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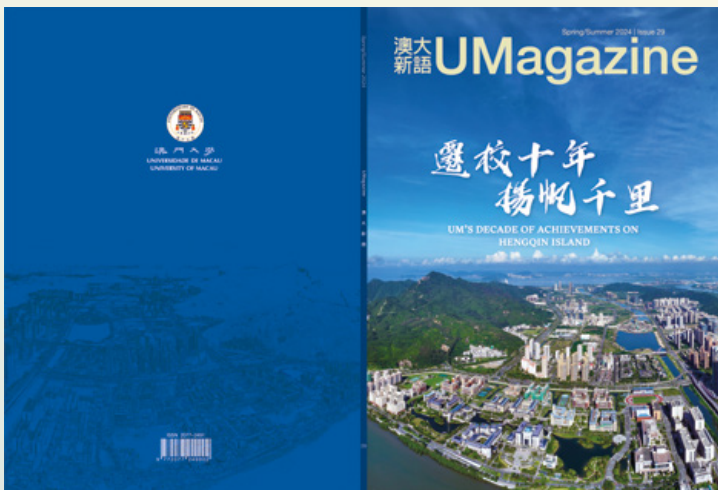
# 澳新大語UM Magazine

## 遷校十年 揚帆千里

UM'S DECADE OF ACHIEVEMENTS ON  
HENGQIN ISLAND







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《澳大新語》創於2009年，為澳門大學官方刊物之一，  
每年出版兩期，旨在展示澳門大學的創見和突破、  
報導教研和社會服務的最新發展和成果。

Published biannually since 2009, *UMagazine* is one of the University of Macau's official publications and aims to report innovative ideas and research breakthroughs of the University of Macau. It also showcases the latest developments and achievements of the university in teaching, research, and community services.



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UMagazine

## 校長的話

### RECTOR'S WORDS

十年前，在中央政府和澳門特區政府傾力支持、澳門大學師生共同努力下，澳大實現從「潭山初建」到「琴島重築」，在比原址大20倍的新校園築夢未來，揚帆啟航。

遷校十年，澳大革新求變、奮力追夢。我們完善人才培養體系、擘劃研究領域佈局、構建社會服務平台、拓展全球合作網絡、優化校園設施與環境。十年間，澳大的辦學規模和水平不斷提升，學生人數從8,000餘人增至超過13,500人、研究領域和質量躍升、國際聲望穩步上揚。

遷校十年，澳大立足澳門，深耕細作。我們孕育一批又一批具有家國情懷、國際視野、全球競爭力和社會責任感的公民和創新型人才。同時，澳大圍繞共建灣區、融入國家、走向世界的發展定位積極作為，不斷擴展其研究和服務，助力澳門、粵港澳大灣區和國家實現發展願景，並為促進人類社會進步作出貢獻。

十年後的今天，澳大乘風破浪，再迎新機。我們將握緊在橫琴粵澳深度合作區的新契機，擴大辦學空間，充分利用「一國兩制」制度優勢，乘勢而上，為促進澳門經濟多元可持續發展、助力共建粵港澳大灣區發揮更大的作用。展望下個十年，我們將堅持立德樹人、繼續改革創新，通過以學生為本的優質教育、具國際影響力的重點研究，以及高水平的社會服務，矢志成為一所國際公認的卓越大學。

篤行致遠，未來可期。

Ten years ago, thanks to the strong support of the central and Macao SAR governments, as well as the dedication of staff and students, the University of Macau (UM) relocated from its original campus in Taipa to a new one on Hengqin Island, reaching a significant milestone. This new campus, twenty times the size of the old one, has allowed us to envision a future filled with possibilities and set sail towards new horizons.

Throughout the past decade, UM has grasped opportunities for growth and innovation. In this period, the university has refined its talent nurturing strategies, enhanced its key research initiatives, created community service platforms, and broadened its global connections, all while upgrading its campus facilities and environment. Over this time, UM's educational scope and quality have significantly improved. The student population has surged from just over 8,000 to more than 13,500, accompanied by a remarkable increase in both the diversity and quantity of research undertakings, bolstering the university's global reputation.

Throughout the past decade, UM, leveraging its strong foothold in Macao, has nurtured numerous citizens and innovators who love their home country, possess global perspectives and competitiveness as well as a strong sense of social responsibility. The university has also made every endeavour to jointly develop the Guangdong-Hong Kong-Macao Greater Bay Area, integrate with national development, and go global. It has consistently expanded research and service activities, making significant contributions to the developmental goals of Macao, the Guangdong-Hong Kong-Macao Greater Bay Area, and the nation as a whole. These efforts have also contributed to the betterment of humanity.

A decade has passed. UM is now embracing change while seizing new opportunities. We are determined to capitalise on the new opportunities in the Guangdong-Macao In-Depth Cooperation Zone in Hengqin to extend our educational facilities. We will also keep up with the momentum and leverage the 'one country, two systems' policy to contribute to the economic diversification and sustainable development of Macao, thereby providing greater impetus into the development of the Guangdong-Hong Kong-Macao Greater Bay Area. As we look to the next decade, our commitment to fostering virtue and innovation remains resolute. Through quality student-centred education, key research subjects with international impact, and high-quality community services, UM strives to become an internationally recognised university of excellence.

With this unwavering conviction, let us steer towards a future filled with promise and potential!



宋永華 Yonghua Song



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# 十年變遷歷程

## Key Milestones of the Past Decade



2014年7月，林金城博士獲委任為  
澳大校董會主席  
In July 2014, Dr Lam Kam Seng Peter was  
appointed Chair of the University Council  
of UM



2014年8月，澳大全面遷入橫琴島校園，  
並在當日舉行開學禮  
In August 2014, UM relocated to its new  
campus on Hengqin Island and held a  
convocation



2014年12月，國家主席習近平視察澳大  
並與學生交流  
In December 2014, President Xi Jinping  
visited UM and engaged in discussions  
with students



2016年，澳大獲澳門特區政府  
頒授教育功績勳章  
In 2016, UM was awarded the Medal of  
Merit — Education by the Macao SAR  
Government

2018年1月，澳大第九任校長宋永華教授  
履新  
In January 2018, Prof Yonghua Song assumed  
his role as the ninth rector of UM



2018年6月，國家主席習近平回信澳門高校  
並提出要求和期許  
In June 2018, President Xi Jinping replied to  
a joint letter from Macao's higher education  
institutions, outlining his expectations for their  
future endeavours



2020年7月，澳門特區行政長官、澳大校監  
兼大學議庭主席賀一誠首次主持2019/2020  
學年大學議庭及校董會聯席會議  
In July 2020, Mr Ho Iat Seng, chief executive  
of the Macao SAR, chancellor of UM, and  
chair of the University Assembly, presided  
over his first joint meeting of the University  
Assembly and University Council for the  
2019/2020 academic year



2021年，澳大發佈五年發展規劃  
(2021/22-2025/26學年)  
In 2021, UM released its Five-Year  
Development Plan for the academic years  
2021/22 to 2025/26





# 十年變遷歷程

## Key Milestones of the Past Decade



THE排名從2015年的276-300位之間升至2024年的193位；QS排名從2015年的701+位升至2024年的254位

UM's position in the THE ranking improved from 276-300 in 2015 to 193 in 2024, while its QS World University Rankings rose from 701+ in 2015 to 254 in 2024



學生規模十年間從8,000多人增至超過13,500人

The student population grew from approximately 8,000 to more than 13,500 in ten years



不斷完善學科及課程體系，十年間課程從96個增至120個

Academic and programme structures were consistently refined. The number of programmes offered increased from 96 to 120 over a ten-year period



進入基本科學指標資料庫（ESI）全球前1%的學科從2018年的5個增至2024年的12個

In 2024, UM ranked the top 1 per cent in 12 subjects in the Essential Science Indicators rankings, up from 5 subjects in 2018

與內地一流大學開展多個聯合培養人才項目，2023年底加入C9聯盟+

UM launched multiple collaborative talent development programmes with leading universities in mainland China, and joined the C9 League+ in late 2023



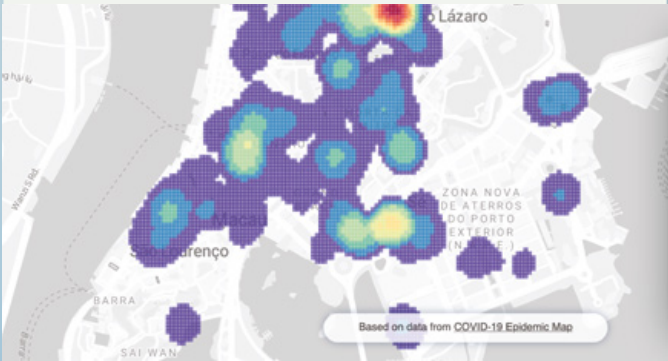
十年間，與澳大簽訂合作協議的高校數量從183所增至320所，涵蓋全球38個國家及地區

The number of higher education institutions partnering with UM increased from 183 to 320 over the past ten years, spanning 38 countries and regions



應對新冠疫情挑戰，積極發揮大學高端智庫的作用

UM actively responded to the challenges of the COVID-19 pandemic by leveraging its high-end think tank expertise



逐步設立更多學術平台，全方位服務澳門社會發展

UM established more academic platforms to support Macao's social development







# 培養創新人才勇闖新時代

## Nurturing Innovative Talent to Embrace New Horizons

文 / 葉浩男、資深校園記者鄭瑋璐 · 圖 / 編輯部

Chinese & English Text / Davis Ip, Senior UM Reporter Zheng Weilu · Photo / Editorial Board

2014年8月23日，澳門大學首度於橫琴島新校園舉行開學禮。這場2014/2015學年的開學禮標誌著澳大不再「有校無園」，學生得以在依山傍水、綠茵滿目的校園求學修業。開學禮當日，澳大教授身披學術袍，迎接約2,000名學子入學。數月後的12月20日，恰逢澳門回歸祖國15周年，國家主席習近平親臨澳大視察，與學生親切交流，勉勵他們努力學習，青出於藍，學以致用。

### 培養學生成人成才

2014年，澳大迎來全面遷校的重要時刻，是澳大人才培養發展的轉折點。遷校以來，澳大持續完善本

科、碩士、博士的人才培養策略，並推進「P.I.C.K.」研究發展策略，即「以問題為導向」（Problem Orientation）、「跨學科合作」（Interdisciplinary

Interaction）、「協同創新」（Collaborative Innovation）及「知識轉移」（Knowledge Translation），以培養創新人才及推進尖端研究。

在本科階段，澳大推動「四位一體」教育模式，將專業、通識、研習及社群教育融合一起。同時，澳大通過建立住宿式書院系統作為整合式教育平台，使書院與學院課堂相互貫通、協同育人，提供豐富的體驗式學習環境，促進學生全人發展。遷校後，澳大的住宿式書院從兩間增至十間，佔地約為校園的五分之一。2020年，書院教育實施改革，推出2.0版，強調培養學生七項勝任力，包括公民責任心、全球競爭力、知識整合能力、團隊協作、服務與領導、文化參與、健康生活，培養學生的軟實力。

在研究生教育方面，澳大校長宋永華教授在六年前的就職演說中強調研究生教育的重要性。他表示，過去

數年，澳大在碩士階段推行「知識整合」，創建並完善前沿和交叉學科課程，培養符合社會發展需求的人才。在博士階段，澳大強調「協同創新」，以開放、合作、資源共享的模式，促進跨領域研究和交流、取得研究突破，造福社會。



澳大校長宋永華教授  
UM Rector  
Prof Yonghua Song

現時在澳大微電子研究院擔任澳大濠江學者的曾文良博士，在澳大取得學士、碩士和博士學位。他表示，他在本科階段涉獵不同領域的知識，確定研究興趣，在研究生階段則專注於研究方向的知識積累和創新，在教授支持下致力將科研成果化為實際應用。



來自馬來西亞的學生許偉恆先在澳大取得金融學理學士學位，繼而轉攻金融科技理學碩士課程。他表示，跨界學習比預想的困難得多，但收穫也遠超預期，獲得將金融概念融入軟件開發的整合能力，克服跨學科學習帶來的挑戰。

完善學科及課程體系

在過去十年間，澳大學生人數從8,000多人增至13,500多人，期間增設約10個學系及逾20個學位課程，覆蓋澳門法學、中國法與環球法律、國際綜合度假村管理、應用物理及化學、公共衛生及醫藥管理、哲學及宗教學、生物醫學、藥物科學及科技、藝術，以及海洋科學及技術等領域，目前約有120個博士學位、碩士學位、學士學位及學士後證書／文憑課程。

澳大的多個課程獲得國際認證，反映出高水平的教學質量，例如工商管理學院的理學士學位（會計學）課程獲得香港會計師公會認可、科技學院計算機科學學士課程及工程學士課程均通過香港工程師學會的全面評鑑，並經由香港工程師學會，取得《首爾協定》及《華盛頓協議》的成員國認可。此外，澳大工商管理學院更獲得國際商學院聯合會（AACSB）、工商管理碩士協會（AMBA）和歐洲質量發展系統（EQUIS）的國際認證，連續數年保持「三冠王」地位，反映該院

在教學、研究和學術管理領域的卓越水平。

培養學生家國情懷

澳大以多種方式培養學生的家國情懷。2018年，澳大成立全澳公立高校第一支學生國旗儀仗隊，並於同年5月26日在畢業典禮前首辦升旗儀式，逾800名師生參與，成為澳門首間舉行升旗儀式的公立大學。自此澳大每逢畢業禮、開學禮、國慶、澳門特區成立紀念日及元旦等節慶均會舉行升旗儀式。

澳大的本科通識教育設有必修科「道德、價值觀、法律與社會」，由法學院憲法與基本法研究中心的導師授課，講解中國憲法與澳門基本法知識。學生亦經常前往內地交流學習、參訪愛國教育基地，以及參與國家安全教育展和紀念五四運動、國慶及澳門特區成立日的活動。自2022/2023學年起，每所書院均設有由學生主導的家國情懷小組。

學生事務長彭執中表示，透過住宿式書院系統、通識教育及多元的學生活動，澳大



彭執中先生  
Mr Paul Pang



澳大全面遷入新校園後的首個開學禮  
UM's first convocation following the relocation to the new campus



