清華大學药学院
School of Pharmaceutical Sciences, Tsinghua University

AMGEN® Foundation
Inspiring the Scientists of Tomorrow

PROGRAM HANDBOOK

DISCOVER YOUR POTENTIAL



TSINGHUA UNIVERSITY
AMGEN SCHOLARS PROGRAM

JUNE 7TH - AUGUST 7TH, 2025
TSINGHUA UNIVERSITY, BEIJING, CHINA

"

An Undergraduate Summer Research Program in Science and Biotechnology.

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1. Tsinghua University

1.1 Overview

Established in 1911, Tsinghua University is one of China's most renowned academic and research institutions and consistently anked as a top university globally. Its profound academic legacy and outstanding research capability have made Tsinghua one of China's major powerhouses for talent development and cutting-edge work in science and technology. At present, Tsinghua has 20 schools and 58 departments with 3,485 faculties in science, engineering, law, medicine, management, education and art etc. as well as over 48,739 registered students studying on campus. Among Tsinghua's numerous outstanding alumni are renowned scholars, eminent entrepreneurs, industry pioneers and state leaders including China's current President, XI Jinping and former President, HU Jintao.

Tsinghua also aspires to create global impact by actively developing strategic partnerships and collaborations with the world's prestigious universities, organizations and business enterprises. Some recent high-profile programs include the Schwarzman College by Stephen A. Schwarzman (Blackstone), Global Innovation eXchange Institute (GIX) in Seattle US sponsored by Microsoft, the Lab for Lifelong Learning at Tsinghua University (TULLL) sponsored by the LEGO Foundation, the Tsinghua-BP Clean Energy Research and Education Center, the Global Health Drug Discovery Institute (GHDDI) co-founded by the Gates Foundation, and the IDG/McGovern Institute for Brain Research. Trough more than one hundred years of development, as well as with its new emphasis on reform and innovation, Tsinghua University bestowed upon itself a unique confidence and strength. With a broader global vision, higher standpoint, and more effective actions, Tsinghua will advance its development as a world-class university with Chinese characters.





1.2 History

Tsinghua University was established in 1911 under the name "Tsing Hua Imperial College". The university section was founded in 1925 and undergraduates were then enrolled.

During the War of Resistance against Japanese Aggression, Tsinghua University moved to Changsha in 1937, then to Kunming in 1938, and was renamed the National Southwest Associated University. When the war ended, Tsinghua returned to its original site at Tsinghua Garden in Beijing in 1946.

Since 1978, Tsinghua has gradually expanded and established more departments in the sciences, economics, management, and the humanities. In 1985, the School of Continuing Education was established. In the last decade, the university has made advances in the refinement of academic disciplines, faculty development and research. Tsinghua is now a comprehensive research university covering disciplines in science, engineering, literature, art, history, philosophy, economics, management, law, education, and medicine.

1.3 Among the top research universities in the world

- 16TH — THE World University Rankings 2022
- 10TH — THE World Reputation Rankings 2021
- 17TH — QS World University Rankings 2022
- 6TH — QS Graduate Employability Rankings 2022 **Worldwide**
- 1ST — QS Graduate Employability Rankings 2022 **in Asia**
- 1ST — US News Best Global Universities for Computer Science
- 1ST — US News Best Global Universities for Engineering
- 3RD — US News Best Global Universities for Materials Science

1.4 Research innovation

With the goal of leading global fundamental research, serving core national development needs, and connecting academic research with talent cultivation, Tsinghua University is dedicated to promoting scientific innovation and addressing global challenges.

◆ Recognition



In 2018, the faculty of Tsinghua University won 24 national awards, including one first prize of the State Natural Science Awards and three first prizes of the State Scientific and Technological Progress Awards. In addition, Tsinghua faculty won 38 prestigious international awards. Twelve Major Tsinghua Projects were approved by the National Social Science Fund of China, while a total of 142 individuals from the University were selected for prestigious programs.

◆ Innovation

Tsinghua is dedicated to comprehensively integrating innovation and entrepreneurship education into its talent training system. Tsinghua provides its students with an integrated education platform for creativity, innovation and entrepreneurship.

- The Student Future Innovation Group Inspires creativity: it encourages students to build teams across different disciplines and grades, and initiate their own innovation projects.
- The iCenter serves technological innovation: it is the largest campus "maker" space in the world.
- The changplus and x-lab support entrepreneurship: they help startups gain market resources, and help them seek professional guidance from off-campus tours.



◆ Research Education

At Tsinghua, all students, including undergraduates, have rich resources and opportunities to transform their research ideas into reality. The Tsinghua "TOP OPEN" undergraduate overseas academic research program enables students to contact overseas institutes independently, based on their own academic interests, to refine their research projects and to have the university fund their research. In 2018, 420 students visited 104 overseas research universities and institutes through this program. Up to today, the university has signed university cooperation agreements with 285 universities and research institutes in 50 countries. Last year, more than 16,000 faculty and students went abroad for visits and exchanges.



