

This article focuses on activities in the BEANS Project that have been covered by newspapers, journals, and other media since the summer of 2010. The Japanese and foreign press have shown interest primarily in our achievements in biotechnology. The work by Associate Professor Shoji Takeuchi, director of the Life BEANS Center, on robots with a sense of smell and implantable blood sugar sensors has been making the rounds through various media outlets this past autumn. The following is some of the media coverage that we at the head office have noted thus far.

Research Achievements

Incorporating cell-based olfactory sensors in robots: an achievement of Shoji Takeuchi, associate professor at the University of Tokyo and director of the Life BEANS Center, researcher Nobuo Misawa, et al. An article on this achievement was published in the prestigious Proceedings of the National Academy of Sciences (PNAS) of the United States of America and was covered extensively in Japan. A list of the media coverage for the achievement is given below.



1) NHK TV, Good Morning, Japan, 9/24/2010; 2) NHK TV. NHK's six o'clock news. 9/24/2010: 3) TV Tokyo. World Business Satellite, 9/10/2010; 4) Nihon Keizai Shimbun, 8/24/2010, morning edition; 5) Nikkei Sangyo Shimbun, 8/24/2010, morning edition; 6) Nikkan Kogyo Shimbun, 8/24/2010, morning edition; 7) Tokyo Shimbun, 8/24/2010, morning edition; 8) Yomiuri Shimbun, 8/24/2010, evening edition; 9) Mainichi Shimbun, 8/24/2010, evening edition; 10) Asahi Shimbun, 9/3/2010; 11) The Chemical Daily, 8/24/2010; 12) Online article: Medical Design and Manufacturing Technology, Canon Communications; 13) Foreign press: *TechNewsDaily*; 14) Foreign press: Reuters; 15) Foreign press: New Scientist Tech; 16) Foreign press: the Brazilian newspaper Folha De S. Paulo, 8/24/2010; 17) Overseas scientific journal: Nature Materials, 8/23/2010, Research Highlights; 18) Overseas scientific journal: Nature Materials, October 2010, Vol. 9, p.78, "Oocytes as Sensors," PNAS, 107, 15340-15344 (2010); 19) Overseas scientific journal: the article "Olfactory Sensor" was selected for Popular Science's Best of What's New 2010 under the "Security" category, 11/22/2010; 20) Radio broadcast: NHK World Radio Japan, 9/20/2010, 14:10-14:30; 21) General magazine: DIME, no. 21, October 2010 (Shogakukan).

Developing an implantable blood sugar sensor: Shoji Takeuchi, associate professor at the University of Tokyo and director of the Life BEANS Center, et al. After its announcement in January 2010, this blood sugar sensor caught the attention of the foreign press at Exhibition Micromachine/MEMS and became prominent in the news once again when the achievement was covered in America's PNAS.

1) YouTube, *DigInfo* video news, 7/29/2010; 2) *Nihon Keizai Shimbun*, 10/5/2010, morning edition; 3) *Nikkei Sangyo Shimbun*, 10/5/2010; 4) Overseas scientific journal: *Royal*

Society of Chemistry NEWS, October 2010; 5) Foreign press: America's ABC News, "Glowing Beads," October 2010; 6) Online article: Medical Design and Manufacturing Technology, Canon Communications.



The glowing minibads can easily be seen through the skin of the mouse ear © Proc. Natl. Analt. Ect. UZA

Research achievements at the Life BEANS Center: the University of Tokyo and Mitsubishi Chemical Medience reported on the Center's success in developing a technique for fabricating bile canaliculi, p.11 of *Nikkei Sangyo Shimbun*, 12/6/2010.

On August 27, 2010, *Nikkei Sangyo Shimbun* published an article linked to Koji Miyazaki, associate professor at the Kyushu Institute of Technology and member of Life BEANS Kyushu, entitled "Thermoelectric materials that generate electricity through a small temperature difference, and their applications in wearable electronics."

Intellectual Property

The BEANS Project was recognized by *Nikkan Kogyo Shimbun* on 9/17/2010 for its pioneering efforts in the creation of intellectual property in an article entitled "Supporting intellectual property through cooperation among different disciplines."

Researchers

Two non-Japanese female researchers involved in the BEANS Project were profiled in the media.

•Khumpuang Sommawan, a researcher at Macro BEANS Center, was profiled in *Nikkan Kogyo Shimbun* October 15, 2010 in an article entitled "New technology research that transcends borders." After completing her undergraduate degree at Chiang Mai University in Thailand, Sommawan obtained a master's degree at the University of Bristol and a doctorate at Ritsumeikan University. She also worked at the University of Freiburg in Germany prior to participating in the BEANS Project.

•Heo Yun-Jung, a researcher at Life BEANS Center, received an excellent paper award for young researcher at the 27th Sensor Symposium on Sensors, Micromachines, and Applied Systems. Yun-Jung graduated from the Korea Advanced Institute of Science and Technology (KAIST) in South Korea and received her doctorate at the University of Tokyo.





Khumpuang Sommawan

Heo Yun-Juna