國家主席習近平親臨澳大新校園視察  
President Xi Jinping visited UM's new campus

將愛國愛澳教育融入到學生的日常學習和生活中，使他們深入了解國家的傳統文化和當今發展，培養家國情懷。他還提到，看到學生在這種環境中茁壯成長，成為更有社會責任感的公民，令人格外欣慰。

培養創新創業人才

澳大鼓勵創新創業，並將其融入教育體系。2017年，澳大創新創業中心成立，為本科生和研究生提供創新創業課程，同時選拔有潛力的創業團隊，鼓勵他們進駐孵化平台。中心還舉辦多次創業大賽和創新創業展，為創業青年提供交流競技和投資融資的機會。2020年，該中心被評為「國家級眾創空間」，至今已孵化約50家公司，大多數由澳大學生或校友主導，涉及醫療科技、新型材料和資訊科技等領域。



梁麗嫻教授  
Prof Elaine Leung

創新創業中心主任梁麗嫻教授表示，澳大為學生提供完善的設施與技術支持，包括實驗室與共享工作空間，為創新創業活動

創造優良環境。她還強調，大學的多元文化氛圍和國際交流機會對培養創業人才至關重要，能夠拓寬學生視野。

澳大鄭裕彤書院的學生充分利用大學豐富的創新創業資源。他們將釀製啤酒時產生的麥芽渣轉化為環保貓砂產品，運用技術噬走麥芽渣中的糖分，以避免幼貓誤食糖分。該團隊的成員付昊明表示，在書院的協助下，他們從澳門科學技術發展基金獲得兩項科研資助，實現從理念到產品的突破。該書院還舉辦創業營系列活動，邀請創業投資專家協助提升他們的項目。此外，該團隊在進駐澳大創新創業中心期間不僅獲得項目啟動基金的支持，還多次參加創業比賽及商業展會，並在中心協助下與廣洲南沙區及增城區的企業簽訂協議，將產品在粵港澳大灣區推廣。

吸引優秀學生

澳大也致力吸引海內外優秀學生到澳大學習。在本地學生方面，大學設立了「校長推薦入學計劃」，吸引優秀的學生入學，在2019/2020學年還增設「葡語專才推薦計劃」和「傑出運動員入學計劃」，以培養中葡雙語人才和本地優秀學生運動員。

為吸引高質素的研究生，自2012/2013學年起，





澳大於新校園的首個上課日  
The first class on UM's new campus

澳大獲准在內地具有研究生推薦免試（推免）資格的高校招收優秀應屆本科推免生，攻讀澳大碩士學位課程。該計劃的範圍隨後在2015/2016學年擴大至直接攻讀博士課程的申請者。此外，大學在2018年推出「澳大濠江人才計劃」，提供具競爭力的獎學金和豐富的研究機會，鼓勵年輕學者投身具社會價值及學術意義的研究項目。

澳大亦與海內外頂尖學府合作，以提升學生的全球競爭力和國際視野，包括與中國科學院轄下研究所的博士生聯合培養項目，以及與愛丁堡大

學、布里斯托大學及倫敦帝國學院推行的1+3碩博雙學位項目。此外，澳大還與里斯本大學合作，在2023年啟動雙博士學位項目。這些合作項目均為學生提供廣闊的學術平台和交流機會。

培養人才勇闖新程——澳大的使命

「潭山初建，琴島重築，校園毓秀鍾靈」。恰如校歌所頌，澳大校園是匯聚靈氣、孕育秀氣之地。琴島重築十載後，正如宋永華校長所言，澳大站在新的起點，在以中華文化為主流、多元文化共存的校園，將會不斷完善教學體系，引領學生勇闖新時代。

On 23 August 2014, UM held the first-ever convocation on its new Hengqin campus to kick off the 2014/2015 academic year. This ceremony symbolised a transformative moment for UM as it was finally able to shed its image as ‘a campus-less university’. The new campus, abundant with greenery and beautiful scenery, provided a brand-new environment for students. During the opening ceremony, UM faculty dressed in academic attire greeted around 2,000 new students. Several months later on 20 December 2014, which was the 15<sup>th</sup> anniversary of Macao’s return to the motherland, a notable moment occurred when President Xi Jinping visited UM and engaged with its students. He encouraged them to work hard and aim to excel beyond their professors.

Committed to Talent Development

The year 2014 was a crucial year for UM as it relocated to a new campus. In addition, this year marked a turning point in UM’s talent development

strategy. Since the relocation, the university has refined its approach to talent development across all study levels, from undergraduate to doctoral. It has adopted a whole-person educational model and

the ‘P.I.C.K.’ research development strategy, which focuses on Problem Orientation, Interdisciplinary Interaction, Collaborative Innovation, and Knowledge Translation, in order to nurture innovative talent and advance cutting-edge research.

UM adopts a ‘4-in-1’ education model in undergraduate education, which integrates discipline-specific education, general education, research and internship education, and community and peer education. The university’s residential college system, an integrated educational platform, incorporates this approach into faculty-led teaching, offering undergraduates a dynamic learning experience that promotes whole-person development. The relocation has enabled the number of UM’s residential colleges to grow from two to ten, encompassing about 20 per cent of the campus area. In 2020, UM reformed its residential college education and introduced an upgraded 2.0 version education model, which emphasises cultivating seven key competencies: responsible citizenship, global competitiveness, knowledge integration, teamwork and collaboration, service and leadership, cultural engagement, and a healthy lifestyle. These goals seek to enhance students’ essential soft skills in tandem with professional knowledge.

Six years ago, UM Rector Prof Yonghua Song

emphasised in his inaugural address the importance of postgraduate education. According to him, in the few years that followed, UM prioritised knowledge integration at the master’s level by developing innovative and interdisciplinary programmes to produce graduates who address societal needs. At the doctoral level, the focus on collaborative innovation encourages an environment featuring openness, cooperation, and resource sharing. This initiative fosters interdisciplinary academic exchanges, propelling cutting-edge research for the greater good.

Dr Zeng Wenliang, currently a UM Macao Fellow at the UM Institute of Microelectronics, completed his bachelor’s, master’s, and doctoral studies at UM. He explains that during his undergraduate years, he had the opportunity to explore various fields in order to find his research interests. As he moved into postgraduate studies, the emphasis shifted to building knowledge and fostering innovation within his chosen field. He also highlights that his professors didn’t just



曾文良博士  
Dr Zeng Wenliang



澳大於新校園全面啟動住宿式書院系統，推動「四位一體」教育模式。  
UM launched its residential college education system on the new campus to push forward its ‘4-in-1’ education model





許偉恆  
Aymo Khoo

encourage theoretical advancements; they also encouraged him to apply his research in practical settings.

Aymo Khoo, a Malaysian student, is pursuing a master's degree in financial technology at the UM Faculty of Science and Technology. He earned a bachelor's degree in finance from the UM Faculty of Business Administration. He shares that interdisciplinary learning was much more challenging than he had expected. However, the rewards he has gained have far exceeded his expectations. During his time at UM, Aymo has not only acquired the skills to integrate financial concepts into software development, but has also overcome the challenges of interdisciplinary learning.

**Refining Disciplines and Programme Structures**

Over the past decade, UM's student population has grown from just around 8,000 individuals to more than 13,500. Moreover, the university has introduced about 10 new academic departments and nearly 20 new degree programmes. These

include specialised fields such as Macao legal studies, Chinese law and global legal studies, international integrated resort management, applied physics and chemistry, public health and medicinal administration, philosophy and religious studies, biomedical sciences, pharmaceutical sciences and technology, arts, as well as ocean science and technology. Today, the university offers around 120 programmes across doctoral, master's, bachelor's, and postgraduate certificate/diploma levels.

Many UM degree programmes have gained international accreditation, serving as a testament to the university's high teaching quality. For instance, the Bachelor of Science in Accounting programme is accredited under the Hong Kong Institute of Certified Public Accountants' Qualification Programme. Moreover, the Bachelor of Science in Computer Science programme and other bachelor's degree programmes in engineering have received full accreditation from the Hong Kong Institution of Engineers, and have subsequently been recognised by all signatories to the Seoul Accord and the Washington Accord. Furthermore, the Faculty of Business Administration holds the 'Triple Crown' status, accredited by the Association to Advance Collegiate Schools of Business (AACSB), the Association of MBAs (AMBA), and the EFMD Quality Improvement



澳大校長宋永華教授(右一)就職  
Prof Yonghua Song (1<sup>st</sup> from right) took office as the rector of UM



澳大舉行首個升旗儀式  
UM's first flag-raising ceremony

System (EQUIS), underscoring its excellence in teaching, research, and academic management.

**Strengthening Students' Sense of National Identity**

UM strengthens students' sense of national identity through various initiatives. For example, the university established its National Flag Team in 2018, marking the first university national flag team in Macao. On 26 May 2018, the team conducted its inaugural flag-raising ceremony in the presence of over 800 students and faculty members, becoming the first public university in Macao to do so. Since then, flag-raising ceremonies have become regular events on major occasions, including congregation and convocation days, National Day, the anniversary of the Macao SAR, and the first day of the new year.

UM's general education curriculum for undergraduate students includes a mandatory course titled 'Ethics, Values, Laws, and Society'. This course, delivered by experts from the Faculty of Law's Centre for Constitutional Law and Basic Law Studies, provides a comprehensive understanding of the Constitution and the Macao Basic Law. Students also engage in activities that strengthen their sense of national identity, including exchange visits to mainland China, tours of national education bases, national security education exhibitions, and participation

in celebrations of the May Fourth Movement, National Day, and the anniversary of the Macao SAR. Since the 2022/2023 academic year, each residential college has established a student-led group to further strengthen students' sense of national identity.

Dean of Students Mr Paul Pang says that through UM's residential college system, general education, and a variety of student activities, the university weaves education about love for the country and Macao into students' daily learning and lives. This enriches their understanding of the nation's traditional culture and its contemporary development, fostering a strong sense of national identity. He adds that it is rewarding to see students flourish in this environment and become more socially responsible.

**Fostering Innovative and Entrepreneurial Talent**

As a university that encourages innovation and entrepreneurship, UM integrates these concepts into its educational framework. In 2017, the university established the Centre for Innovation and Entrepreneurship (CIE), with the objective of providing training courses on innovation and entrepreneurship for undergraduate and postgraduate students, as well as providing promising entrepreneurial teams with access to its incubation platform. In addition, CIE has held many entrepreneurship competitions as well as





澳大40周年校慶啟動儀式  
UM held a ceremony to kick off the celebrations for its 40<sup>th</sup> anniversary

innovation and entrepreneurship exhibitions, providing aspiring young entrepreneurs platforms to exchange ideas and explore investment and financing avenues. In 2020, CIE was recognised as a 'National Co-working Space'. To date, it has incubated around 50 companies, mostly led by UM students or alumni, with ventures spanning medical technology, new materials, and information technology.

Prof Elaine Leung, head of CIE, emphasises UM's commitment to boosting innovation and entrepreneurship: 'The university provides students with state-of-the-art facilities and support, including laboratories and co-working spaces, creating an optimal environment for entrepreneurial pursuits.' She also highlights that UM's multicultural environment and international exchange opportunities are pivotal in broadening students' perspectives and nurturing entrepreneurial talent.

A student entrepreneurial team from Cheng Yu Tung College at UM has repurposed brewer's spent grain, a by-product of beer brewing, into eco-friendly cat litter. This innovative product utilises a technology to remove sugar from the spent grain so that it is safe for kittens who might ingest it. Team member Fu Haoming shares, 'With the support of the

college, we secured two research grants from the Science and Technology Development Fund of Macao to transform our initial idea into a tangible product. Furthermore, the college hosted entrepreneurship camps where venture capital specialists provided valuable advice on enhancing our project.' While being incubated at CIE, the project not only secured initial funding but also gained exposure through different entrepreneurship competitions and trade shows. With CIE's assistance, the team has also established partnerships with enterprises in Nansha and Zengcheng districts in Guangzhou, thereby expanding the product's reach across the Guangdong-Hong Kong-Macao Greater Bay Area.



付昊明  
Fu Haoming

Attracting Talented Individuals

UM is dedicated to attracting outstanding local and international students to study at the university. It implements various schemes and initiatives to

attract talented individuals. For example, the UM Principals' Recommended Admission Scheme attracts many outstanding local students. In the 2019/2020 academic year, the university introduced two new initiatives: the Chinese and Portuguese Bilingual Talent Nurturing Scheme and the Outstanding Student-Athletes Admission Scheme. These two initiatives aim to develop students' bilingual proficiency in Chinese and Portuguese, and support exceptional student athletes, respectively.

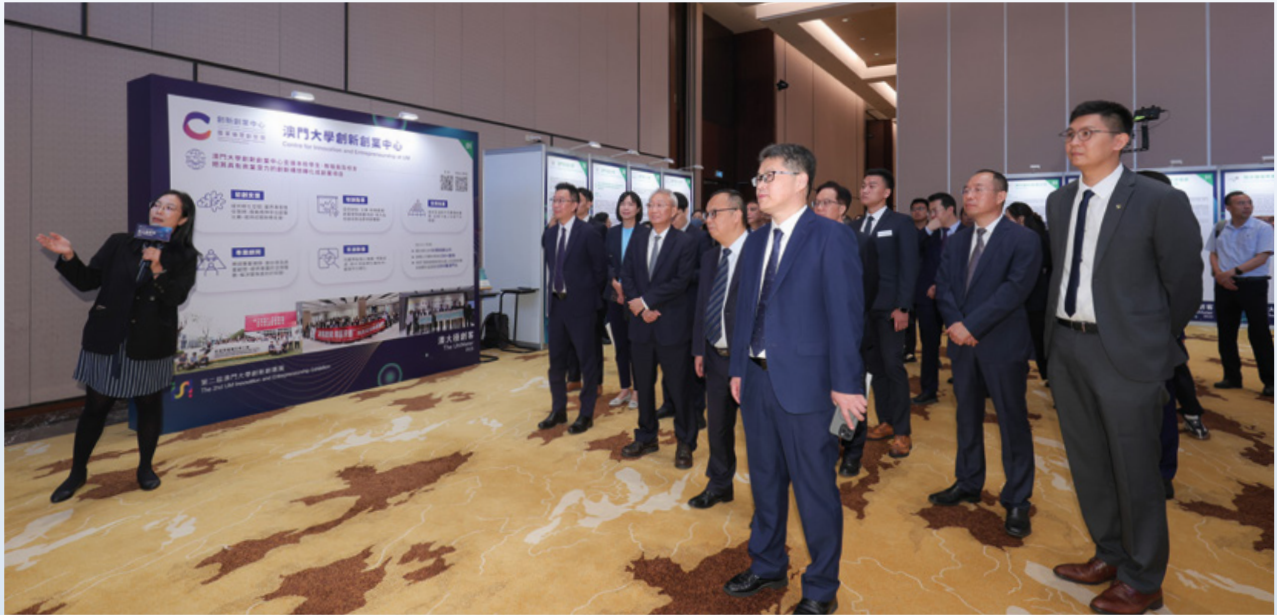
To attract high-quality postgraduate students, UM launched a recommendation scheme in the 2012/2013 academic year for master's degree programme applicants from mainland China. This scheme allows graduating bachelors' students with outstanding performance to progress to postgraduate studies without entrance exams. Since the 2015/2016 academic year, the scheme has also included doctoral applicants. In 2018, the university introduced the 'UM Macao Talent Programme', offering competitive scholarships and extensive research opportunities. This initiative seeks to inspire young academics to pursue research with both social impact and academic significance.

