

SMART & SZBL

Shenzhen Medical Academy of Research and Translation (SMART)
Shenzhen Bay Laboratory (SZBL)

Advancing Biomedical Innovation through
Research, Education, and Open Science

President's Message

“We are committed to bridging the gap between research and translation, turning knowledge into solutions that benefit our society.”



Nieng Yan, PhD

- Founding President, SMART
- Director, Shenzhen Bay Laboratory
- Member, Chinese Academy of Sciences
- International Member, US National Academy of Sciences
- International Honorary Member, American Academy of Arts and Sciences

The **Shenzhen Medical Academy of Research and Translation (SMART)** and **Shenzhen Bay Laboratory (SZBL)** are two closely integrated biomedical research institutions located in Shenzhen, one of China's fastest-growing innovation hubs in the Greater Bay Area. SMART focuses on basic research and clinical translation, while SZBL emphasizes basic and interdisciplinary biomedical science. Together, the two institutions address major challenges in human health.

The integrated ecosystem currently hosts over 100 principal investigators and maintains active collaborations with leading universities, hospitals, and research centers worldwide. SMART and SZBL jointly support international PhD and academic exchange programs for scientists at all career stages. They also develop open science and research infrastructure initiatives, including the SMART National Biobank of China (SMART-NBC) and the LTS Preprint Server to promote scientific communication and collaborations.

Learn More

- SMART Website: smart.org.cn/en
- SZBL Website: en.szbl.ac.cn

A 100-acre campus being constructed for the SMART International Graduate School



Research

Research institutes at SMART & SZBL include:

- Institute for Brain Research Advanced Interfaces and Neurotechnologies (iBrain)
- Institute of Molecular Physiology (IMP)
- Institute of Neuromodulation and Cognition (INC)
- Institute of Neurological and Psychiatric Disorders (INPD)
- Institute of Cancer Research (ICR)
- Institute of Human Immunology (IHI)
- Institute of Infectious Diseases (IFD)
- Institute of Stem Cell, Aging and Reproduction (iSTAR)
- Institute of Chemical Biology (ICB)
- Institute of Bio-Architecture and Bio-interactions (IBABI)
- Institute of Biomaterials and Biomimetics (IBM²)
- Institute of Systems and Physical Biology (ISPB)

Education

SMART PhD Program

The SMART PhD Program is an international biomedical doctoral training program that provides rigorous scientific training within a highly international research environment, equipping the next generation of scientists with cross-disciplinary perspectives and the ability to drive innovation across the full “bedside-to-bench-to-bedside” translational research cycle.

Highlights

- Joint training with leading universities (Tsinghua University and Westlake University)
- Fully English-language curriculum & International academic environment
- Full financial support (stipend + various scholarships)
- Access to world-class faculty and research opportunities across 100+ laboratories
- Powered by state-of-the-art core facilities and translational innovation center

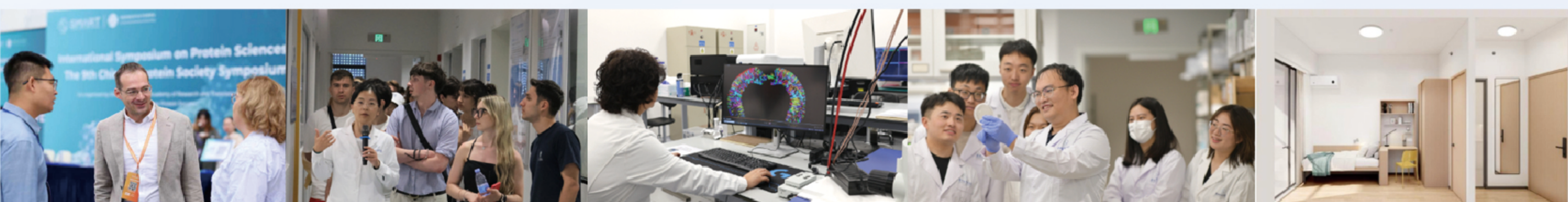
Apply & Learn More

- Application Period: September – End of May each year
- Graduate Program Website: smart.org.cn/en/edu
- Contact: Graduate_office@smart.org.cn

More Info



Apply Now



SMART International Summer School

The SMART International Summer School brings together outstanding undergraduate and graduate students from around the world for an immersive experience in frontier biomedical science and interdisciplinary research.

