

A Detailed Report on

BioJapan 2012

World Business Forum

New Era of Open Innovation in Asia

2012.10.10 Wed.-12 Fri.



Pacifico Yokohama



1. Summary

The BioJapan 2012 World Business Forum, titled "New Era of Open Innovation in Asia," was a major event that was held over three days from October 10 (Wednesday) – 12 (Friday), 2012 at the Pacifico Yokohama Exhibition Hall and Annex Hall. This year marked the 14th BioJapan, which was started in 1986 and is the longest-running international comprehensive biotechnology event in Japan. The event is organized by the BioJapan Organizing Committee comprising eight biotechnology-related organizations, and is operated by ICS Convention Design, Inc. This year as well, the City of Yokohama and Kanagawa Prefecture, where the event was held, were special co-sponsors and supporters of the event, and provided overall support. Sponsorship and support for this major event was also received from a total of 65 Japanese government organizations (including the Ministry of Economy, Trade, and Industry), embassies from foreign countries, and other distinguished organizations. The number of participating countries was 22 (including Japan), and the number of exhibitors and companies participating in partnering was 541. The event was visited by 12,369 persons, exceeding the number of visitors by 150% from the previous year. The large number of visitors included representatives of industry, governments and related organizations, academia, and biotechnology organizations and clusters, making this the largest BioJapan event ever. In particular BioJapan 2012 represents a large transformation into Asia's largest business matching event. Approximately 900 persons participated in the business partnering activities, and approximately 3,400 meetings were held (compared to approximately 1,600 the previous year). It is certain that BioJapan has established a firm place in the culture of the biotechnology industry in Japan, and is making a great contribution to the growing status of open innovation by business matching in Japanese culture.

2. Opening Ceremony

Guests at the opening ceremony included Ikuro Sugawara – Director-General of the Manufacturing Industries Bureau at the Ministry of Economy, Trade and Industry; Kiyotaka Mitsuda – Director of the City of Yokohama Economic Affairs Bureau; and Takao Abe – Mayor of the City of Kawasaki.

Michio Oishi, Chairman of the BioJapan Organizing Committee (and Chairman of the Japan Bioindustry Association), delivered an address on behalf of the event organizer. "I am very pleased that we are able to hold BioJapan 2012 with representatives attending from 22 countries around the world. I am also particularly delighted that the Nobel Prize in Physiology or Medicine was recently awarded to Professor Shinya Yamanaka of Kyoto University, who has worked closely with this field. There is no doubt that biotechnology is an industry with great future potential, including regenerative medicine such as Professor Yamanaka's iPS cells, personalized medicine, the creation of new crops through new methods of breeding, and the development of bio-fuels. This year we have incorporated new directions for this event to suit the new Biotechnology Age. We have focused on updating the organizer's seminars with completely new subjects, expanding and improving the convenience of our matching system, attracting the participation of major overseas pharmaceutical manufacturers, and promoting attendance by large numbers of Japanese bio-ventures and academic institutions."

A special guest of the event, Ikuro Sugawara, Director-General of the Manufacturing Industries Bureau at the Ministry of Economy, Trade, and Industry, delivered the following remarks. "Biotechnology has made great progress in recent years with increasingly advanced technologies such as IT and genome analysis technologies. As Japan becomes a super-aged society in the future, promoting industry in the biotechnology field will be essential if the country is to play a global leading role and achieve further economic growth. I hope that the companies participating in BioJapan will achieve many and great results."

The Director of the City of Yokohama Economic Affairs Bureau, Kiyotaka Mitsuda, introduced the efforts by Yokohama City in the area of life innovation, and the Mayor of the City of Kawasaki, Takao Abe, explained the efforts by Kawasaki City aimed at carrying out innovations in the three fields of life sciences, green innovation, and welfare.



