

# OUR YEAR AT A GLANCE

## 年度大事速覽



**First in Greater China**  
大中華地區首間機構

**Installation of market-leading sequencer NovaSeq X Plus System**  
採用市場最先進基因組測序儀器 NovaSeq X Plus System

**First in Hong Kong**  
香港首間實驗室

**Genomic laboratory offering end-to-end whole genome sequencing services**  
提供整套全基因組測序服務



**>18,000**

Hong Kong Genome Project participants  
香港基因組計劃參加者

**>1,400TB**

Genomic data processed, equivalent to more than 700 iPad (2TB)  
已處理的基因組資料，容量相當於超過700部iPad (2TB)

**HK\$6,000,000**

Disbursed to set up scholarship, research and training grants for genomic medicine  
設立獎助學金，推動基因組醫學研究及培訓



**Long-Read Sequencing**  
長序列測序技術

Deployed this cutting-edge technology, the "Method of the Year 2022" named by *Nature Methods*  
採用被權威學術期刊 *Nature Methods* 譽為「2022年度前沿科技」的嶄新技術

**Research Collaborations**  
科研合作

Collaborated with CUHK, HKU and PolyU on multiple fronts to create impactful findings and publications  
與中大、港大及理大展開不同研究項目，發表具影響力的成果和報告

**Genomic Medicine Symposium**  
基因組醫學會議

Organised this international event with the Hong Kong Academy of Medicine for local and overseas experts to exchange insights  
夥拍香港醫學專科學院舉辦國際會議，匯聚本地和海外專家分享真知灼見



