澳門大學發展基金會 2022年報

University of Macau
Development Foundation
Annual Report 2022





# 概覽

# **Overview**

澳門大學發展基金會成立於2009年,是一間為支持及促成澳門大學實現學術及教育之目標,使澳門大學在本地及國際上具有更佳之競爭力,且確保其可持續發展的基金會。

過去一年,基金會資助澳大在吸引高端人才、科研創新、產學研合作、社會服務等多個領域的項目,並對獎助學金計劃、學生和書院發展等範疇加大支援力度,期望能更好地支持大學的全方位發展,提升大學的綜合實力和競爭力。

The University of Macau Development Foundation (UMDF) was established in 2009 as a foundation that aims at supporting and facilitating the University of Macau to attain its academic and educational goals; making it competitive locally and internationally and achieve sustainable development.

In the past year, UMDF supported the university's efforts in attracting top talents, carrying out research and innovation, and promoting industry-academia-research collaboration and social services. UMDF also increased backing in areas such as scholarship schemes, student and college development with an aspiration to better support the comprehensive development of university, and to enhance its integrated strength and competitiveness.

# 組織架構

# **Organisational Structure**

信託委員會 / Trustees Committee			
主席	Chair	林金城 Lam Kam Seng Peter	
副主席	Vice Chairs	謝志偉 Tse Chi Wai	
		李沛霖 Lei Pui Lam	
成 員	Members	王宗發 Wong Chong Fat	
		何鈺珊 Ho loc San	
		黃顯輝 Vong Hin Fai	
		黃嘉豪 Wong Garrick Jorge Kar Ho	
		蔡雋思 Choi Chun Sze Johnson	
		劉藝良 Lao Ngai Leong	
		禤永明 Huen Wing Ming Patrick	
		鄺達財 Kong Tat Choi	

行政委員會 / Executive Committee			
主 席副主席	Chair Vice Chair	劉永年 Lau Veng Lin 宋永華 Yonghua Song	
成員	Members	林綺濤 Anabela Fátima Xavier Sales Ritchie 唐志堅 Tong Chi Kin 高錦輝 Kou Kam Fai 許敬文 Hui King Man 葛萬金 Kot Man Kam	

監事會 / Fiscal Committee			
監事長 成 員	Chair Members	崔煜林 Chui Yuk Lum António 容永恩 long Weng lan 飛安達 António José de Freitas	
秘書長	Secretary-General	梁佳俊 Leung Kai Chun Chris	

任期: 2020 年 10 月 19 日至 2023 年 10 月 18 日 Term of Governorship: 19 October 2020 to 18 October 2023

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中葡交流與合作

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# 主席寄語

# Chair's Message

在澳門融入國家發展大局帶來的機遇之下,澳門大學積極配合國家和澳門特區的規劃部署,透過完善人才培養體系、推動創新科研戰略佈局、優化研究成果轉化體系、深化拓展與內地及葡語系國家的交流合作、持續增強大學服務社會的功能等,不斷提升大學發展水平,助力澳門社會可持續發展。

按照基金會成立時的初衷,基金會成立的目的是為了更好地支持澳門大學發展,因此,澳門大學為基金會的唯一受益人。基金會秉承一貫宗旨於過去一年資助澳大展開超過40項不同領域的計劃,在社會各界的關心支持下,大學各項工作有序落實。

2020至2022年新冠肺炎疫情反覆,對澳大帶來多重考驗,但在政府和社會各界的支持下,大學保持了平穩的發展環境,使澳大的策略發展得以順利推行。未來基金會將堅守宗旨,與大學同仁並肩同行,持續擴大對澳大的資助領域和範圍,支持大學進一步推進人才培養、學術科研和社會服務的工作,提升大學的研究和社會影響力,更好地服務國家和澳門的發展所需。

林金城博士 信託委員會主席





Seizing the opportunities brought by the integration of Macao into the overall development of the country, the University of Macau actively supports the strategies and plans of the country and Macao SAR. Through improving the talent cultivation system, the strategic development of innovation and research, the research results transfer system, further expansion of exchanges and cooperation with the Mainland and Portuguese-speaking countries, as well as constant enhancement of the university's service to the community, etc., the university is continuously improving its development, and therefore boosting the sustainable development of Macao society.

The foundation was established with an initial objective to better support the development of University of Macau. Therefore, UM is the sole beneficiary of UMDF. Last year, more than 40 projects of UM were approved to be funded in different funding areas. With the care and support from all sectors of the community, the university's work has been conducted in an orderly manner.

The recurrence of the COVID-19 pandemic from 2020 to 2022 posed certain challenges to UM. Thanks to the support of Macao SAR government and all sectors of society, UM maintained steady environment and various strategic development plans of the university were carried out in a smooth fashion. Going forward, the foundation will adhere to its purpose and work with its UM colleagues to promote the university's talent nurturing, academic research and community services by expanding the scope of funding, in a bid to enhance the university's research impact and social prestige and to better serve the developmental needs of the country and Macao.

Dr Lam Kam Seng Peter Chair of the Trustees Committee

# 校長的話

### **Rector's Note**

過去數年,在新冠疫情給全世界帶來了前所未有的衝擊下,國家和澳門不斷努力實現穩固發展,為澳門大學提供了良好的教學與研究環境。受到新冠疫情所限,有部份校園活動、建設及研究項目未能全面執行,我們誠摯感謝基金會的理解與支持,讓澳門大學在疫情下穩步向前發展。2022年,澳門大學在泰晤士高等教育世界大學排名維持在201-250區間,QS世界大學排名由2021年的第367位上升到2022年的第322位,彰顯出特區政府、澳門大學發展基金會,以及社會各界多年來對澳門大學的持續投入取得成效。

2022/2023學年迎來疫情防控過渡期後的重新開放,澳門大學全面恢復面授教學,並配合社會需要,在藥物科學及科技、全球公共衛生、治安管理、物聯網及認知神經科學等領域推出新的學位課程,積極培養澳門四大新興產業所需的專業人才。同時,還通過聯合與國內外一流學術機構建立了緊密合作夥伴關係,開展聯合培養人才項目。

未來,澳門大學將緊扣國家發展戰略、特區施政方向及全球發展態勢,落實校監的指引, 依照大學五年發展規劃的部署,有序進行各項工作,包括:不斷優化和完善學科體系和課 程建設、發揮聯合培養高端人才的優勢、高標準建設產學研示範基地,以及透過重大科研 平台推動產學研合作,全力為學生創造一個更安全、更安心、更友善及更有利於成長成才 和學術發展的環境。

#### 宋永華教授





In the past few years, as the COVID-19 pandemic hit the world with unprecedented impact, the country and Macao have tried their best to achieve stable development and provided a favourable teaching and research environment for the University of Macau (UM). Due to the disruptions caused by the COVID-19, some campus activities, construction and research projects have not been fully implemented. We are very grateful to the University of Macau Development Foundation for its understanding and support, allowing UM to develop steadily despite the epidemic. In 2022, UM is ranked in the 201-250 bracket in the Times Higher Education (THE) World University Rankings, and has risen from 367 in 2021 to 322 in the Quacquarelli Symonds (QS) World University Rankings. These show that the investment of Macao SAR government, the University of Macau Development Foundation and all sectors of society over the years have achieved good progress.

The 2022/2023 academic year welcomes the reopening after the transitional period of epidemic control, and UM has fully resumed face-to-face teaching. UM has also launched new degree programmes in areas such as pharmaceutical science and technology, global public health, security management, the Internet of Things, and cognitive neuroscience to nurture professionals for the four emerging industries in Macao to meet the needs of society. Furthermore, UM has established close partnerships with leading academic institutions in China and abroad to launch joint talent training programmes.

Looking ahead, UM will closely follow the national development strategy, the direction of the Macao SAR's governance and the global development trend; and will carry out the initiatives in accordance with the directions of the Chancellor of UM and those stated in the University's Five-Year Development Plan. UM will implement all tasks in a progressive manner which include improving its curricular system and programmes, giving full play to the advantages of joint training of high-end talents, building a high-standard industry-university-research demonstration base, and promoting industry-university-research cooperation through major scientific research platforms. UM will continue to create a safe, secure, and friendly environment conducive to students' personal growth and academic development.

Professor Yonghua Song Rector



# 支持大學不同範疇發展

# Supporting the Development of UM in Different Areas

基金會所得捐款按捐款人意願作一般用途 資助或特定資助。2022年基金會的主要資 助領域包括:人才招攬和培養、卓越教研 項目、學生及書院發展、獎勵優秀學生、 推動產學研發展、中葡合作與交流、社會 服務及其他資助項目8個方面。 Donations to the Foundation are classed according to the donor's wishes as general endowment or designated fund for specific uses. In 2022, the UMDF has eight key areas of funding, including talent attraction and nurturing, outstanding teaching and research projects, development of students and the residential colleges (RC), rewarding outstanding academic performance, promote industry-academia-research development, exchange and collaboration between China and Portuguese-speaking countries, research that serves the community and other funded projects.

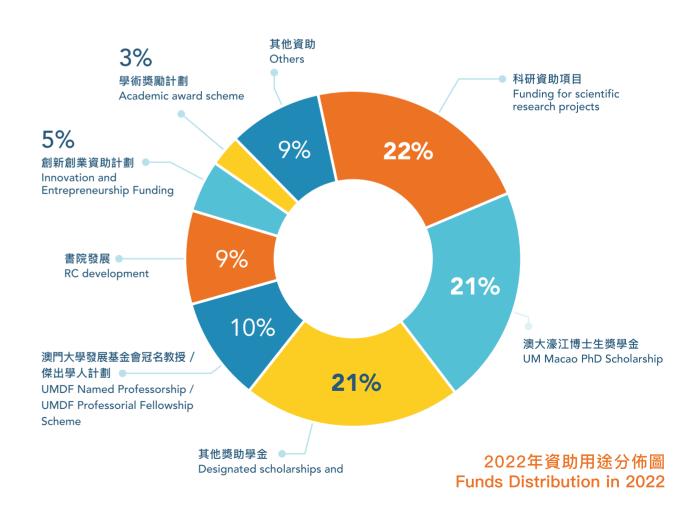
#### 資助領域 Scope of Funding

Rewarding outstanding academic

performance



Other funded projects



# 成果亮點

# Highlights

"揚帆追夢,創啟未來"專項資助計劃,去年撥出 100萬澳門元用於支持"健康科學"及"大數據醫療應 用"範疇的人才培育和科研領域的創新探究

'Set Sail for New Horizons, Create the Future' Grant, granting MOP 1 million last year to support the nurturing of talents in the areas of Health Sciences and Big Data Healthcare Applications, and to support young scholars to venture into innovation and breakthroughs in their research areas

支持大學建設跨學科研究平台和項目,包括金融創新、智慧旅遊、腦科學和神經認知、微電子領域等 Support UM in the establishment of interdisciplinary research platforms and projects, including financial innovation, smart tourism, brain science and neurocognition, microelectronics etc

