

Spring 2019



来辰

伯同

SHANGHAI: Water City

S

Does the City's Past Hold the Key to its Future?

For and about the NYU Shanghai community

ABOUT

Founded in 2012, NYU Shanghai is China's first Sino-US research university and the third degreegranting campus of New York University's global network. Our student body consists of 1,300 undergraduate and graduate students, half of whom are from China. Students from the United States and some 70 other countries represent the other half. NYU Shanghai seeks to cultivate globally-minded graduates and citizens through innovative teaching, world class research, and a commitment to public service.

1000

NYUSH Magazine is published by NYU Shanghai's Office of University Communications.

Write to us:

1555 Century Avenue Pudong New District Shanghai 200122, CHINA

nyushanghai.uc@nyu.edu

Follow us @NYUShanghai



Detail of a 14th century ink painting by Li Sheng depicting the ancient landscape around Lake Dianshan, now part of modernday Shanghai. Reproduced courtesy of the Shanghai Museum.

Contributors: Lu Jiaojiao, Rhine Lu, Ma Yida, Maria Jensen, Charlotte San Juan, June Shih,

Publisher: June Shih

Editor: Juliet Turner

Amanda Zhao

Photography by NYU Shanghai unless otherwise stated

IN THIS ISSUE

NEWS

- 2 In the News
- Δ Snapshot
- Research in Brief 6
- NYU Shanghai Live 8

SECTIONS

- Faculty Q&A
- 12 Alumni
- 21 Arts Focus
- Course Spotlight 22
- 24 Roommates





STORIES

Juliet Turner, Fei Wu, Tannia Xia,

Design by Harp and Company

Printed in Shanghai by Favann Culture Communication Company using paper from sustainable sources

©NYU Shanghai 2019



COVER FEATURE

Shanghai: From Water Town to Water Metropolis?







Building a Foundation in Liberal Arts

The Chinese Minority & Folk Dance class performs a Tibetan piece, "Mandala," at the Power Station of Art in Shanghai.

FACULTY

Paul Romer Awarded Nobel Prize

A distinguished economist and NYU Shanghai founding faculty member has been named a 2018 Nobel Laureate in Economic Sciences.

Paul Romer, a professor of economics at NYU's Stern School of Business, was cited by the Swedish Academy "for integrating technological innovations into long-run macroeconomic analysis."

Romer founded the NYU Stern Urbanization Project in 2011, conducting research on ways policymakers can use the growth of cities to create economic opportunity and pursue social reform. He also directed NYU's Marron Institute of Urban Management.

During the 2013-14 academic year, Romer co-taught the freshman core course, Global Perspectives on Society, to NYU Shanghai's inaugural class (see Spotlight, p.18).





Zhang Zheng to Head Amazon's New AI Lab in Shanghai

NYU Shanghai Professor of Computer Science Zhang Zheng has been appointed director of Amazon Web Services' new Shanghai Artificial Intelligence Lab, where he will lead the company's advanced research and development of deep learning.

Zhang, a U.S. citizen, is the first foreigner to receive a new work permit from the Pudong government that allows him to hold simultaneous positions at Amazon and NYU Shanghai.

NYU Shanghai Chancellor Yu Lizhong welcomed the new policy. "As a research university, NYU Shanghai encourages its faculty to conduct further research on cutting-edge frontiers and help cultivate global talent," he said. "The fact that Professor Zhang can now play a key role in the research and development of a leading industry is of great value to the university, enabling us to strengthen our partnerships with leading companies."

ADMISSIONS

Applications to NYU Shanghai Up 25%

The number of undergraduate applications to NYU Shanghai jumped 25 percent in 2018 to a record high of 16,750, as students vie for one of 450 places in the Fall 2019 freshman class.

This was the fourth consecutive increase, indicating the university's growing popularity among students worldwide. The NYU Shanghai Admissions office said that the applicant pool was extremely diverse, with students from 149 countries and regions. "We are seeing more and more international students seeking admission to NYU Shanghai who are eager to engage with China and with an international student body during their college years," said Annie



Lu, director of admissions for NYU Shanghai. Chinese applicant numbers also remarkably grew by nearly 45 percent this year to just under 3.000.

CGA Awarded Luce Foundation Grant 'Local Environments,' 'Routes of Mobility,'

The Center for Global Asia at NYU Shanghai. together with NYU Global Asia faculty in New York and Abu Dhabi, received a \$450,000 grant from the Henry Luce Foundation.

The grant will support a three-year collaborative research project entitled "Port Cities Environments in Global Asia." Focusing initially on five themes with contemporary and historic significance -'Imperial Connections,'

LEADERSHIP

Vice Chancellor Lehman Named Most Influential Foreign Expert NYU Shanghai Vice Chancellor Jeffrey Lehman was named one of "The Most Influential Foreign Experts During 40 Years of China's Reform and Opening-Up" by the State Administration of Foreign Experts Affairs.

Lehman is one of forty senior foreign scientists, artists, educators and diplomats to be honored for their pivotal contributions to China's remarkable progress since 1978 in scientific research, cultural exchanges, major technologies, and higher education.

'Mobile Cultural Forms,' and 'Temporality'-the project aims to build sustained collaboration among scholars on all three campuses, enriching faculty research, teaching, and graduate training. As a result, the organizers hope to improve knowledge production about Asia and establish "Global Asia" as a dynamic field across NYU's network of global campuses.

Find out more at cga.shanghai.nyu.edu

GIVING

Interactive Wall of Honor Unveiled

In lieu of a traditional plaque, the University has launched an interactive installation to recognize NYU Shanghai's supporters.

The tribute features a video wall with an interactive roll of honor and dozens of messages from members of the University, which can be recorded on the spot in a video booth, nicknamed 'The Box.'

Visit the 2F Mezzanine Floor to view the installation, or find out more about how donations are funding NYU Shanghai dreams at foundation.shanghai.nyu.edu.

