



## Original Article

## A report of the 17th congress of the Japanese Society for Regenerative Medicine

Shinsuke Ohba<sup>a, b, \*</sup>, Hironori Hojo<sup>a, b</sup>, Ung-il Chung<sup>a, b, \*\*</sup><sup>a</sup> Center for Disease Biology and Integrative Medicine, Graduate School of Medicine, The University of Tokyo, 7-3-1 Hongo, Bunkyo-ku, Tokyo 113-8655, Japan<sup>b</sup> Department of Bioengineering, Graduate School of Engineering, The University of Tokyo, 7-3-1 Hongo, Bunkyo-ku, Tokyo 113-8656, Japan

## ARTICLE INFO

## Article history:

Received 12 June 2018

Accepted 19 June 2018

## Keywords:

Congress report

Regenerative medicine

## ABSTRACT

The 17th Congress of the Japanese Society for Regenerative Medicine was held on March 21–23, 2018 at PACIFICO Yokohama (Kanagawa Prefecture) with 3860 participants. The theme of the congress was ‘The Integration of Wisdom from All Sectors.’ With this theme, this congress aimed to provide people from all sectors (including individuals from various industries, regulatory authorities, academia, and citizens) with opportunities for exchanging views on regenerative medicine under one roof. A broad spectrum of topics related to regenerative medicine was covered by one presidential lecture, one keynote lecture, one collaborative lecture by the Congress Chair and the Governor of Kanagawa Prefecture, three special lectures (six topics), four award lectures, 43 symposia (235 talks), 337 oral presentations (59 sessions), 358 poster presentations (43 sessions), 25 co-organized seminars (35 talks), two sessions for junior high school and high school students (basic and advanced), and the state-of-the-art technology showcase (158 organizations).

© 2018, The Japanese Society for Regenerative Medicine. Production and hosting by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

## 1. Objectives

The theme of the 17th Congress of the Japanese Society for Regenerative Medicine was ‘The Integration of Wisdom from All Sectors.’ This congress aimed to provide individuals from all relevant sectors — including industry representatives, regulatory authorities, academics, and citizens — with opportunities for exchanging views on regenerative medicine under one roof.

In general, there are various obstacles to applying new technologies to medicine, and the applications of more innovative technologies encounter larger and more numerous obstacles. Here is an example of conventional research and development (R&D): A

patient with an intractable disease, longing for new strategies that can cure the disease, anticipates the development of such therapeutic strategies. A researcher who has developed a new technology believes that the (seed) technology can answer that patient's need and hopes that some companies will soon apply the technology to clinical settings. In contrast, companies are reluctant to work on clinical implementations of new technology because of its risk; regulatory authorities are even more reluctant to review new products, when no evaluation criteria have been set.

Thus, the conventional R&D lacks the concrete cooperation of all the stakeholders including patients, doctors, researchers, industries, regulatory authorities, and more. This results, in a sense, in ‘relay-type’ collaborations between academia and industries. After one sector hands over the baton to another sector, the former sector often does not care about what the latter subsequently does; the batons are often dropped. To avoid this situation, we need a platform for ‘concurrent-type’ collaborations, where all of the sectors (stakeholders) are involved from the early stage of the R&D. Such a platform would diminish discrepancies between needs and seeds, generate a strong synergy between all of the sectors, and even turn one sector's difficulties into another sector's opportunities, and thereby reduce the cost and time for the industrialization of the products.

\* Corresponding author. Center for Disease Biology and Integrative Medicine, Graduate School of Medicine, The University of Tokyo, 7-3-1 Hongo, Bunkyo-ku, Tokyo 113-8655, Japan. Fax: +81 3 5841 1428.

\*\* Corresponding author. Center for Disease Biology and Integrative Medicine, Graduate School of Medicine, The University of Tokyo, 7-3-1 Hongo, Bunkyo-ku, Tokyo 113-8655, Japan. Fax: +81 3 5841 1428.

E-mail addresses: [ohba@m.u-tokyo.ac.jp](mailto:ohba@m.u-tokyo.ac.jp) (S. Ohba), [tei@bioeng.t.u-tokyo.ac.jp](mailto:tei@bioeng.t.u-tokyo.ac.jp) (U.-i. Chung).

Peer review under responsibility of the Japanese Society for Regenerative Medicine.

We definitely need such an ‘open innovation platform’ to realize the industrialization of regenerative medicine, which is the most challenging medical technology. The Japanese Society for Regenerative Medicine is expected to take a lead in creating such a platform now more than ever; it will connect and involve people with various interests from all of the sectors in a transparent manner, and help them move forward hand-in-hand. The 17th Congress of the Japanese Society for Regenerative Medicine was designed to provide opportunities to contribute to an open innovation platform through lectures, symposia, scientific presentations, seminars, showcases, and personal interactions among stakeholders.

## 2. Participants

There were 3860 participants in total. The congress had 3624 participants in the scientific sessions. The breakdown of the participants are as follows: 1796 general members, 258 graduate student members, 1324 non-members (1192 general and 132 graduate students), 142 junior-high-school, high-school, and undergraduate students, and 104 invitees. In addition, 236 students, teachers, and guardians joined the sessions for junior-high-school and high-school students (basic course, 107 students; advanced course, 34 students).

## 3. Lectures

The congress offered one presidential lecture, one keynote lecture, one collaborative lecture by the Congress Chair and the Governor of Kanagawa Prefecture, and three special lectures.