資助大學頒發72個學院學術獎及年度教員獎項 Provide grants for the university to present a total of 72 faculty-level academic awards and annual awards to eligible academic staff members

繼續支持憲法和基本法推廣,宣傳國旗知識和文化 Continue to support the education and promotion of the Constitution and Basic Law, and promote the knowledge and culture of National Flag

超過400名學生獲得基金會資助的獎/助學金 Over 400 students were presented scholarships or offered financial aids 啟動第二期"創新創業資助計劃",鼓勵更多澳大人 投身科創實踐活動

Funding the second phrase of Innovation and Entrepreneurship Funding Scheme in hope of incentivizing more members of the UM community to engage in science and innovation practice

支持澳大博士生獎學金計劃,共吸納86名世界各地 優秀博士生投身大學研究工作

Support UM Macao Talent Programme, through which the university has enrolled 86 outstanding students in full-time PhD programmes, who would also engage in academic researches

拓展中葡文化交流,支持大學採購一份18世紀前期 關於中葡關係的珍貴手稿

Expand exchange with Portuguese-speaking countries, allocated funding for the university to acquire a rare manuscript from early 18th century that is of great significance to the relations between China and Portugal

頒發"理工科課程獎學金"予48名優秀本地學生,入 讀工程、計算機科學、物理及化學等理工範疇課程 A total of 48 outstanding local students were awarded the 'STEM scholarship' in enrolling programmes such as engineering, computer science, physics and chemistry

資助住宿式書院更新和優化書院環境和設施,亦訂 出每年對書院持續資助的發展方針

Support the RCs in enhancing hardware and software facilities, and develop strategy to sustainably fund RCs in each year

# 人才延攬及培養

# Talent Attraction and Nurturing

# ▶ 基金會冠名教授席 UMDF Named Professorship

澳大發展基金會冠名教授席自2018年設立以來取得良好進展,為大學多個學科發展以至本地社會帶來積極影響。目前基金會按校方建議共向四位教授授予基金會冠名教授席,包括公共政策、哲學、應用數學及智慧旅遊等範疇。考慮到現時國際高教人才競爭激烈,基金會於2022年將"冠名教授席"之專項基金總額由5,000萬澳門元增至6,000萬澳門元,助力澳大延攬更多高端人才,形成一支全方位的高水平教學人員隊伍,提升大學的辦學水平。

Since its establishment in 2018, the UMDF named professorship has made considerable progress, and brought about positive impact on many areas of the university as well as the local community. Thus far, the foundation has conferred the UMDF named professorship to four professors as proposed by the university in areas including public policy, philosophy, applied mathematics and smart tourism.



2022年3月、4月及9月分別舉辦了三場"澳門大學發展基金會冠名教授"的講座。王慶節教授以"數 字時代與文字時代的人文思維"為題,探討當今從文字時代向數字時代的轉折點上,可能衍生出文化 和文明的革命性變革;蔡小川教授以"預測心腦血管健康的數學算法與臨床驗證"為題,分析超級計 算機及計算生物力學在精準醫療上的應用;羅振雄教授則以"旅遊和款客服務業的網站評估"為題, 分享不同的網站評估模型與智慧旅遊發展的關係。幾位教授在講座上和與會者交流互動,增進大 家對相關研究領域的瞭解,亦加強了基金會冠名教授與社會各界及師生的交流和聯繫,營造良好 的學術氛圍。

Three 'University of Macau Development Foundation Named Professorship Lectures' were organised in March, April and September in 2022. Prof Wang delivered a lecture titled 'Thinking of Humanities in the Digital Age and in the Age of Letters', which discussed the revolutionary changes in culture and civilisation that may result from the current turning point from the written to the digital age. Prof Cai analysed the application of supercomputing and computational biomechanics in precision medicine with the topic 'Mathematical Algorithms and Clinical Tests for Predicting Cardiovascular and Cerebrovascular Health'. During the lecture titled 'Website Evaluation in Tourism and Hospitality', Prof Law explored the relationships between different website evaluation models and smart tourism development. Professors interacted with the audience during the lecture, it enhanced people's understanding of relevant research areas and also strengthened communication and connection between the named professors and the community, creating an excellent academic atmosphere.









#### ▶ 基金會傑出學人計劃 **UMDF** Professorial Fellowship Scheme

基金會去年優化"傑出學人計劃",以設立 專項留本基金 (endowment) 形式,每年 從2,000萬撥出5%之金額用作教授的科研 津貼,使其財務安排與現有的冠名教授席 專項基金一致,以確保計劃的延續性。

綜合度假村及旅遊管理領域的苗莉教授於 2021年被任命為"傑出學人",自加入澳大 後致力於後疫情時代旅遊行為及元宇宙旅 遊的研究工作。基金會希望未來透過此計 劃進一步引進不同領域發展所需的人才, 強化大學在不同領域的優勢與特色,提升 整體學術水平和競爭力。

Last year, the foundation optimised the Professorial Fellowship by setting up a designated endowment fund, with 5% allocated per year from the MOP20 million for research grants for professors, so that their financial arrangements aligned with the existing endowment fund for the Named Professorships to ensure the sustainability of the Professorial Fellowship scheme.

Prof Miao Li was appointed as the UMDF Professorial Fellow of Integrated Resort and Tourism Management in 2021. She currently focuses on tourism behaviour in the post-pandemic era and metaverse tourism. Through this programme, the foundation hopes to bring in the talent needed for the development of different fields, and further consolidate the university's strengths and characteristics in different fields and enhance its overall academic standards and competitiveness.



## "揚帆追夢,創啟未來"專項資助計劃 'Set Sail for New Horizons, Create the Future' Grant

為慶祝澳大建校四十週年,何鴻燊博士醫療拓展基金會設立了一個為期十年,每年捐款100萬澳門元的"揚帆追夢、創啟未來"資助計劃,2022年撥出的資助用於支持"健康科學"及"大數據醫療應用"兩個範疇的人才培育,支持青年學者在其科研領域敢於創新探究、尋求突破。

To celebrate the 40th anniversary of the University of Macau, Dr. Stanley Ho Medical Development Foundation (SHMDF) has established a designated fund titled 'Set Sail for New Horizons, Create the Future' Grant, granting MOP1 million per year for 10 years. In 2022, the allocated funding was to support the nurturing of talents in the areas of Health Sciences and Big Data Healthcare Applications, and to support young scholars to venture into innovation and breakthroughs in their research areas.

#### ▶ 卓越創新科研資助計劃 Excellence in Innovative Research Funding Programme

經評審委員會甄選後,中華醫藥研究院的胡元佳教授和王瑞兵教授各自的項目"KRAS G12D小分子抑製劑專利化合物數據挖掘與分子生成"及"細菌仿生納米藥物通過體內搭便車免疫細胞以及胞內自組裝實現腫瘤的靶向治療"分別獲得30萬澳門元的資助。

After evaluation by the review committee, two projects from the Institute of Chinese Medical Sciences were awarded MOP300,000 each. They are led by Prof Hu Yuanjia and Prof Wang Ruibing, with the topics of Data Mining and Molecular Generation of KRAS G12D Small Molecule Inhibitor Patent Compounds and In Vivo Hitchhiking of Immune Cells by Intracellular Self-Assembly of Bacteria-Mimetic Nanomedicine for Targeted Therapy of Melanoma, respectively.

#### ▶ 訪問學人交流計劃 Visiting Scholar Programme

中華醫藥研究院王春明教授及社會科學學院張文瑜教授獲資助赴新加坡南洋理工大學進行研究訪問,兩位教授與南洋理工大學和新加坡其他研究機構的學者展開究流。王春明教授在澳大從事"免疫疾病及組織修復"相關研究,而張文瑜教授則參與"大數據與醫療"相關研究工作,兩位學者在訪問期間,透過學術討論、參訪實驗室、收集數據等形式深入交流,促進雙方的學術合作活動。

Prof Wang Chunming from the Institute of Chinese Medical Sciences and Prof Chang Wenyu from the Faculty of Social Sciences were funded to conduct research visits to Nanyang Technological University (NTU), where they interacted with academics from NTU and other research institutions in Singapore. Prof Wang Chunming engages in research related to immune diseases and tissue repair and Prof Chang Wenyu is involved in research related to big data and medicine. During the visit, the two scholars had in-depth exchanges through academic discussions, visits to laboratories, data collection, etc., and promoted academic cooperation between the two sides.





#### ▶ 成果交流

#### Research Outcome Exchange

澳大與何鴻燊博士醫療拓展基金會於2022 年11月底聯合舉辦"揚帆追夢、創啟未來" 資助計劃之成果交流,受資助的四位教授 分別對自身的研究進展和成果進行了詳細 的彙報。與此同時,亦邀請多名國內外專 家學者線上線下就健康科學和大數據醫療 領域的最新研究展開討論,浙江大學教授 申有青和歐陽宏偉、盧加諾大學Schulz教 授作為演講嘉賓,分享促進肌肉骨骼組織 再生方面的最新研究成果、轉胞吞型高效 抗腫瘤納米藥物研究工作進展及大數據在 醫療領域的應用。相關交流活動為專家學 者提供一個展示健康科學和大數據醫療領 域的最新研究進展和應用的平台,也為研 究人員和學生提供了與國內外學者互動、 探索合作的機會。

總括來說,在過去一年"揚帆追夢、創啟未來"各資助計劃得到階段性進展,在促進科研、學術交流、人才培養方面取得了一定的成果,未來會持續推動大學在健康科學領域的發展。

Towards the end of November 2022, UM and Dr. Stanley Ho Medical Development Foundation jointly held the awardees' sharing of their research achievements under the 'Set Sail for New Horizons, Create the Future' grant programme. The four funded professors gave a detailed presentation on their research progress and results. In addition, experts and scholars from China and abroad were invited to give talks virtually or in-person, sharing their latest research results in health sciences and big data medical applications. Prof Shen Youging and Prof Ouyang Hongwei from Zhejiang University and Prof Schulz from the University of Lugano shared their latest findings on promoting musculoskeletal tissue regeneration, their research progress on transcytosis and efficient anti-tumour nanomedicine and the application of big data in the medical field. These exchange activities provided a platform for experts and scholars to showcase the latest research progress and applications in health sciences and big data medicine, as well as an opportunity for researchers and students to interact and explore collaboration with scholars from home and abroad.

All in all, the 'Set Sail for New Horizons, Create the Future' projects have achieved remarkable progress and significant result in terms of research promotion, academic exchange and talent nurturing. It will continue to encourage the development of health science at the university.



