

Contact us  
Address: Building A, 388 Ruoshui Road,  
Suzhou Industrial Park, Jiangsu, P.R. China,  
215123  
Tel : 0086-512-62869088  
Email : [info@oxford-oscar.cn](mailto:info@oxford-oscar.cn)  
Website : <https://oscar.web.ox.ac.uk/>

联系我们  
地址：中国江苏省苏州工业园区若水路  
388号A幢 ( 215123 )  
电话：0086-512-62869088  
电邮：[info@oxford-oscar.cn](mailto:info@oxford-oscar.cn)  
官网：<https://oscarweb.ox.ac.uk/>  
微信公众号：牛津大学高等研究院（苏州）



WeChat / 微信公众号



   
UNIVERSITY OF  
**OSCAR OXFORD**  
NEWSLETTER 044 MARCH 2021

This issue is dedicated to Women in OSCAR

# Contents

01 Special Feature: Women in OSCAR

17 OSCAR identified as a key part of Jiangsu's scientific and collaboration strategy

20 Impact Generation

23 Outreach and collaboration



## Special Feature: Women in OSCAR

In celebration of this year's International Women's Day, and in recognition of the great work delivered by its women staff, OSCAR is dedicating this monthly newsletter to its amazing team of women scientists and professionals.



*OSCAR's women scientists and operations management professionals*



**Cathy Ye**

Associate Professor in  
Engineering Science,  
University of Oxford and  
OSCAR Principal  
Investigator

“Throughout my academic career at University of Oxford, there has been growing effort to encourage girls to take up STEM (Science, Technology, Engineering and Math) subjects in the UK, which has never been necessary in China. STEM subjects have been instilled into everybody, including girls like myself, as essential life skills (and probably too little emphasis has been placed on humanity subjects on the contrary). People of my generation would have heard of this saying ‘学好数理化，走遍天下都不怕’ (translated as ‘Good knowledge of Math, Physics and Chemistry affords you to face the world with confidence’). I am very pleased to see that we have so many excellent women scientists at OSCAR, some of whom have been featured in this edition of the newsletter, which shows STEM subjects are still attractive to girls as well as boys in today’s China. In addition, I am proud that OSCAR has provided a supportive platform for their career development with mentoring, flexible working and part-time working, among many other things, which I feel are the key elements in retaining women on this path in the long term and helping them reach their full potential.”

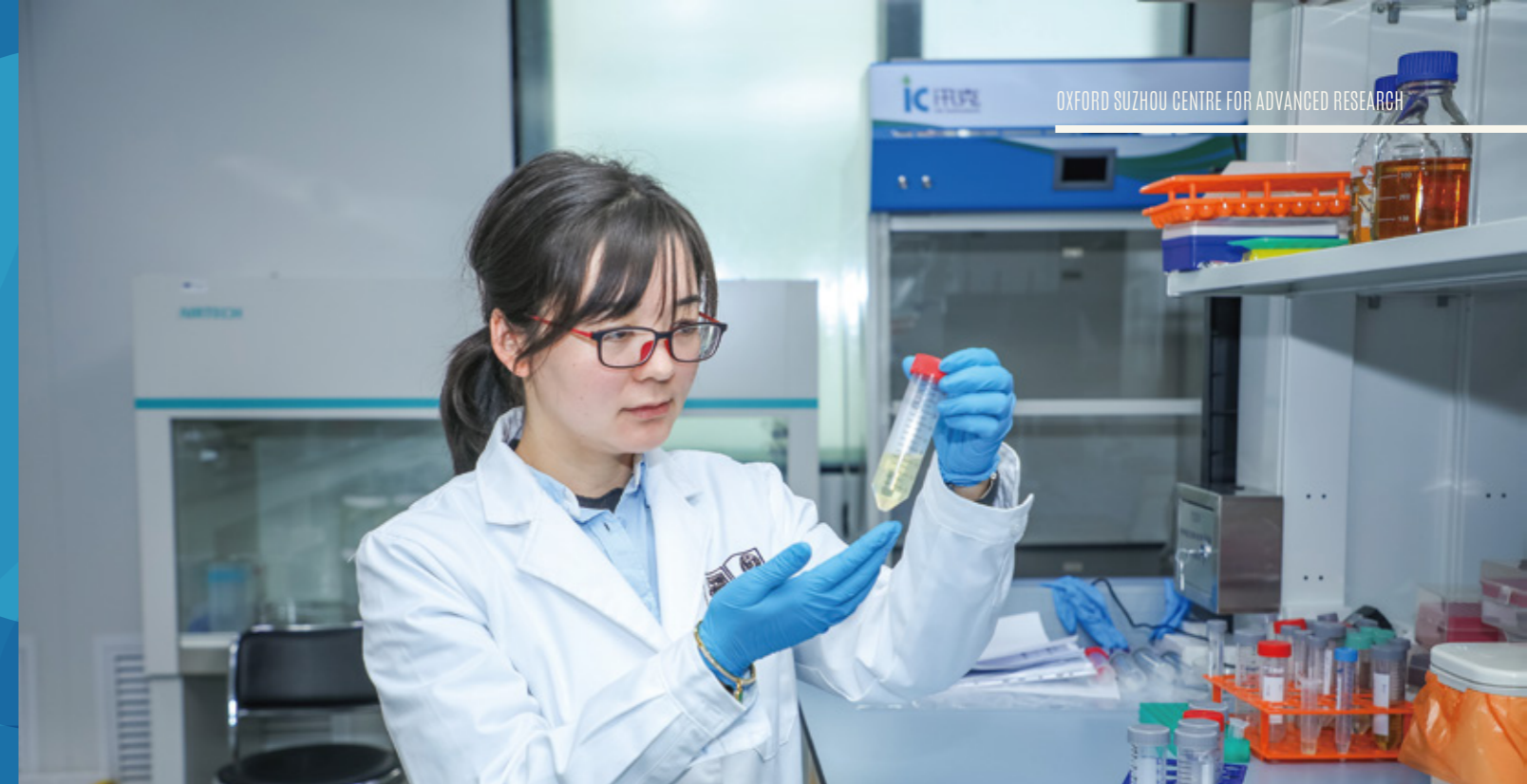
“As the first employee at OSCAR, I am very glad to see OSCAR grow and to have developed a staff with talented women scientists and brilliant female professionals in our finance, health & safety, HR, media, IP management and other specialised fields. Women account for almost half of OSCAR’s staff. They hold up half of OSCAR’s sky! Everyone working at OSCAR is respectful and supportive of each other regardless of gender. Our female staff has also been, and will continue to be, an important part of OSCAR’s success and forward trajectory.