To enhance students' global competitiveness

and expand their international perspectives, UM has forged partnerships with leading universities across China and the globe. These collaborations include joint doctoral training with institutions affiliated with the Chinese Academy of Sciences and 1+3 master's and PhD dual degree programmes with the University of Edinburgh, the University of Bristol, and Imperial College London. Moreover, UM launched a dual PhD degree programme with the University of Lisbon in 2023. These collaborative efforts have created a broad academic platform and provided exchange opportunities for students.

UM's Mission: Nurturing Talent to Embrace New Horizons

As the UM anthem notes, on either Taipa Hill or Hengqin Plain, beauty's brightness shines. Whether on the old or new campus, the university remains a vibrant intellectual hub that attracts people of different backgrounds and fosters their excellent potential. A decade after UM's relocation to Hengqin Island, Rector Song affirms that at this new starting point, on a campus where Chinese culture thrives amid a tapestry of multiculturalism, UM is poised to enhance its academic offerings and lead its students to embark on a new journey.



澳大鼓勵創新創業，為創業青年提供交流競技和投資融資平台。  
As a university that encourages innovation and entrepreneurship, UM provides aspiring young entrepreneurs with platforms to exchange ideas and explore investment and financing avenues.





# 突破界限的跨學科研究

## Breaking Barriers Through Interdisciplinary Research

文 / 葉浩男、資深校園記者張方博、古詠軒 · 圖 / 編輯部

Chinese & English Text / Davis Ip, Senior UM Reporters Zhang Fangbo & Ku Weng Hin · Photo / Editorial Board

澳門大學自2014年全面遷入橫琴島校園以來，研究環境和條件得到改善，學者有更廣闊的空間打破學科邊界，在跨學科研究的前沿不斷探索，十年間為學界、業界以至社會整體作出貢獻，研究質量和影響力取得飛躍。

### 確立研究戰略佈局

格物致知是大學的首要使命。在遷校前，澳大舊校園空間狹小，研究設施有限，研究活動深受限制。然而，自從遷入現今的新校園後，澳大的研究空間大幅增加，加速了既有研究項目的發展，也拓展了全新的

學術領域。十年間，大學不斷增設科研設施，現時校園內科研空間的建築面積超過17萬平方米，聚焦於微電子、智慧城市物聯網、中醫藥、健康科學、應用物理與先進材料、能源、環保、數據科學等領域的研究。

澳大推動以「3+3+3+3」為核心的研究戰略佈局，全力支持三個國家重點實驗室（中藥質量研究、模擬與混合信號超大規模集成電路、智慧城市物聯網）、重點發展三個新興方向（精準醫學、先進材料、區域海洋）、積極推進三個跨學科交叉領域（人工智能與機器人、數據科學、認知與腦科學），以及建好三個人文社科研究平台（人文社科高等研究院、澳門研究中心、亞太經濟與管理研究所）。截至2024年3月，澳大有12個學科領域因被引用次數達國際排名前1%而躋身美國頂尖學術指標基本科學指標（ESI），遠超2018年時的五個學科。

### 拓展國家及區域研究平台

自2010年起，澳大積極發展其國家及區域研究平台。其中，中藥質量研究國家重點實驗室於2010年獲批成立，並在2020年與世界500強中藥企業合作成立澳門中藥研發中心。該實驗室更在2021年獲澳門特區政府頒

授專業功績勳章，其後設立澳門中藥檢測中心，2024年3月起試營運，以支持澳門大健康產業發展。

模擬與混合信號超大規模集成電路國家重點實驗室也於2010年獲批成立。澳大以該實驗室為基礎，在2018年成立微電子研究院，致力於微電子及跨學科領域的人才培養、研究和應用。該實驗室的學者於2023年的第70屆國際固態電路會議（ISSCC）上發表15篇論文，研究成果在國際上處於領先地位。該實驗室還與粵港澳灣區和全國各地的企業建立聯合實驗室。

澳大於2018年設立智慧城市物聯網國家重點實驗室，並憑藉其在技術及應用研究方面的成就，獲得多項重要獎項，包括國家科學技術進步獎。該實驗室以雙碳戰略和打造宜居韌性的智慧城市為導向，通過跨學科交叉合作進行研究，如建立澳門首個協同智能驅動的自動駕駛關鍵技術平台、開發多種傳感器技術來支持智能交通系





鄧初夏教授  
Prof Chuxia Deng

統，以及搭建澳門首個「智慧城市混合現實仿真與智能決策平台」。

健康科學學院是首間遷入新校園的學院，自遷校後，澳大的精準醫學研究發展迅速。健康科學學院院長鄧初夏教授說：「新校園有先進生物科學和醫學實驗設施，推動我們在

藥物研發、疾病機制探索，特別是癌症研究方面的科研工作，取得多項具國際水平的科研成果。」他表示，澳大於2020年底獲國家教育部批准成立「教育部澳門大學精準腫瘤學前沿科學中心」，是國家在港澳地區佈局的首個及唯一一個設於境外的前沿科學中心。

此外，澳大與中國科學院成立五個聯合實驗室，並在2019至2023年期間獲批成立12個粵港澳聯合實驗室。目前澳大也與企業、機構及高校共同建立超過20個聯合實驗室，拓展研究的規模和影響力。

推進研究創新

澳大遷校後積極推進研究創新，增設多個研究院，發展新興方向、跨學科交叉領域和人文社科研究。其中，為促進人文社科領域與現代科技結合，澳大於2017年成立協同創新研究所（後更名為協同創新研究院），並於2019年改革，設立認知與腦科學研究中心、人工智能與機器人研究中心、數據科學研究中心及創新創業中心。同年，澳大成立人文社科高等研究院，推行「駐院學人

計劃」和「卓越出版計劃」等，建設人文範疇的跨學科國際水平研究團隊。另外，澳大於2022年獲批成立澳門先進材料研發中心，以新能源材料、環保材料、大健康保護材料為主要研究方向，旨在促進先進材料產業發展。

過去十年，澳大的各大學院也陸續增設多個研究中心，如翻譯傳譯與認知研究中心、憲法與基本法研究中心、區域海洋研究中心、應用數學研究中心、語言學研究中心等，反映大學在學術領域的廣度和深度。

加強產學研合作促進成果轉化

澳大致力於構建和完善「五位一體」研究創新及轉化體系，重點在於構建五類平台，支持有關科研成果轉化的創新、服務、管理、培育及實踐，加快產學研發展。

珠海澳大科技研究院（以下簡稱「珠研院」）是大學首個產學研示範基地，位於澳大校園一牆之隔的橫琴·澳門青年創業谷內，設有六個研發中心和澳大三個國家重點實驗室的橫琴分部。截至2024年4月，該研究院承擔了160項獲國家、省市科技部門立項資助的科研項目，以及127項由企業委託的研究專案。研究院的多個產學研項目，例如機器人芯片、經典名方、幹細胞再生醫學項目、智能光纖傳感採集設備、納米泡沫水泥等，已開展研發、落地生產，甚至推出市場。在該研究院的基礎上，澳大還計劃設立橫琴澳門大學高等研究院，推進產學研合作。

珠研院代院長陳國凱教授表示，該研究院於2019年在橫琴啟用，是澳大推動產學研合作的重要一



澳大成立首個產學研示範基地—珠海澳大科技研究院  
UM established the Zhuhai UM Science & Technology Research Institute, its first industry-academia collaboration demonstration base.



陳國凱教授  
Prof Chen Guokai

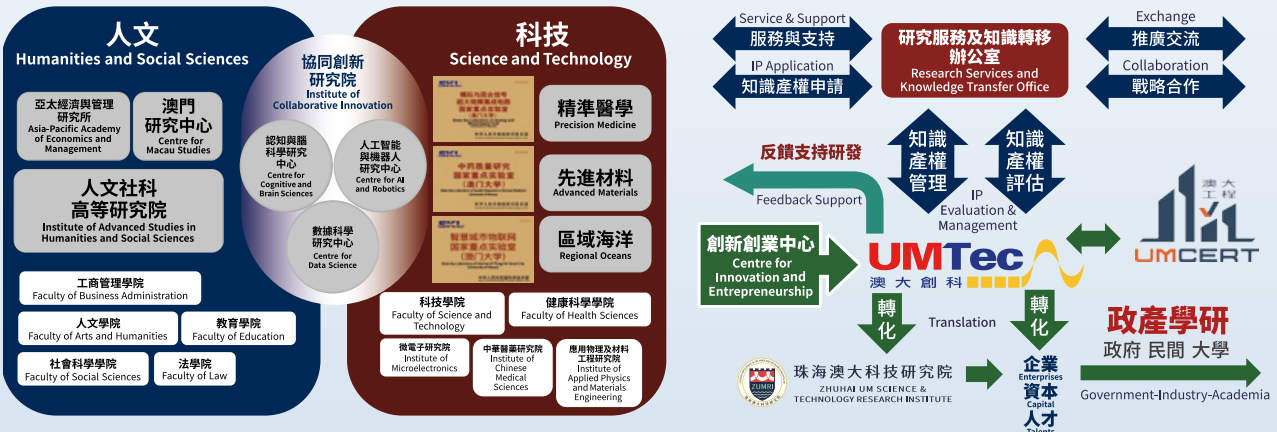
步。他表示：「研究院搭建了澳大與粵港澳大灣區以至內地其它省市的企業之間的合作平台，涉及轉化研究、概念驗證、中試階段，以及轉化服務。」陳教授還提到，研究院有助澳大研究人員直接獲取內地的研究資源，例如在進行癌症細胞檢測時，內地各省市的樣本可送到該研究院檢測，無需跨境運往澳門。

延攬優秀學者

隨著科研佈局日趨完備，澳大也革新人才引进策略，於2017/2018學年啟動「澳大人才計劃」（原名「澳大濠江人才計劃」），旨在延攬優秀學者。其中的「澳大濠江學者」項目致力於培養本地年輕學者。此外，澳大招聘全球各地的頂尖學者，2023年就有超過80位學術精英加盟。

健康科學學院副院長沈漢明教授在2020年成為澳大講座教授。在此之前，他在新加坡國立大學任職超過20年，從事細胞自噬等領域的研究。他表示，加入澳大是基於看重大灣區發展潛力、整個大學尤其是健康科學學院的學術氛圍和美麗的校園。自加入澳大後，他迅速組建了一支包括博士後研究員和博士研究生的科研團隊，取得多項研究突破，涉及線粒體自噬和針對非小細胞肺癌的靶向治療等領域。

人文社科高等研究院院長、法學院講座教授於興中則在2022年加入澳大。此前，他在康奈爾大學任教約十年，研究興趣包括社會理論、比較法哲學、智能科技與法。他說：「到澳大參加兩次研討會後，我對大學在跨學科研究方面的理念深感認同。」他目前與其他學者一起推動澳大的人文和社會科學研究，並促進這些學科和科技領域的跨界合作。加入澳大後，於教授也發表了關於法治與文明秩序、數字素養等方面的專著，以及開展有關心性哲學的研究。



澳大研究創新及轉化體系  
The UM System of Research and Knowledge Translation





遷至新校園後，澳大加速既有的研究項目發展，也拓展全新的學術領域。  
Since the campus relocation, UM has accelerated its research development and expanded into new academic disciplines.

研究碩果纍纍

澳大在過往十年取得豐碩的研究成果，包括乳癌療法的新突破、無人駕駛技術的新進展、中藥免疫調節機制的新發現等科學和科技領域的成果。在人文社科領域，澳大持續出版《南國學術》《澳門研究》和《澳門法學》等學術期刊，以及出版有關中國憲法知識和葡語教學的專著等，成果獲得學界和社會廣泛認可。

澳大學者每年發表的期刊論文數量從2014年的780篇增至2023年的逾2,400篇；論文的引用次數每年從約5,500次增至2023年近90,000次。此外，澳大的累計專

利數量也從2014年的28個增至2023年11月的236個。其中一些成果甚至獲得國家科學技術進步獎、光華工程科技獎、科學探索獎、澳門科學技術獎等殊榮。

造福社會

過去十年，澳大秉持著研究者必須「見人所未見、言人所未言」的精神，跨越學科和地域界限，拓展基礎和應用領域研究，擴大研究創新和合作平台的規模。展望未來，大學將持續致力於跨學科研究，以更多研究成果造福社會。

Since its relocation to the new campus on Hengqin Island in 2014, UM has significantly expanded its research facilities. This transformation has empowered UM scholars to transcend disciplinary boundaries and launch pioneering interdisciplinary projects. Over the past decade, UM has made significant contributions to academia, industry, and the broader community, amplifying the quality and impact of the university’s research.

Establishing a Strategic Research Layout

At the core of every university’s mission is the pursuit of knowledge. Before relocating to Hengqin, UM encountered significant space limitations. Some research institutes were confined to small rooms, which hindered their development. The move to the new campus has supercharged the university’s research capabilities, enabling it to accelerate ongoing projects and explore new avenues for academic

enrichment. Over the past decade, the university has significantly expanded its research infrastructure, with research spaces on the campus now exceeding 170,000 square metres, dedicated to research in microelectronics, Internet of Things for smart cities, Chinese medicine, health sciences, applied physics and advanced materials, energy, environmental protection, and data science.