#### 學術獎勵計劃 Academic Award Scheme



基金會自2017/2018學年起支持澳大的"學術獎勵計劃",以鼓勵大學人員在教學、研究及服務各方面作出傑出的貢獻,至今基金會累計撥出資助達260萬澳門元。2022年基金會增加相關預算至77萬澳門元支持2021/2022學年學術獎勵計劃,包括大學級別的卓越教學獎、學院級別的學術獎勵及教學人員年度獎勵計劃,以進一步鼓勵教師教研及服務水平的提升。2022年,澳大向合資格的教學人員頒發32個學院級別的學術獎項及40個教學人員年度獎項,大學級別的卓越教學獎得獎者是健康科學學院公共衛生及醫藥管理學系黃值富教授。

The foundation has also supported the university's Academic Award Scheme since the academic year 2017/2018 to encourage outstanding contributions to teaching, research and service by university staff. To date, the foundation has allocated a total of MOP2.6 million in grants. The foundation increased the budget to MOP770,000 to support the Academic Award Scheme for the academic year 2021/2022, including the University-level Teaching Excellence Award, Faculty-level Awards and the Annual Incentive Scheme for Outstanding Academic Staff, to further encourage teachers to improve teaching, research and service standards. In 2022, UM presented 32 Faculty-level awards and 40 awards under the Annual Incentive Scheme for Outstanding Academic Staff. The University-level Teaching Excellence Award was conferred to Prof Garry Wong from the department of Public Health and Medicinal Administration of the Faculty of Health Sciences.





## 澳大博士生獎學金計劃 UM Macao PhD Scholarship

基金會自2018年持續資助"澳大博士生獎學金計劃",至今共提供資助款項4,000多萬澳門元,助力澳大吸納世界各地的優秀博士生入讀澳門大學,提升科研力量,為國家和澳門的發展吸引和集聚更多國際高層次人才。

目前共86名來自人文社科、中醫藥、健康科學、應用物理及科技等領域的優秀全職博士生獲得資助。獲獎勵的研究生投身大學研究、輔助教學及行政支援的工作,不少學生亦獲得學術獎項,以及於期刊及研討會上發表論文,整體獲導師評核為表現良好。

The foundation has continued the support to the UM Macao PhD Scholarship since 2018 to assist the university in attracting outstanding doctoral students from around the world to study at UM. The scholarship helps the university enhance its research capabilities and attract more high-level international talent for the development of the country and Macao. The foundation has provided a total of over MOP40 million in funding.

The foundation is currently supporting 86 outstanding full-time PhD students in the fields of humanities and social sciences, Chinese medical sciences, health sciences, applied physics and technology. The awarded postgraduate students engage in research, teaching and administrative support at the university and are assessed by their supervisors as having performed excellently overall.

## 跨領域研究項目

# **Interdisciplinary Research Projects**

基金會一直支持澳大通過創建和優化跨學 科課程、建設跨學科研究平台,推動教學 和科研創新,特別鼓勵大學研究聚焦世界 尖端學術問題,加强跨學科合作。 The foundation has been supporting the university to promote innovation in teaching and research through the creation and refinement of interdisciplinary programmes and the establishment of interdisciplinary research platforms. In particular, it encourages the university to focus on cutting edge academic issues in its research and strengthen interdisciplinary cooperation.

# 促進金融創新和智慧旅遊領域的研究 Promoting Research in Financial Innovation and Smart Tourism

亞太經濟與管理研究所旨在促進對澳門和大灣區的社會經濟發展具有重要意義且息息相關的跨學科研究,去年重點開展了在亞洲經濟、金融創新和智慧旅遊三個研究領域。2020至2022年期間亞太經濟與管理研究所聯同工商管理可完、智慧城市物聯網國家重點實驗至多時及中華醫藥研究院學者展開了多項跨學科的研究。

The Asia-Pacific Academy of Economics and Management (APAEM) aims to promote interdisciplinary research of importance and relevance to the socio-economic development of Macao and the Greater Bay Area. Last year, it focused on three research areas: Asian economy, financial innovation and smart tourism. Between 2020 and 2022, researchers from the APAEM, the Faculty of Business Administration, the State Key Laboratory of Internet of Things for Smart City (SKL-IOTSC), the Faculty of Law, and the Institute of Chinese Medical Sciences (ICMS) of UM jointly launched a number of research projects on smart tourism.

#### ▶ 亞洲經濟學

#### **Asian Economics**

在基金會的支持下,朱智豪教授帶領團隊圍繞"亞洲經濟學的前沿研究:以澳門及其鄰近地區為視角"開展了兩個研究項目,從不同角度分析"中美貿易戰"環境下,對中國領先企業創新活動的影響,為中國企業創新發展戰略注入嶄新力量,同時亦為澳門及粵港澳大灣區的科技創新發展提供理論依據。

此外,為鼓勵學術交流,亞洲經濟學團隊於2022年舉辦了14場線上研討會,邀請一眾知名學者與 澳大學者及學生分享研究成果,共同推動相關學術領域的進步。



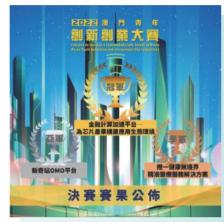




With the support of the foundation, Prof Angus C. Chu led two research projects on 'Frontier Research in Asian Economics: Macao and its Adjacent Regions'which analysed the impact of US-China trade war on the innovation activities of leading Chinese corporates from different perspectives. These studies have injected new strength into the innovation development strategies of Chinese corporates, and provided a key theoretical basis for the development of science and technology innovation in Macao and the Guangdong-Hong Kong-Macao Greater Bay Area.

In addition, to encourage academic exchange, the Asian Economics team organised 14 online seminars in 2022, inviting leading academics to share their research with UM students and faculty to promote the advancement of related academic fields.





#### ▶ 金融創新

#### **Financial Innovation**

亞太經濟與管理研究所金融創新團隊致力 推動澳門經濟適度多元發展,希望能提升 澳門金融業的總體水平、發展澳門成爲財 富管理中心以及發展智慧金融和投資。研 究所於2022年展開了一系列與金融創新相 關的跨領域研究項目,包括"高速金融資 產走勢預測系統"、"智能投資顧問在澳門 的應用"、"金融科技作為融資來源和平台 的問題與機遇"、"基於正則化方法追蹤高 維金融指數研究"等。

上述項目的成果已送交至多個頂尖期刊及論壇,取得良好的學術成果,更有望應用在行業中,孵化出更多企業。其中"高速金融資產走勢預測系統"研究團隊已經申請成立兩家公司,並於澳門青年孵化中心舉辦的澳門科技創新大賽獲得總冠軍。2023年,亞太經濟與管理研究所將繼續支持多項跨學科研究項目,冀為行業及社會作出貢獻。

The Financial Innovation team of APAEM is committed to promoting the moderate economic diversification of Macao, with the goals of elevating the overall standards of the financial sector in Macao, developing Macao into a wealth management centre, and developing smart finance and investment. A series of interdisciplinary research projects related to financial innovation were carried out by the APAEM in 2022, including 'High-Speed Financial Asset Movement Forecasting System', 'The Application of Robo-Advisor in Macao', 'Problems and Opportunities of Fintech as Sources and Platform of Financing', 'High-Dimensional Financial Index Tracking based on the Regularization Approach', etc.

The aforementioned research results have been submitted to a number of leading journals and forums, and have generated favourable academic results. When it comes to the application of research results, more startups are expected to be founded based on the projects. Among all, the teams of 'High-Speed Financial Asset Movement Forecasting System' have applied for theestablishment of two companies and were the overall champion of the Macao Youth Innovation and Entrepreneurship Competition organised by the Macau Young Entrepreneur Incubation Centre. In 2023, APAEM will continue to support a number of interdisciplinary research projects with the aim of contributing to the industry and society.

## 推動腦科學和神經認知的研究 跨語言處理中的執行功能: 基於神經認知的研究 Facilitating Research in Brain Science and Neurocognition Executive Functions in Cross-language Processing: A Neurocognitive-based Study

協同創新研究院認知與腦科學研究中心自 2021年進行一項先導研究項目,透過3T核 磁共振掃描儀研究澳門不同群體的單語、雙 語和多語受試者的聽、說、讀三種在澳門最 常用的語言(即中文、葡文和英文)的大腦 區域,以及在語言之間切換時的大腦動力學 神經網絡。

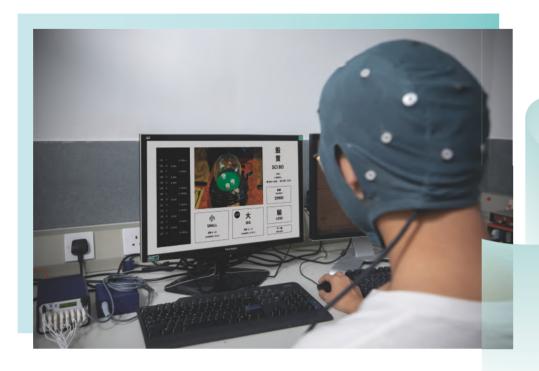
研究團隊已成功建立一個小型多組群、多語言、多模態的大腦圖譜庫,在 2022 年 11 月的 CCBS 第三屆認知與腦科學國際研討會上進行了主題演講和海報展示,並已將具有原創性的研究方法、初步成果和建模寫成論文,提交頂級期刊。項目已於2022年結題,研究團隊根據相關發現作出報告和總結,可望在高影響力期刊上發表,為隨後更大規模的項目打下扎實的基礎。

The Centre for Cognitive and Brain Sciences of the Institute of Collaborative Innovation has conducted a pilot study using 3T MRI scanner in Macao since 2021, studying the brain regions of different groups of monolingual, bilingual and multilingual speakers in Macao in listening, speaking and reading the three languages most often used in Macao (namely Chinese, Portuguese and English) and the neural network of their brain dynamics when switching between languages.

The research team has successfully built a small-scale multi-layered, multilingual and multimodal brain map database. The team gave key note presentation and poster presentations at the CCBS 3rd Macao Symposium on Cognitive and Brain Sciences in November 2022, and produced papers on their original research methods, preliminary results and models for submission to top journals. Overall, after the project's completion in 2022, the research team will draw up a research report and summary, which is expected to be published in high-impact journals and serves as a solid foundation for larger scale projects in the future.







# ▶ 遊戲和賭博成癮的神經認知機制 Neurocognitive Mechanisms of Gaming and Gambling Addiction

協同創新研究院認知與腦科學研究中心於 2021年開展一項為期兩年跨學科的研究項 目"遊戲和賭博成癮的神經認知機制",通 過為參加者進行腦掃瞄的數據收集,對賭 博及網絡遊戲成癮或失調人士的大腦結構 及成癮行為的形成機制有更深入的了解。

該研究團隊透過聖公會澳門社會服務處招募了數十名參加者,取得一定的數據和分析資料。當中的神經影像結果可以進一步幫助研究團隊更直觀地觀察具有遊戲或賭博障礙個體和健康個體他們的大腦在進行決策過程中的活動差異。

相關項目已於2022年結題完成,研究團隊亦達成與本地非政府組織共同加強多方交流的目標,搭建起了學科研究與社區實踐之間的橋樑,期望未來會開展更多探討行為成癮/失調之延伸科研合作,並繼續尋求在神經認知科學的研究在社區教育中轉化、推廣的進一步發展。

The Centre for Cognitive and Brain Sciences of the Institute of Collaborative Innovation initiated a two-year research project on the neurocognitive mechanisms of gaming and gambling addictions in 2021. Data is collected from participants through brain imaging, cognitive and decision-making tests and psychological and behavioural profiling, and is integrated into a multimodal database to gain a deeper understanding of the brain structure and mechanisms of addictive behaviours in people with gambling and gaming addiction or disorders.