**Gold Award**  
金獎

Privacy-Friendly Awards 2023  
私隱之友嘉許獎 2023

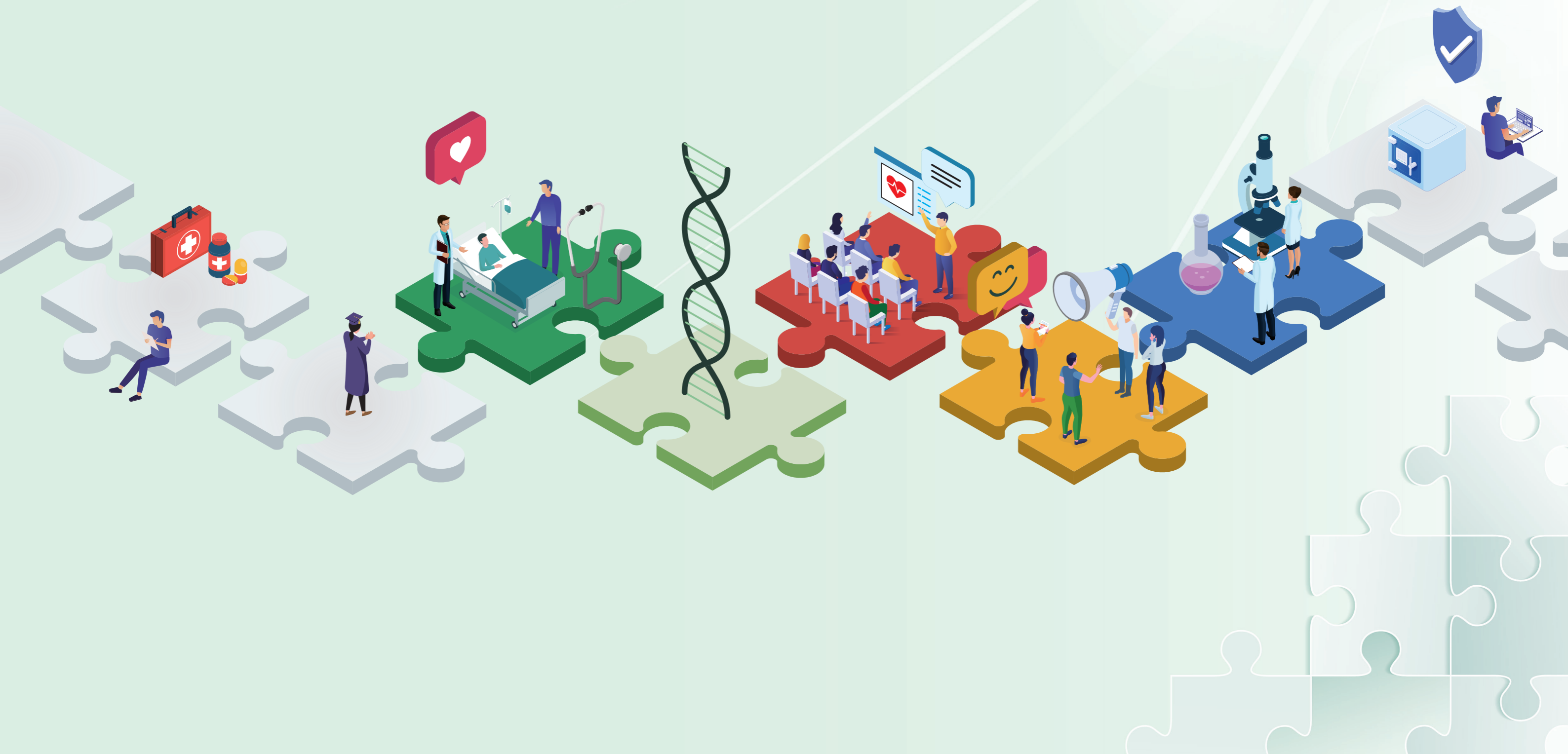
**Platinum Award**  
鉑金獎

Annual Report Competition  
國際年報大獎

LACP Vision Awards 2022

# Milestones of the Year

## 年度回顧



## Robust corporate governance forged by diversity and experience 雲集頂尖專家 鞏固企業管治

Strengthened relationship and communications with the government and industry ensures the Hong Kong Genome Institute (HKGI) achieves utmost effectiveness, relevance and impact.

與特區政府和業界保持緊密聯繫，確保基因組中心高效運作，有效發揮影響力。



Hosted a visit and laboratory tour for the Secretary for Health, Under Secretary for Health and other senior officials from the Health Bureau in August 2022, during which HKGI's latest initiatives and achievements in promoting clinical application of genomic medicine and nurturing talent were highlighted. An updated Memorandum of Administrative Arrangements was also signed during the occasion to underscore the HKSAR Government's unwavering support for HKGI.

於2022年8月接待醫務衛生局局長、副局長及高級官員到訪基因組中心及參觀實驗室，介紹中心在推動基因組醫學臨床應用和培育人才方面的最新措施和成就，並簽訂經更新的《行政安排備忘錄》，充分展現特區政府對基因組中心的支持不懈。



Organised a visit for the Permanent Secretary for Health, Deputy Secretary for Health as well as other senior officials from the Health Bureau in May 2023. The visit provided an opportunity for HKGI to regularly update the Bureau on the latest operational development of HKGI and progress of HKGP.

於2023年5月接待醫務衛生局常任秘書長、副秘書長及高級官員到訪，藉此向局方恆常匯報基因組中心的運作及基因組計劃的最新進展。



Four new members with diverse background were appointed to the HKGI Board by the HKSAR Government. Along with the reappointments of the existing members, the moves further strengthened HKGI's corporate governance, ensuring the Institute is constantly guided by a strong team of world-class scientists, clinical and industry experts, patient representatives and top professionals, as well as persistently adhering to the highest standards.

特區政府委任四名擁有不同專業背景的新成員加入基因組中心董事局，連同獲再次委任的成員，進一步鞏固基因組中心的企業管治，確保機構時刻恪守最高標準，並在世界頂尖科學家、醫生、業界專家、病人代表及專業人士組成的團隊引領下邁步向前。



## Harnessing the power of teamwork for genomics-related clinical applications 齊心群策群力 促進融合應用

Expanded collaborations with the healthcare community to accelerate the integration of genomics into medicine.

加強與醫護界合作，促進融合基因組醫學與臨床護理。



With the successful completion of HKGP pilot phase and launch of main phase, the collection of the HKGP publicity materials including booklets, leaflets, souvenirs and videos was updated to provide participants and prospects with latest information regarding the objectives and scopes of the Project.