As OSCAR’s General Manager, I work closely with the Centre’s Director and my fellow colleagues to strive to make OSCAR a dynamic, motivational and people-centred working environment for all scientists and operations management professionals.”

Earlier this month, OSCAR initiated a media campaign named “OSCAR ‘She says’” where its female employees were invited to talk about their academic/professional journey, and what they would like to say to women walking down a similar path in life. Now let’s take a listen to what the OSCAR “shes” have said.



**Leah He**  
OSCAR General Manager



**Dr. Yun Wang: “Scientific research gives me a sense of self-worth.”**

*What’s your role at OSCAR?*

My name is Yun Wang and I am a Senior Research Scientist in Prof. Wei Huang’s synthetic biology group at OSCAR.

My work at OSCAR involves carrying out scientific research under the guidance of the PI, and assisting the PI in managing day-to-day lab operation, external collaborations and communication, and filing for grant programmes and awards.

*Why did you take up a career in science?*

I didn’t really think through what it means to study for PhD when I started, but I thought it was good to continue my education while having the opportunity

to learn more about the emerging frontiers of science. Then I was granted an opportunity for China Scholarship Council scholarship, so I was able to travel to the UK for my PhD. During that period, my supervisor’s passion for research and his desire to explore scientific questions influenced me greatly, making me feel that scientific research is a very meaningful, rewarding and fun thing to do. That’s why I chose to pursue a future in scientific research.

*What is the best thing about a career in science?*

One of the most awesome things I have done in my research career so far is to have participated in the development of the COVID-19 rapid test kit. We were faced with a tight schedule and a daunting task. Under the leadership of Prof. Cui and Prof. Huang, several researchers in our team worked round the clock and addressed some

technological sticking points. We were involved all the way from the researching, readying, clinical validation, through to industrial production and application of this kit in airports. I think the results of our research can promote the development of this society, which is something that I find particularly meaningful and fulfilling.



Dr. Yun Wang demonstrates the Covid-19 rapid test kit to UK Consul General in Shanghai and his colleagues



### *What advice would you give to girls or women interested in a career in science?*

On the whole, scientific research is a relatively hard job and requires a big time commitment. For women, we need to weigh the balance between work and family, among many other concerns, before choosing a career in science. However, when you decide to go into science, you will have more opportunities to listen to people who only appear in textbooks who will share their research progress and life experiences with you. At the same time, good research is promoting the progress and development of the society. It will also give you a sense of self-worth. So, I would say, if you like it, go for it, don't hesitate or don't be afraid, at least give it a try.



Dr. Yun Wang and her colleagues at OSCAR

### **Dr. Ziyue Xiong: "Science is not easy, but it makes a better me."**

#### *What's your role at OSCAR?*

I'm a Research Scientist working in Prof. Jeremy Robertson's group, and am currently focusing on organic synthesis work in the drug discovery direction. My responsibilities also involve assisting the PI in business negotiations and lab management.

#### *Why did you take up a career in science?*

I know many kids have a dream to be a scientist, but I did not actually set my mind to be a scientist when I was a child. Science naturally started to become more attractive and fascinating to me during my further studies.

In the beginning, I was not even sure if I would end up with a career in science. During my PhD study, my supervisor said

that I have "green fingers", that is, I can make many challenging reaction work, especially those very tricky ones. I felt greatly encouraged by this and started to believe that I was the right person to do science.