The research team recruited dozens of participants through Sheng Kung Hui Macau Social Services Coordination Office (SKH) and obtained data for analysis. The obtained neuroimaging results enabled the research team to better visualise the differences in brain activities during decision-making between individuals with gaming or gambling disorders and healthy individuals

The project was completed in 2022 and the research team has strengthened interactions with local NGOs in multiple aspects and built up channels to translate academic research into practice in the community. More extended research collaborations on behavioural addictions/disorders are expected to be carried out, as well as further translation and dissemination of neurocognitive science research in community education.

#### ► 網上用戶互動-基於數據的跨領域研究 Online User Interaction: A Cross-disciplinary Research Based on Data

此項目利用網路數據瞭解不同人口特徵的個體與組織在不同環境中的互動。基於從互聯網上獲取的使用者行為數據,建立一個關於網絡用戶交互機制和效果的理論框架,並在此框架的基礎上解決社會科學不同領域的實際問題。研究團隊於2022年就人機混合內容分析方法以及使用人工編碼的內容作為機器學習處理大數據等內容發表了論文,並進行了一系列實證研究。

另外,研究團隊也開展了一系列的子項目,包括關於公共衛生和Covid-19信息獲取的研究、關於人工智能生成的新聞對人們感知和態度的影響、VR(虛擬現實)廣告的影響等。

This project is a cross-disciplinary research conducted by the Centre for Data Science of the Institute of Collaborative Innovation. It aims to use online data to understand the interactions among individuals and organisations with different demographic characteristics in various contexts. Based on user behaviour data obtained from the Internet, the research team developed a theoretical framework on the mechanisms and effects of web user interactions, and addressed practical questions in different areas of social science on the basis of this framework. The team published papers on a hybrid human-machine method for content analysis and the use of manually coded content as machine learning materials in big data processing, along with a series of empirical studies in 2022.

The research team has also undertaken a number of sub-projects, including studies on public health and Covid-19 information acquisition, the impact of Al-generated news on people's perceptions and attitudes, and the impact of VR (virtual reality) advertising.







# 強化微電子領域研究 Furthering Research in Microelectronics

The State Key Laboratory of Analog and Mixed-Signal VLSI of the Institute of Microelectronics of UM has long been engaged in cutting-edge research in electronics and other related emerging areas, boasting world-leading capabilities in state-of-the-art chip technologies. Last year, UMDF allocated funding for various pioneering research projects in the field of integrated circuits as designated by the donors, covering areas of data conversion, signal processing, wireless communications and power electronics controller ICs. The funded projects achieved good results in the past year. The foundation will continue to support the university in cutting-edge research on ICs to provide intellectual contribution to the development of IC technologies and industries in the Greater Bay Area.

# 學生及書院發展

# Development of Students and the Residential Colleges

基金會於2022年按澳大住宿式書院運作的實際需要,加大書院發展的資助,使大學有更多資源發展書院教育,優化書院內的教學活動和改善學生生活環境。此外,基金會亦有撥備款項支持學生事務部舉辦愛國教育活動,進一步推動大學實踐全人教育。

To meet the practical needs of UM residential colleges, the foundation has increased its funding for college development in the past year, providing the university with more resources to develop college education, enhance teaching and learning activities in the colleges and improve students' living environment. The foundation has also provided funding to support the Student Affairs Office (SAO) in organising patriotic education activities, further facilitating the RCs in implementing whole-person education.









#### 支援書院優化軟硬件設施 Supporting the RCs in Enhancing Hardware and Software Facilities

The foundation supported RCs to renew facilities such as sports equipment, musical instruments, learning equipment and laundry equipment in an orderly manner. In addition, RCs purchased language enhancement items/courses and various equipment for the enhancement of learning and living environment, to facilitate the RCs to implement the five major educational measures with upgraded hardware for RC staff and students. And the organization of various student activities, the Student Leadership Training Camp, the Service Learning Programme and the Fine Arts and Crafts Exhibitions helped students develop competencies in teamwork and collaboration, service and leadership, responsible citizenship, and cultural engagement.

#### 支持書院購置樂器、升級音響設備及投影機等

Support RCs to purchase musical instruments, upgrade audio visual systems and projectors, etc



# 住宿式書院獎勵計劃 Residential College Award Scheme

基金會一直以來按捐贈者的意願,支持住宿式書院的社群生活。為支持書院實踐全人教育的理念及獎勵表現優異之宿生,基金會於2022年對繼續向10所書院撥出共100萬澳門元的獎學金,共有243名學生學生獲獎。住宿式書院獎學金能有效鼓勵學生積極參與書院學習體驗課程及活動,培養學生的勝任力,為其所屬之住宿式書院作出貢獻。

The UMDF has been supporting the community life of residential colleges according to the wishes of donors. In order to support the RCs' implementation of whole-person education and to reward outstanding students, the Foundation continued to provide scholarships totalling MOP1 million to the ten RCs in 2022, with a total of 243 students receiving awards. The scholarships for residential colleges are effective in encouraging students to actively participate in the RCs' learning experience programmes and activities They also help develop students' competencies and encourage students to contribute to their respective RCs.

關注學生的心理健康 Supporting the Mental Health of Students



在過去3年疫情的影響下,澳大一直密切關注學生的心理健康發展,透過各種計劃以加強對學生的關顧,包括提供心理諮詢服務、輔導培訓課程、增加心理輔導員、舉辦預防性工作坊等。

UM has been paying close attention to students' psychological development and mental health over the past three years due to the impact of the pandemic. Various programmes have been offered to strengthen pastoral care for students, including counselling services, counselling training courses, additional counsellors and preventive workshops.

基金會十分重視澳大學生的身心健康發展,支持"一步步心理健康應用程式" 及"書院心理健康諮詢服務計劃"等特定資助項目,以協助院生在不同學習階段 有更好的適應及發展。

上學期有不少學生因人際關係的議題求助,例如因疫情網課安排及活動減少, 同學間減少接觸而錯失了有效擴展人際關係的時機等。因此,在諮詢過程中, 諮詢師與同學探討如何在面授課開始後重新建立人際網,加強同學的動機與社 交技巧。

大學的心理諮詢服務對於學生的個人成長和規劃尤其重要,基金會將持續支 持校方為有需要的學生提供更多心理諮詢和相應的支援服務,以提升同學們 的身心健康。

The foundation attaches great importance to the physical and mental well-being of UM students. It has designated funds for projects such as Step-by-Step (SBS) Digital Mental Health Programme and RCs' mental health counselling services scheme with the aim of supporting them for better adaptation and development in different learning stages.

In the last semester, many students sought help for interpersonal issues such as decreased interactions with other students and hence missed opportunities for effective networking due to online classes and reduced activities during the pandemic. During the conversations, the counsellor explored with the students about ways to re-establish their social networks after face-to-face classes were resumed, which required them to strengthen their motivation and social skills.

The psychological counselling services of the university play an important role in the students' personal growth and life planning. The foundation will continue to fund the university in providing more counselling and relevant support services to students in need for the betterment of their physical and mental wellness.

# 在新冠肺炎影響下向師生提供關顧服務 Providing Pastoral Care Services to RC Students

由於2022年澳門仍然實施多項新冠肺炎的防疫措施, 而新春假期期間仍有學生在書院留宿,透過基金會的資 助,書院在新春期間舉辦系列關顧活動,使留校學生感 受到節日氣氛和書院對他們的關懷。

在基金會的支持下,各書院由2022年1月至2月共舉辦了66個活動,有1,921學生人次參加。活動形式多樣化,包括派發福袋、團年飯、其他農曆新年慶祝活動、本地深度遊體驗、文化藝術活動、體育運動活動及團體生活等。學生們也感謝書院在春節期間的特別安排,讓他們在學校度過一個溫馨的新春假期,有助加強學生與書院間的連繫及歸屬感。此外,基金會亦資助大學購買了1000盒快速抗原測試劑,分配給教職員、宿舍及書院學生,以有效篩查具感染風險的人士,防止疫情在校內傳播。

With a number of preventive measures against the Covid-19 epidemic still in place in Macao in 2022 and some RC students staying on campus during the Chinese New Year (CNY) period, the RCs put together a series of pastoral care activities during the CNY recess with the support of the UMDF so that those students could enjoy the festive vibes and pastoral care from the RCs.

With the support of the foundation, a total of 66 activities were organised by the RCs from January to February 2022, with 1,921 student participants. The various activities included the distribution of lucky bags, reunion meals, other Chinese New Year celebrations, extensive local tours, arts and culture activities, sports, and group activities, among others. The students were grateful to the colleges for those special arrangements, which gave them a warm Chinese New Year holiday, strengthening their bonds with and sense of belonging to the RCs. In addition, 1000 rapid antigen test kits were purchased and distributed to staff, PGH and RC students, aiming to effectively find out staff and students with risk of infection to prevent the transmission in campus.





#### 強化愛國愛澳教育 Strengthening Love Motherland, Love Macao Education

為培育及發展澳大學生的愛國情懷,加強 學生對祖國的認識,提升其民族自豪感, 學生事務部在基金會的資助下,於2022年 完成了兩項愛國教育活動,包括澳門大學 國旗儀仗隊物資購置以及支援學生會戲劇 社舉辦活動。

In order to foster patriotism among UM students, strengthen their understanding of the motherland, and enhance their national pride, the Student Affairs Office (SAO) completed two patriotic education activities in 2022 with the support of the foundation, including the purchase of materials for the UM National Flag Team and the assistance to the Drama Society of UM Student Union in its event organisation.

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With the funding of the foundation, the university purchased uniforms for the team members of the National Flag Team, so that they can carry out regular training and flag-raising ceremonies in neat and consistent uniforms. This helps to create an image of uniformity and effectively promote the National Flag culture. Apart from carrying out the stately and solemn flag-raising ceremony on important occasions, the UM National Flag Team also organises activities to extensively promote the National Flag culture to Macao youths. In 2022, the team hosted a series of seminars in the residential colleges of UM and various local schools of Macao, where team members visited these places and shared their experience with the students.