SNAPSHOT

1. NYU Women's Soccer

After winning the 2018 Shanghai Football League Championship in May, NYU Shanghai's women's soccer team kicked off the new season with a first-ever encounter with the NYU Abu Dhabi Falcons.

2. Interactive Art

Students exhibited more than 100 projects during the December 2018 IMA showcase, including this plasma strand speaker by Sean Coneys '19.

3. Making an Impact

Students in the Deans' Service Corps spent their October National Day Holiday in Henan Province helping a rural community affected by HIV/AIDS.

4

4. Ping Pong Diplomacy U.S. Ambassador to China Terry

Branstad visited NYU Shanghai in December, fielding students' questions on U.S.-China relations, and accepting a challenge to a game of ping pong.

5. Building a Smarter City

Guo Lu '20 and her team won third place at the 2018 Shanghai Smart City Hackathon for designing a smart home system to help people with impaired vision.

6. Tennis Champions

Freshmen Yang Zhiheng and Bao Handan earned first and second place, respectively, in their divisions at the 16th Shanghai Games.

7. Global Views

This image of the Northern Salt Plains of Argentina by Andre Lucas '19 (Study Away site: Buenos Aires), was one of the winning entries in NYU Shanghai's 2018 Study Abroad Photography Competition.

PHYSICS

New Quasicrystal Discovered

Assistant Professor of Physics Pilkyung Moon, together with a research group from Sungkyunkwan University, have succeeded in creating a new graphene quasicrystal. In their research-which was featured on the August 2018 cover of Science-Moon and his colleagues demonstrated that when two layers of graphene, which is periodic, are placed atop the other and rotated exactly 30 degrees, a more complex, quasi-periodic structure is created. The discovery expands knowledge about atomic order and will enable scientists to build a theoretical model that can describe the physical properties of this new designer structure without relying on the approximations used in conventional quasicrystal research.

NEUROSCIENCE

How We Make Economic Decisions

Assistant Professor Neural and Cognitive Sciences Cai Xinying and his colleagues have observed how the orbitofrontal cortex (OFC), which is good at making abstract choices-like which wine to drink with pasta-handles decision-making when faced with physical factors-for instance, how far to travel to obtain the wine. Their research finds that the OFC can maintain value assessment for optimal choice by adapting its activity to reflect the physical effort incurred for obtaining goods.

CHEMISTRY

The Missing Link

Assistant Professor of Chemistry William Glover has solved a long-standing puzzle in fundamental chemistry. His research shows how butadiene, the smallest among a class of molecules called polyenes, dynamically responds to the absorption of light. It paves the way for new strategies for designing molecules with improved solar energy conversion efficiencies.

For more research news and to read the full papers, visit research.shanghai.nyu.edu

BOOKSHELF

NEWS

6

The Human Body in the Age of **Catastrophe: Brittleness, Integration,** Science, and the Great War (University of Chicago Press, 2018)

In their new book,

Stefanos Geroulanos and Todd Mevers, associate professor of anthropology at NYU Shanghai, uncover a fascinating story of how the medical community sought conceptual frameworks to understand bodily shock, brain injury, and

the vast differences in patient responses they saw during WW1. Geroulanos and Meyers carefully trace how this emerging constellation of ideas became essential for thinking about integration, individuality and collapse far beyond medicine: in fields as diverse as anthropology, political economy, psychoanalysis, and cybernetics.

The Routledge Handbook of the **Global Sixties: Between Protest and Nation-Building**

(2018)

Released on the fiftieth anniversary of 1968, this book reassesses the global causes, themes, forms, and legacies of that tumultuous period. While existing scholarship continues to largely concentrate on the US and Western Europe, this volume-edited by NYU

Shanghai Provost Joanna Waley-Cohen, Distinguished Professor Chen Jian and scholars from NYU's global campuses in New York and Abu Dhabi-focuses on Asia, Africa, the Middle East, and Eastern Europe, and explores the global sixties through the prism of topics that range from the economy and decolonization, to higher education and transnational relations.

The Beauty of **MATHEMATICS**

Associate Professor of Mathematics Pierre Tarrès works well while he walks, and one of his favorite places to seek inspiration is along the Bund. Tarrès joined NYU Shanghai as a visiting professor in 2016. Moved by the "wonderful willingness to learn" of his students, he decided to stay, earning tenure in 2018. The mathematician, who was previously associate professor at Oxford and taught at Paris' Ecole Normale Supérieure, says teaching is a craft: "the art of conveying difficult notions as clearly as possible." Here, he shares his approach to teaching, research and life with NYU Shanghai:

When did you decide to become a mathematician?

My father is a mathematician, which should have helped, but in my childhood and early teenage years, I was more interested in music. It wasn't until high school that I started to discover the beauty of mathematics. It is a language many people feel is boring to learn at first, but once you master it, you can see its artistic side. It is very creative, and of course also useful in many fields: physics, biology, economics, data science. Something John von Neumann said that completely resonated with me: "If people do not believe that mathematics is simple, it is only because they do not realize how complicated life is."

You've made significant advances in Stochastic Analysis and self-interacting random processes. Can you explain what this means to those of us who stopped studying math in high school?

The relationship between self-interaction and learning is fascinating. If you play a game and reinforce the strategies that have more payoff, you have a good chance to play it optimally in the long run-if you don't reinforce too fast. But if you play with other people, things start to get more complex. This is also applicable to biology, statistical physics, dynamical systems, and some of my work aims at developing those interactions. I feel I won't have enough time in my lifetime though to fully understand it!

I try to think of the mathematical problems I care about as soon as I wake up, since the early morning is a precious moment of creativity. It does not mean I find a solution. Most of the time, I have to refine or change my approach several times. Compared with other mathematicians, I don't write a lot of papers or do many computations before I solve a problem. Instead, I spend a lot of time thinking about the best strategy to tackle a problem, and only then begin making computations. Sometimes it does not work, and I need to spend more time thinking. I can spend hours and even days immersed in a mathematical problem.

What do you hope students will take away from your classes?

FACULTY Q&A

How do you approach your mathematical research?

