Since the first Deep Brain Stimulation initiative of Tsinghua University in 2000, PINS Medical has gradually established a multinational corporation with headquarters based in Beijing and international business center in Singapore. As an innovative high-tech enterprise with focus on neuromodulation, a variety of clinical products have been developed to date, which include stimulators for deep brain, vagus nerve, spinal cord and sacral nerve stimulation therapies. PINS Medical devotes itself to providing cutting-edge treatments for patients who suffer from neurological disorders such as Parkinson’s Disease, Epilepsy, Chronic Pain and OAB, etc.

As part of the "National Engineering Laboratory for Neuromodulation", PINS Medical works in close cooperation with Tsinghua University and the numerous affiliated clinical centers, becoming a center of attraction for a wide range of professional talents in areas of clinical research, innovative R&D and business management. Since 2008, PINS Medical has developed rapidly in becoming a leading brand in neuromodulation within the Chinese market, due to the success of its creative research platform that efficiently links basic research, R&D of novel products, clinical testing and market entry.

With an outstanding reputation as a high-tech healthcare corporation, PINS Medical has a primary mission for providing innovative, high-quality products and services for patients to improve quality of life. PINS, which stands for Programmable Implanted Neuromodulation Stimulator, is also an abbreviation of “Patient Is No.1 always”. This clearly presents the goal of PINS Medical for “restoring hope”, not simply as an innovation company but also across society to citizens.

Looking into the future with the continuous rise in incidence of neuropsychiatric disorders and increased social burden across the globe, PINS Medical along with local governments, research centers, companies and top academic scientists, are now developing and promoting innovative therapies worldwide.

www.pinsmedical.com  info@pinsmedical.cn
Milestone Celebrations

19th Amendment
In August 1920, Congress ratified the 19th Amendment. The legal validation for women’s voting rights has resulted, directly or indirectly, in the great advances women and other underrepresented groups have made in all spheres of public and private life.

Science—The Endless Frontier Report
In 1945, engineer Vannevar Bush created this extensive report for then-president Franklin D. Roosevelt. It provided many justifications for the value of the scientific endeavor and the ways it can support U.S. policy, and has had global and wide-ranging impact in government funding for the sciences in the years since its publication.

Earth Day
In 1970, Senator Gaylord Nelson of Wisconsin established the first Earth Day, an occasion to raise awareness about environmental concerns for individuals from all walks of life. In doing so, he began a national conversation about how best to protect America’s natural resources in the years to come.
engineering) to design and construct a microbial cell factory that will enable a clean, green, and efficient bioprocess for developing new drugs and for the biosynthesis of natural products.

As these research groups and the SCCE play a major role in developing China’s industries and defense systems, the school has received a lot of support from China’s central government. The SCCE has been awarded 126 grants totaling over RMB 100 million (USD 14 million) in the last five years from a number of government bodies, including the National Natural Science Foundation, the Ministry of Science and Technology, and the Ministry of Education.

**Stellar students and faculty**

The growing SCCE can now boast 514 Chinese undergraduates and nearly 50 international students.

It offers five undergraduate programs: physical chemistry, applied chemistry, chemical engineering and technology, pharmaceutical engineering, and energy and chemical industry. Classes are taught in both Chinese and English.

The applied chemistry program has been categorized as a national key program of China, while the chemical engineering and technology and physical chemistry undergraduates belong to the key programs of the Ministry of Industry and Information Technology.

The SCCE runs over three campuses and has 123 faculty members. It also has 245 Ph.D. candidates, over 430 Master’s students, and offers the Undergraduate Mentoring System network to help link students with professional mentors.

In its nearly 80-year history, the school has graduated more than 300,000 talented professionals including scholars, entrepreneurs, and government leaders. Graduates include the China’s former Premier, Li Peng, and Chinese Minister of Energy Yicheng Huang. A number of alumni have become academics at the Chinese Academy of Engineering and other well-known organizations.

**Successful collaborations**

The school has won a number of awards for its research, including two second-class prizes of the National Natural Science Award, a first-class prize in the Natural Science Award of the Ministry of Education, and an Outstanding Young Chemist Award.

Graduates from the SCCE have an employment rate of over 98%, and in the past five years, the school has undertaken more than 120 scientific research projects. The school been awarded nearly 100 national invention patents.

The SCCE’s undergraduate and graduate students have published 727 Science Citation Index (SCI) papers in last five years, of which 31 were ESI highly cited papers; and 8 Ph.D.s and 14 Master’s students received Excellent Thesis Awards from BIT.

“The SCCE’s fast-growing international reputation has qualified it as one of China’s most important platforms for scientific research and personnel training in chemical sciences and engineering,” says Zhang.

As part of its expanding global outreach, the SCCE has collaborations and partnerships with several research institutions. It has recently implemented “2+2” joint education projects with Canada’s largest engineering school, the University of Waterloo, and with Queen’s University in the United Kingdom. Students who are part of these projects will be trained and granted bachelor degrees from both universities.

“We have also launched China’s first ‘Triple One Center,’ focused on special molecules, nanoscience, and technology,” adds Zhang.

The Triple One Center, based at the Beijing campus, brings together the expertise of international academics to stimulate joint research projects.

“Because of this center, several foreign professors, including Omar M. Yaghi from the University of California, Berkeley Wolfgang Knoll from the Austrian Institute of Technology, and J. Fraser Stoddart from Northwestern University in the United States, were recruited to our program as adjunct professors to stimulate scientific interaction and collaboration,” says Zhang.

Zhang says that the SCCE is preparing to bring even more international academics to the Triple One Center in the near future to boost its research.

The SCCE programs also have close ties with other schools at BIT, including the Schools of Materials Science and Engineering, Physics, Mechanical Engineering, and Mechatronical Engineering.

**Big ambitions**

With a long-running history that has seen a number of mergers and reinventions, the school has great ambitions for new chapters of growth and development.

Zhang says that the SCCE’s goals include strengthening the international visibility of BIT’s chemistry and chemical engineering programs, attracting more high-level experts, and strengthening undergraduate and graduate education.

Plans include creating an international advisory board, expanding the number of English-language taught courses, and exploring more formal partnerships with foreign universities as well as providing more opportunity for overseas conferences.

“Our objectives in the next 10 years are to reach world-class level with leading original work in certain research fields, to raise a group of prominent scholars and outstanding young talents, and to establish an interdisciplinary center with top universities for both research and education,” says Zhang.

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We’re applying our photographic film innovations to help advance new treatments in the revolutionary field of regenerative medicine. Over the last 80-plus years, we’ve developed advanced technology that controls complex chemical reactions in photographic film that’s a mere 20 microns\(^*1\) thick. And today, that technology is being applied to research and the world’s first clinical trial\(^*2\) of medical treatments that use high-quality iPS cells. And in the future, we’ll strive to help those suffering from a range of medical conditions, such as those of the eyes, nerves, heart and more. Of course, the challenges are endless, but so are the possibilities. Which is why we’ll never stop accelerating regenerative medicine to help build a stronger, healthier future for all.

*1 Thickness of layers excluding the base.
*2 Fujifilm’s iPS cells are being utilized in the world’s first clinical trial using iPS cells conducted in the UK by the Australian company Cynata.