Shao Xianhui, the fourth and fifth president of



## 走進澳大國旗儀仗隊 Getting to Know the University of Macau National Flag Team

澳門大學國旗儀仗隊於2018年成立,現時 有超過60名隊員,由來自不同專業的本科 生和研究生組成。經歷過去五年的發展, 國旗隊的架構日趨完善,除了負責日常訓 練和執行任務的基礎隊伍外,也建立了負 責公關和新媒體的小組以及負責文字工作 的編委會等。

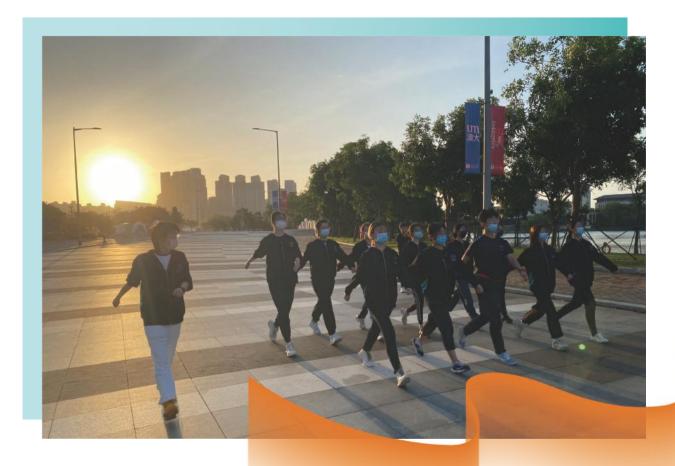
the UM NFT

The University of Macau National Flag Team (NFT) was established in 2018 and currently has more than 60 members, composed of undergraduates and postgraduates from different majors. After five years of development, the National Flag Team has now an enhanced structure. In addition to the basic team responsible for daily training and the execution of tasks, it has also set up a group devoted to public relations and new media, and an editorial committee for copywriting.

#### ▶ 加入國旗儀仗隊的最大得著 The Most Rewarding Aspect of Joining the National Flag Team

我們在2023年4月對澳大國旗儀仗隊第三 屆隊長沈悅同學和第四、五屆隊長邵憲薈 同學進行了一次專訪。沈悅同學為數據科 學(教學分析)的碩士學生,她認為長時 間在國旗隊的培訓,練就出自己堅毅的品 格,也令自身的組織能力、溝通能力和合 作意識得到了明顯的提升。 In April 2023, we conducted an interview with Shen Yue, the third president of the UM National Flag Team, and Shao Xianhui, the fourth and fifth president of the team. Shen Yue is a postgraduate student in Data Science (Analytics in Teaching and Learning). She believed that the long-time training in the NFT had cultivated her perseverance, organisational skills, communication skills and teamwork awareness.

邵憲薈同學是中國語言文學系的大三學 生,她表示加入國旗隊後提升的不只是 專業能力,更多的是綜合素質,例如個人 心理、學術水平的提高。作為文學系的學 生,邵隊長特別重視透過文字和新媒體, 呈現國旗隊的儀仗精神,寫好中國故事, 加入國旗隊為她帶來了很好的實踐素材。 Shao Xianhui is a third-year undergraduate student in the Department of Chinese Language and Literature. She said that after joining the NFT, she had improved not only her professional ability but also her overall quality, such as mental strength and academic proficiency. As a student majoring in language and literature, she is especially committed to presenting the spirit of the National Flag Team and stories about China by using her words and new media. Joining the team has provided her with excellent materials for practicing this skill.



#### ▶ 儀仗隊日常訓練的情況 Daily Training of the Team

為了配合本科生和研究生不同的上課時間,邵隊長表示他們一般在週一至週五其中一天,早上六點至八點進行訓練,而每星期週日亦會進行大訓。訓練內容包括國旗手培訓和刀手培訓,例如基礎動作和隊列齊步行進等。由於博士生一般需要在辦公時間內工作,本科生也各有不同的上課時間,因此早起訓練相對來說對各自的工作和學習影響較少。

In order to accommodate the different class schedules of undergraduate and postgraduate members, President Shao said they routinely conducted training from 6:00 am to 8:00 am on one of the days from Monday to Friday, and a large-scale training on Sunday every week. Flag bearers and sword commanders need to practice basic movements and marching in formation. Since doctoral students generally need to work during office hours, and undergraduates also have different class schedules, this early morning training arrangement has relatively less impact on their work and study.

# ▶ 擔任國旗儀仗隊隊長最難忘的事情和挑戰 The Most Memorable Event and the Biggest Challenge as the President

President Shen said the pandemic had brought many challenges to the training of the team. They resorted to many alternative methods to maintain the standard of flag-raising during the pandemic, such as dividing the team members into small groups for training and even trying out virtual flag raising. Because of this, the team members also developed the ability to perform live broadcasts. In times of recurrent and serious Covid outbreaks, everyone stayed in their dormitories with no social interactions and no face to face contact. President Shen observed that everyone was not in a good mood during that time, and thought regular training could cheer them up. From then on, the team began to organise small regular meetings to strengthen the team culture. This kind of team-building activity has now become a regular practice, helping to cultivate the tacit understanding among members of the team.



邵隊長認為最難忘的任務就是走進書院和 走進中小學系列,因為這是一個很難得的 機會,讓大家認識真正的澳大儀仗隊。走 進校園推廣,隊伍不但要具備基礎技能, 更要傳達愛國愛澳和儀仗精神,以及基本 法和國旗等知識。有中小學國旗隊的成員 對他們的到訪十分雀躍和投入,花了很多 時間練習升旗等技巧,學生們的進步讓邵 隊長感到最難忘。

President Shao regarded the series of promotional activities in residential colleges as well as in primary and secondary schools as the most memorable task because it was a rare opportunity for people to get to know the UM National Flag Team. When carrying out promotional activities in schools, in addition to showing their basic skills, the members must also be able to convey the spirit of loving the nation and loving Macao and the spirit of the National Flag Team, as well as disseminate knowledge of the Basic Law and the national flag. Some members from the national flag teams of the primary and secondary schools were very excited about UM NFT's visit and spent a lot of time practising flagraising skills. President Shao was most impressed by the progress of the students.

#### ► 寄語各位澳大學弟學妹 A Message to Younger Peers at UM

雖然每次早起訓練都很辛苦,沈隊長覺得儀仗隊讓她收獲到不少書本以外的知識,並培養 出堅毅的精神。她希望同學們可以把國家的發展和自己的發展融合在一起,時刻了解國家 的方針,早著先機。

今年適逢澳大國旗儀仗隊成立五週年,邵隊長希望儀仗隊可以成為大灣區愛國愛澳的品牌,並推動灣區青年團體,宣揚國旗文化和儀仗精神。她寄語學弟學妹們,好好利用在大學的時間,在投身社會前積累更多技能,為國家和地區的進步貢獻自己的力量。

Although waking up early for morning training is very hard, President Shen felt that joining the team had enabled her to gain a lot of knowledge outside the textbooks, and cultivate a strong spirit. She hoped that students could integrate their own growth into the development of the country, and always kept abreast of national policies so as to grasp opportunities early.

This year marks the fifth anniversary of the establishment of the UM National Flag Team. President Shao hoped that the team could become a brand of patriotism in the Greater Bay Area, and further encourage youth organisations in the region to promote the national flag culture and the spirit of the National Flag Team. She called on her fellow students to make good use of their time in university to acquire more skills before starting their careers, and contribute to the development of the country and the region.





#### ► 五四青年節:《一揚風潮浪疊浪》 Commemoration of the May Fourth Movement: Wave after Wave

澳門大學學生會戲劇社 - 五四青年節:《一揚風潮浪疊浪》計劃的劇目是澳門青年的原創作品,由澳大學生主動籌辦和製作,邀請了澳大教授作顧問,有效促進澳大學子的全人發展及藝術素養。劇目從社會現況出發,分別討論傳媒道德、追夢創新、公平自由、時代傳承等主題,貫通連結五四精神,剖析青年成長中面臨的責任、夢想、公義、自我、死亡等人生課題,引發青少年的深省與警悟,互勉青年學子關心祖國、積極自強的堅毅精神。

The Drama Society of the University of Macau Students' Union (UMSU) in commemoration of the May Fourth Movement: The play Wave after Wave is an original work by Macao youths. It is organised and produced by UM students on their own initiatives, with UM professors as consultants. The production significantly enhances the all-round development and artistic quality of the UM students. The play is set in the scene of modern day society. It discusses topics such as media ethics, dreams and innovations, fairness and freedom, and passing down values across generations. It echoes the core values of the May Fourth Movement and analyses themes such as responsibility, dreams, justice, self-identity and death, which are common life issues faced by young people in the course of growing up. The play encourages reflections in the young audience and urges them to keep abreast of the nation's current affairs and strive for constant self-improvement and perseverance.

# 推動產學研發展

# Promoting Industry-academia-research Development

在2018年開展"創新創業資助計劃"的基礎上,2022年3月基金會再次撥備500萬澳門元 啟動第二期的計劃,期望鼓勵更多澳大人投身科創實踐活動,加強校內的創新創業氛圍。基金會於2022年9月按澳大的專家評審意見並按創新創業中心的推薦,批出210萬澳門元 用以支持進駐大學創新創業中心的11個初創項目,技術及背景涵蓋多個範疇,包括文化創意、材料工程、資訊科技、中醫診療、醫藥製劑和治療等。

基金會一眾成員於2022年11月參與了由大學創新創業中心主辦的"澳門大學創新創業展示日",活動展出的澳大初創公司及科研成果項目多達30個,吸引了澳門各高等院校及社會各界人士到場了解,讓校內外更多人士了解澳大的產學研和創業孵化的最新發展,培育良好的雙創氛圍,促進科創項目的商業化發展。





Building on the Innovation and Entrepreneurship Funding Scheme launched initially in 2018, the foundation has further allocated MOP5 million in funding for the second phase in March 2022, in hope of incentivising more members of the UM community to engage in science and innovation practice and creating a more vibrant environment for innovation and entrepreneurship. In September 2022, based on the evaluation by UM experts and recommendation by the Centre for Innovation and Entrepreneurship (CIE), the foundation allocated MOP2.1 million to support 11 start-up projects to be incubated in CIE. The projects cover a variety of technologies and sectors including culture and creativity, materials engineering, information technology, Chinese medicine diagnosis and treatment, and pharmaceutical formulation and treatment.

In November 2022, members of the foundation attended the UM Innovation & Entrepreneurship Open Day organised by CIE. The event, which showcased as many as 30 start-ups and technological achievements incubated by UM, attracted participants from Macao tertiary institutions and all sectors of the community. The event allowed people from inside and outside the UM community to learn about the latest development of UM's industry-academia-research and incubation endeavours, as well as fostered a conducive environment for innovation and entrepreneurship and for the commercialisation of the technological and innovation projects.