Highlights

- 4-week hands-on research internship in cutting-edge biomedical laboratories
- Close interaction and mentorship opportunities with leading scientists
- Academic lectures & visits to leading biotech companies
- Free accommodation, insurance coverage, and living stipend for participants
- Travel support available for outstanding international applicants

Apply & Learn More

- Event Period: July – August each year
- Application Period: April – July each year (Admission on rolling basis)
- Graduate Program Website: smart.org.cn/en/summer-intern
- Contact: Graduate_office@smart.org.cn

Apply Now



SMART Symposia

The SMART Symposia is a series of international academic conferences that foster crossdisciplinary collaboration and communication among biomedical researchers around the world.

To date, 20 meetings have been held, attracting more than 10,000 attendees.

Upcoming Symposia in 2026

September 9-11, 2026 Pyroptosis and Gasdermin Biology	November 6-8, 2026 Neuromodulation of Brain Functions
September 21-22, 2026 The Expanding Genetic Code and Beyond	November 10-13, 2026 Targeted Protein Degradation: A 25-Year Journey of Translating Fundamental Discovery to Disease-Treating Drugs
October 15-18, 2026 Genome Symposium: From Structure to Function	
October 30- November 1, 2026 Microbiota in Health and Disease	November 16-19, 2026 Decoding the Glycome: Illuminating Biology's Last Uncharted Frontier

Register & Learn More

symposia.smart.org.cn



Open Science Infrastructure

LTS Preprint Server

The LTS Preprint Server is a life sciences preprint platform launched in November 2025 to provide an open, community-driven space where researchers can rapidly share discoveries, establish priority, and receive constructive feedback from peers worldwide.

LTS currently hosts research across 15 major areas of the life sciences and accepts not only research manuscripts and protocols, but also brief reports, enabling the dissemination of negative results, preliminary observations, and work-in-progress studies.

Highlights

- **Free** submission, access, and downloads
- Simple submission workflow: **submit in minutes and posted within 24 hours**
- **Blockchain-supported** transparent and trustworthy scientific records
- Version tracking with valid **DOI**, clear release dates and revision histories
- Indexing by major academic platforms, including **Google Scholar** and **ResearchGate**

Website

- Ltspreprints.org



SMART National Biobank of China (SMART-NBC)

The SMART-NBC is China's first national-level comprehensive biobank, advancing biomedical innovation through high-quality data, human health resources, and large-scale biological samples to support basic and translational research, as well as global scientific collaboration.

Highlights

• Data Resource

A multi-scale & multi-modal data resource system covering major human diseases

• Biorepository

Biological and genetic resources through high-throughput and digitalized systems

• Open Sharing

Secure data access, open sharing, and collaborative biomedical innovation

Website

- smart-nbc.org.cn/en

CryoSeek Database

Beyond “function-to-structure” approaches, the CryoSeek approach enables the direct highresolution identification of previously unknown biomolecules and biological assemblies, helping researchers chart a new atlas of life’s molecular “dark matter” through cryo-EM–based structural analysis.