I'm known among my students to ask difficult questions. The one thing I would like them to take away is that some problems will not be solvable in under 20 minutes. They could spend a few hours, or even a few days to try to solve a problem or understand a difficult notion. The capacity to answer difficult questions is a unique skill and will be useful to them for any life they have later on.

HEARD ON CAMPUS

A host of well-known faces from the worlds of art, business and sports visited NYU Shanghai during the fall-part of a calendar of more than 100 events, ranging from academic lectures and workshops to film screenings and literary readings.

Students packed the auditorium to hear from stars such as figure skating world champion Michelle Kwan, award-winning novelist Liu Cixin and A.I. expert Kai-Fu Lee, and met with scholars in fields from global history to neuroeconomics.

FIND OUT WHAT EVENTS ARE COMING UP AND BOOK YOUR PLACE NOW AT SHANGHAI.NYU.EDU/EVENTS

LIU CIXIN, author of the Three-Body Problem trilogy

On science fiction in China: "Some people think of science fiction as something for disseminating scientific knowledge or for children. However, that is changing. The new generations care not only about life around them, but also beyond them. [...] It would be stand science fiction as trying to predict the future. Rather it lays out all the possibilities appreciate. To write the best what is least possible. Some-

in the 21st Century

- Conversations with the Vice-Chancellor

wrong, however, to underin a literary way for us to story, authors often explore times, that will come true. Like a broken watch, it has the time right twice a day." - Talk about Science Fiction

Shanghai, 18

KAI-FU LEE. AI expert and former Microsoft tech executive-turned-venture capitalist

ons of Ge

On the duopoly of the US and China: "In Silicon Valley, entrepreneurs compete very gentlemanly, but in the Chinese environment, it is truly a gladiatorial fight to the death. In such a brutal environment, entrepreneurs learn to grow very rapidly, to make their products better at lightning speed, and hone their business models until they are impregnable."

- Presentation on Al Superpowers

MICHELLE KWAN, Olympic figure skater and U.S. **Department of State envoy**

career: "After retiring from professional skating, suddenly my identity as an athlete was stripped away and there was a lot of soul searching. I went back to school. It was a period of self discovery, of finding my passion outside sports. Figure skating had opened a lot of opportunities for me, and I knew at the time I must make the most of these. On one occasion, I was at a state dinner attended by President

On transitioning to a new then-Secretary of State Condoleezza Rice. One thing led to another and I ended up travelling as an envoy for the U.S. Department of State, which led to an interest in foreign policy, and many other things. You never know in 10 years where you will be, so go with your opportunities, put yourself out there, learn from others, and have the courage to take that leap

Bush and President Hu Jintao. It was nerve-wracking but I introduced myself to

ROBERT ENGLE. Nobel Laureate in Economics, NYU

professor

On the Chinese stock market: "A lot of stress could be relieved by three steps. First, gradually reduce the debt-this would be slowing the growth of credit and actually reducing it over time. Second, China should find a credible way to reassure investors that they will have some protection if they come to China. I think a lot of money in the world would come to fill gaps in China's growth plans if investors felt they could do this safely. And the third step would

MADAME ZHANG YUEJIAO. Former Member of the WTO **Appellate Body**

On the role of the World Trade Organization in trade disputes: "The WTO follows the principle of mutual respect for sovereignty and does not interfere in any regime's political, economic or social laws. However, in international trade, we must all have the same benchmark of rules to follow. [...] We need WTO and international law more than ever before, because domestic trade law still needs to be consistent with international practices. Countries that join the WTO are giving an international commitment to multilateral exchange. We have seen that multilateral agreements lead to more predictability and stability, and thus, we need to protect and further develop the multilateral trade system."

- Panel Discussion about The Future of the WTO

Graduate students can take advantage of NYU Shanghai's location in the city's business district

Since its founding, NYU Shanghai has been building rigorous graduate programs to attract the world's best and brightest.

Six years on, NYU Shanghai continues to expand its graduate offerings, launching new PhD programs in Mathematics as well as Transportation Planning and Engineering, and two new Master of Science (MS) programs in Guantitative Finance and Data Analytics and Business Computing. Once the programs welcome their inaugural classes later in 2019, the total number of PhD programs will reach seven, and master's degree offerings will double to four.

Innovative Master's Programs

The **MS in Quantitative Finance** and **MS in Data Analytics and Business Computing** will be offered jointly with the NYU Stern School of Business. The year-long programs are designed to prepare students for careers in the growing fields of analytics and finance in China and Asia. NYU Shanghai and Stern have recruited leaders from top Chinese and Asian companies—among them Didi, Goldman Sachs, IBM, KKR, Ping An, and ZhenFund—to serve on the programs' advisory boards. Each degree candidate will complete a capstone project to solve cases presented by real corporate clients.

The MS programs are just NYU Shanghai's latest collaboration with an NYU partner school. Since 2015, NYU Shanghai has partnered with the NYU Silver School of Social Work to offer a unique option within NYU Silver's Master of Social Work (MSW) program, allowing students to spend their first year in the program in Shanghai. Meanwhile, a joint MA in TESOL (Teaching English to Speakers of Other Languages), offered with the NYU Steinhardt School of Culture, Education and Human Development, admitted its first class in summer 2018. Designed for educators in China, the two-year program is offered part-time in Shanghai during the school year to allow students to stay on the job as they study and also features a summer immersion in New York City.

"The programs are designed to combine the best of both schools and place students at the forefront of their fields in China and Asia."

— Vice Chancellor Jeffrey Lehman

"These collaborations with Stern, Silver and Steinhardt reflect NYU Shanghai's philosophy of offering innovative graduate programs that are tailored to meet societal needs," says Jeffrey Lehman, vice chancellor at NYU Shanghai. "The programs combine the best of both schools and place students at the forefront of their fields in China and Asia."

Doctoral Offerings

The new **PhD in Mathematics** will be offered jointly with the NYU Graduate School of Arts and Science (GSAS) and the NYU Courant Institute of Mathematical Sciences while the new **PhD in Transportation Planning and Engineering** will be offered jointly with the NYU Tandon School of Engineering and its Department of Civil and Urban Engineering.