1.5 International study and program

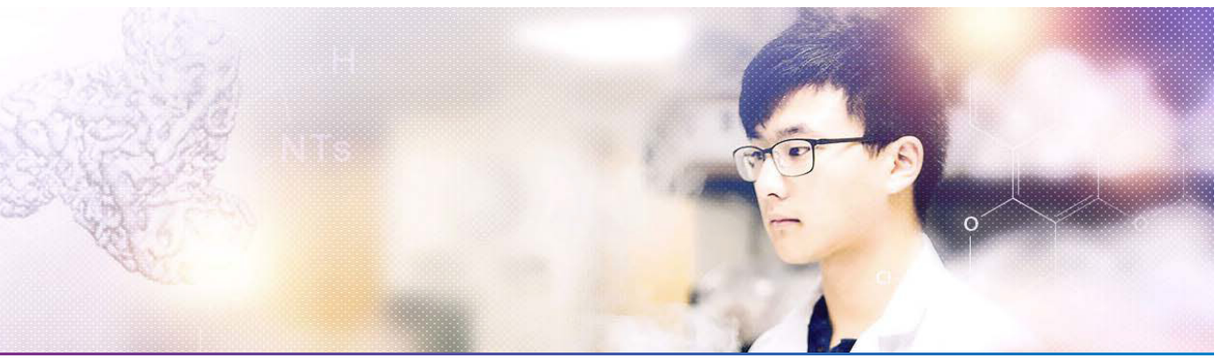
Every summer, Tsinghua offers more than 10 international summer programs for students from across the world. Summer program courses range from subjects such as computer science, engineering, physics, green energy, law and economics. International students taking part in the summer programs can broaden their global perspective and come into direct contact with Chinese culture, society and technology.



2. School of Pharmaceutical Sciences at Tsinghua University

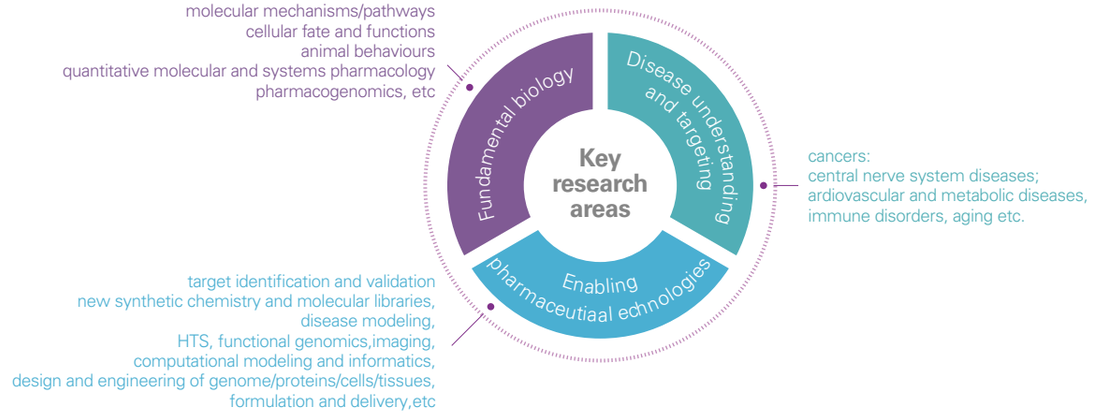
2.1 Overview

Established in 2015, Tsinghua University School of Pharmaceutical Sciences (SPS) is dedicated to educate new generations of pharmaceutical researchers and professionals, and to conduct innovative research to address the world's significant health issues. Leveraging Tsinghua's strengths in related disciplines such as chemistry, chemical engineering, material science, medical engineering and information technology, SPS is committed to advancing understanding of unsolved diseases and translating research discoveries and technological developments into novel medicines and therapeutic approaches. At SPS, we endeavor to lead innovations for China's nascent biomedical industry and make important contributions to human health on the global level.



2.2 A focus on cutting-edge biomedical research

SPS is at the forefront of pharmaceutical sciences, investigating various therapeutic approaches, including small molecules, biologics, gene therapy, cell therapy and medical devices. It seeks to drive drug discovery through major advances in emerging fundamental biology with translational potential, enabling pharmaceutical technologies, and disease understanding and targeting, all highly interdisciplinary areas.



SPS has world-class faculty engaging in innovative pharmaceutical research. 33 faculty members all possess a strong educational background and track record of innovative research in leading universities and institutes around the world. Many are recognized by the national science community with high honors. Several faculty members also bring significant industry R&D experience from previous careers at major multinational pharmaceutical companies. Moving forward, it plans to significantly expand its faculty team in the coming years in order to broaden key research areas and enhance overall research capabilities. Together, we will create vital knowledge and enabling technologies, pushing translational science into new medicine and treatments.



2.3 An endeavor to build advanced translational platforms

Translational medicine is at the core of SPS' development plans. Supported by our University and in partnership with notable organizations and corporations, we have established several key platforms to expedite the process from bench to bedside, including Pharmaceutical Technology Center and early-stage incubator and seed fund. SPS seeks to cooperate with partners to create an integrated ecosystem for global pharmaceutical innovation and, ultimately, impact human health.

