Shanghai Jiao Tong University News International Edition





# **President Xi's Encouragement Inspires Foreign Entrepreneur in Shanghai's Al Sector**

Hamza Boukili, a French entrepreneur and math teacher at the Paris Elite Institute of Technology at Shanghai Jiao Tong University, said he felt deeply honored and inspired after meeting President XI Jinping on April 29 at the Shanghai Foundation Model Innovation Center.

Boukili was the only foreign professional present during President Xi's tour of the center, which focuses on advancing foundational artificial intelligence models. "It was a very rare and valuable opportunity to speak directly with the president," Boukili said. "We spent about ten minutes sharing and exchanging ideas. I introduced myself and talked about my work and research in Al.'

President Xi showed keen interest in Boukili's experience and asked him to share his perspective on the differences between the AI environments in France and China. "From my own background and experience, I think France may have advantages in traditional technologies," Boukili said. "But when it comes to modern Al development—which requires high-quality resources, manpower, and talent density-Shanghai clearly has a world-leading position."

Boukili has lived in Shanghai since 2020. In 2023, he founded YunSuan Technology in Xuhui District, focusing on applying AI algorithms to energy conservation and carbon emission reduction.

Recalling the president's closing remarks, Boukili said they left a lasting impression. "President Xi



said that we young people standing in front of him hold the future in our hands. That made us all feel a great sense of responsibility," he said. "It further strengthened my motivation to continue working hard-not only for myself, but for society, the country, and the world.

He added, "President Xi's words made me feel how fortunate we are to be working in Shanghai's current innovation environment. It gave me more confidence and determination to do our work well."

Following the meeting, Boukili received numerous messages of congratulations and support from friends, colleagues, and students. "Everyone was happy and proud," he said. "This experience reminded me how meaningful our work is, and how important it is to keep pushing forward."

Founded in 2023, the Shanghai Foundation Model Innovation Center is China's first incubator dedicated to foundational AI model development. President Xi's visit highlighted the central government's high expectations for Shanghai to play a leading role in global AI innovation and governance.

(Source: China Daily)



SJTU News Editor-in-chief: HU Hao Executive Editor: ZHENG Mao I IU Jian

SJTU WeChat

JIANG Qiangian HAO Jie YU Qinling

From Lab to Launchpad: SJTU and NUS Explore Further **Opportunities for Innovation** and Collaboration



On May 20, 2025, Shanghai Jiao Tong University (SJTU) President DING Kuiling welcomed Tan Eng Chye, President of the National University of Singapore (NUS), NUS Provost Liu Bin, and the accompanying delegation to the university's Minhang Campus, where both parties engaged in a lively exchange to discuss potential cooperation in cutting-edge research, innovation, and entrepreneurship.

During the visit, President Ding acknowledged NUS's global reputation in global education, noting that its leadership in internationalization makes it a valuable partner. He also highlighted notable research achievements in the two universities' ongoing collaboration through the CREATE (Campus for Research Excellence and Technological Enterprise) program. President Ding added that he hopes to further the partnership by launching similar initiatives in other fields.

President Tan returned the praise. applauding SJTU's track record in nurturing top-tier talent and innovative entrepreneurs. He showed particular interest in SJTU's Grand NeoBay initiative, describing it as a standout example for how universities can encourage tech innovation. The president also shared President Ding's interest in expanding collaboration between the two universities in the future.

May 28,2025

Pilot Issue 4

The visit also brought the NUS delegation to the heart Grand NeoBay, where they toured the "One Kilometer Incubator"-a space packed with early-stage tech ventures and startups. There, the representatives took a firsthand look into the development of two major SJTU-affiliated companies-Qianjue Robotics and Enaho Biotech-both of which emerged from the university's innovation ecosystem.

Representatives from SJTU's International Affairs Division and Grand NeoBay were also present during the meeting and tour.