It's just like people who are good at singing and dancing become artists, and those who have talents in writing may become writers or editors. I believe I'm the person who is good at scientific research, and therefore would like to take up a career in science.

Some people said I'm a serious person. But science is seeking truth from facts, and debunking falsehoods. Science speaks with facts and data, which suits me perfectly. Scientific research also provides a simple and immersing working environment, so we can fully focus on solving the problems we meet without distractions. That's why I chose a career in science, and I really love my job.



## What is the best thing about a career in science?

One of the best things...Well, I think there are a lot of great things! Scientific work is a process that requires constant learning. There's no way you can stay in the same rut, because every day new theories are being built, old theories are being overturned, and past conjectures are being confirmed or proved false. So, you have to keep learning.

I think the best thing is probably the sense of achievement, as research is actually an arduous road to follow. When we come up with an idea and would like to achieve it, it can be extremely difficult to get what we want at the very beginning - or after one, two, even ten attempts with experiments. We may encounter all kinds of expected/unexpected problems and difficulties and what scientists need to do is go through a process of constantly overcoming those problems and difficulties.

When you overcome those difficulties and finally reach a goal which could be small or make a small contribution to our daily life, you will feel very, very satisfied, which is the best thing about having a career in science.

## What advice would you give to girls or women interested in a career in science?



I think that if you like it, and you want to do it, then you should definitely go for it!

Speaking from my personal experience, when it comes to a career in science, I don't think it makes any difference whether you are a 'he' or 'she'. Male and female are completely equal in this working field.

One thing I would like to say is that a career in science probably won't offer you the highest payment, nor is it the easiest choice - you could even say it's an antonym of easy. You'll need to be driven by creative ideas and dreams. I'm still working on it, and I think a career in science will make you a better version of yourself. Go for it!

## Dr. Catriona Inverarity: "A career in STEM helps you shape the world for the future."

### Can you tell us about your academic background?

After receiving a BEng in Biomaterials Science and Tissue Engineering from the University of Sheffield, I joined a small OEM medical devices company as a research scientist in New Product Development. Here, I worked on development of a novel antimicrobial wound dressing for chronic wound management, taking it from lab bench trials through to pilot plant manufacture. Working beyond my job description, I took opportunities to learn the business by engaging with quality assurance, operations, regulatory and marketing departments. I took this experience with me to embark upon an industrially sponsored PhD in tissue engineering. My project involved development of a bio-intelligent scaffold material for skin tissue engineering, designed to enhance therapeutic effect of my sponsors' stem cell therapy through provision of a carefully engineering structure with tunable biochemical and mechanical properties. Alongside my PhD I worked part-time as a Product Engineer for Oxford Mestar, a spinout of Oxford University which specialises in in vitro diagnostic devices.



Catriona and her then PhD supervisor in the wet lab at IBME with one of her scaffold materials

### What's your role at OSCAR?

I work in the Research Services section to provide a 'UK facing' interface with our Oxford-based Principal Investigators. This involves ensuring OSCAR's activities are compliant with Oxford's policies and procedures and supporting PIs and researchers in navigating the local research ecosystem from a UK perspective. I also help develop plans for new initiatives (such as OSCAR Innovation Technology Centres to champion collaborative research; technology accelerators and incubators for spinouts). As domestic and international travel begins to resume, I also hope to develop OSCAR's reputation and exposure in the UK and across China through workshops, seminars and engagement events.



*Tissue Engineering group at the Institute of Biomedical Engineering, Oxford*

### *Why did you choose a career in science?*

I'm a naturally inquisitive person and have always been interested in the world around me and how things work. Studying science has broadened my mind and enriched my understanding of everyday life as well as specialist and technical applications. More importantly it has given me the tools to analyse and interrogate information which I think is a highly valuable and transferable skill. During my A levels, I took part in the Royal Academy of Engineering's Engineering Education Scheme to develop a solution to a real-world problem faced in industry. The combined application of knowledge, analysis and creativity to problem-solving, resulting in a measurable practical outcome, really caught my imagination and inspired me to study engineering.

### *Any career highlight to share with us?*

During my PhD I was selected to present my research at the House of Commons at the STEM for Britain event which aims to raise the profile of early-stage researchers and their work by engaging with Members of Parliament. I was also one of two students selected to participate in the Royal Society of Biology's Voices of the Future event, also at the Houses of Parliament. This was a unique opportunity to question MPs, including members of the cabinet and shadow cabinet, about science policy. This experience gave me better insight and understanding of the way government decides and creates science and technology policy and gave me the chance to advocate my research and other work in my field.

### *What do you think is the best thing about a career in science?*

STEM is a rewarding career because you can get out as much as you put in. There is so much scope for development, you can learn something new every day, and your work has the opportunity to not only teach you about the world but help you shape it for the future.

### *What advice would you give to women considering STEM careers?*

If you are considering a career in STEM – either in academia or in industry – there are a wealth of resources online to help you. Research areas that interest you and investigate possible career paths. Identify role models to inspire and challenge you. What can you learn from their experiences? You may be able to secure work experience

or mentorship that will not only give you real insight into your chosen career path but will also shine on a university or job application. Above all, do not doubt yourself. Self-believe and determination affect how others see you and also shape your own behaviour.