隨着基因組計劃先導階段圓滿結束，主階段繼而推行，基因組中心的一系列宣傳品，包括小冊子、宣傳單張、紀念品和簡介影片，內容均作出修訂，讓參與者和準參加者獲得有關基因組計劃目標和服務範圍的最新資訊。



Enhanced the equipment and operations of HKGI's genomic laboratory, reinforcing its unique position as the first and only laboratory in Hong Kong that is capable of providing end-to-end whole genome sequencing services, covering patient recruitment, sample processing, data analysis, communication and delivery of research reports.

提升基因組實驗室設備和運作，鞏固其作為本港首間及現時唯一可提供整套全基因組測序服務（包括病人招募、樣本處理、數據分析、信息傳遞，以及提交研究報告）之實驗室的優勢。



Co-organised the Genomic Medicine Symposium "Embracing the Era of Genomic Medicine: Research, Training and Clinical Applications" with the Hong Kong Academy of Medicine in May 2023. The event, being officiated by the Under Secretary for Health, brought together an esteemed group of global and local experts to discuss cases and offer insights into genomic medicine and attracted close to 170 participants.

於2023年5月與香港醫學專科學院合辦「基因組醫學新時代：研究、培訓與臨床應用」研討會，由醫務衛生局副局長作為主禮嘉賓，匯聚了國際及本地知名專家，就基因組醫學的研究、培訓和臨床應用等方面，分享相關案例及見解，吸引了接近170人參加。



Set up the Hong Kong Genetic Counselling Practice Consortium to foster the growth of the genetic counselling profession in Hong Kong. It nurtures genetic counsellors, develops scope of practice and code of ethics for the profession, as well as addresses the needs and challenges of this burgeoning field.

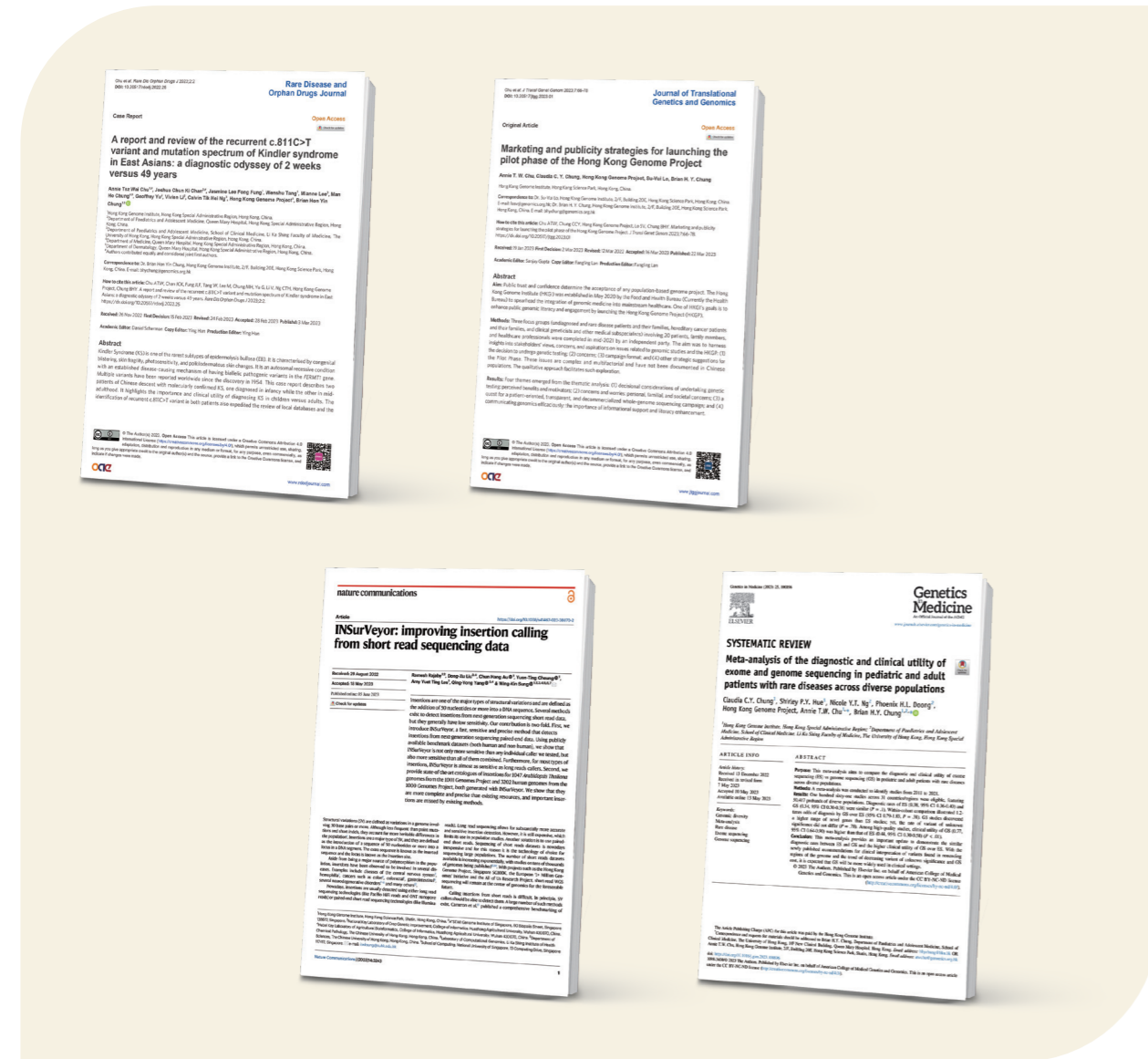
成立「香港遺傳輔導專業發展聯席」，為遺傳輔導專業培育人才、擬訂專業實務範圍及倫理守則，協助這新興行業面對挑戰和應付所需。