"A PhD program is a crucial step for Mathematics at NYU Shanghai. It will be a core asset to attract top faculty here, as well as strong students," says Gerard Ben Arous, Global Network Professor of Mathematics and Associate Provost for the Quantitative Disciplines, NYU Shanghai and a former director of the Courant Institute. "We are fortunate to be able to rely on the breadth and the strength of the Courant Institute, which is one of the top research institutes worldwide, both in applied and pure mathematics."

These programs will be similar in structure to the university's five other **joint PhD programs in Biology, Chemistry, Computer Science, Neural Science**, and **Physics**, which are also offered in collaboration with NYU GSAS, NYU Tandon, and academic departments based in

Neural Science PhD students Li Liujunli and Zhu Xiaoyue examine a brain slice from a rat

BY THE NUMBERS

11 Joint Programs

Students can study for a master's or PhD at NYU Shanghai in 11 subject areas.

2 Global Hubs

All NYU Shanghai graduate programs entail study in New York City and Shanghai.

1 Degree

Graduates of joint programs earn an NYU degree.

New York City. NYU Shanghai's PhD candidates begin their studies with coursework in New York, and then transition to full-time residence in Shanghai, where they undertake doctoral research under the supervision of NYU Shanghai faculty. Upon graduation, students earn a PhD from New York University.

"I chose the Shanghai PhD because of the excellent academic resources NYU has in both the US and China, as well as the generous financial aid provided by the NYU Shanghai Doctoral Fellowship," said Bai Yuanming, a second-year Chemistry PhD student. "The professors here are leading experts in their fields, such as my supervisor, William Glover, and John Zhang, the Director of the NYU-ECNU Center for Computational Chemistry, who spend extensive amounts of time with us on our research."

With the number of graduate students in NYU Shanghai programs set to triple in the coming years, and more than 300 NYU-based graduate students participating in study-away programs at NYU Shanghai every year, the University's graduate community is growing fast.

"The expansion of our graduate programs marks a new phase of development for NYU Shanghai," says Chancellor Yu Lizhong. "The University is looking forward to cultivating more high-level talents who will make important contributions to Shanghai and the world."

For more information about these programs and how to apply, visit shanghai.nyu.edu/graduate.

Go forth, Class of 2018!

NEW REPORT FINDS NYU GRADUATES AMONG MOST SOUGHT AFTER BY GLOBAL EMPLOYERS

12

From top: Graduates on Century Avenue; Student speaker Itmum Momin '18; Leidy Tapasco '18 passes the NYU Shanghai torch to Savannah Billman '19; Joint student speaker Katie Chen '18.

On May 23, 2018, NYU Shanghai celebrated the graduation of its second class. Clad in violet robes, 265 students from 35 countriesincluding 138 from China-one by one crossed the stage at the Shanghai Oriental Arts Center to receive their NYU bachelor's degrees and NYU Shanghai diplomas in front of proud family and friends.

During the ceremony, NYU Shanghai Chancellor Yu Lizhong conferred the 2018 Medal of Honor on Xu Xiaoping, one of China's most celebrated angel investors and educators. In his commencement speech, Xu advised the new graduates "to stay open to new possibilities."

"Think less about finding the ideal job, and more about making yourself the [person you aspire to be]. When that is your outlook, opportunity, I promise, has a way of finding you," he said.

GRADUATE DESTINATIONS

In the months following graduation, opportunities have come in many forms for members of the Class of 2018. Indeed, Ninety-four percent have accepted offers of employment or places at graduate school, with four graduates awarded prestigious global scholarships or fellowships.

More than half (53 percent) have entered the global workforce. Of these, 21 percent are working in the tech industry with companies such as Amazon, Facebook, Google, Alibaba and Tencent, representing a 13 percent increase in this sector since 2017. First-year salaries for graduates working in China are also up, with graduates reporting earning on average 134,575 RMB; those starting their first jobs in the US reported average starting salaries of \$60,217.

According to a recent report, being an NYU graduate may also increase opportunities-at least among global employers. In just one year, NYU has jumped from 43rd to 15th in the Times Higher Education ranking of the top universities in the world that best prepare students for the workplace.

Of the 41 percent in graduate schools, 10 members of the Class of 2018 are enrolled in PhD programs and 90 are studying for their Master's degrees at some of the world's top universities.

Finally, 18 of NYU Shanghai's 111 international graduates found opportunities to remain in China. Eleven are working, while seven are pursuing further study.

To find out more about what members of the Class of 2018 are doing, see shanghai.nyu.edu/destinations, or visit shanghai.nyu.edu/alumni to connect with former classmates.

Clockwise from bottom right: Chancellor Yu and Provost Waley-Cohen congratulate each graduate; A personalized cap stands out during the ceremony; Graduates toss their caps outside the Oriental Arts Center; Graduates celebrate receiving their diplomas; President Andy Hamilton addresses the Class of 2018.

ALUMNI

"Sometimes the only real limitations on how far we go are those we impose on ourselves. In a period of so much change, with so many new business models and the opportunities they bring, don't limit yourself. Stay alert to all your options, especially to new ones, and go where your mind and imagination lead you. In today's dynamic environment, curiosity can e a better career guide than caution You will always find something, somewhere, that answers your inner calling."

Xu Xiaoping, Founder & Managing Partner at ZhenFund and 2018 Commencement Speaker

From Wetlands to Water Metropolis?

by June Shih

THE ZAANHEH PROJECT SEEKS TO REDISCOVER SHANGHAI'S NATURAL HISTORY—AND IMAGINE ITS FUTURE.

Shanghai's historic waterfront rises from marshland on the banks of the Huangpu river

erhaps no city has grown and urban metropolis as rapidly as Shanghai.

The city's iconic skyline—the spaceship-like Pearl Tower, the gleaming World Financial Center, the elliptical Shanghai Tower, all standing tall amidst a gleaming glass forest of skyscrapers along the Huangpu River—has become an indelible symbol of China.