澳大的創新創業團隊積極參與校外的展覽和行業配對活動,包括"2022年澳門第八屆工展會"、"2022澳門科技周暨創科成果展"等,並且在地區性及全國性的創新創業比賽中 屢獲殊榮,以下初創企業的服務或產品已成功與行業對接。

#### a) 澳門芝寶健康科技有限公司

公司透過中醫理論,研發乾眼症的保健產品,包括護眼膳食補充劑、蒸汽眼罩及霧化薰蒸液等,2022年4月開始在京東、抖音和自有商城等電商平臺上銷售,並進駐了橫琴粵澳中醫藥產業園。

#### b) 澳力信科技有限公司

公司以自主研發的核心技術開發首款環境穩定型LixSi基負極產品,針對電動車電池成本高、壽命短等問題,以提升電動車鋰電池的容量和壽命。該公司已成功與廣州南沙的香港科大霍英東研究院合作,建立了小批量試行生產基地,2023年有望可擴大經營規模。

#### c) 澳門寵物紀元有限公司

公司把將啤酒工業產生的廢棄麥芽渣轉化成環保、健康及優質的貓砂產品。項目在半年內接連在原料配比實驗、產品原型測試、小規模化生產等階段不斷出現突破和優化改造。







It is noteworthy that a number of start-up teams under incubation in UM have also won awards in regional and national innovation and entrepreneurial contests as well as participated in exhibitions such as the 8th Macau Industrial Products Show and the Science and Technology Week 2022 cum Exhibition of Achievements in Science and Technology Innovation. The below services or products of the start-ups have been successfully matched with the industry.

#### a) Macau Chiherbal Health Technology Company Limited.

The company researches on and develops eye care products for dry eye syndrome based on Chinese medicine theories. Products include dietary supplements, steam eye masks and fumigation solution and have been available on e-commerce platforms including JD.com, Douyin and the company's self-managed online store since April 2022. The company also has an office in the Traditional Chinese Medicine Science and Technology Industrial Park of Co-operation between Guangdong and Macao in Henggin.

#### b) AOLISIN Technology Limited.

The company uses a self-developed core technology to make the first LixSi anode product that has high environmental stability. It aims to address the pain points of electric vehicle (EV) batteries, such as high cost and short life, and to enhance the capacity and battery life of EV lithium batteries. The company has successfully partnered with the HKUST Fok Ying Tung Research Institute in Nansha, Guangzhou, to establish a factory for small volume trial production and is expected to expand its scale of operation in 2023.

#### c) BioPetech (Macau) Limited.

The company upcycles brewer's spent grain, a waste production from beer production, into eco-friendly, natural and quality cat litter products. Within a period of six months, the team made constant breakthroughs and improvements in the process consisting of product formulation, prototyping and small scale production.

# 中葡交流與合作

# Exchange and Collaboration between China and Portuguese-speaking Countries

# 中葡關係珍貴手稿入藏澳大圖書館 UM Library Preserved the Rare Manuscript of Great Significance to the Study of Early Sino-Portuguese Relations

基金會於2022年按校方建議撥出經費採購一份18世紀前期關於中葡關係的珍貴手稿一葡萄牙國王若昂五世致中國雍正皇帝的使館正式報告全文,這份珍貴的一手史料詳細記錄了葡國使臣麥德樂(Alexandre Metelo de Sousa e Meneses)朝覲雍正皇帝的行程,對瞭解中國當時的政治、經濟、文化及葡萄牙人對中國的認識具有重要參考價值,對中葡早期關係史研究意義深遠。

In 2022 the foundation allocated funding upon the university's proposal to acquire a rare manuscript from early 18th century that details the arrival of the Portuguese ambassador Alexandre Metelo de Sousa e Meneses in Beijing via Macao to visit the Yongzheng Emperor. The rare manuscript would provide an important reference point for understanding the politics, economy, and culture of China at the time, as well as the Portuguese's understanding of China. It is of great significance to the study of early Sino-Portuguese relations.



《葡萄牙國王若望五世特使麥德樂朝覲雍正皇帝紀行 (1725-1728)》

The Official Report of the Embassy of King John V of Portugal to Emperor Yongzheng in 1725–1728



這份手稿將永久保存並展示在澳大圖書館古籍室作為教學和研究的原始資料,對大學和澳門社會在相關學科領域的學習和研究有很大的意義和益處,同時亦增加大家對中國和葡萄牙的歷史和關係的認識和關注。為了讓更多澳門本地和世界各地的人士更便捷地閱讀這份手稿,圖書館已經將其電子化並放在網上供免費閱覽。為保護這份珍貴手稿,圖書館製作了一份手稿複製品,供展示之用。圖書館亦於2022年6月舉行了手稿入藏儀式,豐富了澳大圖書館的古籍收藏。

澳大圖書館為該手稿過錄了一份初步的葡語電子文本,並計劃於2023年出版中譯本。基金會將繼續鼓勵大學好好利用相關資源進行後續的交流和合作活動,或開展文本翻譯、主題展覽、講座、研究會等教學研活動,進一步促進中國與葡語國家關係和文化交流。



澳大圖書館製作的手稿影印本 Replica of the manuscript created by UM Library

This manuscript will be permanently preserved and displayed in the Rare Book Collection Room in UM Library and will be available as a source material for teaching and research. It benefits the university and the Macao community in the study and research of related disciplines. It will also immensely raise the readers' awareness and interest in the history and relations between China and Portugal. In order to provide easier access for a wider audience from Macao and around the world, this manuscript has been digitised and uploaded for free access online. To preserve the rare manuscript, UM library made a replica of it for display purpose. UM Library held a preservation ceremony in June 2022, this addition is expected to enrich the rare book collection of UM Library.

UM Library has produced a preliminary electronic transcript of the manuscript and plans to publish its Chinese translation in 2023. The foundation will continue to encourage the university to make good use of the new resource for subsequent exchange and collaboration, potentially in the form of academic or research activities such as translation, exhibitions, lectures and seminars, in order to further promote the relations and cultural exchange between China and Portuguese-speaking countries.

## 資助在職學生修讀葡文博士課程 Financial Aid for Working Students Enrolled in PhD Programmes in Portuguese

澳大人文學院葡文系於 2018/2019 學年開辦了"哲學博士學位(應用語言學-葡語)及(文學及跨文化研究-葡文)課程之在職教師學習計劃",旨在針對現職葡萄牙語教師及相關領域的從業人員提供專業的在職培訓。基金會從2020年起,支持5位在職學生修讀上述課程,以配合本澳、內地與葡語國家發展合作而對葡語人才的需求。

In the academic year 2018/2019, the Department of Portuguese of the Faculty of Arts and Humanities launched a study programme for in-service teachers to enrol in the PhD in Applied Linguistics (Portuguese) programme and the PhD in Literary and Intercultural Studies (Portuguese) programme. The objective is to provide professional on-the-job training for those working as Portuguese language teachers and in related fields. From 2020 onwards, the foundation has supported five working students of the abovementioned programmes to complete their studies. This will nurture Portuguese-speaking talent needed for cooperation between Macao, the Chinese mainland and Portuguese-speaking countries.

# 設立"飛歷奇博士最佳葡語學術論文獎" Establishing the 'Henrique de Senna Fernandes Best Portuguese Academic Paper Award'

為獎勵澳大以葡語撰寫的優秀碩士/博士論文,提高研究生葡語的學術水平以及研究能力,基金會按照大學的建議,設立了"飛歷奇博士最佳葡語學術論文獎",期望達成與葡語系國家的院校合作儲備更多優秀中葡雙語人才的目標。此外,希望透過飛歷奇博士卓著的藝術及人文精神,以及為促進澳門文化發展所作出的貢獻,鼓勵學生投身於葡萄牙語的學習和研究。

To recognise quality master's theses and doctoral dissertations written in Portuguese, and to improve graduate students' academic and research abilities in Portuguese, upon the proposal by the university, the foundation has set up the 'Henrique de Senna Fernandes Best Portuguese Academic Paper Award'. The objective is to foster more outstanding bilingual talent for the cooperation with institutes in Portuguese-speaking countries. It is also aimed at encouraging students to engage in the study and research of the Portuguese language with Dr Henrique de Senna Fernandes's outstanding artistic and humanistic spirit and his contribution to the cultural development of Macao.

# 社會服務

# **Serving the Community**

# "STEM 40"科普活動計劃 STEM 40 Project

在本澳金融機構的特定資助下,澳大科學 暨工程科普推廣中心和校友及發展辦公室 合辦"STEM 40"科普活動計劃,旨在推廣 科普,培養中學生在科技領域的跨學科運 用能力,激發他們的創新潛能。

2022年舉辦了實驗室參觀及動手小實驗、中小微企交流、中銀科創菁英挑戰賽、頒獎禮及作品展。"STEM 40"一系列的活動一方面能夠支持推動本地中小學科普教育的工作,建立起一個可持續發展的培訓平台,培養和儲備人才;另一方面能夠展現大學在科創人才培育及產學研實踐方面的成果。

With the designated funding granted by Macao financial institutions, the Centre for Science and Engineering Promotion and the Alumni and Development Office jointly organise the STEM 40 project, which is aimed to promote science and help local secondary students apply their interdisciplinary knowledge of science and technology, stimulate their creativity and discover their potential.

A series of activities were organised including laboratory tours and hands-on experiments, SMEs exchanges, BOC STEM Talent Challenge, award presentation ceremony and project exhibition in 2022. The STEM 40 programme, on one hand, supports the promotion of science education in local primary and secondary schools and helps develop a progressive training platform and reserve for scientific and tech talents, and on the other hand, showcases the university's achievements in nurturing such talents and in industry-academia-research development.



U.M.D.F. 40



由於項目獲得良好的成效,大學與相關合作機構繼續於2022年9月至2023年6月開展新一輪活動,包括"科普外展計劃"、實踐科學活動及"中銀科創菁英挑戰賽"。外展計劃於9月至10月份走訪了勞校中學、培正中學、鏡平學校及教業中學,團隊先後到四間學校進行"光的足跡"、"無人機"及"機械人"科普實驗,吸引超過500名中小學師生參與,加強學生對科學與工程知識的理解,及提升自身的學習興趣。

In view of the success of the programme, the university and the partner organisations have planned a new round of activities from September 2022 to June 2023 including the On-The-Go Project, hands-on experience and the BOC STEM Talent Challenge. In September and October, the On-The-Go project was carried out in Lou Hau High School, Pui Ching Middle School, Keang Peng School and Kao Yip Middle School, where the outreach team conducted science experiments with various technologies, including spectral display, quadrotor and robots. The activities attracted over 500 primary and secondary students and teachers. It increased students' understanding of science and engineering and their interest in learning.