## Global genomics advancement catalysed by local research and knowledge 分享研究成果 推動專業發展

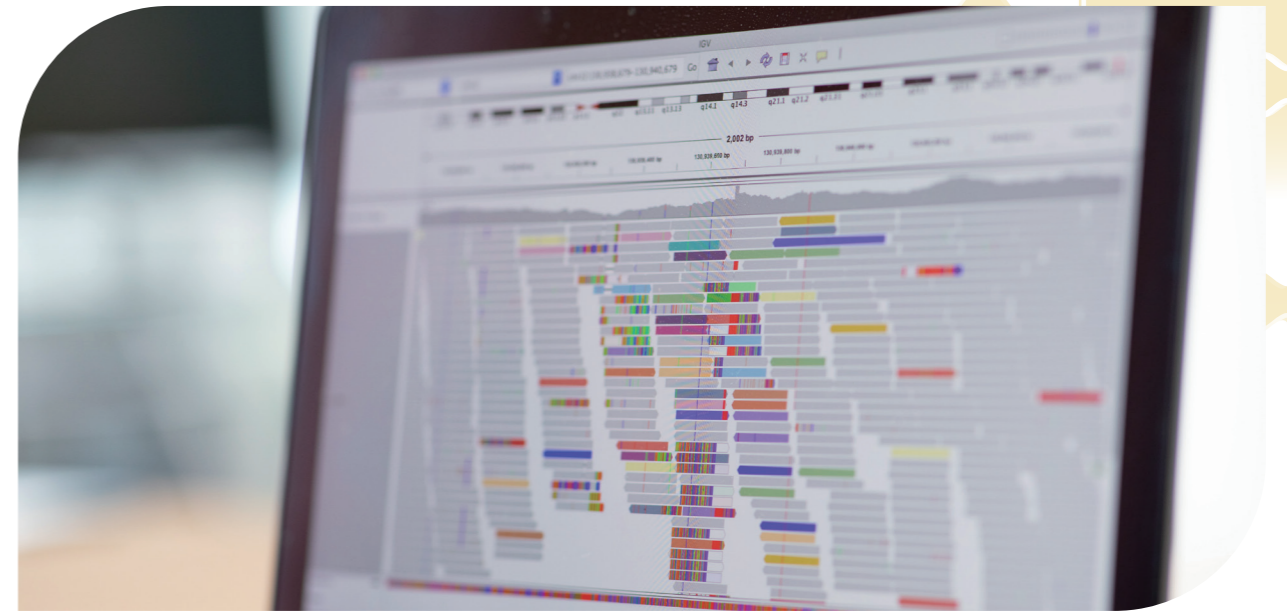
Published papers and launched new initiatives both locally and internationally to advance genomic research and knowledge sharing.