For many, it's difficult to believe that just over 25 years ago, the busy Pudong District was home to scattered warehouses, wharves, and mud flats. Or that a little over 100 years ago, Yan'an Road, now one of modern Shanghai's major thoroughfares, was a stream along whose banks farmers sold watermelons and other produce.

Or that some 600 years ago, Shanghai—Zaanheh, as it has long been called by its residents in the local dialect—was a water town, where boating along canals was the most common form of transportation.

In the daily, urgent hustle of 21st century city life, it is easy to forget the past. And yet hints of the past are still with us—even in futuristic Shanghai: Major roads such as Zhaojiabang Road and Lujiabang Road are named for the waterways they replaced. Small pockets of wetlands and tall grasses can still be found in the city's outer districts. Shanghai's soft, sandy soil and tropical summers—these are not only the legacy of Shanghai's water-saturated past, but also its present. And, with climate change already making its presence felt every day, its likely future.

"WHAT IF YOU COULD WALK AMONG THE RHINOS AND GIBBONS THAT MIGHT HAVE ROAMED SHANGHAI 7,000 YEARS AGO?"

What if Shanghai's residents could travel back in time and experience some of those past landscapes? What if anyone could type in a current Shanghai address into a computer, don a pair of virtual reality glasses and walk among the rhinos and gibbons that might have lived on that particular street 7,000 years ago or board a boat to explore the 15th century canal that ran past their front door? Or put on a pair of headphones and listen to the insects, cranes and other birds that populated Shanghai's wetlands so many centuries ago?

Through the Zaanheh Project, a multidisciplinary team of NYU Shanghai professors and staff, graduate and undergraduate students are attempting to research and create a comprehensive history of Shanghai's landscape and ecology. By using all the materials and tools available to us today—historical, geological, ecological records, maps, paintings, poems, data science and computer modeling—team members hope to create a complete understanding

erhaps no city has grown and urbanized, and transformed itself into a modern

and experience of Shanghai's natural landscape, ecology and geography at distinct points in time.

Zaanheh is directly inspired by the *Mannahatta Project*, a decade-long study undertaken by Eric Sanderson, a conservation ecologist at the Wildlife Conservation Society and an adjunct lecturer in NYU's Department of Environmental Studies. Mannahatta suggests and interprets what the island of Manhattan might have looked like in the moments before the English explorer Henry Hudson and his crew landed there in September 1609. With computer modeling, maps, historical and archeological records, Sanderson and his colleagues recreated in a book and online "the forests of Times Square, the meadows of Harlem, and the wetlands of downtown" that were home to Native Americans who lived among mountain lions, elk, deer, beavers, tens of thousands of bird and fish species in the early 17th century.

circa 5000 BC

During the Majiabang period, elephants. rhinos and tigers may have roamed the ancient wetlands, and much of modernday Shanghai would have been under water

circa 5th century In the late Jin through the Tang Dvnastv. Shanghai was a small fishing village known as Hu 滬-a character derived from 扈, a fishing trap, and still used as an abbreviation to denote the city.

By the Ming Dynasty, the city

was an important center for

wall was built around the

the period show the city

criss-crossed with canals

trade and industry. A defensive

Old Town in 1553. Maps from

The idea to undertake a similar project in Shanghai happened serendipitously. In 2017, Sanderson came to China to give a talk about the Mannahatta Project at the Shanghai Zoo. At NYU Professor Dale Jamieson's suggestion, Sanderson stopped by the NYU Shanghai campus to visit Assistant Professor of Environmental Studies Li Yifei. As they talked, the two had a brainstorm, "Why not do this for Shanghai, too?"

There was clearly a need for the project, says NYU Shanghai Dean of Arts and Sciences Maria Montova, who is spearheading the effort. While it's not too difficult to find books, articles and photos documenting the changes in Shanghai's urban landscape over the last three decades, there has yet to be a comprehensive accounting of Shanghai's past geography,

Manhattan in 1609 and 2009: The Zaanheh Project was inspired by Eric Sanderson's Mannahatta Project, which traced the ecology of New York City to before the arrival of colonial settlers. Credit: Markley Boyer / Wildlife Conservation Society; Yann Arthus-Bertrand / Corbis.

ecology, and biodiversity. Though covering a much shorter timespan, the city's museum of urban planning, for instance, is still larger than Shanghai's natural history museum. And the vast majority of people-Shanghai residents included-know little of Shanghai's ecological past beyond romantic stories of its origins as "a small fishing village."

The idea of a Zaanheh Project that might fill in these gaps quickly captured the imagination of a large interdisciplinary team of NYU Shanghai faculty, graduate students and undergraduates from disciplines such as Interactive Media Arts, History, Philosophy, Art History, and Computer Science. Sanderson, too, signed on to be a key consultant.

Montoya says that team members are working to expand and recruit experts from Shanghai universities and around the world to the join the Project. The NYU Shanghai-ECNU Global Center for History, Economy and Culture has become the Project's sponsor, opening doors to potential partners at regional regional and cultural organizations. The Academia Sinica in Taipei has begun sharing their extensive collection and analyses of ancient and antique maps of the Shanghai region. Berlin's Max Planck Institute, which has digitized some 3,000 Chinese Gazetteers-encyclopedias recording the history of Chinese localities at various points in time-has also made their research tools available to the NYU Shanghai team.

"Our hope is that this project will become a lasting gift from NYU Shanghai to the city of Shanghai," says Vice Chancellor Jeffrey Lehman. "We hope that it will help the people of Shanghai both to better appreciate their city's rich natural heritage and to use that knowledge to better meet the inevitable ecological challenges of the future."

Until the Concession era, Shanghai had been a city of waterways. Many were filled in over the coming decades to make way for roads.

Above: Shanghai's city wall and moat, photographed c.1890.