Michio Oishi



Ikuro Sugawara



Kiyotaka Mitsuda



Takao Abe



Opening Ceremony

3. Keynote Speeches

This year three speakers were invited to deliver a keynote speech: President Isao Teshirogi of the Japan Pharmaceutical Manufacturers Association (President, Shionogi & Co., Ltd.), former FDA commissioner Andrew C. von Eschenbach (President, Samaritan Health Initiatives, Inc.), and President & CEO of Mitsubishi Chemical Holdings Corporation Yoshimitsu Kobayashi. They spoke about bio-innovation from Asia, the industrialization of science and technology in the 21st century, and the life science and green innovation programs of Mitsubishi Chemical Holdings.

Bio-Innovation from Asia

Isao Teshirogi (President, Japan Pharmaceutical Manufacturers Association)

According to statistical materials from the Asian Development Bank, the growth rate in Asian countries (excluding Japan) during 2011 – 2012 was larger than the combined growth rate of Japan, the United States, and Europe, and the GDP of Asian countries is expected to account for 51% of global GDP in the year 2050. We can see the same growth in the Asian pharmaceuticals market. From 1995 – 2010, there was rapid growth in total pharmaceutical sales in Asia even as the rate of growth in Japan slackened, and Asia including Japan now forms one of the largest pharmaceutical markets.

Under these conditions, the role that is expected of Japan is to provide superior pharmaceuticals and medical technologies to the nations of Asia, contributing to Asia in order to grow in partnership with it, and to return this growth to benefit the Japanese domestic market.

When we take an overall look at the Japanese pharmaceutical industry that we hope will make large contributions to Asia, we see that the biotechnology industry is positioned as a key industry in the life sciences growth strategy, and that this strategy is expected to generate 50 trillion yen in demand and employ 2.8 million persons. Japanese pharmaceutical companies are ranked No. 3 in the world in terms of new drug creation, and possess the only true R&D capability in Asia.

While pharmaceutical companies must focus on drugs for unmet medical needs, collaboration with universities, venture businesses, and government has become necessary in fields where new capabilities and expertise are required. The United States has achieved success in drug development based on a mutually beneficial relationship between venture businesses and pharmaceutical companies, and Japan should study these successful cases.

When we look at the development of revolutionary new drugs from Asia, we see that many Asian nations have addressed health care and biotechnology as part of their national policies, and that a large number of biotechnology clusters have been created. Each of the Asian nations is in the process of creating areas of expertise based on the country's unique characteristics. Half of the world's population lives in Asia, and the nations of Asia are geographically close, little affected by time zone differences, and are able to cooperate closely. The Japan Pharmaceutical Manufacturers Association conducts the Asia Partnership Conference of Pharmaceutical Associations (APCPA), and aims to promote bio-innovation in Asia so that the people living in Asia are able to provide revolutionary new pharmaceuticals developed in Asia to the Asian market.



Isao Teshirogi

Creating Solutions in the 21st Century of the Life Sciences

Andrew C. von Eschenbach (President, Samaritan Health Initiatives, Inc.,
Former Commissioner of the United States Food and Drug Administration)

Progress in biotechnology during the 20th century has contributed not only to medicine but to many other fields as well. For example, it has contributed to the creation of GM (genetically modified) crops in the agriculture field and to the livestock industry. It has contributed to the energy and environment fields, with bio-fuel supplied from GM algae and environmental improvements resulting from the creation of new plants. Progress in biotechnology has allowed us to construct a fast and effective bio-defense against bio-terrorism, infectious diseases, and other biological threats.

In this way, 21st century society can enjoy large benefits resulting from investment in the life sciences. General medicine is founded on correctly understanding a patient's illness on the genetic, molecular, and cellular level, and this understanding also makes it possible to correctly conduct personalized medicine and provide highly accurate medical care.

An understanding of life sciences accelerates the three D's: Discovery, Development, and Delivery. Improving each of the three D's individually, conducting continual research and improving capabilities, and combining the results with a delivery capability, will allow us to achieve our future objectives.