*Catriona (L1) at a Women in Engineering networking event and seminar held at Trinity College in Oxford*



**Dr. Zhangdaihong (Jessie) Liu:**  
**"Scientific research helps answer the question of 'Who am I'".**

*Please introduce your academic background and current research work at OSCAR.*

My undergraduate major was mathematics, and I went to the UK to study in 2012. I studied two master's degrees: one in financial mathematics, and the other in applied mathematics. From my MSc to PhD, my research direction gradually shifted toward the application of mathematics in the real world, especially in the medical field. The two topics I focused on during my master's degree in applied mathematics were related to cancer, while the research topics during my PhD were related to the brain.

I joined the OSCAR Digital Health research team in 2020. At OSCAR, my research focuses on how to apply machine learning algorithms to hospital data, including electronic health records, vital signs and blood tests. We work with clinicians to

understand the problems they face. For example, if a clinician hopes to predict the probability of a major event occurring after a patient's operation or in the intensive care unit – such as the possibility of organ failure or death – then we will model and analyse the patient's corresponding data to achieve this kind of prediction function.

*What impact do you think your research will have on the world?*

Sudden diseases can be detectable, and risk factors can be identified in advance, so it is very meaningful to build an early warning system [to predict risk of onset and determine mitigative or interventionist strategies]. In addition, artificial intelligence monitoring systems can be used to detect and evaluate a patient's condition 24 hours a day, something which is impossible for doctors.

Our research can be described as being for social good. Although it is not clinical research, the significance and benefits of our work, particularly in future applications, are self-evident. Our research benefits human health.

*When did you decide to pursue a career in scientific research? Why did you choose to join OSCAR after your PhD?*

The pure mathematics I studied in my undergraduate course was very abstract and not rooted in reality. After finishing my undergraduate course, I didn't know what I would do in the future. At that time, I knew very little about the real world and couldn't imagine how to apply my professional knowledge in industry, so I decided to pursue further education.

After finishing my master's degree, I felt on one hand that my knowledge had not yet reached a level that could be used to solve real-world problems. On the other hand, I thought that the medical field is very interesting and offered many possibilities, which it seemed that only academia was passionate about exploring. On top of that, I really enjoyed the scientific research environment [and so chose to pursue a doctorate combining her maths skills and medical interest].

After graduating from my PhD, I had considered entering industry, but my professional sector has a reputation for '996' (long working hours epitomized by working from 9:00 am to 9:00 pm for 6 days a week, or 'hustle culture') in China and I was worried that I could not adapt. I eventually chose to join OSCAR because the pure scientific research environment here is very similar to the UK, and some of the hardware facilities here are even better than at Oxford University. OSCAR's people-oriented, free and open environment is very suitable for

scientific research. After I came back from studying in the UK and entered OSCAR, I did not feel any difficulty settling in. Moreover, the research interests of Professor David Clifton (the Principal Investigator of the Digital Health research group) perfectly match those of mine, and I can explore the application of various machine learning algorithms in my field.

*What do you think is the best thing about doing scientific research?*

Scientific research satisfies my curiosity, and it offers a great degree of freedom. Both my PhD supervisor and the PI of my current research group [at OSCAR] encourage us to explore and extend our fields of interest.

Scientific research has also given me different thinking systems and ways of thinking. In the research process, the more I know, the more I will discover my own ignorance. This motivates me to look at the problem more dialectically and objectively from multiple angles, and value the importance of rationality.

Scientific research can also give me the ability to learn. I went through the process from listening to what others said to learn, to slowly discovering what I liked to learn, and then to understanding what I needed to learn.

In today's scientific research, interdisciplinary is essential, and many studies cannot be successful only by relying on the knowledge of a single subject.



Dr. Liu (third from right) attending a formal dinner at Green Templeton College, Oxford University

due to the psychological hints I received suggesting I wasn't as good at the liberal arts.

A person's acquired growth environment and the information they receive are crucial, so never say "you can't do it" to anyone. This will sow seeds of self-doubt in their subconscious. Everyone's interests can be different, but it's not that they "can't". It's just that people's choices are different.