(Source: International Affairs Division, Grand NeoBay)

### International Students Won

## Study Published in Nature: Engineered **Bacteria Can Degrade Five Organic Pollutants in Wastewater at the Same Time**

There are over 90, 000 types of pollutants on our planet, which are distributed in the air, soil, and water bodies. According to the WHO report in 2016, 1.3 million people die each year from exposure to pollutants. Fortunately, there are some microorganisms in the natural environment that can grow on pollutants as nutrients. They "eat" pollutants and convert them into carbon dioxide, water, or other harmless components— this process is known as "biodegradation". Scientists can use microorganisms to degrade pollutants in the environment. But in real-world pollution scenarios, such as industrial wastewater and marine oil spills, multiple toxic organic pollutants are mixed with each other, and microorganisms can degrade only one or a few of the pollutants, making it difficult to biodegrade complex organic pollutants in practice.

To address this problem, researchers from Shanghai Jiao Tong University, Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences, and Chinese Academy of Agricultural Sciences applied synthetic biology to construct an engineered bacterial strain to remediate five organic pollutants in industrial wastewater and soil. This project has led to significant progress and was published on May 7, 2025.

The researchers used Vibrio natriegens, a fast-growing bacterium with high salinity tolerance, as the chassis cell. To enhance genome editing, researchers optimized the efficient natural transformation method and subse-



Schematic of the development of bacterial strain Vibrio natriegens VCOD-15, which can degrade five organic pollutants.

quently developed an iterative genome editing method named INTIMATE, which can accurately insert long DNA fragments into a specific site of the genome of V. natriegens, and repeatedly insert new DNA fragments into the previously constructed engineered bacterial strain. This method enabled continuous expansion and modification of the same strain. After multiple rounds of iterative editing, the researchers obtained the final strain, VCOD-15, which was capable of degrading five organic pollutants at the same time. The results

of simulated application tests showed that VCOD-15 could remediate all of the five organic pollutants in saline wastewater samples from oil refinery and chemical plants in 2 days.

This research successfully developed a technical platform for the construction of complex organic pollutant degradation bacterial strains, which realized the entire process from the designing and synthesizing of metabolic pathways to the construction, testing, and application of pollutant degrading strains in real-world scenarios. It provides a cheap and environmentally friendly solution for global challenges such as saline industrial wastewater emission, offshore oil spills, and microplastic pollution. At the same time, INTIMATE provides a universal technical platform to integrate multiple metabolic pathways within a single strain and expand the functions of engineered strains. It can be extended to the construction of other pollutant degradation bacterial systems, as well as other applications such as natural product synthesis and high-value chemical cell engineering construction. Dr. SU Cong from the Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences, CUI Haotian and Dr. WANG Weiwei from Shanghai Jiao Tong University are the co first authors of the article. Prof. DAI Junbiao and Prof. TANG Hongzhi are co-corresponding authors of the article. The collaborators of the article include CHENG Zhenyu, YANG Mengqiao, LI Ye, and HE Siyang from Shanghai Jiao Tong University, Dr. LIU Yong, WANG

Chen, and QU Liwen from Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences, and CAI Yuejin, ZHENG Jiaxin, and ZHAO Pingping from Chinese Academy of Agricultural Sciences. Prof. XU Ping and Prof. LI Yuehui from Shanghai Jiao Tong University and Prof. WANG Qinhong from Tianjin Institute of Industrial Biotechnology, Chinese Academy of Sciences provided important help for

this study. (Source: The School of Life Sciences and Biotechnology)

the Championship and Fourth Place in the 2025 SJTU Top **Ten Singers Competition** 



Recently, the finals of the 2025 SJTU Top Ten Singers Competition concluded successfully. Gemma Villoresi, an exchange student from Italy, won the championship, while the group Acoustic Avenue, formed by Winona Cheyenne Nata from Indonesia and Mongmrasa Marma Manu from Bangladesh, won fourth place.