Cooperation among industry, universities, and government is also necessary in order to accelerate this circle. Universities must accelerate Discovery; industry must accelerate Development; and government health care systems must accelerate Delivery. One important element in this circle is intellectual property. Strengthening intellectual property requires that talented persons be employed in R&D, and education is key for this purpose. Development can be fostered by both public investment and private investment. Government policy is also necessary. It is possible for PMDA and FDA policy reforms to promote best use of available intellectual property and assets, and to accelerate the process.

The new concept of global level "competitive collaboration" is also needed. This requires the creation of a new network of collaboration as teams instead of the previous collaborative relationships between individuals.

Combining these elements will produce an interoperable integrated solution to overcoming disease.

Life Science and Green Innovation of Mitsubishi Chemical Holdings

Yoshimitsu Kobayashi (President & CEO, Mitsubishi Chemical Holdings Corporation)

Mitsubishi Chemical Holdings aims to achieve a kaiteki (comfortable) society based on three major business areas: performance products, health care, and industrial materials. We are conducting our kaiteki business centered on the three axes of technology, profit, and social responsibility. We can no longer operate our business without giving



Andrew C. von Eschenbach



Yoshimitsu Kobayashi

BioJapan2012

consideration to globalization and sustainability (global warming, exhaustion of natural resources, global population growth, and in Japan our aging society and decreasing population) in the environment surrounding our business. Japanese companies also require speed due to factors including the Great East Japan Earthquake, the shale gas revolution, and slowing growth in Europe and China. The global environment also faces a crisis that calls into doubt whether it can survive for another century. Resolving these issues will require a combined effort by governments, industry, and academia. There are only two ways for a company to achieve profits while contributing to society: differentiation and innovation. A company creates new value through a combination of open innovation and open business. Collaboration is necessary not only on the research level, but also on the business level as well. It is necessary to combine closed and open (standardized) approaches, and from the beginning to carry out design with an image of the final product firmly in mind. The shift from "manufacturing products" to "manufacturing ideas" will be critical.

4. Reception Party

This year's reception party was a grand affair held at the InterContinental Yokohama Grand Hotel beginning at 6 PM on October 10 (Wednesday), the first day of BioJapan, and was attended by guests, exhibitors, matching members, and others involved with the event. On behalf of the event organizer, an address was given by Masafumi Nogimori, Vice President of the Japan Pharmaceutical Manufacturers Association. During the address, he explained that it is precisely because of the difficult conditions we face with declining financial conditions of various national governments and dark clouds in the prospects for economic growth, that now is the time for us to bring together the broad-ranging power of biotechnology across the environment, energy, food, and medicine fields.

He was followed by Peter Bramberg, Head of Life Sciences at Invest Sweden, who offered his congratulations to Japan's Professor Shinya Yamanaka. The stage was then given to keynote speaker Andrew C. von Eschenbach; Satoshi Miyamoto, Deputy Director-General at the Ministry of Economy, Trade, and Industry; Shigemi Ohba, Deputy Mayor of the City of Yokohama; Masao Kurokawa, Vice Governor of Kanagawa Prefecture; and Jun Miura, Deputy Mayor of the City of Kawasaki, who joined in a toast to kick off the reception



Reception Party



Masafumi Nogimori



Peter Bramberg



delivered by Koichiro Aramaki, Chairman of the Japan Association for Techno-innovation in Agriculture, Forestry, and Fisheries and President of the Japan Association of Bioindustries Executives. The eight recipients of the three Japan Bioindustry Association awards were also introduced, and the reception concluded in a festive atmosphere. The party also featured jazz performances, and ensured that the new BioJapan made a strong first impression.

5. Organizer's Seminars in BioJapan2012

The Annex Hall was the site of 20 organizer seminars, including those by the keynote speakers, as well as 18 sponsor seminars. These seminars were attended in total by approximately 5,500 persons. For the organizer's seminars, an eight-member planning committee was established, chaired by Michio Oishi, Chairman of the BioJapan Organizing Committee. This planning committee created a seminar plan that covered all the important trends in the biotechnology industry. The seminars gained the strong attention of the participants, with some seminars becoming quickly filled to capacity during the advance registration period. Details of sessions not described here can be found in BIOSCIENCE & INDUSTRY Vol. 71 (2013).