While the project is still in its very nascent stages, the team for now is focusing on Shanghai's natural landscape at three key points in time:

- · Seven thousand years ago, during the Majiabang period, when elephants, rhinos and tigers roamed the wetlands.
- 5th century, in the late Jin through the Tang Dynasty, when Shanghai was still a small fishing village called Hu (滬).
- 1842, on the eve of the the Foreign Concession period after the first Opium War.

The research team is looking to produce several outputs at the end of what they expect will be at least a decade-long process:

- 1. Articles and books to build international interest in the subject matter.
- 2. Interactive web-based map/virtual reality tools for public use.
- 3. Educational material for students in grades K-12.
- 4. Recommendations for better management of floods, parks, wetlands, etc, based on our understanding of the past.
- 5. A network of interdisciplinary scholars or research teams in Shanghai and beyond.

But before any of these outputs can be achieved, years of painstaking research lay ahead. An already robust body of scientific knowledge, from the sedimentary history of the lower Yangtze delta to the social evolution of human settlements in the region, will serve as the foundation for the team's exploration and intellectual undertakings. The story of Shanghai's ecological past must also

AANHEH N 16

.

Early 1990s

A flood wall was built along the Bund waterfront to protect Shangha from rising water levels

After decades of overextraction of groundwater. Shanghai was sinking up to four inches a year, prompting the government to introduce strict limits.

Since the reforms of the early 1990s, the city has expanded rapidly, transforming into the economic powerhouse of Asia, yet it is one of the major cities in the world most vulnerable to serious flooding

A 17th-century painting of the river port and moat outside the city walls of Old Shanghai.

be pieced together from reams of original records left behind by Zaanheh's long ago residents, rulers, and visitors-from the thousands of gazetteers dating from 1193 that were compiled by local scholar-officials to describe Zaanheh's geography, physical features, population, to the diaries and records of the Jesuit missionaries who traveled to China in the 16th century, to the meticulous and comprehensive handwritten minutes of the Shanghai Municipal Council formed by the British, French and Americans to oversee city affairs during the concession era, to the archives of the Shanghai waterworks.

Li says he sincerely hopes that a decade from now, he will still be fully immersed in the ongoing Zaanheh Project. Its possibilities and end products are more than worth the time. "As a Shanghai native, my hope is that everyone can better understand the city in the historical context in which it emerged," Li says. "I'm doing nothing more than dusting off some of the richest stories of Shanghai's past. Let them shine in a way that they so richly deserve."

To find out more about the Zaanheh project, visit *zaanhehproject.hosting.nyu.edu*

GLOBAL PERSPECT

concept of a modern city had so many assumptions based on capitalism and social hierarchy that I had taken for granted. It was a very deconstructive process for me."

Ma's experience with GPS is not unique at NYU Shanghai. An idea or an image in class may spark an interest, that thread of curiosity is followed, and before long that student will find him or herself looking at the world with different eyes.

Developed and taught first by Vice Chancellor Jeff Lehman and Nobel prize-winning economist Paul Romer, GPS is designed to expose students to the great thinkers of the past and today, and to the diverse approaches to thinking about and understanding the world.

All students are required to take this one-semester foundational course in their freshman year—the only time all 450 students in the same class, who hail from around 35 countries around the world, will study the same course.

Twice a week during the fall, they attend lectures with titles such as the 'Social and Political Foundations of Society,' 'Producing the Self,' and the 'Sources and Limits of National Identity.' Readings from political economists to poets are assigned to complement the lectures. A team of "GPS Fellows"—postdoctoral scholars in the social sciences and humanities—then lead weekly "recitations" where small groups of students discuss ideas raised in the texts.

Rooted in Chinese Context

In some ways, GPS is like any other introductory course taught at liberal arts institutions in the United States. Students tackle canonical texts from the history of thought—from Plato to Simone de Beauvoir—and write papers relating the materials to topics of identity, nationality,

CHALLENGING ASSUMPTIONS, REDISCOVERING THE FAMILIAR, AND CHANGING THE WORLD

a Haitian '20 didn't know what to expect from her first Global Perspectives on Society lecture in the fall of her freshman year. "Judging from the course title, I thought it was going to be a discussion about diversity," she said.

RSE SPOTUGHT

by Fei Wu

Instead, the first lecture focused on global cities. "We read articles about the history of Shanghai with different perspectives on the city's evolution. Professor Corpis then challenged us to think about what it means to live in a 'global city.' Who benefits and who loses from living in global cities?"

After the lecture, Ma, a native of Kunshan in nearby Jiangsu Province, started to the see the city around her differently. "That class made me reflect. I began noticing the history of the buildings, the different people who live here. My

IVES ON SOCIETY

and globalization. But that's where the similarities end.

The course is deeply rooted in its Chinese context. Discussions regularly touch on China and her impact on the world. Furthermore, roughly one-third of the readings are by Chinese authors and thinkers ranging from Confucius to Zhou Enlai.

The current custodians of the course, Associate Professor of History Duane Corpis and Associate Professor of Philosophy Brad Weslake have carried on the practice of intertwining interdisciplinary and multicultural perspectives into the course, forcing students to grapple with multiple perspectives and often contradictory points of view.

"We try to expose students to the Western world's foundational 'Great Works,' but we also introduce them to texts from Asian and Afro-Caribbean authors, Indian philosophers, as well as works from the natural sciences, psychology, and feminist theory...." says Weslake.

There is also a micro to macro progression of course topics. When students begin the semester, they encounter readings about the individual and the self. As the semester progresses, the topics pan out to encompass collectives, communities, the nation, the marketplace, and the world itself.

For instance, when tackling notions of Human Nature and the Self, students will read the 17th century English philosopher Thomas Hobbes, who asserted that humans are intrinsically selfish. A few weeks later, they'll read a paper on cognitive science arguing that collaboration is what makes human cognition unique. Eventually, they'll read Buddhist Indian philosopher Vasubandhu's exhortation to eradicate all forms of belief in the self.

Every subject-gender, race, society, nationalism, globalization—is approached in a similar way.

From Comprehension to Engagement

"The readings are hard. We try to give them primary texts rather than secondary textbook-style readings," says Weslake. "It might be difficult and confusing at first, but if the text is sophisticated and complex

we're going to respect that."