在本地和國際期刊發表論文及推出新項目，促進基因組學研究和知識共享。



Continued to share Hong Kong's experience, insights, and findings in genomic research with the global medical and healthcare community. HKGI has published an array of research papers covering various topics in leading journals since its inception.

致力與全球醫療界分享本港在基因組學研究方面的經驗、觀點和結果。自成立以來，基因組中心也一直在不同權威期刊發表各種題材的研究論文。



Developed a highly sensitive and precise bioinformatic tool "INSurVeyor" for detecting insertions in genomic data. Its integration with the HKGI Bioinformatics Pipeline can improve the accuracy of variant calling, leading to more reliable clinical diagnoses and treatment decisions.

研發出生物信息學工具INSurVeyor，以偵測基因組數據中涉及的結構變異。INSurVeyor結合基因組中心的生物信息管理流程，可提高辨認基因變異的準確程度，以便作出更可靠的臨床診斷和治療方案。



Established the "HKAM-HKGI Research Excellence Grants in Genomic Medicine" with the Hong Kong Academy of Medicine to nurture talent through motivating and supporting local researchers to conduct genomic research. HKGI also signed an agreement with the College of Physicians for provision of similar scholarship and training grants.

與香港醫學專科學院合作設立「基因組醫學卓越研究獎」，鼓勵和支持本地研究人員進行基因組研究，藉以培育人才。基因組中心亦與香港內科醫學院簽訂設立獎學金和助學金的協議。

## Industry-academia collaboration key to building generational talent

攜手緊密合作 積極培育棟樑

Inspired, informed and attracted talent to genetics and genomics, as well as promoted genomic literacy among professionals by engaging the broader healthcare community.

啟發和吸引人才加入遺傳學及基因組學領域；積極加深醫療專業人員對基因組學的認識。



Organised visits, meetings, talks and seminars for healthcare professionals, including clinicians, nurses, allied health professionals, genetic counsellors and bioinformaticians, to inspire and encourage their participation in genetics and genomics.

為醫生、護士、專職醫護人員、遺傳輔導員及生物信息學家等舉辦參觀活動、會議、講座及座談會，啟發和鼓勵他們加入遺傳學和基因組學的領域。



Committed to developing the next generation of genomic talent, HKGI arranged visits and summer internships for secondary students and university students across various disciplines, enabling them to gain valuable hands-on experience and learn about HKGI's work and career opportunities.

為中學生及不同學科的大學生舉辦參觀活動和提供暑期實習，讓他們認識基因組中心的工作及了解職業發展機會，獲得寶貴經驗，藉此培育新一代基因組學人才。



## 傑出老師及獎學金頒獎典禮 2023

20 May 2023



Launched academic scholarship with the Faculty of Medicine of The Chinese University of Hong Kong to arouse interest in genetics and genomics among undergraduate and postgraduate students. Four prizes in Genomic Medicine are offered to outstanding students each year. Similar scholarship awards will also be set up with the Faculty of Medicine of The University of Hong Kong.

與香港中文大學醫學院合作設立獎學金，每年設有四個名額予成績優異的學生，目的是激發大學生及研究生對遺傳學和基因組學的興趣。基因組中心亦將與香港大學醫學院設立同類型獎學金。



## Gathering leading minds to chart the future of genomics and genomic medicine 匯聚業界精英 啟迪未來發展

Constantly exchanged ideas, insights and intelligence with local and global experts to chart the collective growth of the genomics field.