Life Innovation Summit

Construction and Global Promotion of Japan as an Innovative Problem-Solving Country

Coordinator: **Tatsumi Yamazaki** (Chairman of the Steering Committee, Japan Bioindustry Association)

Based on the title above, Mr. Yamazaki invited five panelists to discuss the following subjects.

1) Health Innovation and National Growth

Yoichiro Matsumoto (Secretary General, Cabinet Secretariat Office of Medical Innovation, Government of Japan)

The Office of Medical Innovation was established to serve as a control tower for carrying out projects in cooperation with government ministries and academia or industry. At present in Japan, academic seeds are not being linked to pharmaceutical production, and Japanese manufacturing technology is not being put to best use in medical devices. Japan must create a Japan Care Model that allows Japan to present its global top-standard medical care to the world.

2) Japan's STI Policy – The 4th Basic Plan of S&T –

Naoki Okamura (Executive Member, Council for Science and Technology Policy)

A system of three strategy committees has been established, and an "Action Plan" for fiscal year 2013 has been formulated, so that requests for budgetary appropriates from various government ministries are discussed and decided in accordance with key policy measures. We hope for continued active participation in such programs in the future.



Tatsumi Yamazaki



Yoichiro Matsumoto



Naoki Okamura

3) Creating Innovation

Ryoji Chubachi (Co-Chairman, Committee on Industrial Technology, Keidanren (Japan Business Federation))
Among the issues facing innovation in Japan are the lack of a "control tower," the zero-risk syndrome, a perception gap related to science, and personnel training.

4) Towards New Medical Innovations

Masafumi Nogimori (Vice President, Japan Pharmaceutical Manufacturers Association)
The pharmaceutical industry contributes to society in three ways. Although development periods are shorter in Japan, costs are higher. Most new cancer drugs are imports and Japan is lagging behind in its cancer research programs. We need collaborations and alliances involving industry, government, and academia at all stages from basic research to clinical applications.

5) Overcoming Issues in Japanese Medical Care

Osamu Nagayama (President, Japan Bioindustry Association)
Prevention, Intervention, and Rehabilitation are three important factors for Japanese medical care. Following the seminar, the members engaged in active discussion regarding the steps that need to be taken to achieve "Construction and Global Promotion of Japan as an Innovative Problem-Solving Country."



Ryoji Chubachi



Masafumi Nogimori



Osamu Nagayama

Green Innovation Summit

Coordinator: **Hideaki Yukawa** (Director, Research Institute of Innovative Technology for the Earth (RITE))

This summit described the conditions in the United States, where the introduction of bio-fuels made from cellulose to the market is not proceeding as initially expected even though these fuels should be among the top priorities of bio-refineries. It explained that the reason for the trouble is that while the price of manufacturing bioethanol compared to gasoline should be \$2.50/gallon, in fact the cost just for the diastatic enzyme catalyst is nearly \$5.00. At present in the United States, RITE process testing is under way for use of lactic acid, succinic acid, propanol, amino acids, and other green chemicals in addition to ethanol from cellulose. The objective is to achieve trial production in 2014 and the start of commercial production in 2015. The ethanol production cost is also expected to drop to less than \$2.50/gallon (DOE target cost: \$2.15/gallon).



Hideaki Yukawa

This session was conducted by the following four panelists, who presented a broad range of measures aimed at resolving resource, environmental, and energy issues that have swelled to a global scale.