A recent influential example is the Global Health Drug Discovery Institute (GHDDI), jointly founded by Tsinghua University, the Bill & Melinda Gates Foundation, and the Beijing Municipal Government. GHDDI aims to develop a transformative platform with exceptional biomedical R&D capabilities to address some of the most pressing disease challenges faced by developing countries.

2.4 A place to cultivate future pharmaceutical scientists

At SPS, we aim to prepares students to become future leaders in biomedical research and pharmaceutical R&D through excellent education. To help students build a comprehensive knowledge foundation, we focus the teaching of pharmacology, biology, chemistry, fundamental medical science, engineering, and information technology. We offer a broad-spectrum curriculum that aligns with global top universities. Our students experience a traditional classroom environment supplemented with cross-disciplinary projects, internships, study abroad, and laboratory research, to better prepare them to carry out innovative research and solve unmet biomedical challenges in the future.

In addition to providing practical coursework that requires students to conduct research in the lab starting their sophomore year, we encourage students to visit and learn from world-renowned pharmaceutical enterprises and academic institutes during the summer term, at home and abroad.

3. Amgen Foundation

The Amgen Foundation seeks to advance excellence in science education to inspire the next generation of innovators, and invest in strengthening communities where Amgen staff members live and work.

The Foundation, established in 1991, is an integral component of Amgen's commitment to dramatically improve people's lives. The Foundation is the principal channel for Amgen's corporate philanthropy. To date, the Foundation has contributed more than $300 million to local, regional and international nonprofit organizations that reflect Amgen's core values and complement the company's dedication to impacting lives in inspiring and innovative ways.

The Foundation places a strong emphasis on strengthening science education and is committed to investing in meaningful, evidence-based initiatives that make a difference at the local, national, and international levels. To that end, the Amgen Foundation has contributed nearly $150 million to advancing science education programming globally.

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Inspiring the Scientists of Tomorrow



4. Tsinghua Amgen Scholars Program

4.1 Amgen Scholars Program

The Amgen Scholars Program aims to open the door to research opportunities at 24 host institutions for undergraduates from any four-year college or university in a given region.

Made possible through a 16-year, $74 million commitment from the Amgen Foundation, Amgen Scholars allows undergraduates from across the globe to participate in cutting-edge research opportunities at worldclass institutions. 24 premier educational and research institutions across the U.S., Europe, Asia, Australia and Canada currently host the summer program.

Undergraduate participants benefit from undertaking a research project under top faculty, being part of a cohort-based experience of seminars and networking events, and taking part in a symposium in their respective region where they meet their peers, learn about biotechnology, and hear from leading scientists.

Australia: Open to students in Australia, New Zealand, and Oceania

Europe: Open to students in Europe

United States: Open to U.S. students

Asia: Open to students in Asia

Canada: Open to Canadian students

AMGEN® Scholars Program



Host Institutions

Caltech · Columbia University Barnard · Duke University · ETH zürich · Harvard University · Institut Pasteur · Johns Hopkins University · Karolinska Institutet · 京都大学 Kyoto University · LMU · NIH National Institutes of Health · NUS National University of Singapore · Stanford University · 東京大学 The University of Tokyo · 清華大學 Tsinghua University · Berkeley University of California · UCLA · UCSF · University of Cambridge · The University of Melbourne · University of Toronto · UT Southwestern Medical Center · Washington University in St. Louis · Yale

4.2 2025 Tsinghua Amgen Scholars Program

The Amgen Scholars Program at Tsinghua is an 8-week faculty-mentored residential summer research program to provide undergraduate students the opportunity to conduct research in a lab environment, engage in cutting-edge research experience, and learn more about biotechnology and drug discovery.

Tsinghua Amgen Scholars will join a faculty's laboratory and involve in one or more specific research projects. Each Scholar will be paired with a faculty member as his/her mentor. As a member of the lab, the Scholar will have the opportunity to participate in a series of academic activities, such as weekly lab meetings, group discussions, presentation training, and campuswide seminars of interests. In addition, other non-academic gathering will be organized, such as networking events, Chinese and Beijing culture exploration, etc.





4.3 Symposium

A significant component of the summer program is a symposium hosted by Kyoto University where students hear firsthand from leading scientists working in industry and academia. The symposium provides students with a valuable opportunity to discuss their research, learn about drug discovery and development, and network with other Amgen Scholars from all over Asia and the world.