#### Gemma Villoresi

Gemma is currently studying in the Faculty of Arts and Humanities at University College London (UCL), and since the fall semester of 2024, she has been studying at UM-SJTU Joint Institute (UMJI) as an exchange student. In just two semesters, she has not only smoothly adapted to life and study in China, but has also brought a unique artistic flair to the engineering-oriented atmosphere of UMJI. Upon arriving in China, Gemma gave herself a meaningful Chinese name-WEI Zhuoma. This name is not only a tribute to Tibetan culture but also perfectly matches her warm, cheerful, and versatile personality. Like a Tibetan girl who sings and dances with joy, she uses art as a bridge to connect Eastern and Western cultures.

In March this year, Gemma successfully planned and hosted a concert on SJTU's campus titled "Thawing Beats." The event attracted enthusiastic participation from seven bands across different departments, each expressing the rhythm of youth through diverse musical styles, creating a moving symphony for the spring season on campus.

### Acoustic Avenue

Acoustic Avenue is a talented and versatile group that brings a unique blend of musical genres into everyday life. From the timeless charm of Disney songs to the joyful rhythm of reggae, the smooth allure of whiskey blues, and the powerful energy of classic rock, Acoustic Avenue offers an unforgettable experience for every music lover. Whether you're a fan of nostalgic melodies or someone looking for something bold and energetic, this band has something for everyone. With their distinctive sound and passion for performance, Acoustic Avenue promises to take you on a musical journey that continues to resonate long after the final note fades.

(Source:International Student Service Center)

### SJTU TODAY SHANGHAI JIAO TONG UNIVERSITY

# **Pioneering University Cultivating Top-Tier Talent in Al**

### 中國日報客户端

E-mail:siyuanhu@sjtu.edu.cn



**Pioneering university** cultivating top-tier talent in Al 2025.05.11 The China Story 

at Your Fingerti

Aiming to cultivate top-tier global talent in artificial intelligence, Shanghai Jiao Tong University has introduced a new integrated bachelor's and master's program with a talent cultivation path that is unprecedented in Chinese universities

Editor: ZHENG Mao, JIANG Qianqian, LIU Jian, HAO Jie, YU Qinling

Integrating mathematics, AI and engineering, as well as incorporating humanities and social sciences, the program seeks to nurture AI innovators who embody a blend of technological prowess and humanistic understanding. and who are equipped to play a leading role on the international stage, according to the school

SJTU is among pioneering universities in China that are starting to offer Al-related courses and majors.

Launched by the university's Paris Elite Institute of Technology, together with two prestigious French academic groups — Ecole Polytechnique and Paris Sciences and Lettres University - the "Class of Descartes" program is scheduled to enroll its inaugural group

of around 20 undergraduate students this autumn.

"Such an integrated path of talent cultivation, especially one that involves AI governance and humanitarian concern, has not been seen in other institutions of higher education in the country," said CHEN Cailian, the Chinese dean of the institute, during a media briefing on Friday.

The program will be conducted in Chinese, English and French, emphasizing the need to enhance students' cross-linguistic expression and intercultural comprehension. The students will be encouraged to contemplate issues, such as trustworthy AI and ethical technology, against a global backdrop, according to the institute.

The curriculum will specifically incorporate content from humanities and social sciences, and offer a module on global AI governance, in order to guide students in understanding the ethical, legal and regulatory challenges brought about by AI development.

Chen said that AI is profoundly reshaping the global technology and industrial landscape, with its core lying in the deep integration of fundamental theories, underlying algorithms and engineering implementation.

"This class emphasizes the integration of mathematics, physics and AI, inheriting the advantages of French education in abstract modeling and logical reasoning, while also incorporating the practical traditions of engineering applications and system realization from SJTU," she said.

Named after Rene Descartes (1596-1650), the renowned French mathematician, physicist and philosopher, the program places a strong emphasis on fostering originality and global awareness among students.

"The program aims to produce high-level talent with a keen sense of international AI governance, innovation capabilities and collaborative skills essential to meet the strategic needs of the nation in fundamental research, key

technologies and global technological competition, "said Chen.