### *Do you have any advice for women interested in scientific research?*

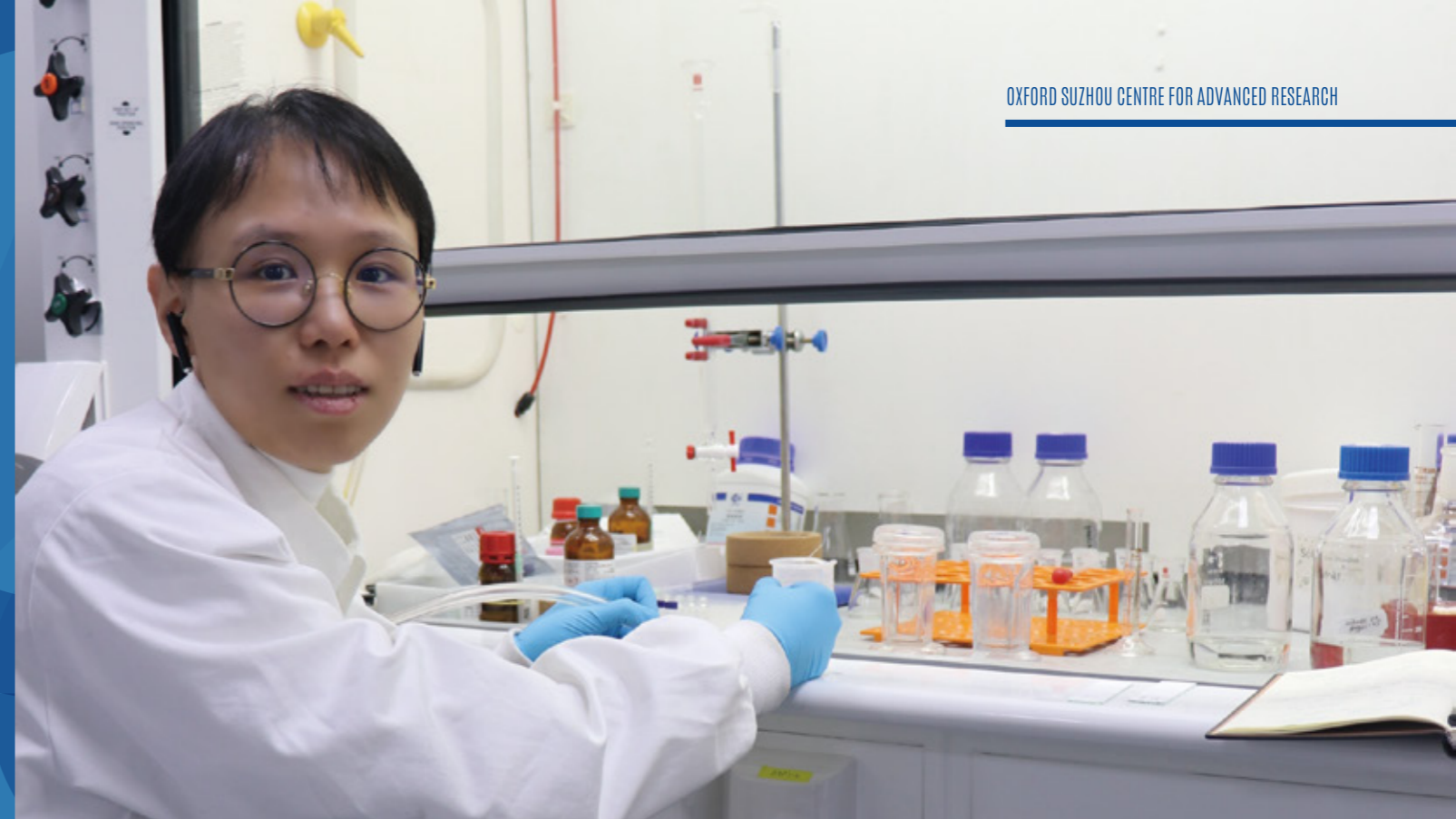
I can't think of any suggestions specifically for women. I think there are individual differences among researchers, but these differences come from their growth experience, educational background, (etc.), and have nothing to do with gender. Assuming that the social feedback received by each of us and the social norms that we are exposed to are the same – of course this is an ideal state, and I am grateful that my family and educational environment have provided me with such conditions – there is no need at all to discuss this issue separately by gender. As far as my personal experience is concerned, there are indeed very few female researchers in my field. When I was studying abroad, as a non-white woman, as a minority, my voice was easier to be heard.

For those interested in scientific research, what I want to say is that interest is really an important prerequisite. If you lack a strong interest in scientific research, don't start, otherwise you will be miserable.

Doing research can also help answer the question "Who am I?" Scientific research allows me to better understand who I am and achieve a sense of self-worth and self-actualization through my work and my role in the scientific community. Scientific research is a very rich, niche, and demanding field.

### *When you were a child, did you ever hear the remarks about girls not learning well or not to study science and engineering?*

I have almost never encountered it. I think this is entirely a psychological suggestion from the outside world. For example, I came from a family with a background in science and engineering. From a young age, I was told by my family that I didn't have to worry too much about learning mathematics but should instead spend more time developing the liberal arts which I found harder. This was possibly



## **Dr. Yushu Li: "Scientific research allows me to be an observer of the world."**

### *Please introduce yourself.*

I graduated from Peking University Health Science Centre with a bachelor's degree in pharmacy and got my doctoral degree in Inorganic Chemistry in University of Oxford. I am currently undertaking research work in protein engineering of cytochrome P450.

### *Can you introduce your research work in OSCAR?*

At OSCAR I am working under the supervision of Professor Luet Wong, who was my doctoral supervisor at Oxford, to continue the research derived from my DPhil project. We are cooperating with Professor Jeremy Robertson's research team at OSCAR to build a drug-fragment

compound library composed of small molecules. Discovering novel reactivities of cytochrome P450 enzymes is another the focus of my research.