5. Faculty Mentors



Wei QIN, Ph.D
Chemical Biology, Proteomics, protein dynamics

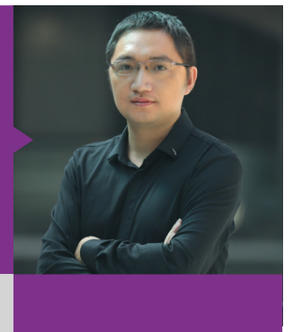


Bailong XIAO,Ph.D
Tactile, Pain, Mechanical Gated Ion Channels, Temperature Gated Ion Channels, Drug Screening

Hang Hubert YIN, Ph.D
Chemical Biology, Medicinal Chemistry



Xiangyu LIU, Ph.D
Structural biology of G protein-coupled receptors and structure-based drug design





Shuyi ZHANG,Ph.D
Synthetic biology,protein design,directed evolution



Ling CHU,Ph.D
Chemical biology, drug discovery



Juanjuan DU,Ph.D
Novel Protein Drugs, Nano Drugs



Ligong CHEN,Ph.D
Transporter Pharmacology, Toxicology and Physiology

Conggang Zhang, Ph.D
Natural immunity,mitochondrial quality regulation,neurodenerative diseases,inflammation,autoimmune diseases



Haidong TANG, Ph.D
Tumor Microenvironment, Immunotherapy, Costimulatory Molecules, Antibody Engineering





Yinqing Li, Ph.D
Genome Medical Technology



Boxue Tian, Ph.D
computational chemistry and biology

Anran Li



Hi, I am Li Anran from Shanghai. You can call me Leanna. I study Biochemistry at The University of Hong Kong. I am really thrilled to join this program and have the opportunity to collaborate and communicate with people from diverse backgrounds. I usually prefer chilling over cardio, and volleyball and softball are the only sports that I would play voluntarily. I also like cooking, travelling and watching TV. Since both Shanghai and Hong Kong are hot in summer, I enjoy staying in a room with air conditioning, while I lie in bed with a laptop playing my favourite TV series. I looking forward to getting to know everyone and making this research journey both fun and meaningful!

Kevin Brian



Hello. I am Kevin Brian, a Bioengineering student at New York University Abu Dhabi. My research interests are in nanotechnology and nanosynthesis, particularly their applications in cancer treatment and neurotherapeutics, with a great emphasis on interdisciplinary research. I have a background in quantum dots synthesis and lipid-based nanoparticles characterization, which I hope to expand on through the Amgen Program by exploring related fields.

I also maintain a keen interest in theoretical physics, exploring the fundamental distribution of matter and energy, and find creative expression through literary poetry.



Guan Hui Hor

Hello! My name is Hor Guan Hui, a freshman at Tsinghua University. I am truly honored to be selected as an Amgen Scholar and deeply grateful for the opportunity to work alongside outstanding mentors and peers. This program will allow me to expand my knowledge and perspectives in the fields of chemistry and biology, and I am eager to contribute my passion and dedication to this collaborative journey. I look forward to learning, growing, and making meaningful discoveries together.



Marise Samer Samir Erian Bishay

Hi! I'm Marise, but you can call me Risa! I'm a rising senior majoring in Molecular Biotechnology at Galala University, originally from Cairo, Egypt. I'm also a virtual exchange student at Shanghai Jiao Tong University. I'm passionate about genetic engineering, innate immunity, and biophysics, especially how they connect to the molecular mechanisms behind neurodegenerative diseases like Parkinson's.

I'm the founder and president of FA Model GU (a student club by FAO, UN), head of the marketing and media team at my faculty, and a volunteer lab assistant.

Outside the lab, I love photography, kickboxing, and working with kids through scouts and summer camps. I also enjoy traveling and discovering new cultures. I'm really excited to be part of Tsinghua ASP and can't wait to meet everyone, learn together, and make the most of this amazing experience!er!

İpek Deniz Özkan



Hi, this is İpek from Türkiye! I am a third-year medical student at Trakya University School of Medicine and I want to become a physician-scientist in the future. I graduated from TEV Inanc Turkes High School for the Gifted, a boarding school where my passion for science blossomed along with my interest in event organization and public relations. I am currently one of the deputy editors-in-chief at Turkish Medical Student Journal and student representative in the National Accreditation Board for Medical Education. I am also an amateur cellist and a huge tennis fan!□with you all!

Mengxiao Liu



Hi, I'm LIU Mengxiao, originally from Beijing and currently majoring in Cell and Molecular Biology as a junior at The Chinese University of Hong Kong. My research focuses on gene therapy, drug delivery, and organelle dynamics, and I've had the chance to work with single-cell multi-omics during a stint at the Functional Genomics Center Zurich. Moving forward, I'm particularly interested in integrating quantitative imaging and multi-omics to advance precision medicine approaches. Outside the lab, I love hiking, taking photos, and exploring new cities. I'm really looking forward to spending this summer at Tsinghua—it's going to be a great experience!

Nischay Patel



Hi, I'm Nischay Patel, a junior majoring in Biological Sciences and Bioengineering at the Indian Institute of Technology (IIT) Kanpur, India. My interests lie in Bioinformatics and Genetics, and I enjoy applying mathematics, data analysis, and computational tools to unravel complex biological systems.

Outside academics, I regularly compete at an intermediate level in Table Tennis, a sport where China sets the global benchmark ^_^ and I'm an avid Cricket player, a popular sport in India. I also enjoy improving my touch typing skills whenever I'm on my laptop. I look forward to new research, academic culture, and connecting with everyone at Tsinghua!