UM has implemented its ‘3+3+3+3’ strategic research layout in recent years. This plan provides comprehensive support for the three state key laboratories (State Key Laboratory of Quality Research in Chinese Medicine, State Key Laboratory of Analog and Mixed-Signal VLSI, and State Key Laboratory of Internet of Things for Smart City), three emerging research fields (precision medicine, advanced materials, and regional oceanology), three interdisciplinary research fields (artificial intelligence and robotics, data science, cognitive and brain sciences), and three research platforms for the humanities and social sciences (Institute of Advanced Studies in Humanities and Social Sciences, Centre for Macau Studies, and Asia-Pacific Academy of Economics and Management). As of March 2024, UM was among the top 1 per cent in the Essential Science Indicators (ESI) database in 12 subjects, which indicates a remarkable advancement as the university was represented in only five subjects in 2018.

Expanding National and Regional Research Platforms

Since 2010, UM has been putting effort into developing its national and regional research platforms. One notable example is the State Key Laboratory of Quality Research in Chinese Medicine, which UM obtained approval to establish in 2010. In 2020, the laboratory partnered with a leading company specialising in Chinese medicine and listed on the Fortune Global 500 to establish the Macao Centre for Research and Development in Chinese Medicine. In 2021, the laboratory was awarded the Medal of Merit—Professions by the Macao SAR Government in

recognition of its research achievements. Building on the laboratory’s pioneering work, the Macao Centre for Testing of Chinese Medicine at UM began trial operations in March 2024.

UM also obtained approval to establish the State Key Laboratory of Analog and Mixed-Signal VLSI in 2010. In 2018, UM set up the Institute of Microelectronics to enhance its efforts in talent cultivation, research, and practical applications in microelectronics and related interdisciplinary fields. At the 70<sup>th</sup> International Solid-State Circuits Conference (ISSCC) in 2023, scholars from the laboratory presented 15 papers, which demonstrated the university’s leading global position in the field. Additionally, the laboratory has set up joint laboratories with enterprises in the Guangdong-Hong Kong-Macao Greater Bay Area and across the country.

In 2018, UM established the State Key Laboratory of Internet of Things for Smart City, which has since garnered a number of prestigious awards such as the State Scientific and Technological Progress Award. The laboratory is at the forefront of the national ‘dual carbon’ strategy and the development of a salubrious and resilient smart city. Scholars working in the laboratory have conducted fundamental and applied research through interdisciplinary collaboration. Its key projects include Macao’s first platform for autonomous driving vehicles featuring collaborative intelligence, the development of various sensor technologies for intelligent



澳大致力發展國家及區域研究平台  
UM is committed to developing national and regional research platforms



transport systems, and Macao’s first smart city virtual reality simulation and decision-making platform.

The Faculty of Health Sciences was the first faculty to relocate to UM's new Hengqin campus. Since the relocation, UM has made significant achievements in precision medicine research. Prof Chuxia Deng, dean of the Faculty of Health Sciences, says, ‘The new campus provides state-of-the-art facilities for biological sciences and medical research, which have enhanced our investigations into drug development, disease mechanisms, and in particular, cancer research. This has resulted in numerous internationally recognised research achievements.’ He adds that the faculty’s fruitful results in precision oncology research led to the Ministry of Education’s (MoE) approval for the establishment of the MoE Frontiers Science Center for Precision Oncology in late 2020. This centre is the first and so far the only Frontiers Science Center established by the central government in Hong Kong and Macao.

Moreover, UM has established five joint laboratories with the Chinese Academy of Sciences. Between 2019 and 2023, the university obtained approval to set up 12 Guangdong-Hong Kong-Macao joint laboratories. It has also set up over 20 joint laboratories in collaboration with enterprises, organisations, and other higher education institutions, which have expanded the scale and impact of UM’s research.

**Advancing Innovative Research**

Following its campus relocation, UM has enhanced

its research infrastructure by establishing several new institutes. These entities are dedicated to advancing research in emerging fields, interdisciplinary areas, and disciplines within the humanities and social sciences. In 2017, UM established the Institute of Collaborative Innovation to integrate the humanities and social sciences with advanced technology. A strategic reorganisation in 2019 broadened the institute’s scope to include the Centre for Cognitive and Brain Sciences, the Centre for Artificial Intelligence and Robotics, the Centre for Data Science, and the Centre for Innovation and Entrepreneurship. The year 2019 also saw the establishment of the Institute of Advanced Studies in Humanities and Social Sciences. This institute has launched several schemes, including the Fellowship Scheme and the Excellence Publication Scheme, with the aim of fostering the development of world-class, interdisciplinary research teams in the humanities and social sciences. In addition, UM obtained approval to establish the Macao Centre for Research and Development in Advanced Materials in 2022. The centre focuses on research on new energy materials, eco-friendly materials, and materials for health protection, thereby driving forward the advanced materials industry.

Over the past decade, various UM faculties have established research centres, such as the Centre for Studies of Translation, Interpreting and Cognition, the Centre for Constitutional Law and Basic Law Studies, the Centre for Regional Oceans, the Centre for Applied



澳大推動人文社科研究及與內地院校的合作  
UM is committed to advancing research in the humanities and social sciences, as well as enhancing cooperation with mainland universities.

Mathematics, and the Centre for Linguistics. The establishment of these research centres has reflected the university’s growing commitment to expanding and diversifying its academic pursuits.

**Fortifying Industry-Academia Collaboration to Transform Research Outcomes**

UM has developed a ‘5-in-1’ system for research innovation and result transfer. This system focuses on the establishment and improvement of industry-academia platforms to support the commercialisation of research results in five dimensions: innovation, service, management, cultivation, and practice. This approach further enhances the synergy between academia and industry.

The Zhuhai UM Science & Technology Research Institute (ZUMRI), located in the Hengqin-Macao Youth Entrepreneurship Valley, is UM’s first demonstration base for industry-academia collaboration. ZUMRI comprises six R&D centres and the Hengqin branches of the three state key laboratories at UM. As of April 2024, ZUMRI had undertaken 160 research projects approved by national, provincial, and municipal science and technology departments. It has also conducted 127 research projects commissioned by various enterprises. Many industry-academia research projects conducted by ZUMRI, including robotic chips, traditional Chinese medicine prescriptions, stem cell and regenerative medicine projects, advanced fibre-optic sensing and acquisition equipment, and nano-foam concrete, have successfully transitioned

from development phase to production, and some have even been launched in the market. Building on these achievements, UM is set to further enhance its industry-academia collaboration by establishing the Hengqin University of Macao Advanced Research Institute.

Prof Chen Guokai, interim director of ZUMRI, emphasises that ZUMRI, which was established in 2019, is pivotal for enhancing industry-academia collaboration at UM. He says, ‘The institute serves as a nexus for collaboration between UM and businesses in the Guangdong-Hong Kong-Macao Greater Bay Area and beyond, facilitating a range of activities spanning from translational research, validation, pilot phase, to commercialisation services.’ Prof Chen also mentions that ZUMRI provides UM researchers with direct access to a wide array of research resources from mainland China. For example, researchers are able to analyse cancer cells with samples from various regions in the mainland without the need for cross-border delivery to Macao.

Established in 2017, CIE serves as a national co-working space. The centre supports faculty, students, and alumni in transforming their creative ideas into tangible solutions and ventures through its robust industry-academia collaboration platforms. To date, the centre has incubated over 50 companies, with projects spanning cultural creativity, environmental protection, new materials, information technology, and the medical and biotechnology sectors.



澳大推動產學研發展，其中包括自動駕駛巴士。  
UM is committed to promoting industry-academia collaboration, exemplified by the development of its autonomous bus.





澳大研究人員參加第70屆國際固態電路會議，其發表的論文及研究成果處於國際領先地位。

UM researchers participated in the 70<sup>th</sup> International Solid-State Circuits Conference, where they presented their papers and research results, showcasing the university's leading position in the research field.

In 2019, UM restructured its commercial subsidiary UMTec Limited to improve its services for industry-academia collaboration. The company manages and industrialises the university's intellectual properties, while also supporting the protection and commercialisation of innovation achievements. In addition, in 2020, UM launched UMCERT Engineering Research and Testing Limited to meet the demand for engineering quality control and technical support in Macao.

### Recruiting Outstanding Researchers

Alongside refining its research layout, UM has revamped its talent acquisition strategy. The UM Macao Talent Program (initially known as UM Talent Programme) was launched in the 2017/2018 academic year to recruit eminent researchers. A key component of this programme is the UM Macao Fellow Scheme, which is designed to nurture promising local scholars. Additionally, UM's global recruitment efforts have borne fruit, with over 80 distinguished scholars joining the university in 2023, each bringing international teaching and research expertise.

Prof Shen Hanming, associate dean of the Faculty of Health Sciences, took up the position as chair professor at UM in 2020 after teaching at the National University of Singapore for over two decades. He is an expert in cancer cell biology,

with a particular focus on autophagy. 'I joined UM because I saw huge potential for growth in the Greater Bay Area, the excellent academic environment of UM and the Faculty of Health Sciences, as well as the beautiful campus,' he says. After joining UM, he assembled a team of postdoctoral researchers and doctoral students, which has achieved notable advancements in research on autophagy/mitophagy and targeted therapy against non-small cell lung cancer.

Prof Yu Xingzhong, director of the Institute of Advanced Studies in Humanities and Social Sciences and chair professor in the Faculty of Law, joined UM in 2022 after teaching at Cornell University for about ten years. His research interests span social theory, comparative legal philosophy, and intelligent technology and law. 'Before joining UM, I visited the campus twice for seminars, and I was impressed by the university's commitment to interdisciplinary research,' he says. 'I am now working with my colleagues to promote research in the humanities and social sciences at



沈漢明教授  
Prof Shen Hanming



於興中教授  
Prof Yu Xingzhong

the university, and to foster interdisciplinary integration between these disciplines and technology.' Since joining UM, Prof Yu has published books on the rule of law and civil orders, and digital literacy. He has also begun research on the philosophy of the heart.

### Achieving Fruitful Research Results

Over the past ten years, UM has achieved remarkable research results in various fields. Its scientific and technological achievements include breakthroughs in breast cancer treatments, advancements in autonomous driving technology, and new discoveries in the immunomodulatory properties of Chinese medicine. The university has also excelled in the humanities and social sciences, publishing several academic journals, including *South China Quarterly*, *Journal of Macau Studies*, and *Macau Law Review*. Furthermore, it has enriched academic discourse with publications on a diverse range of topics, including the Constitution of the People's Republic of China and Portuguese language pedagogy. These achievements have been widely recognised by academia and the broader community.

The number of journal publications by UM scholars increased significantly in the past decade, from 780 in 2014 to over 2,400 in 2023. The number of citations of these works also surged from about 5,500 in 2014 to nearly 90,000 in 2023. Furthermore, the cumulative number of patents granted to UM rose significantly, from 28 in 2014 to 236 in November 2023. Some of the university's research results have even been recognised with prestigious awards, including the State Scientific and Technological Progress Award, the Macao Science and Technology Award, the Guanghua Engineering Science and Technology Prize, and the Xplorer Prize.

### Contributing to Society

Over the past decade, UM researchers have explored the unknown, and the university has achieved what once seemed unattainable. On the new Hengqin campus, the university has effectively leveraged its resources to expand the scope of its fundamental and applied research, transcending disciplinary and geographical boundaries. This expansion has resulted in the establishment of larger platforms that foster research innovation and collaboration. Looking ahead, the university remains resolute in its unwavering commitment to pioneering interdisciplinary and innovative research, transforming research results into tangible outcomes, and delivering cutting-edge insights that benefit academia and society at large.



澳大出版的人文社科學術期刊

The humanities and social sciences journals published by UM





# 持續完善社會服務平台

## Optimising Platforms to Serve Society

文 / 葉浩男、資深校園記者周媛媛 · 圖 / 編輯部  
Chinese & English Text / Davis Ip, Senior UM Reporter Silvia Zhou · Photo / Editorial Board

澳門大學創校至今一直心繫澳門社會發展，2014年遷校橫琴後服務初心依然不變，更憑藉其不斷擴展的學術優勢、科研力量，助力提升法律普及、文化推廣、基礎教育、公共服務、持續進修的水平，並以研究服務社會所需，支撐澳門經濟適度多元可持續發展。

**普及憲法和基本法知識**  
為推進「一國兩制」實踐在澳門行穩致遠，澳大法学院於2018年設立憲法與基本法研究中心，參與編撰教材、協助政府部門和學校等推廣「兩

法」教育、推動「兩法」研究。該中心在2019年成為國家教育部人文社科重點研究基地—北京大學憲法與行政法研究中心的夥伴基地。

**加強文化推廣**

文明薪火代代相傳，澳大致力推動文化傳承。為加強對中華文化的研究及推廣，澳大人文學院於2017年增設中國歷史文化中心。中心編著《澳門文學編年史》、出版期刊《中國文化論叢》、出版《澳門少年報》等，以及舉辦「中國文化推廣大使」培訓計劃，目前與12所本地學校建設中國歷史文化推廣基地。該院亦設有中葡雙語教學暨培訓中心和孔子學院，推廣文化、語言教育和翻譯培訓，以及推動中國與葡語國家的文化交流、向葡語國家弘揚中國傳統文化。



朱壽桐教授  
Prof. Zhu Shoutong

中國歷史文化中心主任朱壽桐教授表示：「我們與各界廣泛合作，舉辦專題講座和歷史文化遺產考察等活動，讓中小學生在輕鬆的環境學習中國歷史和文化，激發他們對中華文明的熱愛。」他也提到，中心開設針對中小學教師的中國歷史文化學位課程，提升他們賞析和解說中國歷史文化知識的技巧。

**支援中小學教育**

澳大一直善用學術資源優勢與社會各界開展合作，支援本地中小學人文社科和科普教育，透過多樣化的活動培育學生的品德、人文素養及科學思維，同時開辦面向教師的培訓活動和證書課程。

2018年，澳大成立「澳門中小學生人文社科教育基地」及「澳門中小學生科技實踐基地」，後者獲中國科學技術協會列為全國首批「2021—2025



年全國科普教育基地」之一。此外，澳大與葡萄牙國家科學暨技術文化推廣署在2019年簽署合作框架協議，建設科普合作平台，培養青少年成為科創人才。

助力培養管治人才

為助力特區政府人才梯隊建設，澳大於2020年啟用公共行政培訓中心，同時舉行首屆「公務人員領導力培訓班」開課典禮。澳門特區行政長官賀一誠親臨向學員提出期許。



稅兵教授  
Prof Shui Bing

該中心為特區政府公共行政人員提供高質量、系統性的學習課程。公共行政培訓中心主任稅兵教授指出，澳大充分利用新校園一流的教學設施，為本地公務員提供日臻完善的培訓體系，為澳門公共行政改革作出重大貢獻。「迄今已舉辦五屆的公務人員領導力培訓班，是本澳開埠以來首個公職人員全脫產培訓項目。培訓班堅持問題導向、行動導

向，培養出一批富有創新精神和服務意識的梯隊人才。」他還提到，中心計劃進一步優化培訓方案，努力培養更多讓市民滿意的政府管治人才。

提供專業持續進修

澳大在創校之初便向大眾提供持續進修機會。過去十年，澳大持續進修中心提供優質的培訓課程，涵蓋專業高端文憑課程、訂製化企業管理培訓、政府人員培訓、醫療人員培訓、教師培訓、跨境專業培訓，以及專業研學遊等。

持續進修中心主任劉丁己教授表示，中心在遷校後開設了更專業和更多元的培訓課程。「專業化、多元化、訂製化、國際化、融入國家發展是五個主要方向。我們不僅開辦面向大眾的專業課程，更加強為企業或機構提供訂製化內部培訓課程，近年也配合國家和大灣區發展，增加針對內地及海外院校的跨境專題培訓班與研學遊。」他補充，中心也因應澳門近年發展「1+4」產業適度多元增設相關領域的課程，並引入多個獲國際機構認證的專業文憑課程。

研究成果服務社會

澳大在遷校後研究發展迅速，依托科技成果服務



澳大公共行政培訓中心啟用並舉辦首屆公務人員領導力培訓班，澳門特區行政長官賀一誠（右）出席。  
UM inaugurated its Public Administration Training Centre and launched the first leadership training course for civil servants. Macao SAR Chief Executive Mr Ho Iat Seng (right) attended the first class of the course.