1) IHI Programs for Using Technology to Resolve Global Environmental Problems**Tamotsu Saito** (President & CEO, IHI Corporation)**2) Tire Material Development Technologies for Contributing to a Sustainable Society****3) Kozaburo Nakaseko** (Senior Executive Officer, Sumitomo Rubber Industries, Ltd.)**4) Achieving the "Joy of Free Movement" and an "Affluent and Sustainable Society"****Michio Shinohara** (General Manager, Environment and Safety Planning Office, Business Planning Division, Honda Motor Co., Ltd.)**5) P&G Sustainability Overview****Ching-Gang Charles Peng** (Associate Director, R&D – Safety, Regulatory, Technical Relations, and Sustainability, P&G Japan K.K.)**Tamotsu Saito****Kozaburo Nakaseko****Michio Shinohara****Ching-Gang Charles Peng**

All of the members had conducted lifecycle assessment evaluations (including changes in land use). They focused attention on programs for identifying rate-limiting processes by quantifying the environmental impacts (including resource consumption and greenhouse gas emissions) of a company's product or system over its entire lifetime. On the subjects of biomass and biotechnology, the members shared high expectations for bio-refineries, with the development and use of bio-fuels expected to address energy problems, and the use of natural materials and changes to materials from renewable resources expected to address resource problems.

Cluster SummitModerator: **Tsuneaki Sakata** (Visiting Professor, Osaka University Cybermedia Center)

At this summit, representatives of four clusters reported on their operating strategies and the unique strengths of their individual clusters.

1) The Munich Biotech Cluster m⁴**Horst Domdey** (CEO, BioM Biotech Cluster Development GmbH)

The Munich Biotech Cluster m⁴ in Germany is the successor to the Munich Gene Center, and got its start by winning a 25 million-Euro prize at the BioRegio Competition held by the federal government in 1996. Since that time, it has constructed a successful record as a powerful partner in drug development, and has created more than 130 small- and

**Tsuneaki Sakata****Horst Domdey**

mid-size businesses to date. It carries out a personalized medicine business that departs from the previous blockbuster product approach, and aims to provide drugs that are tailored to the individual patient.

2) Bio Clusters—Strategic Development and Scientific Focus

James Cameron (Sales Director, Scottish Development International, Edinburgh BioQuarter)

Based on the plan for the first 25 years since it began operating in 1999, the Edinburgh BioQuarter in Scotland is in the process of constructing a large bio-business park containing a collection of hospitals, research institutions, and corporate laboratories. There are also increasing numbers of spin-out ventures from universities, and one-quarter of the 100 entries in September 2011 were spin-outs. The area is characterized by relatively little population migration, and the cluster has constructed a disease database of Scotland residents covering 35 years. It has also been conducting cohort studies with the University of Edinburgh and other institutions for more than 10 years, making use of this database in pharmaceutical company biomarker development.

3) Biomedical Sciences in Singapore—A Springboard into Asia and Beyond

Kevin Lai (Director, Biomedical Sciences Group, Singapore Economic Development Board)

The Singapore Economic Development Board is dedicated to translational clinical research and to the development of the necessary human resources for that purpose. It also works for infrastructure construction and the optimization of regulations in the manufacturing industry, and is capable of conducting Phase II clinical trials in just 4 – 6 weeks. Over the past 20 years, it has attracted 10 billion dollars in overseas capital, and developed 70 billion dollars of products. In 2012, its efforts led Chugai Pharmaceutical Co., Ltd. to establish an antibody laboratory in Singapore.

4) Biotechnology in North Carolina

Bill Bullock (Vice President, Bioscience Industrial Development, North Carolina Biotechnology Center)

The North Carolina Biotechnology Center in the United States was established in 1984, with a focus on agri-biotechnology. It has invested 1.5 billion US dollars in collaborations with the faculties of medicine and veterinary medicine at 16 universities including Duke University. Beginning 10 years ago, it began accepting private capital, and is now focusing on personnel development using the BIOIMPACT network that joins together 36 US universities.