Xinpeng Huang

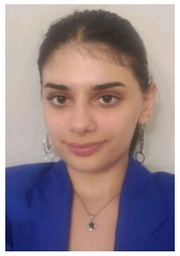


Hello! My name is Huang Xinpeng, and I've just completed my third year at the National University of Singapore, majoring in Life Sciences with minors in Bioinformatics and Nutrition. I have a strong interest in computational biology and metabolism, and I've recently been drawn to immunology as well. Through the A*STAR Research Internship Award (ARIA), I worked on single-cell RNA sequencing data to study pancreatic delta cells in Type 2 Diabetes. I enjoy using data to uncover biological insights and am excited to join Tsinghua ASP to learn from diverse perspectives and explore new research directions.



Poorvikha Satish Kumar

My name in Poorvikha Satish, and I am a medical student from Bangalore, India. Outside of medicine, I am an avid reader and traveller and have a keen interest in learning about different ideas, people and cultures. I am passionate about mentorship, public speaking, and being part of communities that foster collaboration, innovation, and social impact.



Ani Pahlavuni

I am a 3rd-year student at Yerevan State Medical University, majoring in Pharmacology/ Pharmacy. I have dreamed of working in the medical field ever since I was young. Aside from my stated major, I have many hobbies, which represent many traits of my character. A few examples include writing, reading, video editing, swimming, dancing, etc. I believe myself to be a well-rounded individual who never shies away from a challenge, but on the contrary - rises to it!

Making an impact and leaving a mark in the world has always been my biggest goal and final destination.

Pradchapon Dechakorn



Hi everyone! I'm Pradchapon Dechakorn, but you can call me Ken. I'm currently in my third year studying Biotechnology under the Bachelor of Science in Biotechnology (BBTech) department at Chulalongkorn University in Bangkok, Thailand. As of now, my research interest is shifting towards drug discovery and drug design, and I intend to pursue research that contributes to better healthcare solutions. Aside from academics, I enjoy PC gaming, especially games like Valorant and Warhammer 40K: Darktide, and I also love reading manhwa in my free time. I'm looking forward to gaining new research skills and experiences as well as meeting everyone in this Amgen Scholars Program.u guys in Beijing ! Thanks !

Sara Erciyas



Hello! My name is Sara Erciyas, and I'm a French citizen coming from Turkish origins. I am currently in my third year studying Biology at Middle East Technical University in Turkey. I have a strong interest in plant biotechnology and microbiology, and I've gained hands-on experience in both chemistry and microbiology labs. I enjoy working in interdisciplinary and international settings. Outside of academics, I play rugby and practice judo, which have taught me resilience and collaboration. I'm truly excited to be part of this practicum and look forward to contributing to the research while learning from inspiring scientists around the world.

7. Life on Campus

7.1 Library

The Tsinghua University Library was established in 1912, and is now composed of the Main Library (also called Old Library) and six branch libraries including the Humanities and Social Sciences Library, the Art Library, the Finance Library, the Law Library, the Economics & Management Library and the Architecture Library. The Library system owns more than five million books and other printed material and has a comprehensive digital system to ensure convenient access to resources anytime, anywhere.

Opening Hours in Summer Vacations:

For Main Library (Old Library) : 7:30-22:30 From Monday to Sunday
For Yifu Library (New Library) : 9:00-17:00 From Monday to Sunday
For Mochtar Riady Library (North Library): 9:00-17:00 From Monday to Sunday
Website: http://eng.lib.tsinghua.edu.cn/default.html

** For holidays and vacations, please refer to the special notice.*

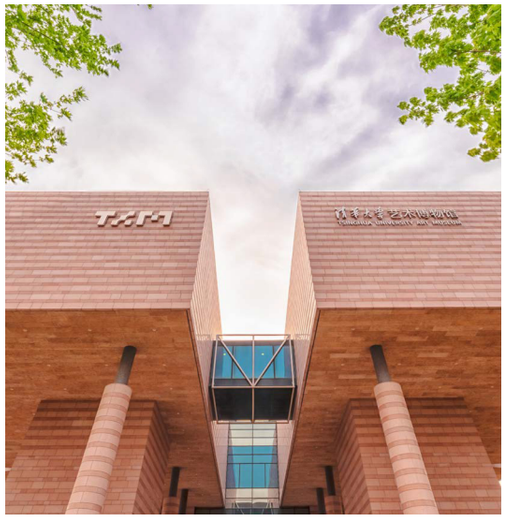


7.2 Art Museum

Officially opened in 2016, the Tsinghua Art Museum is the largest university museum in China and has attracted more than one million visitors since its opening. The museum has over ten exhibition halls and hosts exhibits from China and across the world. Its comprehensive collection includes more than 13,000 art objects, including six major categories: painting and calligraphy, embroidery, porcelain, furniture, bronzeware and diverse artwork.

Opening Hours: **9:00-17:00** (No entry after 16:30)
Tuesday to Sunday; closed Mondays
(Except for statutory holidays)

Website: http://www.artmuseum.tsinghua.edu.cn/en/



7.3 Gymnasium

The Tsinghua physical education base on the principle of Education as priority, access to all, pursue of Excellence. Tsinghua has not only inherited from the achievements of last decades but also integrated with emerging viewpoints and methods resulting form changes of mentality and values. Sport is nowadays an essential component of Tsinghua education as well as one element of national strength.