澳大成立「澳門中小學生科技實踐基地」，支援本地中小學科普教育。  
UM established the Macao Base for Primary & Secondary STEM Education to support science education in local primary and secondary schools

澳門社會發展。同時，澳大發揮高端智庫的作用，在社會、經濟、科技等領域建言獻策，並且提供專業諮詢及技術服務。其中，澳大創科有限公司承接開展各類項目，推廣和商業化澳大的研究成果，促進與業界的研發合作。澳大工程研究及檢測中心有限公司則於2022至2023年間，為46個公共建設項目提供土建部分的質量保證、圖則檢閱和建築物結構監測工作。

工程研究及檢測中心主任、澳大工程研究及檢測中心有限公司常務董事盧偉國表示，中心在遷校後擁有更完善的檢測儀器和場所：「我們的服務廣泛，包括工程及建築材料檢測、公共工程質量控制與保證、圖則檢閱、工地地質勘查與分析，以及結構物的安全監測與評估等。」他也稱，公司目前參與澳門多個大型公共工程項目的質量控制，包括公共房屋、橋樑基建項目、公共辦公大樓、以及運動員培訓設施。

為配合澳門大健康產業的發展，澳大借助其國家重點實驗室十多年來的研究成果，建立澳門中藥研發中心、澳門中藥檢測中心等，為政府及廠商提供服務。此外，國際組織西太區草藥監管協調

論壇的永久秘書處在2023年落戶澳大，可望提升澳門在中藥國際發展中的地位。

此外，澳大協助政府編纂《澳門志》，整理澳門在地理、政治、經濟、文化、軍事、民俗等方面的資料。該項目涵蓋《總述·大事記》和多個分志，其中《地理分志》將於2024年內出版。

師生貢獻社區

在眾多社區服務中經常可見澳大師生身影。2017年，澳大學生在澳門風災過後自發組織義工團隊，走進社區協助善後工作。抗疫期間，澳大師生也紛紛走上前線，為疫情防控出一分力。在澳門以外，不同書院學生及澳大義工隊到內地各省區、東南亞國家以至非洲國家參與志願活動。此外，澳大於2022/2023學年推出「澳大體育志願者計劃」，並且招募了約1,000名澳大成員成為2025年全國運動會（澳門賽區）志願者。

致力服務社會

過去十年，澳大一方面追求學術創新，另一方面鼓勵師生與各界互動、貢獻社會，與大眾共享大學遷校後進步的成果。



Since its establishment, UM has been committed to making contributions to Macao society. Even after its relocation to Hengqin in 2014, the university has remained steadfast in this core mission. Over the past decade, UM has made significant advancements in its academic and research capabilities, enabling the university to effectively disseminate legal knowledge, promote culture, support basic education, enhance public services, expand continuing education, and align research with the needs of society. These efforts have played a vital role in the sustained development of Macao.

**Promoting the Constitution and the Basic Law**

In 2018, UM's Faculty of Law established the Centre for Constitutional Law and Basic Law Studies with the aim of supporting the effective implementation of the 'one country, two systems' policy in Macao. Since its establishment, the centre has played an important role in producing teaching materials, providing assistance to government departments and schools in promoting the Constitution of the People's Republic of China and the Basic Law of the Macao SAR, as well as facilitating relevant research endeavours. Since 2019, the centre has also served as an official partner of Peking University's Center for Studies of Constitutional and Administrative Law, a key research centre in the field of humanities and social sciences under the Ministry of Education.

**Enhancing Cultural Promotion**

UM is committed to preserving and promoting cultural heritage. In 2017, the university established the Centre for Chinese History and Culture within the Faculty of Arts and Humanities to strengthen the study and dissemination of Chinese culture. The centre has undertaken numerous initiatives, including

the publication of a chronicle of Macao literature, a journal dedicated to Chinese culture research, and a newspaper targeting teenagers in Macao. In addition, it has launched the Chinese Culture Promotion Ambassador training programme and established a base for the promotion of Chinese history and culture in collaboration with 12 local schools. The faculty also houses the Chinese-Portuguese Bilingual Teaching and Training Centre and the Confucius Institute, which aim to enhance cultural and language education, translation training, and cultural exchanges between China and Portuguese-speaking countries, while also promoting traditional Chinese culture in these nations.

Prof Zhu Shoutong, director of the Centre for Chinese History and Culture, says, 'Through partnerships with various sectors, we organise themed lectures and cultural heritage field trips. These initiatives are designed to create a relaxed environment for primary and secondary school students to learn about Chinese history and culture, and stimulate their interest in Chinese civilisation.' Prof Zhu also mentions the launch of a degree programme in Chinese history and culture tailored for local teachers. The programme aims to



澳大積極推廣「兩法」教育和研究

UM actively promotes the education and research on the Constitution and the Basic Law

improve their skills in interpreting and communicating China's historical and cultural heritage.

**Supporting Primary and Secondary Education**

UM utilises its rich academic resources to bolster local primary and secondary education in the humanities, social sciences, and sciences. The university organises a wide range of activities to foster students' moral values, cultural literacy, and scientific thinking, while providing specialised training and certificate courses for teachers.

In 2018, UM established the Macao Base for Primary & Secondary Education in Humanities & Social Sciences, and the Macao Base for Primary & Secondary STEM Education, the latter of which has been recognised as a national science education base for 2021-2025 by the China Association for Science and Technology. Moreover, in 2019, UM signed a cooperation agreement with Ciência Viva, Portugal's national agency for the promotion of science, technology, and culture, to jointly develop a STEM platform to foster the next generation of technology and innovative talent.

**Nurturing Governance Talent**

In 2020, UM inaugurated the Public Administration Training Centre with the aim of assisting the Macao SAR Government in cultivating a talent pool. The inauguration day also saw the opening ceremony of the first leadership training course for civil servants.

Macao SAR Chief Executive Mr Ho Iat Seng joined the civil servants in the first class and shared his expectations for them.

The Public Administration Training Centre is dedicated to providing high-quality and systematic training for civil servants of the SAR Government. According to Prof Shui Bing, head of the centre, the state-of-the-art teaching facilities on the Hengqin campus have enabled UM to provide high-quality training for local civil servants, thereby making significant contributions to the reform of Macao's public administration. He says, 'Our civil servant leadership training course, which has been running for five years, is the first off-the-job training programme for civil servants in Macao. The course is designed to address specific problems and foster action-oriented approaches. As a result, it has cultivated a cadre of talented individuals who possess innovative and service-oriented mindsets.' He adds that the centre plans to further enhance its training courses to produce more government officials who can meet the expectations of citizens.

**Offering Professional Continuing Education**

Providing continuing education to the public has been an integral part of UM's educational mission since its establishment. Over the past decade, the university's Centre for Continuing Education (CCE) has offered a wide range of high-quality training courses and programmes. These include advanced professional diploma programmes; customised business



澳大成立「澳門中小學生人文社科教育基地」，培育學生的品德和人文素養。  
UM established the Macao Base for Primary & Secondary Education in Humanities & Social Sciences to cultivate students' moral and humanistic qualities





澳大學生到內地、東南亞國家以至非洲國家參與志願活動  
UM students participate in volunteer activities in the mainland, as well as countries in Southeast Asia and Africa.

management training courses; training courses for civil servants, medical professionals and teachers; cross-border professional training initiatives; as well as professional study tours.

Prof Matthew Liu, director of CCE, says that following the 2014 campus relocation, the centre has expanded its offerings and introduced a wider range of professional and diverse training courses. ‘Our work is guided by five pillars: professionalism, diversity, customisation, internationalisation, and integration into national development. We not only offer professional courses for the general public but also provide customised in-house training for companies and institutions,’ he says. ‘In addition, in line with the development of the country and the Greater Bay Area, we have also launched more thematic cross-border

training and study tours for mainland and overseas institutions in recent years. According to Prof Liu, in response to Macao’s ‘1+4’ strategy for economic diversification, CCE has introduced new courses in related fields and a number of professional diploma programmes accredited



劉丁己教授  
Prof Matthew Liu

by international bodies in recent years.

Utilising Research Results for the Betterment of Society

Since its campus relocation, UM has made significant progress in research, yielding numerous outcomes that contribute to the development of Macao. The university has served as a high-level think tank that provides expert recommendations, advice, and technical services across social, economic, and technological sectors. For instance, UM, through its commercial subsidiary UMTec Limited, undertakes various projects to promote and commercialise the university’s research results, and to enhance R&D collaboration with industry. Moreover, UM’s UMCERT Engineering Research and Testing Limited (UMCERT) participated in 46 public construction projects between 2022 and 2023, where it provided services such as quality assurance, review of architectural drawings, and monitoring of building structures.

Mr Mason Lo, director of the Centre for Engineering Research and Testing (CERT) and executive director of UMCERT, highlights the significant enhancements in testing instruments and facilities since the UM campus relocation. He says, ‘UMCERT provides a wide range of services, including testing of engineering and construction materials, quality control and assurance of public construction projects, review of architectural drawings, site geotechnical investigation



盧偉國先生  
Mr Mason Lo

training facilities for athletes.

Leveraging the research findings from its State Key Laboratory of Quality Research in Chinese Medicine, UM has established the Macao Centre for Research and Development in Chinese Medicine and the Macao Centre for Testing of Chinese Medicine. By providing services to the government and local manufacturers, these centres play a vital role in supporting the growth of Macao’s big health industry. Additionally, the permanent secretariat of the Western Pacific Regional Forum for the Harmonization of Herbal Medicines was established at UM in 2023. This initiative enhances Macao’s influence in the international development of Chinese medicine.

In addition, UM assists the government in the compilation of *Macao Gazetteer*, which encompass

and analysis, and safety monitoring and assessment of building structures.’ Mr Lo further mentions that UMCERT is currently responsible for the quality control of many major public construction projects in Macao, including public housing, bridge infrastructure, public office buildings, and

knowledge about Macao’s geography, politics, economy, culture, military, and folklore. This extensive work includes an overview volume and several specialised volumes. Among them, the volume on geography is scheduled for publication in 2024.

UM Members Contributing to the Community

UM members actively participate in various community service activities. After a severe typhoon hit Macao in 2017, UM students took the initiative to form volunteer teams to contribute to Macao’s recovery efforts. Similarly, during the COVID-19 pandemic, both staff and students dedicated their efforts to disease prevention and control measures. In addition to their contributions in Macao, students from various residential colleges and the UM Volunteer Programme participate in volunteer teaching and other initiatives in mainland China, Southeast Asia, and even Africa. In the 2022/2023 academic year, the university launched the UM Sports Volunteer Programme and recruited around 1,000 UM members to volunteer for sports events to be held in Macao during the National Games of China in 2025.

Committed to Serving Society

Over the past decade, UM has not only fostered academic innovation but also encouraged its faculty and students to engage with society. By sharing the fruitful outcomes of its achievements from the Hengqin campus, the university has made significant contributions to the wider community.



澳大協助政府編纂《澳門志》，發揮高端智庫作用。  
Serving as a high-level think tank, UM assists the government in the compilation of *Macao Gazetteer*.