#### 憲法與基本法教學推廣 Teaching and Promotion of the Constitution and the Basic Law



為進一步深化憲法與基本法在澳門高校、中小學以及社會上的教育、推廣和理論研究工作,基金會支持澳門大學與澳門基本法推廣協會,結合社團在識法普法的推廣經驗,以及高校在授法研法的學理基礎上,共同合作建構憲法與基本法教學推廣系統,做好憲法和基本法的社會普及、學校教育和理論研究的工作。

為達到預期效果,在教學方面,憲法與基本法研究中心於校內為學生提供通識課教學,2018年至2022年第一學期末已完成126班,約5,735名學生參與了有關兩法的課程。另一方面該中心亦支援政府部門、其他高等院校及澳門基本法推廣協會的授課任務。在培訓方面,中心承擔了中小學教師的兩法培訓工作,成效顯著。此外,為培養更多愛國愛澳人才,中心與澳大書院合辦兩法講座活動,並舉辦課程培訓了46位書院教職員。去年更合辦兩法推廣優苗培訓課程,選出基本法推廣大使,讓同學們有機會到本澳各中小學開展兩法推廣活動。

此外,中心亦受到不同機構或單位如國家教育部、香港特區政府等委託開展多項相關的課題研究。2022年8月大學完成出版《中國憲法簡明讀本》,供澳門公務員和澳門大學授課用,此教材得到中央電視台和澳門中聯辦官方網站推薦。明年將承辦中國法學會指導的"第七屆粵港澳法學研討會",增強對憲法、基本法和"一國兩制"理論的學術交流。

In an effort to further deepen the education, promotion and theoretical research of the Constitution and the Basic Law in higher education institutions, schools and the community of Macao, UMDF supports University of Macau and the Macau Basic Law Promotion Association combine the association's experience in knowledge dissemination and promotion with the university's expertise in academic teaching and research in law. The two parties will work together to build a comprehensive system for the promotion and education of the Constitution and the Basic Law in the local community and schools and for their theoretical research.

To achieve the desired objectives, in terms of education, the Centre for Constitutional Law and Basic Law Studies provides General Education courses on the Constitution and the Basic Law for UM students. Lectures were given to 5,735 students in 126 classes from 2018 to the first semester of 2022. The centre also supports government departments, other tertiary institutions and Macau Basic Law Promotion Association in offering relevant courses. In terms of training, the centre undertakes the training of primary and secondary school teachers on the Constitution and the Basic Law. In addition, to fortify national and local identity, the centre has joined the residential colleges in hosting seminars on the Constitution and the Basic Law, and offered relevant training to 46 RC staff members. Last year a training programme was launched, where students were selected as Basic Law Ambassadors to carry out promotional activities in local primary and secondary schools.

Furthermore, the Centre has been commissioned by various organisations and departments such as the Ministry of Education and the Hong Kong SAR government to carry out research on a number of topics. The book Concise Readings of the Chinese Constitution was published in August 2022, which can be used as teaching material by Macao civil servants and UM and has been recommended by CCTV and the Liaison Office of the Central People's Government in the Macao SAR. In the coming year, the centre will host the 7th Legal Forum of Guangdong, Hong Kong and Macao under the guidance of China Law Society, which is aimed at promoting academic exchange on the Constitution, the Basic Law and the 'One Country, Two Systems' principle.

## 獎勵優秀學生

# **Rewarding Outstanding Academic Performance**

基金會一直以來按捐贈者的意願及運用其投資收益,支持大學設立各項獎/助學金,獎勵表現優秀學生。若將住宿式書院獎學金的獲獎學生計算在內,2022年獲得基金會資助的獎/助學金學生超過400名,資助總額約420萬澳門元。

As per the designation of the donors and making use of its investment income, the foundation funds the establishment of various scholarships and assistantships to reward students with outstanding performance. Including the recipients of RC scholarships, more than 400 students were awarded scholarships or assistantships funded by the foundation in 2022, which involved a total funding of about MOP4.2 million.

# 澳門大學理工科課程獎學金 STEM Scholarship

在基金會的支持下,澳門大學於2022/2023學年設立"澳門大學理工科課程獎學金",吸引優秀本地學生入讀理工科範疇的課程,包括工程、計算機科學、物理及化學、人工智能及物聯網等。去年共有48名學生獲獎,已發放的資助金額約95萬澳門元。

With the support of the foundation, the university established the 'STEM Scholarship' in the academic year 2022/2023, with the aim of attracting outstanding local students to enrol in STEM programmes such as engineering, computer science, physics, chemistry, artificial intelligence and Internet of Things (IoT) programmes. A total of 48 students were awarded the scholarship last year, with a total funding of MOP950,000.

#### 澳門大學理工科課程獎學金得主 Recipient of STEM Scholarship

#### 李家浩 LEI KA HOU



我是2022/2023學年入讀理學碩士學位(數學)課程的學生,十分感謝澳門大學發展基金會頒發的澳門大學理工科課程獎學金。

我選擇澳大是由於我喜歡英文作為授課語言的學習環境。我是一名中學數學教師,明白到"活到老、學到老"的重要意義,而澳大正給了我這個寶貴的學習機會。

我修讀的課程具有一定挑戰性,第一學期選修了"Real Analysis"及"Advanced Numerical Linear Algebra"。教授們講課清晰,講授各科目內容在科研上的應用。工餘時,我會複習學習內容並向教授們請教。讀論文、做研究是研究生生活的重要環節,我感恩遇到一群熱心的教授,他們都很樂意引導學生做課題,這也為我的澳大生活增添色彩。

I am a student of the Master of Science in Mathematics programme enrolled in the academic year 2022/2023. I would like to thank the University of Macau Development Foundation for awarding me the UM STEM Scholarship

I chose the University of Macau because I like its learning environment with English as the medium of instruction. As the saying goes, you are never too old to learn. A secondary school mathematics teacher myself, I understand the importance of lifelong learning and I appreciate this precious opportunity UM offered me to pursue my study.

The courses I took were quite challenging. I completed Real Analysis and Advanced Numerical Linear Algebra in the first semester. The professors explained the subject matter clearly and elucidated its applications to research. After work, I reviewed and consulted the professors on what I had learned. Reading papers and conducting research are important aspects of my postgraduate life. I am grateful with the fact that I have met a group of professors who are enthusiastic and willing to guide students in their projects. Their presence has enriched my life at UM.

#### 澳門大學理工科課程獎學金得主 Recipient of STEM Scholarship

#### 秦梓超 QIN ZICHAO



我就讀理學士學位(土木工程)課程,獲得澳門大學理工科課程獎學金對我來說是個非常珍貴的機會。在申請過程中我努力展示自己的優點和特長,獲獎讓我感到非常自豪和興奮,讓我更有信心,相信自己能做得更好。我會好好運用獎學金,部分用來支付學費及購買學習用品,如書籍及筆記型電腦。剩餘的獎學金將用作生活費,減少生活壓力,讓我可更專注於學業。

最後,我想再次感謝澳門大學發展基金會,感謝他們對我成就的認可和支持。我將繼續努力學習,將這份榮譽轉化為更好的成績和更深入的學習,用實際行動回報社會,為實現個人和國家的發展作出貢獻。

I am enrolled in the Bachelor of Science in Civil Engineering programme. The UM STEM Scholarship provides me with a precious opportunity. I worked hard in the application process to showcase my strengths and talents. Winning the scholarship has made me very proud and excited, giving me more confidence to achieve higher goals. I will make good use of the scholarship, part of which will be used to pay for tuition fees and purchase books and a laptop to facilitate my studies. The remaining will be used for living expenses, which will reduce my financial burden and allow me to focus more on my studies.

Lastly, I would like to thank the University of Macau Development Foundation again for its recognition of and support for my achievements. I will continue to work hard and cherish this honour as a motivation to achieve better study results and further my learning. This will enable me to give back to the community with actions, promote personal growth and contribute to the development of the nation.

### 教育學院中文教育本科生到內地交流獎學金 Scholarships to Students of the Faculty of Education to Participate in Exchange Programmes in Chinese Mainland

為鼓勵中文教育本地本科生赴內地大學交流學習,藉以培養專業的中文教師,基會自2021年起資助大學設立"教育學院立"教育本科生到內地交流獎學金",與完本科生到內地交流獎學金",與明四年,2022年共有5名學生獲獎中期四年,2022年共有5名學生獲獎中的節人學、華東師範大學進行交流。該計劃不但提升學學中的能力。 通話語言技能、中文表達與明節等等等。 通話語言技能、中文表達與學的能力。 生更有技巧地學習賞析中文,提高學生教與學的能力。 To encourage local undergraduate students from the Chinese Education programme to participate in exchange studies in mainland universities, the foundation has funded the 'Scholarships to students of the Faculty of Education to participate in exchange programmes in Chinese Mainland' since 2021. In 2022, five students were awarded the 4-year scholarship for exchange studies in Beijing Normal University, East China Normal University and Central China Normal University. The programme not only enhances the students' mandarin proficiency, Chinese speaking, thinking and writing skills, but also deepens their knowledge in Chinese literature, so that they can learn to appreciate the Chinese language more efficiently and thus upgrading their teaching and learning abilities.







#### 教育學院中文教育本科生到內地交流 獎學金得主

#### 梁藝 LIANG YI

Recipient of Scholarships to Students of the Faculty of Education to Participate in Exchange Programmes in Chinese Mainland



這個學期用兩個詞總結,可以說是"機遇"和"挑戰"。"機遇"是對於一個師範生而言,來到華中師範大學交換是很難得機會,而且碰到了很多很棒的老師。"挑戰"就是本著多學多獲原則所選的10節課,課業負擔比較重。

在"教師口語"課上,老師讓我們就"明日之師今日始"發表演講,對於這個題目,我的思緒始於自己為什麼要做老師,到未來如何做一名好老師:我曾經在老師的話語中感受到愛,而我也想把這份愛傳遞下去。但是在未來成為一名好教師之前,我們要學會的除了熱愛,更重要的是專業。

如果時間允許,我希望這學期不要這麼快結束。感謝華中師範大學 對此次學期交流的策劃、安排,感謝在學習生活中遇到的老師、 同學、夥伴,後會有期,感謝澳門大學發展基金會提供的交流獎學 金,抵消了這一學期的學費和住宿費,讓我的經濟負擔沒有那麼重。 在未來的發展道路上,我將始終堅持初心,砥礪前行。

This semester can be summarised in two words, 'opportunity' and 'challenge'. 'Opportunity' means that an exchange programme to the Central China Normal University offers a rare opportunity for a preservice teacher. I encountered many excellent teachers during the exchange. 'Challenge' refers to the heavy workload of the ten courses I chose for I believe that the more I learn, the more I benefit.

In the 'Verbal Communication Skills for Teachers' course, the instructor asked us to give a speech on 'Tomorrow's Teachers Start Today'. To elaborate on this topic, I began to think about why I want to be a teacher and how to be an excellent one in the future: I once felt love in the words of my teachers and I want to pass on that love. But to become an excellent teacher in the future, we need to learn not just love, but more importantly, professional knowledge and skills.

If only time could slow down so that this semester would not end so soon. I would like to thank the Central China Normal University for planning and arranging this exchange. I am grateful to the teachers and students I encountered and the friends I made during my studies here. We shall meet again someday. I would also like to express my gratitude to the University of Macau Development Foundation for the exchange scholarship. It offset my tuition and accommodation fees for the semester, alleviating my financial burden. Going forward, I will stay true to my aspirations and keep forging ahead.