Stadium and Playground
East Athletic Field, West Stadium, Zijing Athletic Field
Open Hours: Access all day

Gymnasium
Open Hours: 06:30-22:00

Outdoor Swimming Pool
Open Hours: 06:30-22:00

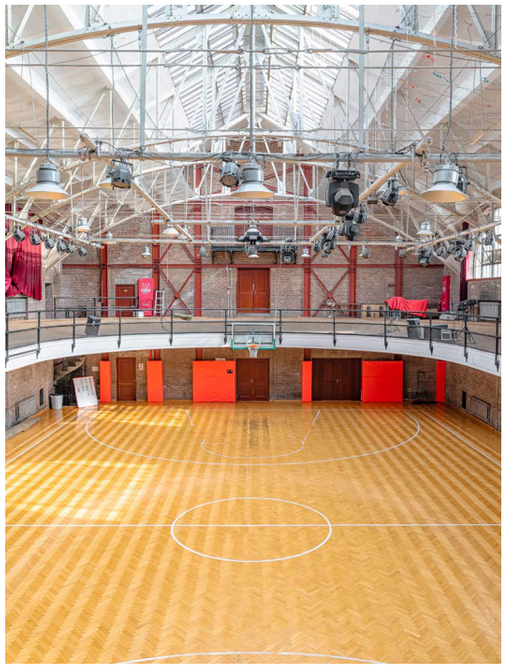
Natatorium
Open Hours: 06:30-22:00

Badminton Hall
Open Hours: 06:30-22:00

Table Tennis Gym
Open Hours: 06:30-22:00

Tennis Court
Open Hours: 08:00-22:00

Website: http://www.thsports.tsinghua.edu.cn/publish/sportsen/index.html



7.4 Transport

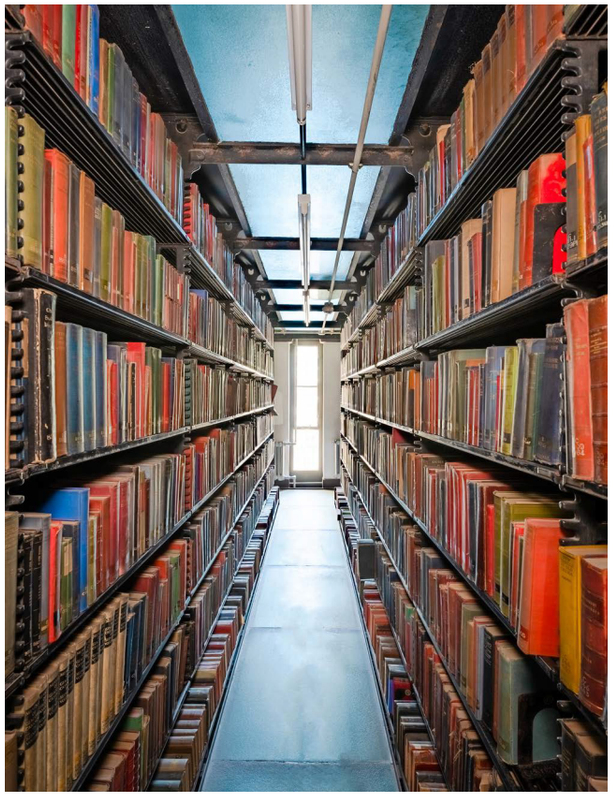
◆ *Campus shuttle bus*

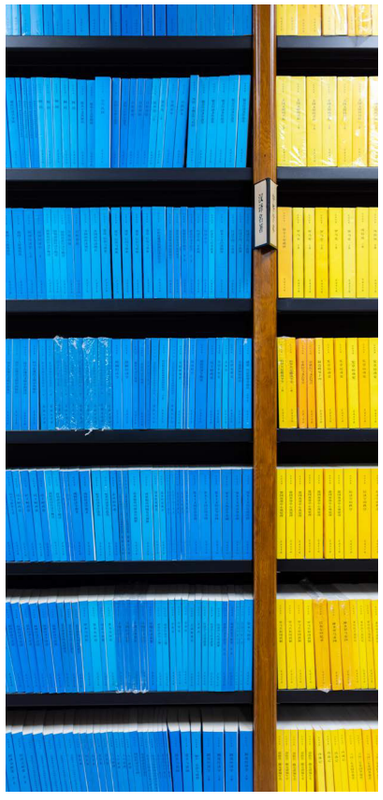
Timetable: **7:40, 9:20, 13:00, 14:50** (Only on workdays)

You can check "清华校园巴士" mini program on Wechat to see the timetable.