P450 is a superfamily of hemoproteins specialised at oxidation at CH bonds. It exists not only in human body, but also in plants, bacteria and even viruses. In the human body, P450 can help degrade exotoxins, which are mostly lipophilic, therefore difficult to excrete from the body. In a nutshell, P450 has the potential to achieve various types of reactions. And one branch of my research is to explore these novel enzymatic reaction types which do not normally occur in organisms meanwhile difficult to achieve by classic synthesis, to understand the mechanism of them, and to generalise the usage of them in synthetic biology.

Our team is working to speed up drug design and discovery by expanding the size and diversity of the small molecule libraries utilised in fragment-based drug discovery via exploitation of methodology developed by our group. If a small molecule possesses no activating group, its carbon-hydrogen bond will be difficult to react with, so it is not possible to produce larger size, more complex and drug-like molecules. P450 can activate certain carbon sites and erase such reaction barrier. At the beginning, my research focused on how to activate difficult sites to diversify the structure of compounds with the same molecular skeleton. Subsequently, we realised that P450 could also complete many reactions other than hydroxylation. These reactions are rather valuable in the chemical and biological fields. If the P450-involved approach is proved to be viable, it can offer synthetic chemists an alternative route in green chemistry to achieve what results which would otherwise require extreme reaction conditions.

***When did you decide that you want to take the path of scientific research? Was there any confusion or doubts during this period?***

I came to the idea that I would like to be a researcher during my high school period. I am very headstrong and clear in mind – if I identify something interesting, even if my supervisor tells me not to touch it, I will definitely do it! Exploratory



*Yushu Li with other researchers from OSCAR's Organic Synthesis Research Group*

research conceives unpredictability and all sorts of possibilities. It is like following a path leading to nowhere, which suggests that you have a lot of freedom during marching through such a 'path'. In industry, for example, if your task is to obtain product A, then you can only develop the route towards product A; even if you discover something novel over the process, you could not follow them up due to common work ethics. My interests are dispersed in a variety of assorted fields, so I personally prefer a job offer labelled with more freedom for exploration.

I have had my concerns. To be honest, scientific research is not a very well-paid profession. I do hope I could earn much higher salaries, but I also understand I must sacrifice my freedom to fit the job's requirement, a scenario which I can't tolerate at all. Therefore, I would rather to be poor but happier to preserve my freedom. Just like Petofi's poem:

*Liberty and love  
These two I must have.  
For my love I'll sacrifice  
My life.  
For liberty I'll sacrifice  
My love.*

I believe that there is no independent individuality without a liberated mind.

During my childhood, my father educated me with many anecdotes of Confucius and Laozi, and also their philosophies. I admire Confucius' courage to do what he believes to be right, but his corrupted society would never comply with, whereas I prefer Laozi's non-interventionist attitude. Laozi advocates the idea of letting everything develop as it should naturally go. An observer is to allow everyone, every plant, and everything to develop according to their original trends and laws. I think it's good to be an observer of the world. Scientific research shares this property to a certain extent. I am the observer of this world. I am observing which direction something might go, understand the principle behind this trajectory, and then think of potential applications of such generalised principles.

***What do you think is the best thing about scientific research?***

Doing research makes me believe that learning is a very enjoyable process. My curiosity about the entire world is

gradually fulfilled during researching around. To give a very empathetic example, I grew up in Beijing and I haven't seen very much wintersweet. After coming to OSCAR, I was walking through the misty streets of Suzhou one winter night. Suddenly, the fragrance of the wintersweet flower wafted out. I couldn't help but marvel, it turned out that saying "the fragrance of wintersweet comes from the bitter cold" is really true! The happiness that science gives me is just like this. From being totally ignorant of something, to contemplating "what's this??", to the moment when I was making a painstaking investigation, and eventually to the "gotcha!" point, the pleasure derived from discovering truth grows exponentially.

***What are your career goals?***

I want to become a great scientist. During my undergraduate period, I developed an interest for the underlying chemistry utilised in pharmaceutical sciences and realised that I needed to further deepen my understanding of chemistry particularly. The current chemistry research environment requires researchers to have an interdisciplinary and complex knowledge system, so I need to keep learning.

***What do you think it takes to excel in scientific research?***

In terms of experimental science, the difference between a good and an average scientific researcher resides in the ability

to perceive the significance of the experimental outlier. An average researcher will observe the basic indicators of an experiment, but a good scientific researcher observes more deeply and takes account of unexpected results. When an experiment is repeated five times with one outlier case observed, a good researcher will think about why they are different. They will check their experimental records and try to fully understand this abnormal phenomenon – that is to say, good researchers obtain more useful information from the same set of results than average researchers; they have keen insights and will not ignore the potential value of any occasional outliers. I think this is one basic quality

an excellent scientific researcher should have. The other is the ability to vigorously learn new things. Essentially, what makes a great scientist is to never stop studying, inspired by limitless curiosity.