5) Current Status and Opportunity for Health-bio Cluster in Okinawa

Daiya Miyazato (Special Associate Professor, Integrated Innovation Center for Community, University of the Ryukyus)

This health biotechnology cluster was established in Okinawa in 2010. During the coming 10 years, it will collaborate with biotechnology clusters in the prefecture and across Japan, aiming to be a center for creation of a health biotechnology industry that will help Okinawa contribute to the health and long lives of people in Asia. For this purpose, it has constructed a network with 100 health biotechnology



James Cameron



Kevin Lai



Bill Bullock



Daiya Miyazato

companies in Okinawa Prefecture, conducted industry site concept meetings and launched problem-solving working groups, and is active at the forefront of educational and other activities.

*

The panel discussion included comments from each of the representatives concerning the primary problems involved in collaborations with Japan, and confirmed the continued importance of ensuring good collaborations that proceed smoothly without significant problems, and of building up a record of successful collaborations in the future.

Functional Food Summit

Health Claims of Functional Food Products: Systems and Science from an International Perspective

Coordinator: **Toshio Shimizu** (Professor, Faculty of Health and Human Life, Nagoya Bunri University)

1) Scientific Substantiation of Health Claims on Foods and the International Comparison

Toshio Shimizu (Professor, Faculty of Health and Human Life, Nagoya Bunri University)

On the subject of food functional claims, Mr. Shimizu explained the classification (definition) of functional food products in Japan, and the perspectives of the Codex, EU, US, and Chinese systems.

Although the Japanese system is scientifically and legally reasonable and is highly consistent with the systems in other countries, areas for future improvement include expanding health claims, the limited-period permit system for designated health foods, and the notification system for foods with nutrient function claims.

2) Regulation and Scientific Substantiation of Health Claims on Foods in the EU

Albert Flynn (Chairman, EFSA Health Claims Evaluation Committee)

Mr. Flynn explained the role of the European Food Safety Authority (EFSA) in regard to EU regulations on health claims, and examples of EFSA health claims. Through the EFSA, the EU has approved 241 health claims.

3) The Current Situation and Problems of Health Claims in Japan

Reiko Yonekura (Health inspector, Food Labeling Division, Consumer Affairs Agency)

Ms. Yonekura spoke primarily to organize the points of argument from the Health Food Investigative Commission regarding functional claims in Japan.

The science and government policy on food safety rely on regulatory science in order to function, and functional claims require an understanding of government policy, science, and consumers.

4) History and Future of the Health Food Development in Hokkaido

Ken-ichi Kosuna (President, Hokkaido Association for Bio-Business)

Hokkaido bio-clusters have been highly rated as Mature Clusters (second rank from the top). Mr. Kosuna explained his request for



Toshio Shimizu



Albert Flynn



Reiko Yonekura



Ken-ichi Kosuna

allowing special cases of claims based on Hokkaido approval for products manufactured in Hokkaido only when the scientific basis for a health claim is certified in Hokkaido.

6. Business Partnering

There were 868 partnering participants at this year's BioJapan, making it the largest business matching event in Asia. During the event, 627 persons from 22 countries/regions were registered in the matching system (compared with 310 persons in the previous year's event), and approximately 3,400 meetings were held (compared to approximately 1,600 in the previous year). Most of the major and key pharmaceutical manufacturers from Japan and overseas participated, and there were many participating companies and institutions in the green innovation field. BioJapan was the first event in Japan to provide a web matching system, and this system is now used as a mechanism for supporting open innovation including technology transfer, joint research, and business collaborations.

A new highly convenient web matching system was developed for this year's event based on past experience. A special partnering area was set up next to the exhibition space, and the number of meeting booths was increased to 120. A fee is now charged for system use, which was previously free, ensuring a forum for participants who are enthusiastic and serious. The system has received high praise from many of the participants.

