialists was established. Prof. Masayuki Yamamoto received the 18 th Tsukuba Prize.
Graduate School / School of Dentistry	MEXT Research and Education Funding "Highly-functional Interface Science: Innovation of Biomaterials." Prof. Fukumoto received Minister of MEXT Award 2007 (Science and Technology, Young Scientist). Development of the Regional Oral Health Promotion Office with Miyagi Pref. and Sendai City. Publication of "Interface Oral Health Science 2007"
Graduate School of Pharmaceutical Sciences / Faculty of Pharmacy and Pharmaceutical Sciences	Prof. Tetsuya Terasaki received ""The Academy of Pharmaceutical Science and Technology, Japan Award" and "The Japanese Society for the Study of Xenobiotics Award." Prof. Hidetoshi Tokuyama received "The Commendation for Science and Technology by MEXT (Young Scientist's Prize)." Prof. Sumio Otsuki received "The Gold Medal Award" from Tokyo Techno Forum 21."
Graduate School / School of Engineering	Prof. Kazuo Hokkirigawa was awarded the prize of Minister of science and technology policy. Analysis of traction mechanics and development of a slip compensation control for lunar/planetary rovers (Prof. Kazuya Yoshida G). Realization of Stable Quadruped Gait Transition By Changing Body Stiffness (Prof. Akio Ishiguro G). Towards establishing a venture company with non-destructive analyzing systems (Prof. Keisuke Asai G). Al Alloys for Hydrogen Generation Successfully Developed.(Prof. Kiyohito Ishida G). Cu-Mn alloys can drastically improve the performance and reliability of LCD panels (Prof. Junichi Koike G). Application of earthquake early warning system in schools (Prof. Masato Motosaka G).
Graduate School of Agricultural Science / Faculty of Agriculture	Prof. Ikuo Ikeda was awarded the Japanese Society of Nutrition and Food Science Prize 2008 for "Physiological functions of food components preventing atherosclerosis." Associate Prof. Hideki Takahashi was awarded the JPS Prize 2008 for "Study on the molecular interaction between CMV and host plants". Involvement of the Arp-Ino80 complex in DNA replication and genome stability (Assoc. Prof. Harata G).
Graduate School of International Cultural Studies	Joint Workshop on "Japanese Culture" by Graduate Students of Chung-Ang-University (Korea) and Tohoku University (GSICS). Lecture Forum on "the European Union" by Christophe PENOT, Minister-Counsellor, French Embassy.
Graduate School of Information Sciences	Cooperative Support for Asian IT Student Career Route by MEXT-METI ASIST program. Symposium on "Research Activity and Morality" was held for development of all faculty members. OB and incumbent faculty cooperative seminar on "Science Integration" was held.
Graduate School of Life Sciences	Established the "Basic & Translational Research Center for Global Brain Science" as a global center of excellence (GCOE) for life science fields. (Cooperated with the Graduate School of Medicine) Shedding blue light on algal gene expression. -AUREOCHROME, the new blue light receptor of Stramenopiles-

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Graduate School of Environmental Studies	Environmental Forum (13 th ~ 15 th) "Global warming and sustainable manufacturing" etc. 5 th Environmental Technology Symposium "Global warming — Life Style and Industry."
Institute for Materials Research	Giant spin Hall effect in perpendicularly spin-polarized FePt/Au devices. Li superionic conductivity in hydride. Different drive mechanisms of domain wall motion -Step toward MRAM- Formation mechanism of dendrite crystals with parallel twins and its implementation to the crystal growth method to realize high-quality Si multicrystals for solar cell applications.
Institute of Development, Aging and Cancer	Identification of a novel cell-surface receptor regulating allergic responses. We found IL-10 gene transfer reduces acute allograft rejection in a rat lung transplant model.
Institute of Fluid Science	7 th International Symposium on Advanced Fluid Information and 4 th International Symposium on Transdisciplinary Fluid Integration. Development of damage-free nano-process using neutral beam.
Research Institute of Electrical Communication	Emeritus Professor Fujio Masuoka was awarded the Purple Ribbon Medal in spring 2007. Prof. Kazuo Tsubouchi received the "Minister of Education, Culture, Sports, Science and Technology Award" in the Award for Persons of Merit in Industry-Academia-Government Collaboration in FY2007. Associate Professor Yuzo Ohno received the "Marubun Science Award" in FY2007 from the Marubun Research Promotion Foundation.
Institute of Multidisciplinary Research for Advanced Materials	Post-Silicon Materials and Devices Research Alliance was started under 4 different institutes in different universities. Center for Advanced Microscopy and Spectroscopy and Center for Advanced Nitride Technology were reorganized. Res. Prof. T. Fukuda was awarded The Czochralski Gold Medal and The 57 th Kahoku Bunka Prize. Big project, Development of Ultra-Hybrid Materials, was started, and also concentrated research laboratory was founded.
Center for Northeast Asian Studies	Demining sensor ALIS and its deployment in mine fields in Croatia.
Center for the Advancement of Higher Education	CAHE developed and held a laboratory subject entitled "Introductory Science Experiments for Humanities" for first-year students in humanities course (Faculty of Arts and Literature, Education, Law, and Economics). CAHE established "Advanced Mathematics Course" which stresses mathematics seminar in order to implement small and high-level extracurricular class.
The Center for Academic Resources and Archives	Interchange program on facilitating museum education runs with the Smithsonian National Museum. A long term monitoring of Aobayama was started under a co-operation with Ministry of the Environment.
International Advanced Research and Education Organization	Start of nurturing for excellence young researchers in interdisciplinary areas by selection of "Master's course students of the Institute", employment of "Research Fellows" and etc.
Cyclotron and Radioisotope Center	Successful development of a semi-conductor animal PET scanner of ultra high resolution "Fine PET".
New Industry Creation Hatchery Center (NICHe)	Prof. Migaku Takahashi received prize from Minister of MEXT. The Tohoku University Business Incubator (T-Biz) sponsored by Small & Medium Enterprises and Regional Innovation - JAPAN(SMRJ) was inaugurated.
Center for Interdisciplinary Research	Success in the fabrication of vertical blue-light-emitting diodes by chemical lift-off technique
Cyberscience Center	Reference of sample policies for information security measure for universities.
Tohoku University Library	Special exhibition, "Tohoku University Treasures" and "A Great Novelist Natsume Soseki" held to commemorate the Centenary Anniversary of the University. TOUR (Tohoku University Repository) providing more than 20000 items.
Tohoku University Hospital	Building up a foothold of translational research based on cooperation with medical science and engineering-Tohoku University Innovation of New Biomedical Engineering Center - has been established. DMAT (Disaster Medical Assistance Team) had been dispatched to the Niigata Chuetsu Offshore Earthquake. Regional emergency medical treatment system promotion project had been reinforced by Emergency Center. (Miyagi Prefecture and Sendai City). Opinion exchange meeting for the promotion of equality in cancer treatment was held. Regional medical treatment cooperation conference was held. Emergency Center public lecture for citizens was held. Training for "Cancer Medicinal Treatment", cancer expert pharmacist and nurse was held.
WPI Advanced Institute for Materials Research	Professor Inoue was elected as a foreign member of National Academy of Engineering. Professor Miyazaki was awarded the Asahi Prize.
Biomedical Engineering Research Organization (TUBERO)	Symposium commemorating completion of TUBERO project was held. A venture company originating from TUBERO "Clino" was established.