Finally, develop academic connections. My friends with different academic backgrounds proposed many witty suggestions to my own research; such helpful effects can rival with the aid offered by reading more literature. The intelligence of one individual is limited. The intelligent input from my friends has helped me think outside-the-box and optimise my research. Working alone behind closed doors shuts out creativity and limits attainment.

Part of OSCAR's female staff in Wuzhen (an ancient water town near Suzhou) during a team building event last year



## OSCAR identified as a key part of Jiangsu's scientific and collaboration strategy in its new 5-year plan and objectives to year 2035

### 江苏省人民政府文件

苏政发〔2021〕18号

省政府关于印发江苏省国民经济和社会发展第十四个五年规划和二〇三五年远景目标纲要的通知

各市、县（市、区）人民政府，省各委办厅局，省各直属单位：  
《江苏省国民经济和社会发展第十四个五年规划和二〇三五年远景目标纲要》已经省十三届人大四次会议审议通过，现印发给你们，请结合实际认真贯彻落实。



（此件公开发布）

Following the release of *China's 14<sup>th</sup> Five-Year Plan (2021-2025) for National Economic and Social Development* and the *Long-Range Objectives Through the Year 2035* ('the Plan and Objectives') earlier this year, the People's Government of Jiangsu Province released its own regional plan and objectives. These new strategic plans identify OSCAR as a **"Key Project of Scientific Opening-up and Collaboration"** along with seven other current and planned research centres in Jiangsu as a result of international collaboration.

Jiangsu's Plan and Objectives dedicates a full chapter to what will be done to enable the province to grow into a science and technology powerhouse. The chapter breaks down into three sections which cover plans to bolster indigenous innovation, incentivise innovation and creativity of talents, and refine systems and institutions for scientific innovation.

On integration into the global innovation network, the Plan and Objectives lays out an inclusive, mutually beneficial and shared strategy for international science and technology collaboration. This will allow for more exchanges and teamwork in science and technology at different levels, on diversified themes, and through multiple channels. It states that Jiangsu will also push forward academia-industry cooperation between international governments and implement critical joint funding programmes.

In the document, the government of



Jiangsu also voices its support for talented scientists and research teams in providing solutions to global sustainable development issues. Another key point is Jiangsu's intention to attract internationally prestigious universities, research institutes and multinational corporations to set up R&D facilities in the province. To that end, the document lists **OSCAR, alongside the National University of Singapore Suzhou Research Institute, UCLA Suzhou Advanced Research Centre, Cambridge University-Nanjing Centre of Technology and Innovation, China-Singapore Bio-tech Innovation Island, China-Israel-Changzhou Innovation Park, International Centre for Genetic Engineering and Biotech - China Centre (in Taizhou, 160 km north of Suzhou), Deep Time Digital Earth International Centre of Excellence (Suzhou), among others, as "Key Projects of Scientific Opening-up and Collaboration" that will be high on the government's development agenda.**

The document states that the government of Jiangsu province will support Suzhou in its efforts to build an integrated industrial innovation centre, and facilitate the cities of Suzhou, Wuxi (bordering Suzhou in the northeast; one of the 30 most innovative cities in China in 2018) and Changshu (a county-level city bordering Suzhou in the north; one

of the top 10 most economically competitive counties in China in 2019) in forming a dynamic technology innovation collaborative triangle. Specifically, **the government will give high priority to the establishment and development of Gusu Lab, Suzhou Innovation Centre for Macromolecular Medication Industry, National Manufacturing Innovation Center for Advanced Functional Fibers (Suzhou) and Third Generation Semi-Conductor Technological Innovation Centre (Suzhou), among others, as 'Key Platforms for Scientific Innovation'.**



*The four key research fields of Gusu Lab– electronic information materials, life and health sciences materials, energy and environment materials, and cutting-edge strategic materials – closely complement OSCAR's research interests. Prof. Zhanfeng Cui, OSCAR's founding Director, was appointed to the Gusu Lab Strategic Consultancy Committee last year.*

According to the document, the province will focus on tackling technological bottlenecks in the high-priority industries of high-end equipment manufacturing, integrated circuits, biomedicine, artificial intelligence, mobile communications, aerospace and aviation, software, new materials, and new energy.

A wide range of strategies for attracting and retaining tier-one overseas talents are also detailed, including talent programmes and other incentives to encourage international talents to work in Jiangsu under diversified and flexible employment agreement.



## Impact Generation

### Leadership of Jiangsu Provincial Education Department visits OSCAR



A high-profile delegation comprising the leadership of Jiangsu Provincial Education Department and Suzhou Dushu Lake Science, Education and Innovation District (SEID), led by its deputy director Mr. Chengbin Wang, visited OSCAR on the afternoon of 9<sup>th</sup> March.

OSCAR General Manager Leah He met with the delegation and briefed the visitors on the productive collaboration between the University of Oxford and SEID and the hard work put in by both parties, which have led to the establishment of OSCAR as Oxford University's first overseas research centre for sciences. She also impressed the visitors with OSCAR's strong research capacity, research dynamics and the

outputs from academic-industrial cooperation.