"We will pay particular attention to cultivating an international perspective from this group of young people to focus on the common issues of humanity, such as climate change and AI governance and relevant ethics, rather than just letting them learn a technical skill," she said.

"Meanwhile, we hope they will make voices from China better heard on the international stage in the future. showcasing the grace and spiritual pursuits of Chinese scientists," Chen said.

Hamza Boukili, a French math teacher at the institute, said the focus of cultivating future-oriented talent should be fostering AI and interdisciplinary capabilities to tackle complex, real-world engineering challenges, which is exactly what the "Class of Descartes" program hiahliahts.

ZHU Ye, 31, who was among the inaugural group of graduates from SJTU's Paris Elite Institute of Technology and is now a postdoctoral researcher at the computer science department of Princeton University in the United States, emphasized the evolving demands of talent in the rapidly advancing field of AI, where proficiency in cross-disciplinary skills and systemic thinking is becoming increasingly essential.

Aiming to cultivate engineering talent and business leaders, SJTU and four France-based engineering schools jointly established the institute at SJTU in 2012.

Many universities in China have begun offering AI-related courses and majors. Some prestigious schools, including Tsinghua University, Peking University and Zhejiang University, have strong research capabilities in the Al field and provide education in related maiors.

Tsinghua University has enabled more than 200 courses to be empowered by AI, enhancing the teaching and learning experiences through various functions. (Source: China Daily)

## From Spain to Shanghai Jiao Tong University Bringing with Her a Passion for the Study of **Chinese Culture**

Deeply Rooted in Chinese Culture, Bridging a New Chapter of Academic Excellence

The elegance of Eastern architecture, the artistry of Chinese calligraphy, and the beauty of traditional attire planted a seed in Maria's childhood-a deep yearning for China. As she grew older, this early fascination blossomed into a profound love, nurtured by her readings of Chinese literature and appreciation for traditional music.

To draw closer to what she saw as a "cultural sanctuary," Maria began studying Chinese at a local Chinese school in Spain. Rain or shine, she never missed her twice-weekly classes, supplementing them with self-study in her free time. This perseverance built a strong foundation in the language and ultimately led her to excel academically, gaining admission to the School of Humanities at Shanghai Jiao Tong University, where she pursued a Master's degree in Chinese Language and Literature.

At SJTU, Maria found her academic passion perfectly aligned with the richness of the humanities. Her grades have consistently ranked among the top of her class. She has actively engaged



Maria Santamaria Diaz Outstanding Graduate of the Class of 2025, School of Humanities, Shanghai Jiao Tong University.

in academic research, delving into Chinese philosophy, translation studies, and cross-cultural communication

**Competing Bravely in Dragon Boat** 

carries Maria through her journey of discovering China, then dragon boat racing is the "bond" that anchors her into its cultural rhythm

Over two years, Maria competed across both national and international waters-winning back-to-back championships in the China C9 Universities Dragon Boat Race, taking second place at the Shanghai Student Sports Games, and earning a silver medal at the International Eco Regatta for World-Class Universities.

Not only did she immerse herself in this traditional sport, but she also actively promoted it among international students, encouraging many to join the team. The SJTU Dragon Boat Team has become a symbol of cross-cultural exchange on campus-with teammates from different countries paddling in unison, embodying the universal values of unity and perseverance.

### Fulfilling a Diverse Mission, Dialoguing with the Future of Civilizations

Maria has always believed that

has taken part in numerous activities such as international student orientation, cultural city tours, and International Exchange Week, helping international students experience the depth and charm of Chinese culture firsthand.