與本地及海外專家定期作出學術、意見和知識交流，合力推動基因組學的發展。



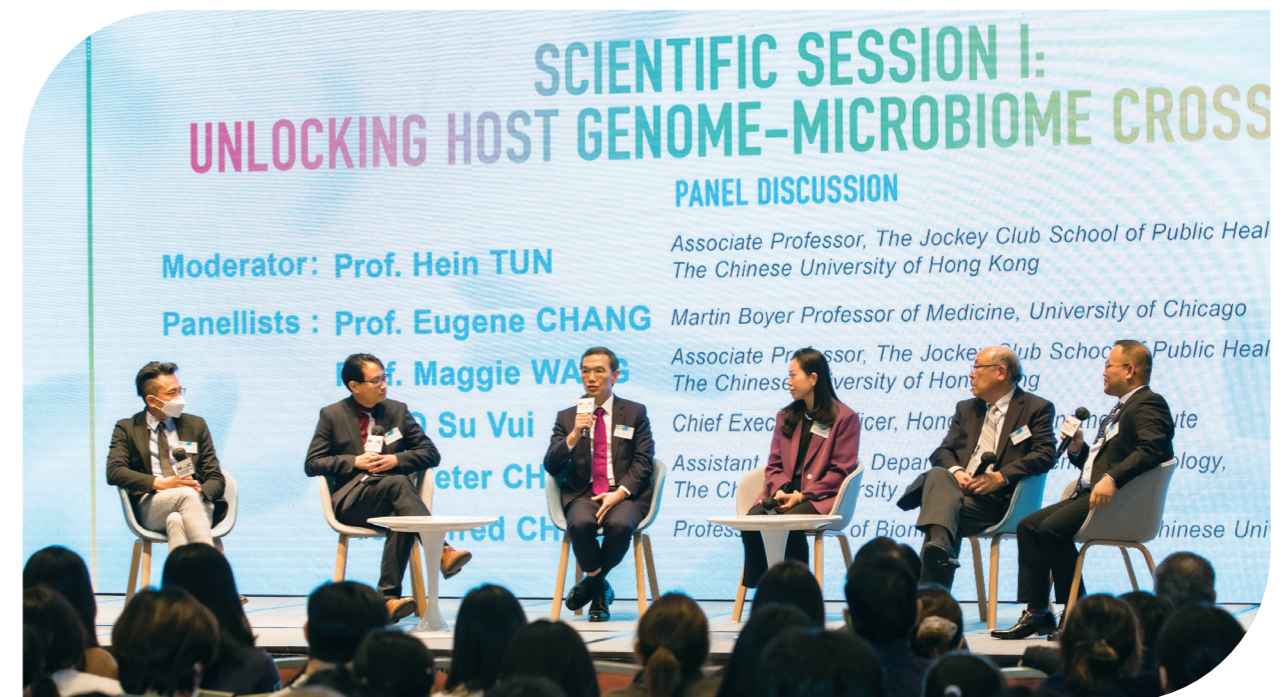
Selected by the American Society of Human Genetics to produce a HKGI feature video for the "Thought Leadership Film Series" to be premiered at its Annual Meeting. The video featured the Secretary for Health, Professor Lo Chung-mau, and HKGI senior management to showcase HKGI's accomplishments to clinical geneticists, scientists, researchers and medical professionals around the globe.

基因組中心獲美國人類遺傳學協會邀請參與拍攝「領袖影片系列」，影片並於該協會的周年大會上首播。醫務衛生局局長盧寵茂教授及基因組中心管理人員一同參與拍攝，向全球遺傳學家、科學家、研究員及醫療專業人員展示基因組中心的成就。



Co-hosted a session titled "What's Next in the Biotech and Genomics Revolution?" at the Asia Summit on Global Health 2022 with the Hong Kong Trade Development Council. During the session, HKGI executives discussed megatrends and potential applications in the field with international experts, while also sharing HKGI's pioneering work.