As the president of the Japanese Society for Regenerative Medicine (JSRM), Dr. Yoshiki Sawa (Osaka University) delivered the presidential lecture entitled ‘Developing Regenerative Medicine Universally’ (Chairperson: Dr. Tsuyoshi Takato, JR Tokyo General Hospital). The lecture reviewed the efforts that the JSRM has made over the last five years in bringing domestic legislation on regenerative medicine to fruition. Dr. Sawa also provided an overview of the on-going project commissioned by the Japan Academy for Medical Research and Development (AMED), ‘Formulation of Regenerative Medicine National Consortium Which Renders Nation-wide Assistance to Clinical Researches.’ The project consists of the following three pillars, which will contribute to ‘Developing Regenerative Medicine Universally’: (1) technical support for regenerative medicine clinical researches, (2) the development of human resources for regenerative medicine, and (3) the management and operation of regenerative medicine clinical research data systems.

The keynote lecture was delivered by Dr. Toshiharu Furukawa, a member of the House of Councilors, Professor of Keio University, and Attorney-at-law at TMI Associates (Chairperson: Dr. Yoshiki Sawa, JSRM President, Osaka University). Dr. Furukawa’s lecture, entitled ‘Future of the Regenerative Medicine in Difficult Japanese Economic Situation’ summarized the perspectives on the future of regenerative medicine, given the current status and future prediction of the economy and medical care cost, the progressive aging of the population, and legislation enacted or improved for regenerative medicine in Japan.

The Congress Chair Dr. Ung-il Chung/Yuichi Tei (The University of Tokyo) and the Governor of Kanagawa Prefecture Mr. Yuji Kuroiwa delivered a collaborative lecture. Dr. Tei first gave a lecture entitled ‘The Integration of Wisdom from All Sectors: The Construction of an Open-innovation Platform.’ He pointed out the drawbacks of conventional ‘relay-type’ collaborations in the development and application of medical technology, proposing ‘concurrent-type’ collaborations based on open-innovation

platforms, on which people with various interests from all of the sectors are connected and involved in a transparent manner, acting together hand-in-hand. In his lecture entitled ‘Kanagawa Vision for Industrialization on the Regenerative Medicine Field,’ Governor Kuroiwa then overviewed ‘Healthcare New Frontier Policy’ that the Kanagawa Prefectural Government has been developing in order to extend its citizens’ healthy life expectancy and create new markets and industries. The policy integrates two approaches: (1) improvement of ME-BYO, a new concept that the individuals’ mental and physical conditions change continuously between healthy and sick states, and (2) the promotion of the social implementations of advanced medical technologies.

Three special lectures included ‘Toward Social Implementation of Regenerative Medicine: Activities of Supporting Organizations’ chaired by Dr. Yoshiki Sawa (JSRM President, Osaka University), ‘KSSCR Presidential Session’ chaired by Dr. Yoshiki Sawa, and ‘Joint Session with TERMIS: Overview of TERMIS and TERMIS-AP Activities’ chaired by Dr. Yasuhiko Tabata (Kyoto University). ‘Toward Social Implementation of Regenerative Medicine: Activities of Supporting Organizations’ provided the following four topics: ‘State of the Industry’ from Dr. Robert Preti (Alliance for Regenerative Medicine; Hitachi Chemical Advanced Therapeutics Solutions; Hitachi Chemical Regenerative Medicine Business Sector, USA), ‘Academic Nation-wide Platform Which Delivers Regenerative Medicine to Bedside’ from Dr. Yoshiki Sawa, ‘UK Cell and Gene Therapy toward Commercialization’ from Dr. Hidetoshi Hosoya (Cell and Gene Therapy Catapult, UK), and ‘CCRM: A Collaborative Public/private Partnership Driving Commercialization in Regenerative Medicine’ from Dr. Mitchel Sivilotti (Centre for Commercialization of Regenerative Medicine, Canada). In the ‘KSSCR Presidential Session,’ Dr. Youngsook Son (President of the Korean Society for Stem Cell Research; Department of Genetic Engineering and Graduate School of Biotechnology, Kyung Hee University; Institute of Regenerative Medicine, Kyung Hee University Hospital, Seoul, Korea) delivered the lecture entitled ‘Trafficking of Endogenous Stem Cells for Tissue Repair.’ In the ‘Joint Session with TERMIS: Overview of TERMIS and TERMIS-AP Activities,’ Dr. Gilson Khang (TERMIS Global Chair-Elect) summarized the history of the Tissue Engineering and Regenerative Medicine International Society (TERMIS) and the activities of TERMIS-AP (Asia-Pacific Chapter).

## 4. The award lectures

The winners of the two JSRM Research Awards (clinical field and basic field), the JSRM Achievement Award, and the JSRM Johnson & Johnson Innovation Award gave short lectures about their achievements. The JSRM Research Awards were presented to Dr. Makoto Ikeya (Kyoto University) and Dr. Jun Takahashi (Kyoto University). The JSRM Achievement Award was presented to Dr. Mitsuo Ochi (Hiroshima University). The JSRM Johnson & Johnson Innovation Award was presented to Dr. Ryuji Kato (Nagoya University).

## 5. The symposia

The Congress offered 43 concurrent symposia (235 talks in total) including two joint symposia with the Consortium for the Advancement of Animal Regenerative Medicine and the Japan Research Association for Immunotherapeutics. The titles, organizers, and members of the symposia are listed in [Table 1](#). The symposia covered a broad spectrum of topics related to regenerative medicine: cutting-edge findings in stem cell biology, biotechnology, bioinformatics, and medicine; regenerative therapies and medical devices currently under development; the results and perspectives of clinically available products; regenerative therapies

Download English Version:

<https://daneshyari.com/en/article/8360827>

Download Persian Version:

<https://daneshyari.com/article/8360827>

[Daneshyari.com](https://daneshyari.com)