# 拓展全球合作網絡

## Strengthening Global Networks

文 / 葉浩男、資深校園記者徐文欣、校園記者王楚月 · 圖 / 編輯部

Chinese & English Text / Davis Ip, Senior UM Reporter Xu Wenxin, UM Reporter Wang Chuyue · Photo / Editorial Board

隨著高等教育國際化日益加深，對外發展成為澳門大學完善教學和研究的重要一環。在2014年全面遷往橫琴島校園後，澳大革新對外發展戰略，與全國各地、葡語國家、英語國家和周邊國家的夥伴拓展合作，網絡遍及五洲四洋。

### 擴展全球合作網絡

過去十年，大學吸引來自世界各地的學生和學者來訪，並舉辦眾多國際學術會議，促進學術交流與合作，與澳大簽訂合作協議的高校數量

從2015年的183所增至2024年的320所，涵蓋38個國家及地區；學生交流合作院校也從2015年的122所增至2024年的177所，覆蓋34個國家及地區。

澳大致力與世界各地的學術機構建立夥伴關係，推動知識的創新和共享，以「立足澳門、共建灣區、融入國家、走向世界」為發展定位，推行「4S」國際化戰略，結合「戰略性」（Strategic）、「實質性」（Substantial）、「具體性」（Specific）、「可持續性」（Sustainable）的目標，旨在實現學術上的深度合作，並為學生提供更多交流機會。

### 加強與全國各地高校合作

澳大進一步拓展與中國內地一流大學的合作，如聯合人才培養和協同研究創新，融入國家發展大局，合作院校包括北京大學、清華大學、南京大學、復旦大學、浙江大學、哈爾濱工業大學等。在2023年12月，澳大加入「中國大學校長聯誼會」（C9聯盟+），與內地九所高校以及香港三所高校共同形成「C9+3+1」交流合作框架，推動中國一流大學建設，促進校際交流。

澳大與中國科學院的合作也取得顯著成果。自2019年起，澳大與中國科學院深圳先進技術研究院聯合培養博士研究生，並與中國科學院轄下的五所研究院所建立聯合實驗室，涉及腦與認知科學、人工智能與機器人、空間信息、海洋環境與工程，以及腫瘤與基礎醫學研究等領域，至今已開展27個研究項目。

澳大與粵港兩地的高校也一直緊密合作。2016年，澳大與粵港澳三地共37所高校組建「粵港澳高校聯盟」，並擔任副理事長單位。目前，澳大還參與超過20個粵港澳高校合作的專業聯盟。2019年，澳大更與多所院校共同發起「粵港澳大灣區西岸科技創新和人才培養合作聯盟」，並且擔任理事長單位。

在其它區域性合作方面，澳大於2021年參與創立



「蘇港澳高校合作聯盟」，並擔任副理事長單位，推動三地師生互訪交流、探索人才聯合培養，以及共建優勢學科、聯合實驗室和研究中心等。

此外，澳大法學院於2021年與國家法官學院簽署合作協議，招收內地法官或法官助理到澳大攻讀博士和碩士學位，為國家培養法治人才提供支持。在2024年，澳大法學院亦與香港國際廉政學院簽署合作備忘錄，推動反貪研究和人才交流。

深化與葡語國家高校合作

澳大與葡萄牙、巴西、佛得角、莫桑比克等葡語國家近30所大學建立密切的合作關係，包括學生交換項目和研究合作。以Stephanie Andaluz Ramos為例，她曾在里斯本大學獲得本碩學位，在葡萄牙期間曾與澳大研究人員合作，2022年來到澳大修讀生物醫學博士課程。Stephanie表示，澳大研究設施先進，而且與葡語及英語國家保持緊密合作，是她在亞洲學習的首選。她現在經常在澳門和內地的實驗室之間穿梭，開展有關微流控芯片和基因學的研究，包括參與建立一個涵蓋葡萄牙血統人群中BRCA基因變異的開放數據庫。

澳大也在中國與葡語國家間的學術交流和合作方面發揮重要作用。2014年，第二十四屆葡萄牙語大學聯會年會在新校園召開，澳大獲選為首間出任聯會會長的澳門高校（2014至2017年）。此外，澳大在2021年發起成立「中國澳門特別行政區與葡語國家學術圖書館聯盟」，促進學術交流、共享葡語教學資源和培養中葡雙語人才。

2023年，澳大先後與里斯本大學、波爾圖大學、科英布拉大學建立戰略合作關係。這些合作包括雙博士學位項目、師生交流、共建研究中心和聯合實驗室，涵蓋微電子、機器人、海洋科學、認知老化、藥學、法學、葡語等領域的合作。

João Veloso教授是波爾圖大學的前協理副校長。他於2022年從葡萄牙來到澳大出任葡文系主任。他



João Veloso教授  
Prof João Veloso



澳大的國際化辦學吸引來自世界各地的學生  
UM's international education model has attracted students from different parts of the world



澳大遷校後舉辦首個大型會議—葡萄牙語大學聯會第二十四屆年會  
The 24<sup>th</sup> annual meeting of the Association of Portuguese Speaking Universities was the first large-scale conference held at UM after the relocation

指出，澳大在葡語大學多邊合作平台扮演重要角色，因為澳大不僅具有中葡英三語優勢，而且在中國、葡萄牙、巴西、非洲和東帝汶等地建立廣泛的合作網絡。他認為這種語言上的親近性和歷史聯繫令澳大與葡語國家大學合作更有成效。

拓展與英語國家和周邊國家高校合作

澳大持續拓展與英語國家和周邊國家高校的合作關係，在英語國家方面，澳大與澳大利亞、加拿大、美國、英國等超過30所高校已建立交流合作夥伴關係。自2017年，澳大開展與北美院校的雙學位項目，並在2019年起分別與倫敦帝國學院、布里斯托大學、愛丁堡大學合辦「1+3碩博雙學位項目」。此外，澳大還與英國貝爾法斯特女王大學合辦有關食品科學與營養學的「3+2雙學士學位項目」。

澳大工商管理學院、榮譽學院四年級學生李智杰在2023年到倫敦大學瑪麗皇后學院交流半年，體驗多元文化、提高國際視野和適應力、深入了解如何從不同學科的交叉視角來批判性地開展研究。他說，在澳大學習到扎實的經濟分析能力，以及批判性思考和理論建構能力，加上到海外交

流的經歷，讓他獲得劍橋大學等大學多個碩博項目錄取。

與此同時，澳大也加強與周邊國家的院校合作。2023年，澳大代表團訪問日本、韓國、泰國、馬來西亞、新加坡約15所高校，促進在材料科學、中醫藥、工商管理等領域的學術合作，並增設學生交流項目。這些合作將會拓展澳大的國際交流平台，為學生提供更多學習和成長機會。

推進大學國際化

澳大近年來在推動國際化方面取得重要進展。除了參與亞太教育者年會、亞太大學交流會理事會會議等多個國際高等院校協會及聯盟的會議，亦於2022年加入人文社會科學高校聯盟，與各國高校保持聯繫。

澳大利用新校園的完善設施，在過去十年間舉辦眾多國際會議，吸引世界知名學者參加。例如，澳大自2014年起與聯合國國際貿易法委員會合辦國際法律學術會議，雙方共同舉辦九次高級別會議和一次法律研討會。在澳大召開的大型會議亦包括葡萄牙語大學聯會第二十四屆年會、第一屆





澳大與中國科學院轄下的研究院所建立多個聯合實驗室  
UM has established multiple joint laboratories with institutes and research centres under the Chinese Academy of Sciences

中國與葡語國家高校校長論壇、第三屆粵港澳高校聯盟年會暨校長論壇等。

座，拓寬師生的學術視野。

過去十年，澳大也邀請眾多頂尖學者到校園開講，包括十多位諾貝爾獎得主，例如在2014年剛遷校後到訪的諾貝爾經濟學獎得主羅伯特·默頓教授和諾貝爾文學獎得主莫言教授。2023年底，諾貝爾物理學獎得主中村修二教授也到校園主持講

提升全球聲譽

校園再大仍有邊際，全球聯繫卻無界限，澳大善用澳門獨特的多元文化土壤和精心規劃的校園，與世界各地的夥伴協作，不僅強化與全國各地院校和葡語國家的聯繫，還促進與英語國家和周邊國家的合作，提升大學在全球的高等教育舞台的聲譽，不斷擴大其國際影響力。

As the globalisation of higher education continues, UM recognises the importance of expanding external engagement to enhance teaching and research quality. Since relocating to a new campus on Hengqin Island in 2014, UM has seized every opportunity to refine its global strategy. The university has strengthened ties with partners in China, the Portuguese-speaking world, the English-speaking world, and neighbouring countries, extending its collaborative networks across the world.

Forging Global Partnerships

Over the last decade, UM has attracted students and scholars from around the world for exchange and learning. The university has also become a popular venue for international academic conferences. During this period, UM’s network of partner institutions has expanded from 183

partners in 2015 to 320 partners across 38 countries and regions in 2024. Additionally, up to 2024, UM has established student exchange agreements with 177 partners in 34 countries and regions, marking a significant increase from 122 partners in 2015.

UM positions itself as a university firmly rooted in Macao and committed to jointly developing the Guangdong-Hong Kong-Macao Greater Bay Area, integrating into the nation, and going global. To achieve these goals, the university has adopted a ‘4S’ internationalisation strategy, which focuses on strategic, substantial, specific, and sustainable objectives, as well as aims to deepen academic cooperation and provide more exchange opportunities for students.

Fortifying Collaboration Across China

UM has expanded its collaboration with leading universities in mainland China. The collaborative efforts include joint talent development initiatives and collaborative research and innovation programmes with Peking University, Tsinghua University, Nanjing University, Fudan University, Zhejiang University, and Harbin Institute of Technology, with the aim of integrating into national development. In December 2023, UM joined the Association of University Presidents of China (C9 League+) and established a ‘C9+3+1’ exchange and cooperation framework with nine universities in mainland China and three universities in Hong Kong. This initiative aims to enhance the development and exchange among China’s top-tier universities.

UM’s partnership with the Chinese Academy of Sciences (CAS) has yielded substantial results. In 2019, UM and the CAS Shenzhen Institute of Advanced Technology began joint supervision of PhD students. UM has also established joint laboratories with five institutes or research centres affiliated with CAS, spanning the fields of brain and cognitive sciences, artificial intelligence and robotics, aerospace information, ocean environment and engineering, as well as cancer and basic medical research. To date, these joint laboratories have initiated 27 research projects.

UM has long maintained strong partnerships with universities in Guangdong and Hong Kong. In 2016, a total of 37 higher education institutions in Guangdong, Hong Kong, and Macao—including UM—established the Guangdong-Hong Kong-Macao University Alliance, where UM served as the vice-chair. Furthermore, UM is a member of over 20 professional university alliances across the three regions. In 2019, UM initiated the establishment of the Alliance for Technological Innovation and Talent Development in Western Guangdong-Hong Kong-Macao Greater Bay Area, and served as the chair of the alliance.



澳大與多所院校共同發起「粵港澳大灣區西岸科技創新和人才培養合作聯盟」  
UM and several other higher education institutions initiated the establishment of the Alliance for Technology, Innovation, and Talent Development in Western Guangdong-Hong Kong-Macao Greater Bay Area.



In terms of other regional collaborations, UM co-founded the Jiangsu-Hong Kong-Macao University Alliance in 2021, where UM served as the vice-chair. This alliance aims to facilitate faculty and student exchanges among universities in the three regions, explore joint talent development initiatives, foster collaboration in advancing academic disciplines, and build collaborative laboratories and research centres.

Under a cooperation agreement signed with the National Judges College of China in 2021, UM's Faculty of Law admits judges and judicial assistants from mainland China for doctoral and master's studies, with the aim of supporting the country in the development of legal professionals. Additionally, in 2024, the faculty signed a memorandum of understanding with Hong Kong International Academy Against Corruption to enhance anti-corruption research and professional exchanges.

Deepening Ties with Universities in Portuguese-Speaking Countries

The university has established close partnerships with institutions across Portugal, Brazil, Cape Verde, and Mozambique. These partnerships include student exchange programmes with

nearly 30 universities in these countries. Stephanie Andaluz Ramos is one such student who has benefited from these partnerships. She completed both her bachelor's and master's degrees at the University of Lisbon in Portugal. During her time there, she had the chance to collaborate with researchers from UM. In 2022, Stephanie decided to pursue a PhD in biomedical sciences at UM. She shares, 'UM's advanced research facilities and close ties with Portuguese and English-speaking countries made it stand out among Asian universities.' Now at UM, she often travels between the university's laboratories in Macao and mainland China. Her research focuses on microfluidic chips and genetics, including the development of an open database of BRCA gene mutations in the Portuguese-heritage population.

UM plays a pivotal role in fostering



Stephanie Andaluz Ramos



澳大舉辦眾多國際會議，吸引世界知名學者參加。  
UM has held numerous international conferences, attracting the participation of many world-renowned scholars.

collaboration between the higher education institutions in mainland China and in the Portuguese-speaking world. A few weeks after moving to the Hengqin campus in 2014, UM hosted the 24<sup>th</sup> annual meeting of the Association of Portuguese-speaking Universities. During the meeting, UM was elected as president of the association (from 2014 to 2017), becoming the first institution from Macao to take on this role. In 2021, initiated by UM, the Academic Library Alliance between Macao Special Administrative Region and Portuguese-speaking Countries was established. The alliance seeks to enhance academic exchanges, promote resource sharing for Portuguese language teaching, and nurture Chinese-Portuguese bilingual professionals.

In 2023, UM established strategic partnerships with the University of Lisbon, the University of Porto, and the University of Coimbra. The collaborations include dual PhD programmes, faculty and student exchanges, as well as the establishment of joint research centres and laboratories in fields such as microelectronics, robotics, marine science, cognitive aging, pharmacy, law, and Portuguese language studies.

Prof João Veloso, former pro-rector of the University of Porto in Portugal, assumed the role of head of the Department of Portuguese at UM in 2022. He emphasises that UM plays an important role in the multilateral cooperation platform among Portuguese-speaking universities. This is due to UM's strong emphasis on the Chinese, Portuguese, and English languages, as well as its extensive collaboration network that spans China, Portugal, Brazil, Africa, Timor-Leste, among other places. He believes that the shared language and historical connections greatly enhance the effectiveness of collaborations between UM and Portuguese-speaking universities.