### 澳門大學湖北省醫護人員子女全免獎學金 Full Scholarship for Children of Medical Staff from Hubei Province

為向湖北省醫護人員的抗疫工作作出肯定,基金會自2020/2021學年起資助澳大設立"澳門大學湖北省醫護人員子女全免獎學金"。在嚴格甄選下,共有9位優秀學生獲頒發該項獎學金,當中7位獎學金得獎者之學業成績達到指定要求,並於2022/2023學年繼續享有獎學金。湖北學子們在澳大學習表現優秀並展現堅毅精神,日後一定學有所成,同饋社會及國家。

In recognition and appreciation of the contributions of the Medical Staff of Hubei Province during the pandemic, the foundation has allocated funding for the full scholarship for their children since the academic year 2020/2021. Following a rigorous selection, a total of nine outstanding students were awarded the scholarship. Seven of them have met the academic requirements and continued to receive the scholarship in the academic year 2022/2023. They have exhibited academic excellence and tenacity and will surely be able to contribute to the society and the country after they finish their studies

#### 澳門大學湖北省醫護人員子女全免 獎學金得主

#### Recipient of Full Scholarship for Children of Medical Staff from Hubei Province

I am a third year student of the Bachelor of Science in Electrical and Computer Engineering programme. I am very grateful to the University of Macau Development Foundation for granting me the Full Scholarship for Children of Medical Staff of Hubei Province. This has enabled me to realise my dream of completing my degree at the University of Macau. This valuable scholarship has greatly alleviated my family's financial burden and allowed me to concentrate on my studies and enjoy campus life.

At UM, I got to know many friends and teachers and participated in many memorable activities. The instructor who taught me academic English during my first year guided students with patience and effective pedagogical methods; my summer study tutors were kind and knowledgeable. I participated in debate competitions to harness my language skills and explored my interests and hobbies in archery classes. I am deeply indebted to the University of Macau Development Foundation for its support and financial assistance, which have enabled me to enjoy a wonderful university life.

#### 王曉通 WANG XIAOTONG



我是理學士(電機及電腦工程)學位課程的三年級學生,感謝澳門大學發展基金會給予我"湖北省醫護人員子女全免獎學金",讓我能夠實現在澳門大學完成學士學位課程的夢想。這份珍貴的獎學金大大減輕了家庭的經濟負擔,讓我能夠安心地投入學習和校園生活中。

在澳大,我結識到很多師長和朋友,還參加了許多令人 難忘的活動。大一學術英語課的老師循循善誘,耐心指 導;暑研的導師知識淵博,和藹可親;參加辯論賽學習 語言技巧,在射箭班探索興趣愛好等。這份獎學金讓我 能夠在澳大度過精彩的大學生活,我非常感激澳門大學 發展基金會的資助和支持。

# 學院獎助學金 Faculty Scholarships and Assistantships

基金會亦持續向社會科學學院撥出5萬澳門元的獎學金,共有5名學生獲獎。同時,為培育優秀的教育人才及鼓勵學生的優異表現,基金會自2022年起加大對教育學院的支持,將有關獎/助學金的資助金額提升至50萬澳門元,共有39名學生獲獎。

The foundation also continued to allocate MOP50,000 for a scholarship of the Faculty of Social Sciences and five students were awarded. In addition, to nurture excellent educators and encourage outstanding academic performance, the foundation increased the funding for FED scholarships and assistantships to MOP500,000 in 2022 and 39 students were awarded.

# 社會各界支持的特定獎學金及學術獎項 Designated Scholarships and Academic Prizes Sponsored by the Community

2022年,社會各界的機構透過基金會向59名成績優異的學生發放超過74萬澳門元的特定 獎學金及學術獎項。

In 2022, various organisations from different sectors of the community awarded designated scholarships and academic prizes through the foundation to 59 students with outstanding academic performance, involving a total amount of over MOP740,000.









#### 經基金會頒發的獎助學金及學術獎項

#### Scholarships and Academic Awards Issued through UMDF

獎助學金 / 學術獎項	Scholarship / Academic Prize	名額 No. of recipients
中國銀行學術獎項	Bank of China Academic Prize	8
中國銀行澳門分行精英運動員獎學金	Bank of China Macau Branch Elite Athletes Scholarship	7
中國銀行澳門分行澳門大學國旗儀仗隊 優秀隊員獎學金	Bank of China Macau Branch University of Macau National Flag Team Outstanding Team Members Scholarship	4
中國銀行獎學金	Bank of China Scholarship	17
大西洋銀行澳門大學信用卡獎學金	BNU UM Affinity Card Scholarship	5
曹光彪書院獎學金	Chao Kuang Piu College Scholarship	20
張崑崙書院獎學金	Cheong Kun Lun College Scholarship	25
鄭裕彤書院獎學金	Cheng Yu Tung College Scholarship	34
蔡繼有學術獎項	Choi Kai Yau Academic Prize	6
蔡繼有書院獎學金	Choi Kai Yau College Scholarship	20
蔡繼有獎學金	Choi Kai Yau Scholarship	2
教育學院助學金	Financial Support for FED Students	11
教育學院優秀博士論文獎學金	FED Scholarship for Outstanding Doctoral Thesis	2
教育學院優秀碩士論文獎學金	FED Scholarship for Outstanding Master Thesis	7
教育學院研究生優秀研究成果獎學金	FED Scholarship for Outstanding Postgraduate Research Outcomes	5
教育學院優秀服務獎學金	FED Scholarship for Outstanding Service	6
教育學院優秀實習教師獎學金	FED Scholarship for Outstanding Student Teacher	4
教育學院全人發展獎學金	FED Scholarship for Whole-person Development	4
霍英東珍禧書院獎學金	Henry Fok Pearl Jubilee College Scholarship	31
呂志和書院獎學金	Lui Che Woo College Scholarship	15
滿珍紀念書院獎學金	Moon Chun Memorial College Scholarship	18
馬萬祺羅柏心書院獎學金	Ma Man Kei And Lo Pak Sam College Scholarship	30
教育學院中文教育本科生到內地交流 獎學金	Scholarships to students of the Faculty of Education to participate in exchange programmes in Mainland	4
紹邦書院獎學金	Shiu Pong College Scholarship	33
何鴻燊東亞書院獎學金	Stanley Ho East Asia College Scholarship	17
田家炳獎學金	Tin Ka Ping Scholarship	10
澳門大學發展基金會社會科學學院 獎學金	University of Macau Development Foundation Scholarship for the Faculty of Social Sciences	5
澳門大學湖北省醫護人員子女全免獎 學金	University of Macau Full Scholarship for Children of Medical Staff from Hubei province	9
澳門大學理工科課程獎學金	Unviersity of Macau Scholarship for Science, Technology, Engineering and Mathematics (STEM) Programmes	48

<sup>\*</sup>按英文縮寫字母排序 In alphabetical order of English abbreviations

# 財務報告

## **Financial Statements**

澳門大學發展基金會 損益及其他綜合收益表 截至2022年12月31日止年度

	2022 澳門元	2021 澳門元
捐款收入	84,813,904	86,246,544
利息收入	57,255,570	47,177,261
股息收入	871,586	-
以公允價值計量且其變動計入當期損益的金融資產:		
公允價值變動	13,318,490	-
已實現及未實現之淨投資收益	-	5,097,366
匯兌(損失)/收益	( 2,707,190 )	4,886,808
	153,552,360	143,407,979
淨資助支出	( 21,289,211 )	( 15,493,756 )
法律及顧問服務費	( 822,830 )	( 529,000 )
銀行費用及其他支出	( 482,846 )	( 553,008 )
	( 22,594,887 )	( 16,575,764 )
稅前盈餘	130,957,473	126,832,215
所得稅費用	-	-
本年度盈餘	130,957,473	126,832,215

# UNIVERSITY OF MACAU DEVELOPMENT FOUNDATION STATEMENT OF SURPLUS Year ended 31 December 2022

	2022 MOP	2021 MOP
Donation income	84,813,904	86,246,544
Interest income	57,255,570	47,177,261
Dividend income	871,586	-
Fair value changes on equity investments at fair value through profit or loss	13,318,490	-
Net realised and unrealised gains on equity investments	-	5,097,366
Foreign exchange (losses)/gains	( 2,707,190 )	4,886,808
	153,552,360	143,407,979
Net grant expenditure	( 21,289,211 )	( 15,493,756 )
Legal and consultancy fees	( 822,830 )	( 529,000 )
Bank charges and other expenses	( 482,846 )	( 553,008 )
	( 22,594,887 )	( 16,575,764 )
SURPLUS BEFORE TAX	130,957,473	126,832,215
Income tax expense		
SURPLUS FOR THE YEAR	130,957,473	126,832,215

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#### 澳門大學發展基金會 財務狀況表

	於2	022	年12	月31	B
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於2022年12月31日	2022 澳門元	2021 澳門元
非流動資產		
固定資產	127	423
以公允價值計量且其變動計入損益的非上市股權投資	12,394,562	-
長期股權投資	-	12,394,562
以攤餘成本計量的債權證券投資	775,086,456	-
持有至到期債權證券投資	-	808,996,218
以公允價值計量且其變動計入損益的債權證券投資	103,000,000	-
非流動資產合計	890,481,145	821,391,203
流動資產		
交易性股權證券投資	9,771,610	4,486,011
利息及其他應收款	10,812,430	4,567,431
定期存款	930,616,669	689,718,456
現金及現金等價物	121,861,446	310,120,401
流動資產合計	1,073,062,155	1,008,892,299
流動負債		
應付資助支出	3,337,085	1,136,090
其他應付款	239,155	137,825
流動負債合計	3,576,240	1,273,915
流動資產淨值	1,069,485,915	1,007,618,384
資產淨值	1,959,967,060	1,829,009,587
資金及儲備		
專用款項	15,163,344	15,562,719
專用留本基金	1,135,852,679	1,032,914,582
一般留本基金	808,951,037	780,532,286
資金及儲備總計	1,959,967,060	1,829,009,587

#### UNIVERSITY OF MACAU DEVELOPMENT FOUNDATION STATEMENT OF FINANCIAL POSITION 31 December 2022

31 December 2022	2022 MOP	2021 MOP
NON-CURRENT ASSETS		
Fixed assets	127	423
Unlisted equity investment at fair value through profit or loss	12,394,562	-
Long-term equity investment	-	12,394,562
Debt investments at amortised cost	775,086,456	-
Held-to-maturity debt investments	-	808,996,218
Debt investment at fair value through profit or loss	103,000,000	-
	890,481,145	821,391,203
CURRENT ASSETS		
Equity investments at fair value through profit or loss	9,771,610	4,486,011
Interest and other receivables	10,812,430	4,567,431
Fixed deposits	930,616,669	689,718,456
Cash and cash equivalents	121,861,446	310,120,401
	1,073,062,155	1,008,892,299
CURRENT LIABILITIES		
Grant expenditure payables	3,337,085	1,136,090
Other payables	239,155	137,825
	3,576,240	1,273,915
NET CURRENT ASSETS	1,069,485,915	1,007,618,384
NET ASSETS	1,959,967,060	1,829,009,587
CAPITAL AND RESERVES		
Designated fund	15,163,344	15,562,719
Designated endowment	1,135,852,679	1,032,914,582
General endowment	808,951,037	780,532,286
	1,959,967,060	1,829,009,587