In the meeting booth



The space of Business Partnering

7. Partnering Party – Yokohama Blue Night Party

As an additional opportunity to promote partnering in addition to the web matching system, a party for matching members was held on the second day of the event, October 11 (Thursday), from 18:00 – 20:00. It was held in Osanbashi Hall and was attended by approximately 400 participants. In order to produce a more open feel, there was a greater focus on entertainment than at previous BioJapan events, with a dress code that required participants to wear blue, as well as blue charity chemical lights, cocktail performances, and jazz music by top-class musicians. In this festive atmosphere, many participants were seen actively introducing themselves and exchanging information, and the event was kept lively by persons who continued with active communication up until the very end. Osanbashi Hall offers a spectacular night view of Yokohama, and the event was also highly popular among participants from overseas.



Yokohama Blue Night Party

8. Alliance Promotion and Metropolitan Bio Network Japan Booths

The Alliance Promotion in BioJapan 2012 (business partnering session), Metropolitan Bio Network Japan booth exhibition, and Metropolitan Bio Network Japan International Partners program were held over three days from October 10 (Wednesday) – 12 (Friday). These programs represent one part of the "2012 Grant for Promoting Creation of New Local Growth Industries (New Local Growth Industry Project)," a business subsidy project of the Kanto Bureau of Economy, Trade, and Industry.

Alliance Promotion is a forum for using links with biotechnology clusters from around the country to introduce the core competences, business plans, and other elements of bio-ventures from all parts of Japan to Japanese and overseas pharmaceutical companies. It was held for the purposes of facilitating the formation of alliances, M&A, joint research, and other collaborations, creating connections for acquiring funding, and accelerating the pace of business creation.

This year featured the Metropolitan Bio Network Japan International Partners program as an opportunity to promote expansion of bio-ventures overseas. Materials from embassies in Japan and other sources introducing each country's technical seeds and needs were installed in the Alliance Promotion and Metropolitan Bio Network Japan booths, aiming to help create a network for connecting with overseas clusters, bio-ventures, and other entities.

In total, 36 bio-ventures from across Japan and eight overseas institutions operating in drug development, drug development support, medical care, and other areas of the biotechnology industry participated in the BioJapan exhibition. During the three-day event, 62 sessions were conducted (with 20 of the oral presentations conducted in English), and a total of 1,062 persons attended the sessions. This year saw an increase in the number of English oral presentations, and all of the presenters were focused on finding alliances over a broad range both in and beyond Japan.

Metropolitan Bio Network Japan operates as an organization that supports the creation and growth of bio-ventures in the greater Kanto metropolitan area. As one part of its operations, it provides support for exhibits at events – an otherwise large burden on a venture company. It also conducts joint exhibitions together with bio-venture companies that contribute to expanding sales channels. This year, a total of 21 promising bio-ventures from a wide range of fields across the country exhibited through Metropolitan Bio Network Japan booths, including eight drug development companies; five companies offering drug development support and contracted services; four companies in the medical care, diagnosis, medical device, and health care field; and four companies in the machine and manufacturing field.

A total of 10 institutions exhibited in the Metropolitan Bio Network Japan International Partners zone, including six from Europe, two from Asia, one from the United States, and one from Australia.

The matching system was also updated for this year, and the matching system and Alliance Promotion were linked together. The booth exhibition area was extremely active, with a large number of business meetings taking place in the booths and producing agreements and other results.



Alliance Promotion

9. Presentations from Academics to Introduce Seeds

This year marked the fourth time that the Academic Seeds Presentation was held, aimed at generating joint research between industry and academia and accelerating the pace of technology transfer. In total, 18 research institutions participated. These institutions were Kyoto University, Tokyo Institute of Technology, University of Tokushima, University of Tsukuba, Tohoku University, Tokyo University of Science, medU-net (Japan Association of Medical University Network for Technology Transfer), Tokyo Medical



