CSPE: THREE DECADES OF ADVANCING CARDIAC ELECTROPHYSIOLOGY AND PACING IN CHINA

Written by: Hailei Liu, MD, PhD, FHRS

Associate Professor, Cardiac EP Center
The First Affiliated Hospital with Nanjing Medical University



Introduction

Founded in Beijing in 1994 under the Chinese Medical Association, the Chinese Society of Pacing and Electrophysiology (CSPE) has played a central role in the development of heart rhythm medicine in China. Over the past three decades, CSPE has helped guide the clinical application of cardiac electrophysiology and device therapy, promote standardized professional training, develop Chinese guidelines and expert consensus documents, and strengthen academic exchange among heart rhythm professionals.

Its biennial scientific meeting has become one of China's most influential academic platforms in cardiac electrophysiology and pacing. More than a national congress, it reflects the changing priorities of the specialty and provides a shared forum for scientific discussion, technical education, professional development, and collaboration.



The First Committee of the Chinese Society of Pacing and Electrophysiology (Beijing, 1994)

CSPE2024: Celebrating 30 Years of Progress

The 15th Biennial Scientific Meeting of the Chinese Society of Pacing and Electrophysiology, CSPE2024, was held at the Beijing International Convention Center from 10 to 13 October 2024. The meeting coincided with the 30th anniversary of CSPE. Its theme, "Thirty Years of Inspiration, Moving Forward with Heart," recognized the achievements of several generations of Chinese electrophysiologists while looking towards the future of the specialty. Since its establishment, CSPE has witnessed and contributed to remarkable changes in arrhythmia care in China. Clinical practice has progressed from conventional pacing and basic electrophysiological studies to advanced three-dimensional mapping, complex catheter ablation, conduction system pacing, leadless pacing, remote device monitoring, and increasingly individualized rhythm management.



CSPE2024 provided an opportunity to review this development and consider how new technologies should be evaluated, standardized, and translated into better patient care.

- ***A Comprehensive Scientific Program***

The program was organized around the major domains of contemporary heart rhythm medicine. Sessions addressed new developments in the diagnosis and treatment of arrhythmias, atrial fibrillation, cardiac implantable electronic devices, ventricular arrhythmias and sudden cardiac death, antiarrhythmic drug therapy, non-invasive electrocardiology, innovation and translation, and basic electrophysiological research.

Live and recorded procedural demonstrations connected scientific discussion with clinical practice. These sessions allowed participants to examine procedural workflows, mapping strategies, implantation techniques, complication prevention, and clinical decision-making.

The program also highlighted technologies that are reshaping the field, including pulsed field ablation, high-density mapping, intracardiac imaging, leadless pacing, and conduction system pacing. Rather than focusing only on technological novelty, discussions considered patient selection, procedural endpoints, safety, reproducibility, and long-term outcomes.

- ***Structured Training Before the Congress***

An important feature of CSPE2024 was its structured pre-congress training program. Dedicated courses covered atrial fibrillation ablation, cardiac resynchronization therapy, His-Purkinje system and conduction system pacing, fundamental electrophysiology, and training for electrophysiology technicians.

A separate program on the emergency management of arrhythmias was designed for physicians working in primary and regional hospitals. This reflected CSPE's commitment to extending heart rhythm education beyond major academic centers.

The range of courses illustrated the Society's tiered educational approach. Training was provided not only for experienced electrophysiologists, but also for fellows, developing operators, technicians, and physicians who encounter arrhythmias in general clinical practice.

- ***Supporting Young Professionals***

The development of the next generation remains an important CSPE priority. The CSPE Young Electrophysiologists Group provides a platform for early-career physicians to participate in academic activities, case discussions, research presentations, and professional networking. At the biennial meeting, young physicians were given opportunities to interact with established experts and contribute to the scientific program.

This engagement is essential to the future of the specialty. Young electrophysiologists need more than procedural exposure. They also require mentorship in clinical reasoning, research methods, scientific communication, professional responsibility, and leadership.

- ***Women in Electrophysiology***

CSPE2024 also included dedicated sessions organised by women electrophysiologists. These sessions addressed clinically important topics while increasing the visibility and participation of women in the specialty.

Supporting women in electrophysiology contributes to a broader and more representative professional community. It also creates opportunities for mentorship and helps younger female physicians identify potential career pathways and role models.

- ***Guidelines, Consensus and Clinical Standards***

The work of CSPE extends beyond its scientific meeting. The Society has participated in the development and dissemination of guidelines, expert consensus documents, and technical standards relevant to arrhythmia diagnosis, catheter ablation, cardiac pacing, sudden cardiac death prevention, and device therapy.

These documents help translate international evidence into recommendations that reflect China's patient population, healthcare system, clinical resources, and patterns of practice. CSPE also contributes to the standardization of electrophysiology and pacing procedures through professional training and competency development. This work has become increasingly important as advanced technologies expand from major centers to a wider range of hospitals.

- ***International Collaboration***

CSPE maintains active relationships with major international and regional heart rhythm organizations, including the HRS, the EHRA and the APHRS.

Joint scientific sessions and international faculty participation allow Chinese clinicians and researchers to exchange experience with colleagues from different healthcare systems. CSPE has also contributed dedicated sessions to APHRS scientific meetings, presenting Chinese research and clinical perspectives to the wider Asia-Pacific community.

International collaboration supports more than the exchange of new technology. It encourages collaborative research, development of shared educational standards, and long-term professional relationships among young electrophysiologists.





Looking Ahead to Guangzhou in 2026

The 16th Scientific Meeting of the Chinese Society of Pacing and Electrophysiology will be held in conjunction with the Sun Yat-sen Cardiovascular Disease Conference in Guangzhou from 17 to 20 December 2026.

The meeting will provide the next major opportunity for CSPE to assess changes in electrophysiology and pacing since its 30th anniversary congress. Topics likely to shape the discussion include the expanding role of pulsed field ablation, new mapping and imaging technologies, advances in conduction system and leadless pacing, remote monitoring, artificial intelligence, and the growing importance of clinical quality and long-term outcomes. Equally important will be the continued development of young professionals, regional training networks, and multidisciplinary electrophysiology teams.



Conclusion

For more than three decades, CSPE has provided academic leadership for cardiac electrophysiology and pacing in China. Its contribution is reflected not only in scientific meetings and new technologies, but also in clinical standards, professional training, consensus development, and the growth of a national heart rhythm community. As CSPE prepares for its 16th scientific meeting in Guangzhou, its central mission remains unchanged: to connect scientific progress with standardized practice, develop the next generation of heart rhythm professionals, and improve care for patients with arrhythmias throughout China.