As a member of SJTU's Unity Stream Team, Maria manages the university's overseas social media platforms, sharing SJTU's academic strengths, cultural richness, and vibrant student life with the world. In just over half a year, she helped publish more than 50 posts and grew the follower base to over 17,000. "I want the world to see a real, multidimensional, and dynamic China," she says

"As I graduate, I hope to continue deepening my understanding of China and build more bridges for civilizational dialogue," Maria says. And SJTU, with its open and inclusive spirit, will continue to nurture more young ambassadors like her-individuals who, armed with deep academic insight and a global vision, will carry the torch of intercultural dialogue and illuminate a shared future

## **SJTU Delegation Visits** Peru and Chile to **Promote International** Collaboration



As part of its efforts in expanding its collaboration opportunities that pertain

Races, Building Bridges of Cultural Understanding If academic pursuit is the "vessel" that

cross-cultural understanding "begins with language and is fulfilled through action." As a dedicated volunteer, she for humanity (Source:International Student Service Center)

# Silken Lineage, Southern Visions: SJTU "Southeast **Asian Cultural Exhibition "Series of Events Hold**

This year, China celebrates a milestone in diplomatic relations with several Southeast Asian countries. Seizing this important opportunity to deepen exchanges and promote friendship, the "Silken Lineage, Southern Visions" Southeast Asian Cultural Exhibition series was successfully held at Shanghai Jiao Tong University's Minhang Campus on May 9. The event attracted enthusiastic participation from students, faculty, and quests. The exhibition featured four main sections: cultural exhibitions, cultural themed booth, special cultural performances, and food festival. It was graced by representatives from the consulates of Malaysia, Thailand, Singapore, Vietnam, and other Southeast Asian countries in Shanghai, along with university leaders and over a thousand students and faculty members who joined this cultural celebration.

Notable guests included Vietnam's Consul General in Shanghai, Mr. Nguyen The Tung, and Consul Mr. Nguyen Hoai Phu; Thailand's Deputy Consul General in Shanghai, Ms. Vinanda Vannasin, and Consul Ms. Hataipat Sresthabutr; Singapore's Consul in Shanghai, Ms. Wong Xiaofang; Malaysia's Consul in Shanghai, Nur Athira Hani Abdul Rahman; and President of the Singapore Chamber of Commerce, Shanghai Branch, Mr. William Chang. The delegation was warmly welcomed by ZHAO Xin, Vice Party Secretary of Shanghai Jiao Tong University, WANG Houji, Party Committee Standing Member and Minister of the United Front Work Department, as well as responsible officials from various departments and faculties.Both



sides engaged in in-depth discussions on topics such as promoting cultural exchanges and enhancing educational cooperation. In a friendly atmosphere, they expressed mutual determination to further advance multicultural exchange and cooperation, taking the friendly relations between countries to new heights.

The Southeast Asian Cultural Exhibition at the Student Center vividly showcased the rich history, unique arts, and traditional customs of various Southeast Asian countries, reflecting the long-standing friendship and exchanges between China and Southeast Asia. The cultural-themed booths, carefully set up by international students, attracted the attention of numerous faculty and students. Dressed in traditional attire, the international students presented their countries' folk arts, cuisine, and culture, allowing visitors to experience Southeast Asian culture up close. Leaders, guests, and students

engaged in warm conversations, praising the enthusiasm and efforts of the students in actively promoting their national cultures. The lively atmosphere of exchange on-site was a vivid reflection of the flourishing cultural exchanges between countries.

ZHAO Xin and WANG Houji, together with the consuls from various countries, struck the Festive Drums. As the countdown of "three, two, one" echoed, the drumming began, officially marking the start of the performance. The crisp and powerful beats not only conveyed the ceremonial sense of the changing seasons but also injected a sense of collective energy into the event. The exhibition performances included a variety of forms, such as classical dance, modern dance, solo singing, choral performances, and instrumental music, with performers from China, Malaysia, Singapore, Vietnam, Thailand, Bangladesh, Indonesia, Pakistan, and other countries. Malaysia's Festive Drum

performance "Lixia" featured a striking rhythm, Vietnam's modern dance "SEE TÌNH" was full of vitality, Singapore's song "Great World" conveyed vouthful voices. In these performances, the resonance between different cultures flowed quietly, highlighting the beauty of cross-cultural exchange.

