Heshan Forum underlines roles of stem cells

A two-day forum focusing on the prospects and major achievements of stem cells research and clinical trials was held in Jimo, Qingdao, Shandong Province from Sept. 14 to 15.

Richard John Roberts, a Nobel Laureate of Physiology and Medicine in 1993, addresses the opening ceremony of a two-day forum of life sciences on Thursday, in Jimo, Qingdao, Shandong Province. [Photo by Wu Jin / China.org.cn]

Officially titled Qingdao China-2017 International Annual Meeting on Biology and Medicine, also known as Heshan Forum, the workshop, proposed by Zhao Chunhua, doctor and chief scientist from Peking Union Medical College Hospital, attracted an outstanding line-up of biomedical luminaries. The presence of Richard John Roberts, the 1993 Nobel Laureate of physiology and medicine, has given prominence to the cross-country and interdisciplinary meeting.

As one of the critical breakthroughs in the sector of life sciences, the research, application and regeneration of stem cells is expected to save more people who are suffering from deadly diseases such as cancer, leukemia or diabetes.

Leukemia patients, who could only survive in many cases with a compatible organ donation chosen from a bank of millions, may in the future have a better chance of surviving by receiving marrows donated from their lineage

family members, Zhao introduced.

According to Martin Zenke, a professor of cell biology and chairman of the University Hospital Pauwelsstrasse, the science of artificial stem cell has a close relation with genetic engineering.

“It’s a big topic and we have different kinds of stem cells, conventional stem cells and unconventional stem cells, because we can make artificial stem cells,” he said.

“What is also very important is that the stem cells have property. When it grows, and it divides one stem cell into two stem cells. They can also change their identities to becomea different cell. This also goes together with the technology of genetic engineering, genetic editing with stem cells and engineering cells, which give us, the new bunch of cells and cell products,” he added.

Zenke’s interdisciplinary explanation has been echoed by Steve A. Kay, the provost professor of neurology, biomedical engineering and biological sciences of the University of Southern California.

“[We aim] to really pool together people from very different backgrounds, much broader than normal, from our cinema school, from our art, design school and our engineering school and our medicine school to really look at big and massive things like cancer and diseases related to aging,” Kay said.

“So, gathering as much patient data as we can on different diseases within a diverse population. We don’t think we know everything about health to solve these problems, so we are really interested in collaborating with institutions, individuals and government,” he added.

During the opening ceremony, two standardized programs, namely, “the clinical standard of mesenchymal stem cells (MSCs) transplantation for treating graft-versus-host-diseases (GVHD)” and “the clinical standard of MSCs transplantation for treating acute Myocardinal infarction” were launched and “the establishing of the biomedical sciences international alliance of the ‘Belt and Road’ initiatives'” was inaugurated.

In retrospect of China’s progress made in biomedical sciences and healthcare services, the forum, with an attendance of 600 people from both home and abroad, aimed to forge ahead with the exchanges and cooperation among the professionals.

Following Chinese President Xi Jinping’s remarks made in August, 2016, during which he reiterated that the policymakers should observe people’s healthcare demands as one of the top priorities on their strategic agendas, the Qingdao government mapped out an outline endeavoring to shape the coastal city’s medical and pharmaceutical layout within four years.

“China has spent lots of money on research, and I think this is because you have leaders who are technically savvy as they understand important modern technologies and they understand important sciences,” said Roberts.

The organizers of the forum have chosen Jimuo, the county-level city under the jurisdiction of Qingdao, as the venue for the annual biomedical workshop.