Enhancing Connections with Universities in English-Speaking and Neighbouring Countries

UM has expanded its partnerships with universities in the English-speaking world and neighbouring countries. Its partners include more than 30 institutions in Australia, Canada, the US, the UK, and other English-speaking nations. In 2017, UM introduced its first batch of dual degree programmes with North American universities. In 2019, UM launched a '1+3' master's and PhD dual degree programme with Imperial College London, the University of Bristol, and the University of Edinburgh,

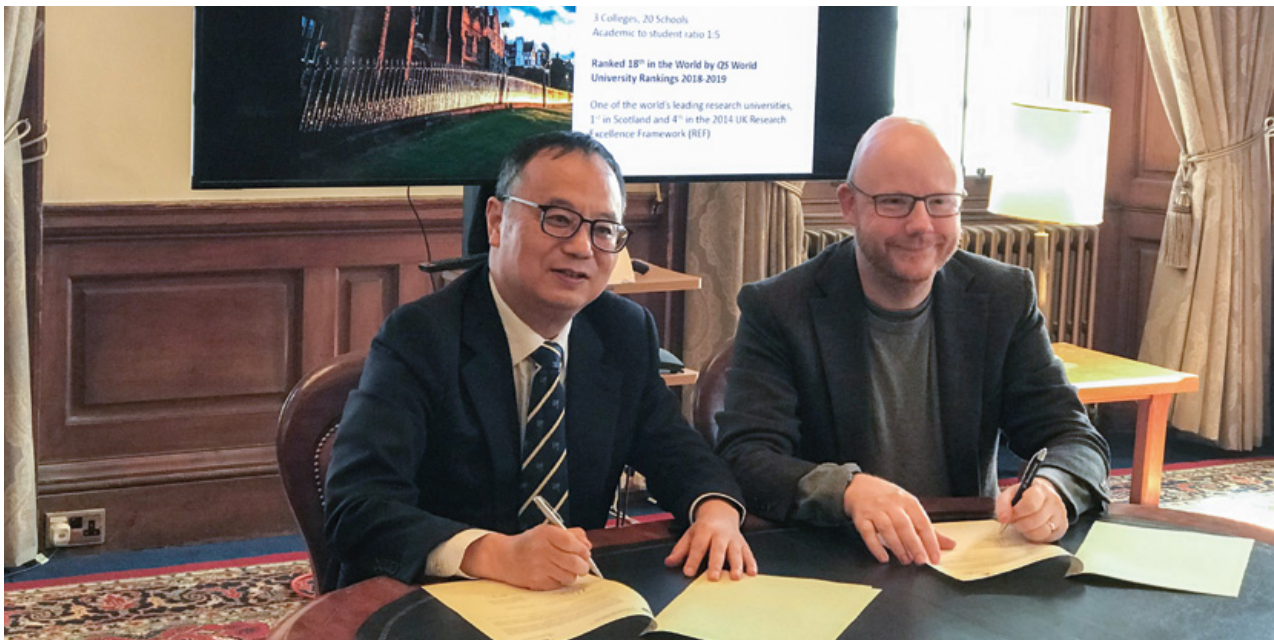


澳大拓展與中國內地一流大學的合作  
UM has expanded its cooperation with leading universities in mainland China





在澳門特區行政長官賀一誠（中）見證下，澳大與里斯本大學簽訂戰略合作框架協議，深化與葡語國家高校合作。  
In the presence of Macao SAR Chief Executive Mr Ho Iat Seng (middle), UM and the University of Lisbon signed a strategic cooperation agreement to enhance collaboration with higher education institutions in Portuguese-speaking countries.



澳大拓展與英語國家高校的合作  
UM has expanded cooperation with higher education institutions in the English-speaking world

respectively. Moreover, in collaboration with Queen’s University Belfast, UM offers a ‘3+2’ dual bachelor’s degree programme in food science and nutrition.

Li Zhijie, a fourth-year student in UM’s Faculty of Business Administration and Honours College, completed a six-month exchange programme at Queen Mary University of London in 2023. During the exchange period, he had the opportunity to be immersed in multicultural communities, which broadened his international perspective and enhanced his adaptability and interdisciplinary research skills.



李智杰  
Li Zhijie

As a result of his outstanding academic performance and experience abroad, Li has received offers from several prestigious master’s and doctoral programmes, including an offer from the University of Cambridge. He attributes this remarkable

achievement to the rigorous training he received at UM in economic analysis, critical thinking, and the development of theoretical frameworks, which were further complemented by his invaluable overseas experience.

UM has intensified its cooperation with universities in neighbouring countries. In 2023, UM delegations visited around 15 institutions across Japan, South Korea, Thailand, Malaysia, and Singapore, with the aim of deepening academic cooperation in materials science, Chinese medicine and business administration, as well as expanding student exchange programmes. The collaborative efforts will further broaden UM’s international exchange platform, providing students with more learning and development opportunities.

**Bolstering UM’s International Presence**

In recent years, UM has enhanced its international stature by participating in key conferences, including the annual meetings of the Asia-Pacific Association for International Education and the University Mobility in Asia and the Pacific, along with other global higher education events. In 2022, UM became a

member of the Social Sciences Universities Network, further strengthening its ties and collaborations with academic institutions around the world.

Leveraging its well-equipped new campus, UM has become a preferred destination for international conferences over the past decade, attracting renowned scholars from around the world. Since 2014, the university, in collaboration with the United Nations Commission on International Trade Law, has co-host nine high-level meetings and a legal seminar. Other major conferences held on the UM Hengqin campus include the 24<sup>th</sup> annual meeting of the Association of Portuguese-speaking Universities, the inaugural Forum for Heads of Higher Education Institutions of China and Portuguese-Speaking Countries, and the third Guangdong-Hong Kong-Macao University Alliance Annual Meeting and Presidents’ Forum.

Over the past decade, UM has invited numerous distinguished scholars, including over 10 Nobel laureates, to deliver lectures at the university. Among them are notable figures

such as Prof Robert C. Merton, Nobel laureate in Economic Sciences, and Prof Mo Yan, Nobel laureate in Literature, who both visited UM shortly after the 2014 relocation. More recently, in 2023, Prof Shuji Nakamura, Nobel laureate in Physics, delivered a lecture at the university. These lectures have significantly enriched the academic perspectives of students and faculty members.

**Boosting UM’s Global Reputation**

Regardless of geographical limitations, universities should strive to transcend local boundaries and foster global collaboration. UM, with an embrace of Macao’s cultural diversity and a thoughtfully designed campus, has cultivated strong partnerships worldwide. The university has not only reinforced ties with partners across China and Portuguese-speaking countries, but has also strengthened connections with institutions in the English-speaking world and neighbouring countries. Through these collaborations, UM aims to elevate its stature within the global academic community and continuously extend its international influence.





# 全方位建設育人環境

## Building an All-Encompassing Educational Environment

文 / 郭麗雅 · 圖 / 編輯部 · 英文翻譯 / 謝苑菁、資深校園記者鄭瑋璐

Chinese Text / Gloria Kuok · Photo / Editorial Board · English Translation / Bess Che, Senior UM Reporter Zheng Weilu

澳門大學新校園於2009年奠基，歷經數年密鑼緊鼓的施工建造，以及大規模的搬遷工作，澳大終於在2014年完成了遷校的創舉。十年來，澳大悉心耕耘這片學術研究的土地，全面落實和持續優化教學設施、生活環境，以及提升行政效能，奠定了大學飛速發展的基礎。

### 持續完善校園設施

澳大舊校園位於澳門氹仔島，1981年隨澳大前身東亞大學成立而啟用，佔地僅約0.054平方公里，教學設施擁擠，使大學發展受到制約。為此，全國人民代表大

會常務委員會於2009年6月27日通過關於授權澳門特區對設在橫琴島的澳門大學新校區實施管轄的決定，以支持澳門培養人才。在中央和澳門特區政府的大力支持下，澳大於2014年全面遷入佔地1.0926平方公里的

現校園，面積是舊校園約20倍，自此擁有更優越的空間實踐辦學理念。

為了創建良好的教學及研究環境，澳大貫徹「以人為本」的理念，規劃新校園的整體佈局，將現校園按東南北西四大區域劃分，分別發揮教學、科研、住宿和生活的功能。除了七個學院有了寬敞的教學大樓，住宿式書院也從舊校園的兩間增至十間，為學院與書院協同育人的教育模式創造條件。此外，校園內更設各式體育場地和活動場所，為超過120個學生組織、文化藝術校隊和運動校隊提供活動空間，其中不少文體設施開放予公眾。

### 拓展學術研究空間

澳大致力為教研團隊提供完善的研究平台。現時校園內科研空間的建築面積超過17萬平方米，聚焦於微電子、智慧城市物聯網、中醫藥、健康科學、應用物理

與先進材料、能源、環保、數據科學等領域的研究。在校園的北面，有一個建築面積逾12萬平方米的科研基地，設多幢科研大樓，其中，醫藥檢測樓於2023年啟用，現設有澳門中藥檢測中心，促進澳門中醫藥產業發展。

同時，澳大持續完善人文科研設施。2019年啟用的崇文樓匯聚大學的中國歷史文化中心、澳門研究中心、孔子學院、中葡雙語教學暨培訓中心、藝術設計中心、澳門中小學生人文社科教育基地、人文社科高等研究院。澳大也積極推廣藝術普及活動，2023年啟用藝術博物館，展出世界各地藝術大師的名作及大學藝術與設計學科的教學成果。

澳大其中一個匯聚學術資源的樞紐，就是位於校園中央的澳大伍宜孫圖書館。該館在2014年遷校時啟用，建築面積為32,000平方米，是澳門面積最大、館藏最豐富





王國強博士  
Dr Raymond Wong

的圖書館，約有3,000個座位，藏有紙本和電子書刊超過1,600萬冊。圖書館旁設有大學展館，展示澳大的歷史、學術發展、科研成果及人才培養的概況。

1987年加入澳大圖書館的副館長王國強博士說：「遷校後，圖

書館在服務和館藏量均有明顯提升，並且提供現代化的閱讀空間和先進的科研工具，提供舒適、高效的學習環境。圖書館也經常舉辦講座、展覽和學術研討會等活動。」王博士補充說，圖書館在過去十年開拓了不少新服務，包括自2020年起協助校方收集和整理檔案、2021年在館內設立澳大檔案館。在實體藏書方面，圖書館亦不乏特色館藏，如中西古籍、手稿、澳門文獻、葡文天地內的館藏等。

創設優質生活環境

澳大為學生打造多元文化與學科融會貫通的知識整合平台，營造充滿啟發性的環境。澳大各書院均為本科生提供豐富的學習和生活設施，包括宿舍、膳堂、研討室、圖書室、電腦室、康體設施

及庭園。校園也設有研究生宿舍、教職員宿舍、休閒設施和和眾多學習共享空間等，為師生創造優質的生活環境。

人文學院副院長、翻譯傳譯認知研究中心主任李德鳳教授曾在新舊校園工作與生活，深有體會：「新校園的設計充分考慮師生所需，無論住宿條件、餐飲服務還是康體設施，都較舊校園優勝，為我們提供舒適的工作和學習環境，同時促進師生交流。」李教授還提到，新校園的會議和傳譯設施完善，他和同事多次利用這些設施，舉辦大型口譯比賽和學術會議。

另外，澳大亦設綜合性學術交流中心——聚賢樓，兼具會議、休閒、住宿、餐飲及接待等功能，以招待來自全球的學者。

優化行政、推動環保

遷往橫琴島校園後，澳大重啟服務質量與環境管理工作，2016年獲取新版ISO9001：2015和ISO14001：2015認證，成為澳門首間通過ISO新版本認證的高等院校。另外，澳大全力配合澳門特區政府推動電子政務發展，在校內推行使用「公文及卷宗管理系統」和提供廣泛的電子支付服務，並優化線上教學，加強線上視頻管理系統、學習管理系統等，全面提升行政效率，滿足師生在教學資源上的需求。



澳大為師生營造完善的育人環境  
UM provides an all-encompassing educational environment for its faculty and students



澳大新校園於2009年奠基  
UM held a groundbreaking ceremony in 2009 to mark the construction of its new campus

除了不斷完善各部門工作的流程及表現，澳大亦致力營造環保、節能的綠色校園，並提升教職員及學生的環保意識。2015年，澳大學生活動中心獲中國綠色建築委員會評定為三星級綠色建築設計標識，展現了澳大在校園可持續發展方面的實踐。

實踐環境育人

澳大持續美化及完善校園設施，為大學成員營造適宜學術思考的育人環境，澳大校園擁有別緻的湖景和園林景觀，綠化及水體面積達54萬平方米，為師生創造了一個自然的環保綠化生活空間。

2018年，國家教育部向澳大贈送「博雅之壁」雕塑，位於大學蓮花廣場，象徵中央政府對澳門教育事業的關愛與支持，承載澳大「仁、義、禮、知、信」的校訓精神和「大博」、「大雅」的人才培養理念。

同年，位於湖邊的澳大文農盆景園揭幕，展示伍宜孫家族捐贈的近百盆盆景，千姿百態、秀麗清雅，為校園增添詩意。2023年落成的「蘇澳亭」也豐富了校園的文化景觀，體現江南與嶺南文化的交融。

在鬱鬱蔥蔥的校園裡，有些植物是由應屆畢業生和校友饋贈，以答謝母校的栽培。在校友大道旁，有

畢業生栽種的鳳凰木和藍花楹，也有校友贈送「開卷有益」石刻。另外，在澳大綜合體育館外，有一片竹林也是由校友捐贈。他們的心意不但成為校園優美的人文風景，更是一份獨特回憶。



鄧景濱教授  
Prof Tang Keng Pan

中國語言文學系榮休教授鄧景濱在1993年加入澳大，見證澳大從氹仔「有校無園」的時代到遷入新校園的轉變。鄧教授說：「荀子說『木受繩則直，金就礪則利』，人的成長深受環境熏陶。澳大新校園依山傍水、綠樹成蔭，為師生提供一處靜心求學、自由探究之地，有利推行博雅教育。」他又表示，寬廣的校園也為住宿式書院制的實施提供空間，令不同學系學生得以同宿共膳，突破學問界限，對成長甚有益處。

推進校園可持續發展

十年間，澳大持續完善教學、科研、住宿及生活設施，不斷優化行政服務，支援教研工作。澳大將繼續營造優質和可持續的育人環境，創設智慧化校園，促進師生創新求變。





澳大新校園建造歷時三年多，並於2013年11月啟用。  
UM's new campus, which took more than three years to construct, was inaugurated in November 2013.

UM began the construction of its new campus in 2009. After years of intensive construction and relocation efforts, the university finally completed its relocation in 2014. Over the following decade, UM has made every effort to develop this academic space. The university has implemented various measures to improve its teaching facilities, living environment, and administrative efficiency, laying the foundation for its rapid development.

Continuously Improving Campus Facilities

The original UM campus, which was situated on Taipa Island and founded in 1981 as part of the University of East Asia, the predecessor of UM, covered a modest 0.054 square kilometres. This limited space greatly hindered the university’s development. Recognising this challenge, on 27 June 2009, the Standing Committee of the National People’s Congress of China granted the Macao Special Administrative Region jurisdiction over UM’s new campus on Hengqin Island to support Macao’s talent development initiatives. In 2014, with the support of the central and Macao SAR governments, the university relocated to an expansive new site spanning 1.0926 square kilometres. This new campus, 20 times larger than the old one, has significantly expanded the university’s capacity to fulfil its educational aspirations.

To create an environment conducive to teaching and research, UM embraced a ‘people-centred’ concept when designing the layout of the new campus. The UM Hengqin campus is divided into four zones: north, south, east, and west, serving the functions of teaching, research, accommodation, and living, respectively. With the relocation, the university’s seven faculties now enjoy expanded teaching and

research spaces, and the number of residential colleges has grown from two to ten. This expansion has created favourable conditions for implementing a collaborative educational model that synergises faculties and residential colleges. Moreover, there are various sports venues and activity spaces on the new campus, providing spaces for more than 120 student organisations and university teams in culture, arts, and sports. Many of these cultural and sports facilities are also open to the public.