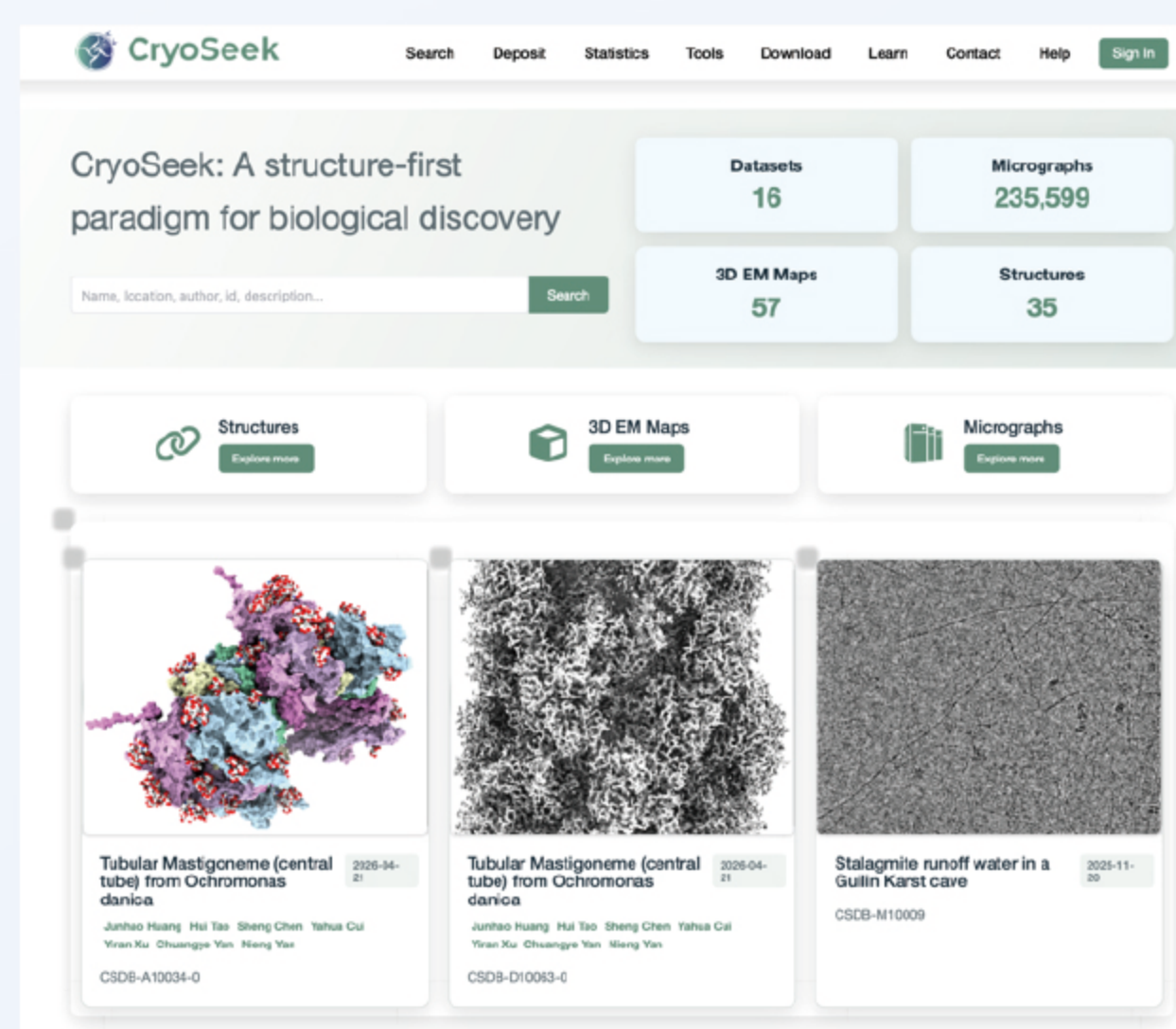
Unlike traditional structural databases such as Protein Data Bank (PDB) and Electron Microscopy Data Bank (EMDB), CryoSeek specializes in glycans and other non-protein biological “dark matter.”

Highlights

- Structure-led discovery of unknown biomolecules and biological assemblies
- Advanced computational and analysis tools
- Integration of structures, cryo-EM density maps, and raw micrographs
- Bridging atomic structures with environmental and clinical multi-omics data

Website

- cryoseek.org.cn



Follow Us & Join Us

PI Positions

talent@smart.org.cn

Postdoctoral Positions and Fellowships

[Contact research groups](#)

<https://smart.org.cn/en/faculty>; <https://en.szbl.ac.cn/research/groups.htm>

PhD Program & Short-term Programs

Graduate_office@smart.org.cn

Website



Instagram



[@SMART_SHENZHEN](#)

LinkedIn



SMART
[@SMARTshenzhencn](#)