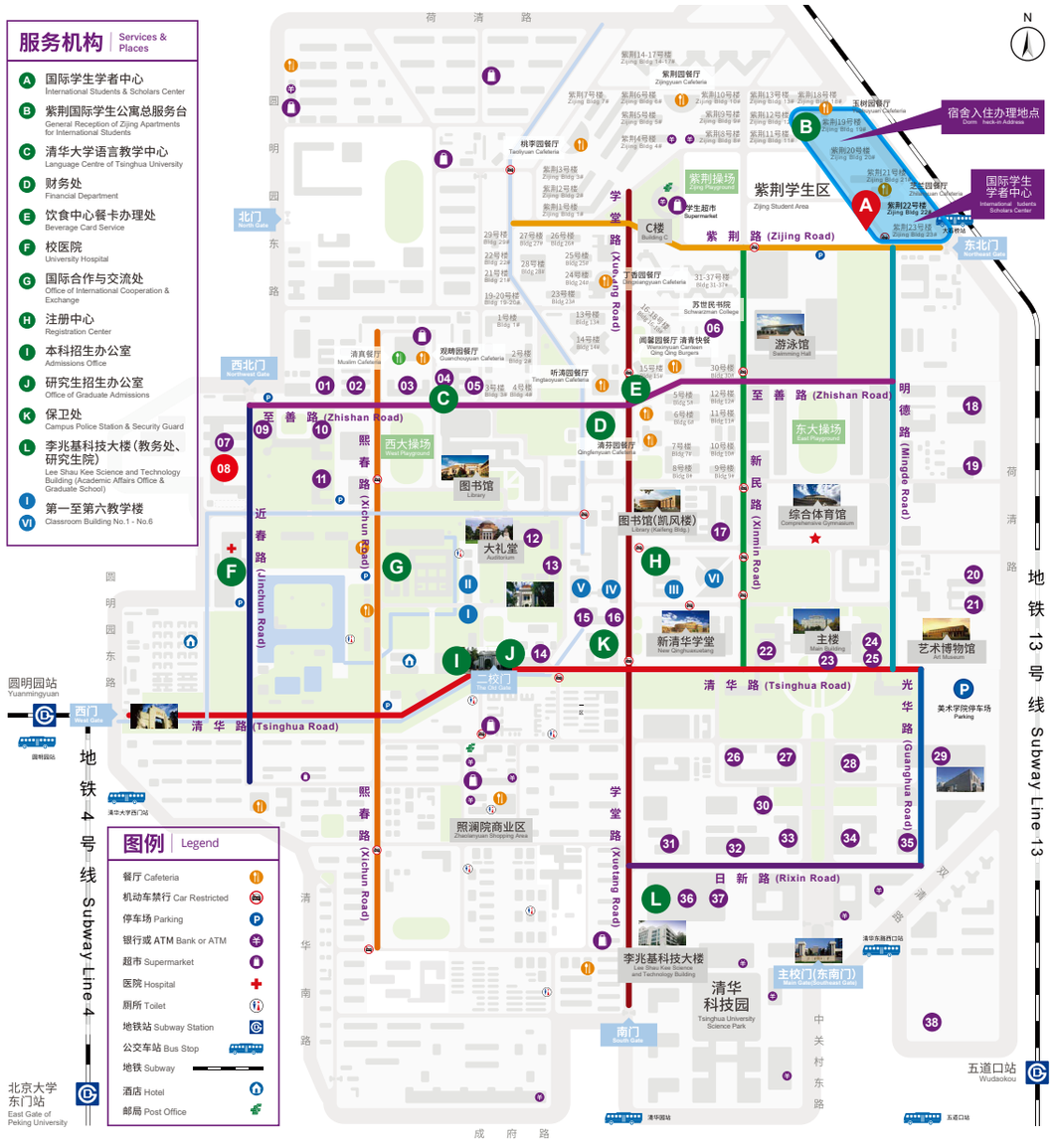
◆ *Subway Stations nearby*

- **Yuanmingyuan Park Station:** *Line 4, near the West Gate, 15-20 mins to walk to the School of Pharmaceutical Sciences (Medical Science Building)*
- ***Tsinghua East Road Xikou Station:*** *Line 15, near the East Gate, 15-20 mins to walk to the Tsinghua Zijing International Students Apartment*
- ***Wudaokou Station:*** *Line 13, near the Main Entrance, 15-20 mins to walk*