在香港貿易發展局主辦的「亞洲醫療健康高峰論壇 2022」中，合辦一個以「生物科技及基因組學的革新與前景」為主題的環節。基因組中心管理層與其他國際專家討論基因組學大趨勢及潛在應用，同時分享基因組中心在推動基因組醫學方面的先導工作。



Joined the panel discussion on "Unlocking Host Genome-Microbiome Cross Talks" at the Microbiome Summit 2023 to share the importance of genomic and precision medicine.

參加微生態峰會2023其中一個題為「Unlocking Host Genome-Microbiome Cross Talks」的專題小組討論，闡述基因組學及精準醫學的重要性。



## Gathering leading minds to chart the future of genomics and genomic medicine 匯聚業界精英 啟迪未來發展



Hosted a visit for PHG Foundation with latest updates on HKGI, HKGP and collaboration with Partnering Centres (PCs). Multi-disciplinary team meetings and visits to PCs were also arranged during the visit for knowledge exchange.

接待PHG Foundation的到訪，並向其簡介基因組中心、基因組計劃及與各夥伴中心合作的最新進展，同時安排出席跨專業團隊會議及參觀夥伴中心，以作知識交流。



Implemented a variety of media engagements to raise public awareness of HKGI, HKGP, and genomic medicine, as well as enhance genomic literacy, including an interview of Chief Executive Officer, Dr Lo Su-vui, with Hang Seng University and an interview of Chief Scientific Officer, Dr Brian Chung, with Radio Television Hong Kong. A media briefing was also organised to promote genomic knowledge and share updates of HKGI and HKGP with the public.

透過多項媒體活動，提升公眾對基因組中心、基因組計劃及基因組醫學的認識，包括基因組中心行政總裁羅思偉醫生與香港恒生大學的訪問，以及首席科學總監鍾侃言醫生與香港電台的訪問。基因組中心亦舉辦傳媒簡報會，介紹中心及基因組計劃的最新發展，藉此向市民推廣關於基因組學的知識。



Invited four Board Directors to produce thematic videos to share their ground-breaking research, highlight the milestone development of genomic medicine, and how it would reshape future healthcare and benefit everyone in the society. The world-renowned scientists and clinical experts featured included Professor Raymond Liang, Professor Nancy Ip, Professor Lau Chak-sing and Professor Dennis Lo.

邀請四位董事局成員參與拍攝主題影片，分享他們的創新研究、闡述基因組醫學發展的重要里程碑，以及基因組醫學如何改革醫療護理系統，惠及社會大眾。受訪者均為世界知名科學家和醫療專家，包括梁憲孫教授、葉玉如教授、劉澤星教授及盧煜明教授。



Participated in HKSciFest 2023 and set up a virtual exhibition booth named "ATCG Genomics" on its event website to introduce to visitors HKGI's work and a wide range of HKGI publications and videos, inspiring them to explore more about genetics and genomics. Other public events HKGI took part in included InnoCarnival 2022 and Career Expo 2022.

在香港科學節2023活動網站設立以「探索基因組學」為主題的網上虛擬展覽攤位，簡介基因組中心的工作，展示一系列刊物和影片，啟發公眾進一步探索遺傳學和基因組學。基因組中心亦積極參與其他活動，包括創新科技嘉年華2022及香港創科職業博覽2022。





## Operational excellence comes when teams work together 團隊上下同心 締造卓越成就

Designed training and team-building activities to foster staff development, bonding and sense of belonging.

舉辦培訓及團隊活動，以促進員工發展，培養團隊精神和歸屬感。



Arranged a series of training on different topics, such as health privacy, to further the professional development of all staff to ensure they are informed and equipped to uphold the latest pertinent rules, regulations and best practices.

安排一系列的培訓，涵蓋不同主題，如醫療私隱等，以提升員工的專業發展，確保他們了解並恪守各種最新規定和行業的最佳實務守則。



Organised a staff forum, Christmas party, and Chinese New Year lion dance to bring the HKGI team together, foster bonding and boost their sense of belonging to promote an inclusive, supportive and collaborative work environment.

舉辦員工大會、聖誕聯歡會、農曆新年舞獅活動等，提升基因組中心團隊凝聚力及歸屬感，藉此建立互相包容、互助互勉的工作環境。