Academic Seeds Presentation

& Dental University, University of Toyama, Sapporo Medical University, Shiga University of Medical Science, Tokai University, Nagasaki University, St. Marianna University School of Medicine, Kurume University, Hamamatsu University School of Medicine), National Cerebral and Cardiovascular Center, National Institute of Advanced Industrial Science and Technology, and RIKEN. In addition, the following organizations all presented their latest research results: Okayama University, Tokyo University of Technology, Fukushima University, Kyoto Pharmaceutical University, Yokohama City University, Nagoya Institute of Technology, Nagoya City University, University of Yamanashi, Kumamoto University, Saga University Medical School, Tohoku University Micro System Integration Center, The Hokuriku Industrial Advancement Center, Tokyo Metropolitan Institute of Medical Science, Japan Science and Technology Agency, and Chemicals Evaluation and Research Institute, Japan. The presentations covered a broad range of subjects including medical diagnosis methods, medical treatment, drug development, food products, bio-refineries, and biomass. The participating universities and institutions were highly active over the three days, making full use of BioJapan through presentations of their research at the booths, participation in the matching system, and other means to expand opportunities for projects such as joint research, joint development, and other programs.

10. Exhibition

This year the layout was reviewed and the matching booths were moved to the partnering venue in Hall C, making it possible to use all of Hall D as space for exhibitions and presentations. Steps were also taken to promote business interaction and improve convenience for both visitors and exhibitors, including use of a free LAN service in the venue, and restoration of the lounge space. Attendance was further boosted by reinforced advance publicity activities, and by



broad coverage of the event in television and newspapers sparked by the increased interest in exhibitions related to iPS cells and regenerative medicine following the announcement of the Nobel Prize in Physiology or Medicine. The usual happy hour was combined with the partnering party and moved to a different venue, and some exhibitors provided their own food and drink services at the booths as an opportunity for further communication.



11. Postscript

This year the event was blessed by favorable weather over all three days, and there was a large increase in the number participants over the previous year, reaching 12,369 persons. Moreover, the event finished on schedule amidst great fanfare. This was entirely due to the cooperation and support received from the exhibitors, lecturers, co-sponsoring and supporting local governments and ministries, the visitors, and to everyone else who was involved, and we would like to express our sincere thanks. In particular, there was a dramatic increase in the number of partnering meetings resulting from the event. This year's event produced a large number of results. Again this year, with the cooperation of the Japan Pharmaceutical Manufacturers Association, many representatives of the major and key pharmaceutical companies participated in alliance booth exhibits, and also participated in the partnering event, coming to the venue in order to create alliances. More companies and institutions than in previous years also participated for the first time in the green innovation field, and the new business matching system functioned as expected and was welcomed by the partnering participants.

We are certain that BioJapan clearly presented its intention to be one of the largest business matching events in Asia in the future. Following the event, many of the participants and visitors reported that the event had provided a foothold for business collaborations and joint research alliances. We were also pleased to hear of the large increase in high-quality business matching meetings that led to business negotiations.

The event was also boosted by the awarding of the Nobel Prize in Physiology or Medicine to Professor Shinya Yamanaka of Kyoto University just before the event period. This resulted in mass media and television coverage, and focused attention on the Regenerative Medicine zone and on the exhibitions and presentations where there was a gathering of medical universities that are involved with regenerative medicine. There were also reports of success in arranging technology transfer from the participants in the Academic zone as well. There are expectations for further expansion of the program for next year as an opportunity for presenting information about



BioJapan 2012

leading-edge research, and as an opportunity for creating alliances between academia and industry. The First Japan Biotechnology Professionals Conference was also held at the same time as this year's BioJapan, with nearly 100 of the top professionals in Japan from biotechnology organizations; bio-clusters; the Ministry of Economy, Trade and Industry; the Ministry of Education, Culture, Sports, Science, and Technology; local governments; supporting institutions; the industry; and related organizations all coming together for active discussion and exchange. The participants unanimously confirmed that this conference will continue to be held in the future as a permanent part of BioJapan and as a nexus for the activities of biotechnology professionals who are facing a broad range of challenges.

Reprinted and modified from BIOSCIENCE & INDUSTRY (B&I) vol.71(1).

© 2013 **JBA**