This visit by the Jiangsu Provincial Education Department was part of a showcase event following a signing ceremony formalising a new strategic partnership between SEID, the International Exchange Service Centre of the Jiang Provincial Education Department, and the Suzhou Dushu Lake Science and Education Development Co. Ltd. OSCAR was chosen by SEID as an international collaboration paradigm to show its commitment to engaging with top-flight higher education institutions.

### OSCAR and SEID met with members of China Resources Pharmaceutical Group Innovative Development and Intellectual Property Committee

Members of the Innovation Development and Intellectual Property Committee of China Resources Pharmaceutical Group Limited (CRPharma) led by Mr. Chuncheng Wang, Deputy General Manager of CRPharma and Director of the Committee, visited OSCAR on 31<sup>st</sup> March. Secretary



General of SEID, Wenqing Xu and OSCAR's General Manager Leah He met with the visitors.

The CRPharma delegation were given a brief tour of the labs for biosynthesis, regenerative medical engineering, and digital health. OSCAR Research Scientist Dr. Yang Cao, Senior Research Scientist Dr. Yun Wang, and Senior Research Scientist Dr. Yang Yang explained the research work being carried out in their respective research groups.

After the tour, the visitors sat down with Mr. Wenwing Xu and his colleagues from SEID, along with OSCAR General Manager Leah, and had friendly discussions over topics on technology commercialisation, allocation of market resources, and the incubation of innovative technologies.

Mr. Xu spoke of the developments observed in the biomedicine industry within the SEID area and emphasised the efforts invested by the SEID government into fostering biomedical innovation momentum.

Speaking of their innovation initiatives, strategies for resource allocation, and the pre-clinical groundwork laid for hospital application scenarios, CRPharma expressed their interest in forming strategic partnerships with universities and research institutes, particularly in the medical field.



China Resources Pharmaceutical Group is a flagship subsidiary of China Resources Group. It engages in the research and development, manufacture, distribution, and retail of pharmaceutical and healthcare products. The company was founded in 1938 and is headquartered in Hong Kong. In 2017, CRPharma's total revenue stood at HK\$ 172.5 billion.



## Outreach and collaboration

### OSCAR's growing impact is translating into possible academic collaboration in new areas

Merely 2 years since its official opening, OSCAR has achieved commendable progress across the board, and a visible increase in its impact. In tandem with proactive efforts of OSCAR's leadership to grow its profile and professional network, this is now translating into an increasing number of mutual visits with established universities and research organisations in the region and beyond.

On 4<sup>th</sup> March, in their first visit to OSCAR, the senior leadership of the International Office and Postdoc Management Office of Soochow University met with General Manager Leah He and OSCAR's operations management team, as well as research scientists representing OSCAR's diverse and dynamic research areas.

Mr. Shuao Wang, Head of the International Office, led the delegation and engaged in productive conversations with OSCAR over topics of common interest. Mr. Wang expressed keen interest in establishing collaboration with OSCAR in areas that serve the strategic interest of both parties, in particular the joint training of young researchers.



*OSCAR in discussion with the International Office and Postdoc Management Office of Soochow University*



*OSCAR pays reciprocal visit to Soochow University*

OSCAR researchers explained to the delegation OSCAR's ongoing research activities and their plans for further lab establishment, team building, and research cooperation. They also reciprocated Mr. Wang's proposal of forming partnerships, agreeing that they too would like to see strengthening of ties between

Soochow University and OSCAR for more fruitful and mutually beneficial cooperation.

This visit has helped deepen understanding between OSCAR and the International Office of Soochow University, and led to a reciprocal visit by OSCAR General Manager Leah He and research cooperation team on 23<sup>rd</sup> March. During this visit, the two parties discussed in further details the possibility of submitting joint research funding proposals with complementary neighbouring research institutes, and undertaking joint training of young researchers, among other topics.

The same collaboration prospects were proposed during a meeting between OSCAR and Deputy Secretary of Xi'an Jiaotong University Suzhou Academy and his team on 22<sup>nd</sup> March.



*OSCAR in discussion with Xi'an Jiaotong University Suzhou Academy*

In March, visits were also exchanged between OSCAR and the Suzhou Institute of Shandong University to initiate conversations regarding mutually beneficial areas in which the two organisations could collaborate for complementary or joint research.



On 29<sup>th</sup> March, Mr. Mingxin Liu, Executive Deputy Director of Suzhou Institute of Shandong University, and his colleagues had their first formal meeting at OSCAR with General Manager Leah He and OSCAR researchers.

A few days later, Leah He and Head of Research Cooperation Alex Yang paid a reciprocal visit to the Suzhou Institute of Shandong University, paving the way for possible collaboration.

As OSCAR prepares its second phase of development, conversations with local and international academic coordinators such like these will offer invaluable information for OSCAR to explore a sound mechanism to work with and capitalise on a wider network of resources. Success in such partnerships will provide impetus for strengthening OSCAR's research capacity and help consolidate OSCAR's reputation, footprint and position as a leading research institute in the region.