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**1. [Solicitation-type R&D Allocation to Become Flexible]** The CSTP (Council for Science and Technology Policy) (Chairman: Prime Minister Koizumi) will revise the system for allocating the solicitation-based R&D resources to researchers at universities and research institutions. By the revision CSTP intends to place more importance on creative research and young researchers. For example, part of the funds will be included in the researchers' salaries depending on their abilities. To be ready for the universities to be independent administrative organizations in 2004, CSTP is discussing the possibility of providing portions of researchers' salaries by solicitation-type research funds. This is to follow U.S. organizations', including NSF's, way of providing research funds to university researchers. In NSF's case, grant budgets may include up to half the salaries of researchers. The Council intends to promote research of world-class excellence by introducing the American-style competitive principle. (Summary translation of an article on Nihon Keizai Shimbun - 4/22/02)

**2. [Tohoku Techno Arch]** Tohoku Techno Arch is a Technology Licensing Organization (TLO) which is participated in by 13 universities and technical colleges in the seven provinces in Tohoku Area, having its core at Tohoku University. It professes itself as No. 1 TLO in the nation when it comes to university-industry collaboration. More than 50 cases of technology transfer occurred in three years. It has been making remarkable results in materials and electric/communication fields. (Summary translation of an article on Nihon Keizai Shimbun - 4/22/02)

**3. [Final Report on Making National Universities to be Independent Administrative Organizations]** The National Universities' Association held a special trustees meeting where they almost agreed to the final report compiled by MEXT (Ministry of Education, Science and Technology) on converting national universities to independent administrative organizations, with a remark, "The final report is agreeable to

the Association as a blue print of national universities under the internationally competitive environment in the 21st century. The Association agrees to enter into the stage of being ready for being independent administrative organizations." (Summary translation of an article on Nihon Keizai Shimbun - 4/13/02)

**4. [Industry-University Collaboration in Kansai]** The Nara Institute of Advanced Science and Technology (NAIST), three universities in Kansai, and about 40 private companies will, in collaboration, initiate development of new products and services, using biotechnology and IT. Their target is to launch 30 businesses in five years in health care and education fields, e.g., production of artificial bones and care service robots. (Summary translation of an article on Nihon Keizai Shimbun - 4/4/02)

**5. [University Invention-Oriented Venture Companies: 10 Percent of the U.S.]** The rate of the inventions made at universities in Japan to develop into establishment of venture companies is one tenth of that of the U.S. This is a passage from the report compiled by the Council for Industrial Structure, which discusses the way industry-university collaborate. To improve it, the council suggests to expedite fostering of personnel who are involved in technology transfer. (Summary translation of an article on Nihon Keizai Shimbun - 4/25/02)

**6. [More Patents in Post Genomic Field]** The survey conducted by the Patent Office has revealed that the number of patent applications in Post Genome field such as pharmaceuticals and regeneration-type medical treatment by application of human genome has sharply been increasing worldwide, and the number has exceeded 60 percent of the total number of patent application in biotechnology in 2001. Among them, the number in the United States was the highest in 2000, dominating more than 40 percent of the total number. The number for Japan, however, was behind China, which means that Japan is lagging behind other countries in basic technologies in bio industries. (Summary translation of an article on Nihon Keizai Shimbun - 4/13/02)

**7. [Transmission of 75 Movies in One Second]** NTT has developed an optical communication system that enables it to send 313 optical signals in one single optical fiber. Such large volume transmission is made possible only by limited equipment and with a cost of less than one tenth. They succeeded in transmission of 3.13 terabit per second so that 75 2-hour long movies can be transmitted in one second. (Summary translation of an article on Nihon Keizai Shimbun - 4/5/02)

**8. [Administrators and Researchers Circles Need to Change]** To solve the problem of BSE (Bovine Spongiform Encephalopathy: so-called mad cow disease), the Committee for Investigating BSE compiled a final report, which calls for importance of scientific risk evaluation. However, it is not so easy to materialize such evaluation because of the following reasons: the administrators in Japan historically have not allowed scientists and researchers to be involved in administrative decision-making, whereas they have used their signboard as expertise. So, those researchers who do not enter into policy making have been regarded as most useful. Ever since the Meiji era, Japan has been using science and technology as a useful tool for politics, economy, and

administration, but avoided reaching rational results based on science. On the other hand, researchers tend to focus on fulfilling their interest, and often forget to speak on public occasions at their own responsibilities. Also, researchers who like to speak in public have been looked down as persons who love to be the center of attention (this has been a negative factor in traditional Japanese culture). Now, however, Japanese academic circles have just begun to set up an ethical rule that a researcher act not as a member of an organization, but as an independent scientist or technologist and allow them to act based on their conscience. (Summary translation of an article on Nihon Keizai Shimbun - 4/13/02)