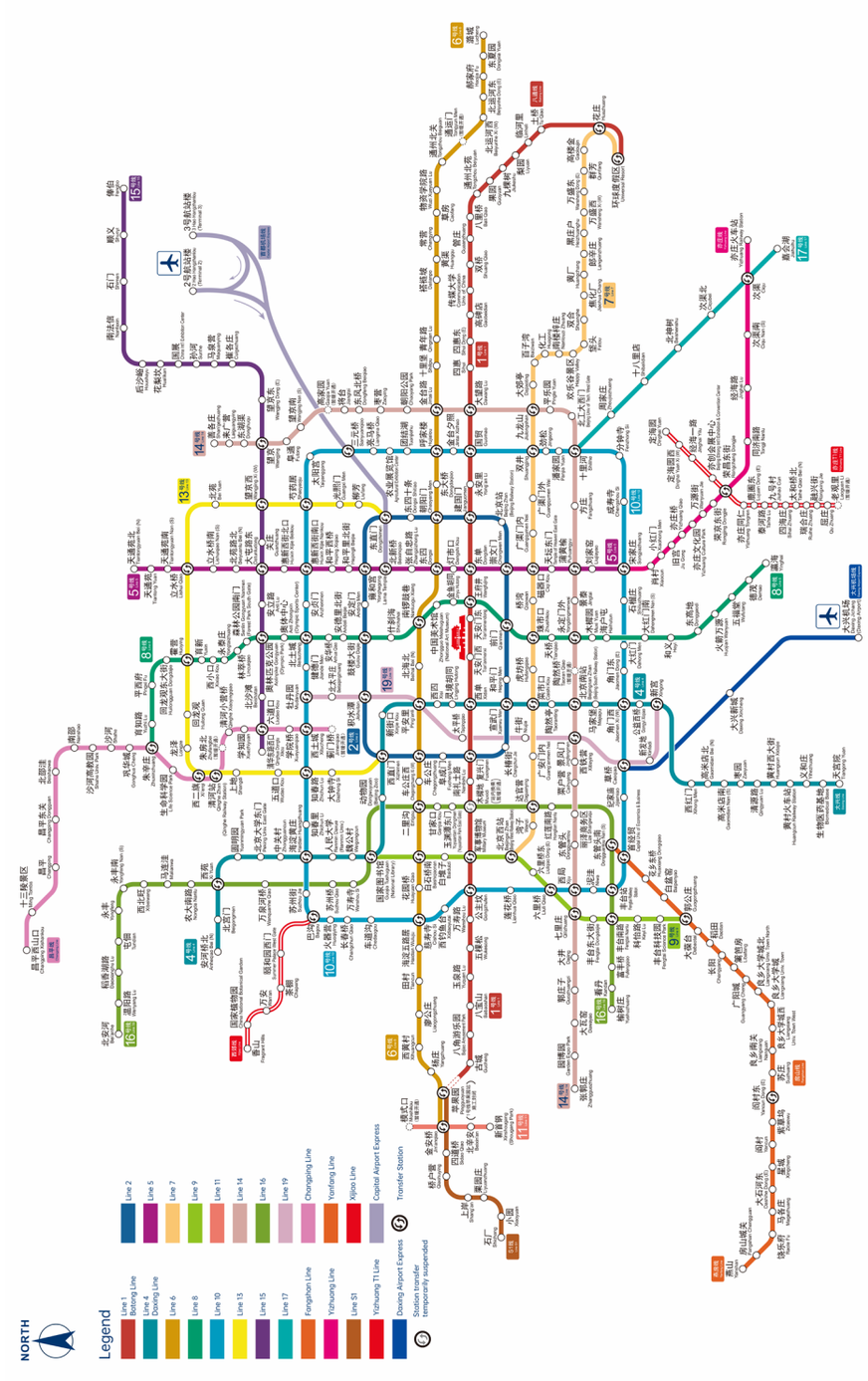
7.5 Map of Tsinghua University



院系 Schools & Departments

01 化学系 Dept. of Chemistry
02 马克思主义学院 School of Maxisms
03 社会科学学院 School of Social Sciences
04 人文学院 School of Humanities
05 中国语言文学系 Dept. of Chinese Language and Literature
06 苏世民书院 Schwarzman Scholars
07 医学院 School of Medicine
08 药学院 School of Pharmaceutical Sciences
09 数学科学系 Dept. of Mathematical Sciences
10 物理系 Dept. of Physics
11 生命科学学院 School of Life Sciences
12 水利水电工程系 Dept. of Hydraulic Engineering
13 新闻与传播学院 School of Journalism and Communication
14 热能工程系 Dept. of Thermal Engineering
15 外国语言文学系 Dept. of Foreign Language and Literature
16 教育研究院 Institute of Education
17 土木工程系 Dept. of Civil Engineering
18 航天航空学院 School of Aerospace
19 电子工程系 Dept. of Electronic Engineering
20 工程物理系 Dept. of Engineering Physics
21 化学工程系 Dept. of Chemical Engineering
22 电机工程与应用电子技术系 Department of Electrical Engineering
23 自动化系 Dept. of Automation
24 计算机科学与技术系 Dept. of Computer Science and Technology
25 软件学院 School of Software
26 工业工程系 Dept. of Industrial Engineering
27 经济管理学院 School of Economics and Management
28 建筑学院 School of Architecture
29 美术学院 Academy of Arts & Design
30 公共管理学院 School of Public Policy and Management
31 核能与新能源技术研究院 Institute of Nuclear and New Energy Technology
32 精密仪器系 Dept. of Precision Instrument
33 法学院 School of Law
34 材料学院 School of Materials Science and Engineering
35 环境学院 School of Environment
36 车辆与运载学院 School of Vehicle and Mobility
37 机械工程系 Dept. of Mechanical Engineering
38 五道口金融学院 PBC School of Finance

7.6 Beijing Rail Transit Lines



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清華大學药学院

School of Pharmaceutical Sciences, Tsinghua University

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