Expanding Academic Research Space

UM is dedicated to providing robust research platforms for its academic teams. Over the past decade, the university has significantly expanded its research infrastructure, with research spaces on the campus now exceeding 170,000 square metres, dedicated to research in microelectronics, Internet of Things for smart cities, Chinese medicine, health sciences, applied physics and advanced materials, energy, environmental protection, and data science. Notably, the university has established the Scientific Research Base in the north zone of the campus, which spans more than 120,000 square metres and houses many research buildings. Within the Scientific Research Base, the Medical and Pharmaceutical Testing Building was inaugurated in 2023. This building houses the Macao Centre for Testing of Chinese Medicine, which aims

to promote the development of the Chinese medicine industry in Macao.

In addition to the abovementioned fields, UM has enhanced its research facilities for the humanities and social sciences. For example, the Cultural Building unveiled in 2019 serves as a hub for several key academic and cultural institutions within the university. These include the Centre for Chinese History and Culture, the Centre for Macau Studies, the Confucius Institute, the Chinese-Portuguese Bilingual Teaching and Training Centre, the Centre for Arts and Design, the Macao Base for Primary & Secondary Education in Humanities & Social Sciences, and the Institute of Advanced Studies in Humanities and Social Sciences. Moreover, dedicated to promoting the arts, UM established its Museum of Art in 2023. The museum exhibits not only global masterpieces but also the creative work of UM students and faculty members in art and design.

Situated at the heart of the UM campus, the UM Wu Yee Sun Library stands as an academic resource centre of the university. The library was opened in 2014 when UM relocated to the Hengqin campus. With an area of 32,000 square metres and approximately 3,000 seats, it holds over 16 million printed and electronic books and periodicals, making it not only the largest library in Macao but also home to the most extensive collection. Next to the library is the University Gallery, which showcases UM’s history, academic development, research achievements, and talent nurturing efforts.

Dr Raymond Wong, associate librarian of the UM Library, has been with the university since 1987 and has witnessed its evolution. ‘Since the relocation, the library has seen enhancements in both its services and collection size,’ he says. ‘It now provides modern reading areas and advanced research tools, creating a comfortable and productive environment. The library also regularly hosts lectures, exhibitions, and academic seminars.’ Dr Wong adds that over the past decade, the library has expanded its range of services, including the collection and organisation of archival records since 2020. In 2021, the UM Archives was established within the library. Another distinctive feature of the library is its unique physical collections, which include ancient books and manuscripts in Chinese and Western languages, documents about Macao, and a collection housed in the library’s Portuguese Corner.

Creating a Quality Living Environment

To create an inspiring learning environment, UM has developed multiple platforms for knowledge integration that transcend cultural and academic boundaries. For example, the UM residential colleges are equipped with dormitories, dining halls, seminar rooms, libraries, computer labs, recreational facilities, and gardens, all fostering vibrant communities within the university. In addition, the university’s Postgraduate Houses, Staff Quarters, and various leisure facilities are designed to enhance the quality of life of students and staff.

Prof Li Defeng, associate dean of the Faculty of Arts and Humanities and director of the Centre for





李德鳳教授  
Prof Li Defeng

Studies of Translation, Interpreting and Cognition, has worked on both the old campus and the new one. He comments on the changes: ‘The new campus was meticulously designed to meet the needs of students and staff. It offers better accommodation, dining, and sports facilities.

These enhancements not only improve the work and study environments but also facilitate the interaction between students and faculty.’ Prof Li also highlights the well-equipped conference and interpreting facilities on the new campus, which have hosted many large-scale interpreting contests and academic conferences.

UM also features a comprehensive academic exchange centre known as the UM Guest House. This facility provides amenities for conferences, leisure activities, accommodation, dining and reception to welcome scholars from around the world.

**Optimising Administration and Promoting Environmental Protection**

Since relocating to Hengqin Island, UM has reaffirmed its commitment to improving service quality management and environmental protection.

In 2016, the university achieved the ISO 9001:2015 and ISO 14001:2015 certifications, making it the first higher education institution in Macao to obtain these certifications. Furthermore, in response to the Macao SAR Government’s initiative to promote e-governance, the university has implemented the Official Letter and Document Management System and introduced a wide range of e-payment options. In addition, the university has optimised its online teaching capabilities by enhancing its video and learning management systems. These efforts have not only enhanced administrative efficiency but also addressed the teaching and learning needs of both faculty and students.

In addition to improving the workflows and performance of its departments, UM is committed to creating an environmentally friendly and energy-efficient campus, as well as raising environmental awareness among its members. This commitment was exemplified when UM’s Student Activity Centre was certified as a three-star green building by the China Green Building Council in 2015, underscoring the university’s dedication to sustainable development.

**Creating an Environment Conducive to Education**

By consistently landscaping its campus and enhancing its facilities, UM is committed to creating an environment that encourages intellectual and academic pursuits. The UM campus, which features beautiful garden and lake views, has greenery and water areas totalling 540,000 square metres, providing a serene and environmentally friendly living space for faculty and students.



澳大為學生創造充滿啟發性的學習環境  
UM creates an inspiring learning environment for students



澳大為教研團隊提供完善的研究空間  
UM provides well-equipped research spaces for its faculty

In 2018, the Ministry of Education gifted UM a sculpture ‘The Wall of Great Wisdom’. Situated at the UM Lotus Square, the sculpture symbolises the central government’s support for Macao’s educational development. It is also inscribed with the UM motto—Humanity, Integrity, Propriety, Wisdom, and Sincerity—reflecting the university’s commitment to nurturing well-rounded students.

Another notable highlight is the lakeside UM Man Lung Garden, which was inaugurated also in 2018. The garden showcases a collection of nearly one hundred Penjing pots generously donated by the Wu Yee Sun family. These Penjing pieces, with their diverse and elegant shapes and styles, contribute a sense of poetic serenity to the campus. On the other hand, the Suao Pavilion unveiled in 2023 further enriches the campus’s cultural landscape, exemplifying an integration of Jiangnan and Lingnan cultures.

The UM campus is distinguished by its abundant greenery, which has been further enhanced by the contributions from its graduates and alumni. To show their gratitude to UM, two graduating classes planted a flame tree and a jacaranda respectively along the Alumni Avenue on the campus. Additionally, a group of UM alumni gave the university an inscribed stone tablet that highlights the importance of reading, while some other alumni established the Alumni Grove near the UM Sports Complex by planting trees. These meaningful contributions not only add to the natural beauty of the campus but also serve as lasting memories.

Prof Tang Keng Pan, emeritus professor of Chinese Language and Literature, has been with UM since 1993. He has witnessed the university’s evolution from a small university in Taipa to a large university with an expansive new campus. Reflecting on this transformation, Prof Tang quotes philosopher Xunzi: ‘Just as wood straightens under tension and metal sharpens on a whetstone, so too does the right environment foster human growth.’ He speaks highly of the university’s new setting. With its verdant landscapes and proximity to natural beauty, the campus provides an ideal environment for the pursuit of knowledge and free exploration, which is essential for liberal arts education. Furthermore, he notes that the campus design, which promotes communal living and dining among students from various disciplines, helps break down barriers between students and enriches their university experience and personal development.

**Advancing Sustainable Campus Development**

Over the past decade, UM has made continuous efforts to upgrade its teaching, research, accommodation, and living facilities, while also enhancing administrative services to better support academic activities. Looking to the future, the university remains dedicated to fostering a high-quality and sustainable educational environment. Furthermore, UM is committed to developing a smart campus that fosters innovation among faculty and students.





## 緊握澳琴一體新機遇

### Seizing New Opportunities from Macao-Hengqin Integration

文 / 余偉業 · 圖 / 編輯部 · 英文翻譯 / 謝苑菁

Chinese Text / Kelvin U · Photo / Editorial Board · English Translation / Bess Che

正值澳門回歸25周年之際，澳琴一體化總體發展格局迎來新篇章，也為澳門大學未來發展鋪設康莊大道。在新的歷史節點上，澳大把握機遇，啟動在橫琴粵澳深度合作區（深合區）增設校區、研究院的計劃，拓展辦學規模，開闢新的教學與研究空間，以培養高端人才和加速科創成果轉化。

#### 深合區校區增四學院

《橫琴粵澳深度合作區總體發展規劃》明確支持澳門高校與世界名校在深合區推進微電子、醫學、金融等領域的辦學，其內地籍學生在合作區接受跨境教學時間可獲得境外（澳門）學歷學位認證認可。在中央及澳門特區政府支持下，澳大正籌備在深合區建設校區，其面積將為現時大學校園的一半。澳大校長宋永華教授表示：「未來，澳大將繼續緊扣澳門多元產業發展需求，並推動大灣區科技創新、產學研合作及科技人才培養，助

力澳門更快、更深層次融入國家發展大局。」

深合區校區的辦學規劃，將圍繞澳門「1+4」多元產業發展所需，依托大學現時的科研優勢和特色，優化學科專業佈局，並計劃新增四個學院：一）醫學院，培養包括臨床醫學、藥劑學、牙醫學和營養學等領域的醫學人才；二）設計學院，擬開設創意設計、建築與城市設計、智能製造與系統設計等學科；三）信息科學技術學院，擬開設人工智能與數字技術、微電子與電氣工程、金融科技

和量化商學等學科；四）工學院，擬開設材料科學與工程、能源科學與工程、化工與環境工程、生物醫學工程等學科，賦能新材料、新能源等產業落地發展。

#### 開展產學研基地二期建設

澳大正密鑼緊鼓地建設其產學研示範基地的二期項目「橫琴粵澳深度合作區澳門大學高等研究院」（琴高院），將依托深合區校區的建設，佈局科創轉化平台，幫助建設深合區轉化生態。同時，為鼓勵學科交叉融合，琴高院將建設交叉研究院，促進醫工結合、微電子與工程技術交叉、人工智能與機器人技術融合、物聯網技術嵌入到智能電網及智能制造領域等。

宋永華校長指出，澳大依托深合區校區、琴高院的建設，推進學科交叉融合的人才培養，提高原始創新和關鍵核心技術的攻關能力，加強與內地高校、科研機構等開展高水平的創新研究和技術研發，加速科創成果轉化。

#### 乘勢而上

十年前，澳大把握機遇，遷校橫琴，迎來了前所未有的蓬勃發展；十年後，現在我們面向未來，宋永華校長對深合區發展新藍圖充滿期待：「我校將繼往開來，乘勢而上，堅持『立足澳門，共建灣區，融入國家，走向世界』的發展定位，繼續通過以學生為本的優質教育、具國際影響力的重點研究、高水平的社會服務，矢志成為一所國際公認的卓越大學。」





This year marks the 25<sup>th</sup> anniversary of Macao's return to the motherland, and the integrated development of Macao and Hengqin has also opened a new chapter, expanding opportunities for UM. At this historic juncture, UM is capitalising on opportunities to establish a new campus and research institutes in the Guangdong-Macao In-Depth Cooperation Zone in Hengqin. These initiatives aim to expand the university's educational offerings, create new spaces for teaching and research, cultivate talent, and accelerate the transfer of UM's research and innovation results.

#### Launching Four Faculties in the Cooperation Zone in Hengqin

The Overall Development Plan for the Guangdong-Macao In-Depth Cooperation Zone in Hengqin states clearly that higher education institutions in Macao and world-renowned universities are encouraged to launch initiatives in the Cooperation Zone to advance education in fields such as microelectronics, medicine, and finance. According to the development plan, when mainland Chinese students complete programmes in these fields in the Cooperation Zone, their results will be recognised as equivalent to degrees in Macao. With the support of the central government and the Macao SAR Government, UM is planning to construct a new campus in the Cooperation Zone. UM Rector Prof Yonghua Song says, 'UM will continue to align with Macao's needs to develop diverse industries. The university will also promote technological innovation,

industry-academia collaboration, and science and technology talent development in the Greater Bay Area, so as to facilitate Macao's integration into national development.'

The new campus in the Cooperation Zone will support Macao's '1+4' development strategy and leverage the university's characteristics and research strengths to enhance its educational offerings. Specifically, UM plans to establish four faculties on the new campus: 1) Faculty of Medicine, which will focus on cultivating medical professionals in fields such as clinical medicine, pharmacy, dentistry, and nutrition; 2) Faculty of Design, which will offer programmes in creative design, architecture and urban design, and intelligent manufacturing and system design; 3) Faculty of Information Science and Technology, which will offer programmes in artificial intelligence and digital technology, microelectronics and electrical

engineering, financial technology, and quantitative business studies; 4) Faculty of Engineering, which will focus on materials science and engineering, energy science and engineering, chemical and environmental engineering, biomedical engineering, and other areas that support the development of new materials, new energy, and related industries.

#### Advancing Phase Two of the Industry-Academia Collaboration Demonstration Base

UM is progressing with the construction of the Hengqin University of Macau Advanced Research Institute (HUMRI), which represents the second phase of UM's industry-academia collaboration demonstration base in Hengqin. This institute, along with the new campus in the Cooperation Zone, will establish platforms for the transfer of research and innovation results to help develop a transfer ecosystem in the Cooperation Zone. Additionally, to promote discipline integration, HUMRI will establish an entity that focuses on fostering the integration of medicine and engineering, microelectronics and engineering technology, artificial intelligence and robotics technology, as well as the incorporation of the Internet of Things technologies into smart grids and intelligent manufacturing sectors.

According to Rector Song, the establishment of the new campus and HUMRI in the Cooperation Zone will significantly enhance UM's capacity to develop interdisciplinary talent, original innovations, and core technologies. These initiatives will also enable UM to strengthen collaborations with mainland universities and research institutions in high-level innovative research and technological development, thereby accelerating the transfer of research and innovation results.

#### Keeping up the Momentum

Ten years ago, UM relocated to Hengqin, marking the beginning of a period of unprecedented developments. A decade later, the university is seizing opportunities again—it will craft a new development blueprint in the Cooperation Zone. Rector Song says, 'UM will continue to progress. With firm roots in Macao, it will continue to position itself as a university committed to participating in the development of the Greater Bay Area, integrating with national development and going global. Through quality student-centred education, impactful research in key subjects, and superior community services, UM aspires to become an internationally recognised university of excellence.'





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