It can be a shock to the system, especially if students expect to excel in the course by meeting a checklist of expectations. Many students report feeling confused and lost in the first weeks. But soon, they begin to find their footing.

"The semester starts off gently," continues Weslake, "with assessments being more about comprehension than analysis, but over time, we start to see enormous progress. I'm actually in awe, especially of the students who also have

the struggle of reading primary sources in a second language."

The sophistication of the students at the end of the course compared with the beginning is dramatic, and both professors have witnessed encouraging signs of engagement.

"Two students came up to me. They were roommates. One international, one Chinese, they looked absolutely exhausted, holding coffees in their hands," says Corpis. "They said: 'Professor! We didn't sleep. We spent the entire night talking about Freud! Does he make any sense? Does he make sense in a Chinese context? Does he make sense in a European context?' As an educator, these are the really exciting moments."

A Strong Foundation

But why place such emphasis on a humanities core in the first semester, when students are already challenged by a new environment and new expectations?

"We want all our students to be 'well educated," Vice Chancellor Jeffrey Lehman explains, "We want them to leave NYU Shanghai having thought about the most influential ideas that have shaped

> human societies across the millennia, and to have discussed those ideas with classmates who grew up in different cultures, with different worldviews."

He emphasizes the outsized influence the narrow window of time spent in college can have on a person's life, "This moment of transition from high school to university is the key. This is when students learn there's more than one right answer, and sometimes no answer at all. This is when they need to be comfortable with uncertainty and ambiguity."

GPS is valuable to the humanities student because it exposes them

to canonical texts and theories. It is valuable to business students, because it informs their later careers within the contexts of societies, economies, and nations. And it is valuable for science students, because it shines a light on the potential for biases within the scientific fields.

"Poverty. Gender inequity. Environmental degradation. Overpopulation. Income disparity. Whatever the question that's raised...the people who come up with the answers need to have a broader perspective than one that is limited to my community, my people, my nation," says Corpis.

"To change the world, you first need to understand it," adds Weslake. "We want to see them examine what seem to be inevitable features of the world, and show them that they are actually optional."

A Few of Her Favorite Things

When a Chinese language version of the beloved Broadway musical, The Sound of Music, opened at the Shanghai Grand Theater at the end of 2018, a familiar NYU Shanghai face was among the cast. Tannia Xia caught up with Wang Jie backstage on the opening night for a quick Q&A, as the music professor donned a nun's habit and prepared to sing one of the showstoppers.

Q: Do you think performing makes you a better music instructor?

A: Definitely. As in the field of medicine, theoretical study is essential to musical artists and educators, but continuous clinical practicei.e. stage performance-is even more important. For example, only when we keep honing our performing skills can we become better at finding the rhythm of our partners.

Q: What do you think of your role, the Mother Abbess, and how are you interpreting it?

A: In the movie version, Mother Abbess was a kind, older woman, while in this Chinese version, she has been adapted into a compassionate younger woman. When singing *Climb Ev'ry Mountain*, Mother Abbess is not only enlightening Maria, she is also exploring her own life mission and strengthening her belief in life. To me, Mother Abbess is a fully-developed character with great charm.

Q: How does the Chinese version of this musical compare to the well-known movie version?

A: Musicals are a rich art form and adaptation is guite difficult. It's not a case of simply translating the language. Translators must be aware of cultural differences and have an in-depth understanding of vocal science, otherwise, the songs and the lyrics may sound strange to both the actors and audience. I think this Chinese adaptation of The Sound of Music has been very successful. After studying musicals in America, it is a great feeling to be able to perform in my mother tongue with some of the best musical actors in China and bring the story to new audiences.

Q: What do you think is the importance of music education in an international university?

A: Many universities or colleges in developed western countries attach great importance to art and music in a liberal arts education. A song may inspire a student and stimulate his or her imagination and creativity. Fostering a student's musical ability can help increase the sensitivity of their hands and ears, their capacity for emotional response, and improve their observation and memory. Musical appreciation also enhances students' cultural education, helping them become versatile talents.

20

ARTS FOCUS

Professor Wang Jie on stage as Mother Abbess in the 2018 Chinese production of the Sound of Music at the Shanghai Grand Theatre

COURSE SPOTLIGHT

FINDING SOLUTIONS TO PLASTIC WASTE

by Amanda Zhao

ore than two billion tons of solid waste is generated every year by the world's cities, with serious consequences for our health and the environment. During the fall semester, nine NYU Shanghai students accepted the challenge to combat waste by exploring ways to sustainably upcycle plastics in a new Interactive Media Arts (IMA) course, *Re-Made in China*.

The seven-week class, taught by Clinical Arts Instructor Marcela Godoy, introduced students to social and environmental problems presented by plastic pollution and some of the technologies being used to address it. Students then experimented with various methods to transform plastic waste into "something valuable and even extraordinary."

Dividing the class into three groups, Godoy asked students to focus on developing machines to process plastic, such as shredding and melting; experimenting with what materials plastic can be transformed into; and designing new products. "I wanted them to work together like a design firm, where we learn about plastic together and collaborate on projects," she said. To help with this mission, Godoy also invited seasoned designers from Precious Plastic Shanghai, a social enterprise devoted to raising plastic pollution awareness in China, to offer a handson workshop for the students.

Suhyeon Lee '19 said the class opened her eyes to the range of solutions. "I learned that plastic waste has many possibilities for reuse; it can become its own raw material with many options to create new things." Together with her classmates Dou Qingyi '19 and Jiang Xinye '19, Lee created a tool to cut plastic bottles into plastic threads. After determining that the new material was strong enough, the team explored knitting and weaving techniques to create new products, including baskets and even a chair.

in Ch

Left: Students experiment with recycling plastics into new objects through shredding, melting, molding and weaving; Above: Coin purses made from recycled plastic bags

Godoy also encouraged her students to think beyond design solutions and to engage with the community they live in by learning about the cycle of waste in the city. After hearing from a local man who worked from 7am to 11pm collecting recyclables in Shanghai, Lee was left reflecting on the implications of sustainability. "His story not only helped me think about how plastic waste was sourced, but also how recycling should not be seen only as an environmental movement, but also about human rights and economic justice," she said.