The Southeast Asian culinary experience was one of the highlights of the event. The tangy and spicy Tom Yum soup, the rich flavor of Bak Kut Teh, and the unique taste of Satay allowed students and faculty to deepen their understanding and appreciation of Southeast Asian culture through their taste buds. Food served as a bridge, promoting cultural fusion.One student who participated in the event said, "The Southeast Asian Cultural Exhibition made me feel like I traveled through various Southeast Asian countries. Not only did I get to enjoy wonderful performances, but I also have the chance to taste delicious food. I hope the school can organize more events like this in the future.'

The successful hosting of the "Southeast Asian Cultural Exhibition" series provided students and faculty with a valuable opportunity to closely explore Southeast Asian culture, fostering communication and integration between different cultures. In the future. Shanghai Jiao Tong University will continue to organize more vibrant cross-cultural activities, promoting exchanges between Chinese and international youth, helping more students understand multiculturalism, and creating an international campus atmosphere.

(Source:International Student Service Center)

international footprint, a delegation from Shanghai Jiao Tong University (SJTU) recently embarked on a trip to Peru and Chile to strengthen academic and industry partnerships aligned with the Belt and Road Initiative. The delegation included representatives from the university's Publicity Department, Office of International Cooperation and Exchange, and the School of Naval Architecture, Ocean and Civil Engineering.

On May 8th (local time), the SJTU delegation met with Peru's Minister of Education Morgan Quero and Lima Mayor Rafael López Aliaga. During the meeting, both parties discussed opportunities for further collaboration in education and research. The delegation also met briefly with the Pontifical Catholic University of Peru during that same day.

In the following day, the delegation participated in a roundtable discussion centered around the theme: "Bridging Mountains and Seas: Multidisciplinary Talent Training and Research Collaboration between Chinese and Peruvian Universities in the New Era". This event featured a number of high-profile attendees, including the following individuals:

•XIE Dong, Shanghai Vice Mayor •WANG Ping, Deputy Secretary-General of the Shanghai Municipal People's Government

•ZHOU Yaming, Director of the Shanghai Municipal Education Commission

•GAO Zhen, Associate Dean of SJ-TU's School of Ocean and Civil Engineerina

HU Hao, Standing Committee Member and Director of the Publicity Department at SJTU, delivered a keynote speech that energized the room, facilitating conversations between SJTU and representatives from four Peruvian universities-Pontifical Catholic University of Peru, Universidad del Pacífico, University of Lima, and Cayetano Heredia University. The talks included topics on academic discipline development and research collaboration, specifically

to the transformative Chancay Port project.

Later in the afternoon, a major milestone was reached as SJTU's School of Naval Architecture, Ocean and Civil Engineering signed a new cooperation framework agreement with COSCO Shipping Ports Chancay Peru. Vice Mayor XIE Dong attended the event, who applauded SJTU's proactive role in supporting the nation's priorities and expressed hope that the university would continue nurturing young, socially responsible talent. This partnership signals marks a new chapter in university-industry cooperation; by integrating SJTU's expertise in engineering and innovation with COSCO's leadership in port development, the two parties aim to set a role model for Belt and Road cooperation in research, education, and infrastructure.

On May 11, the delegation moved forward with a visit to Chile, where the representatives met with MA Zhen, chargé d'affaires at the Chinese Embassy in Chile to discuss possibilities for further educational cooperation between the two countries. The next day, the delegation participated in a work session between Shanghai officials and Chile's Acting Minister of Education, Alejandra Arratia. They also stopped by the University of Chile to explore more collaboration opportunities.

While in Chile, the delegation also met with various SJTU alumni working in the country, marking SJTU's 130th anniversary with a special commemorative event in the process. The event was held under the theme "Bearing the Flag Together", capturing the sense of community and collective pride shared among SJTU alumni and supporters.

Through a series of candid, in-depth dialogues on international cooperation, the visit helped strengthen ties with partners in Latin America and laid the foundation for more open, diverse forms of international exchange.

(Source: International Affairs Division, Grand NeoBay)