**9. [Eye on the Stars]** Astro-F, the nation's first infrared space telescope, has been unveiled by the Ministry of Science and Technology (MEXT)'s Institute of Space and Astronautical Science. The Astro-F is about 3.5 meters in height with a lens 70 centimeters in diameter. Once launched into space, the telescope is expected to pick up infrared signals to detect stars being born and also to discover planets with air in their atmospheres. The Institute is planning to launch Astro-F with the aid of an M-5 rocket in fiscal 2003. (excerpt from the Daily Yomiuri - 4/16/02)

**10. [Government to Develop More Powerful H-2A Rocket]** The government plans to develop a more powerful version of its H-2A rocket to boost payload capacity for flights to the International Space Station by attaching two main engines to it. The improvement was chosen because its cost will be nearly 10 percent lower than enhancing the payload capability of the H-2A with a liquid rocket booster developed by NASDA (National Space Development Agency). The government is likely to formally adopt the new plan around June. (Excerpt from the Daily Yomiuri - 4/7/02)

**11. [Vodka Leads to Nanotube Breakthrough]** A Tokai University research group led by Prof. Yoichi Hirose has succeeded in synthesizing carbon nanotubes from vodka and whisky with simple equipment. With the successful experiment, it appears possible that the ultrafine carbon tubes, which currently cost several tens of thousands of yen per gram, could be produced cheaply and in large quantities in the future. Hirose's team put an electric heating tube and a nickel sheet in a glass bottle filled with alcohol vapor. After the tube was heated to about 2,000 C, soot formed on the nickel sheet. Some of the soot formed carbon nanotubes. (Excerpt from the Daily Yomiuri - 4/4/02)

**12. [Public Schools Start 5day Week]** The government's new curriculum for public primary and middle schools kicked off in earnest on April 5 to continued criticism of the shortened school week, with much of the opposition coming from parents and local governments. The new system is built on two pillars - a five-day week that allows students to take Saturdays off, and a pared-down set of teaching guidelines that allows schools to adapt to the shortened week. The government believes the curriculum will help children take the initiative in their education. (Excerpt from the Daily Yomiuri - 4/6/02)

**13. [Isahaya Bay Dike Opened for Study]** The Agriculture, Forestry and Fisheries Ministry (MAFF) opened the drainage gates of a dike in Isahaya Bay in Nagasaki

Prefecture for the first time since 1997. The reopening is part of a study of the causes of the poor seaweed harvest last year in the Ariake Sea, of which the bay is part, in connection with the bay's ongoing state-run reclamation project. The study, which ends in June, starts with the drainage gates on the south and north sides of the dike being lifted to release seawater into the freshwater reservoir. While keeping the freshwater level inside the reservoir at between one meter and 1.2 meters below the seawater level, the incoming seawater will replace the fresh water at a rate of about 8 million tons a day over the next month. (Excerpt from the Daily Yomiuri - 4/25/02)

**14. [Japan, U.S. Studying Air Pollution]** The National Space Development Agency of Japan, Tokyo University and the U.S. National Oceanic and Atmospheric Administration embarked on a joint investigation to learn how air contaminations, including nitrogen oxide from China - which is believed to be the cause of acid rain in Japan - are spreading. (Excerpt from the daily Yomiuri - 4/22/02)

**15. [Kyoto Univ. Researchers Find Potential Cure for Osteoporosis]** A team of researchers at Kyoto University has determined through experiments using mice that a protein called EP4 helps regenerate bones. EP4 is one of four receptors that mediate bone formation in response to physiological activator prostaglandin E2 (PGE2). The finding is expected to be used to treat about 10 million patients suffering from osteoporosis and prevent future cases. (Excerpt from the Daily Yomiuri - 4/29/02)

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