In December, Godoy presented her class' work at the Precious Plastic WANA Conference at NYU Abu Dhabi, which looked at how communities in Asia and North Africa were addressing the plastics issue by using lowcost recycling systems.

Together with NYU Shanghai arts professor Monika Lin, Godoy has since been awarded a NYU Green Grant to extend Re-Made China into a 14-week course in the spring semester and create a Re-Makerspace for NYU Shanghai, where all students and faculty can get together to learn how to process plastic and share ideas for reducing waste.

Hometown: Suzhou, China Major: Mathematics

New perspectives: I'm a 苏州人 (a person from Suzhou) but I don't think Dayna has that kind of identity. She's lived in many different places due to her father's work. From her, I've gained a new understanding of 'family.'

Seeing positive changes: Dayna's taught me about

taking risks and seeking new opportunities. I used to think of myself as a very conservative person, but after having Dayna as a roommate, I think I'm now pretty open to new things. She encourages me, and now I've tried storytelling events, speaking in public, even taking an on-campus job. Study support: The night before my GPS final last year, we

ended up having a long discussion on Descartes' Meditation on First Philosophy until 2 a.m. Dayna helped me a lot. The best thing about Dayna:

She is always friendly, cheerful and confident. She loves swimming, playing the cello and things which I might have considered strange in the past, such as blue mascara and purple lip gloss. She always maintains an open and positive attitude towards new things and ideas, which is what has influenced me the most.

家乡: 中国苏州 专业: 数学与应用数学 新视角: 我是苏州人, 但在我看 来,Dayna似乎没有这样的属于某个 特定地方的身份认同感。因为她父亲 的工作,他们一家人在很多地方生活 过。而我跟她恰恰相反,在上大学之 前,我一直在苏州。Dayna和她家人 的经历,让我对"家"的含义有了新 的理解和认识。

尝试新事物: Dayna教我怎么去接 受挑战,寻求新的机会。我本来是个 偏保守的人,但认识了Dayna以后, 我开始敢于尝试很多新事物。在她的 鼓励下,我在故事分享活动上讲述了 自己的经历,在公众场合做演讲演 说, 还参加了校内实习。 学习上相互帮助:我印象最深的-是去年,在"全球视野下的社会"这 门课期末考的前一晚,Dayna和我一 起讨论笛卡尔的《第一哲学沉思集》,

一直谈到凌晨两点多,她对我的帮助

最喜欢Da

开朗自信的人。她总是 很随和友善、 能把自己的生活安排得丰富多彩,在 课业之余,她还积极参与各种社团活 动。同时,她勇于尝试新事<u>物、接受</u> 新观点。我觉得,她这种积极的态度 对我的影响真的很深。

非常大。

Dayna是一个

Sophomores Dayna Brown and Feng Yuxin were paired together freshman year and have been together since. The roommates have already shared many bonding experiences—from spending Chinese New Year with Yuxin's family to teaming up against dorm room mosquitoes. "NYU Shanghai is a place where everybody is open to new things and being roommates with Dayna makes me feel that," says Yuxin.

Interview: Charlotte San Juan Photo: Henry Zhang

家乡:我的父亲在军队里,所以我从 小到大一直在搬家。来上海之前,我 住在美国俄克拉荷马州。 专业:世界史(全球中国学) 平时都聊些什么:我们什么都聊,电 视节目、音乐、身份认同、政治话题 等等。我修读了一门名为"中国概念" 的课程,受这门课的启发,我们进行 了许多有关中国的有趣对话。 她教会我很多东西:她跟我分享了中 国文化与习俗。比如,她会告诉我食 物具有热性、凉性。她会说,"我需 要暖胃,所以不能喝这种茶",也会 跟我解释为什么不应该喝冷水。 语言练习:有一天,语欣用中文问 我,"你明天坐几点的班车去学校?" 我本来想说的是"其实我打算坐地 铁,"但我却错误地将"其实"发成 了"去世"的音,整句话就成了"去世 我打算坐地铁。"她听得一头雾水! 最喜欢语欣的一点:我们真的很聊得 来,她很聪明,经常是妙语连珠。 无论什么话题,她都能把它讲得有滋 有味。

上海纽约大学大二学生Dayna Brown和冯语欣,从大一入学开始被分在 一个宿舍、并自此一直是室友。她们分享了过去两年来一起生活学习的 点点滴滴:和语欣的家人一起度过春节,一同与宿舍里的蚊子"斗智斗 勇"……"在上海纽约大学,每个人都对新事物抱有开放态度,与 Dayna成为室友,更是让我深刻体会到这一点,"冯语欣说。

> 采访: Charlotte San Juan 摄影:张瑞俊

Home: My dad was in the military, so I moved every 2 years for my whole life. Before I came to Shanghai, I was living in Altus, Oklahoma, USA Major: Advanced Global China Studies

What we talk about:

Everything-from TV shows and music to identity politics. I'm in a class called The Concept of China, and I asked Yuxin, 'What makes you Chinese? Is it language? Is it nationality? We've had interesting conversations about the conflicts among China's ethnicities.

She's taught me a lot about: Chinese culture. For instance, the rules about eating or drinking "hot" versus "cold" stuff in China. She'll say: 'Oh my stomach is too hot to drink this kind of tea,' and explain why I shouldn't drink cold water.'

One day Yuxin asked me in Chinese: 'Which bus are you taking tomorrow?' and instead of saying 'qishi,' the word she taught me for 'actually,' I said 'qushi,' which means 'go die.' So I basically told her: 'Go die, I'm going to take the subway to class'-she was super confused. The best thing about Yuxin

Yuxin is so great to talk to. She's so smart and uses lovely turns of phrase. Whatever the topic, she always can add an amusing twist to the conversation. She is just a friendly and intelligent person.