

Engines of Discovery

Central research facilities



Research Office

HKBU central specialised research infrastructure is meticulously designed to support and elevate transdisciplinary research, dedicated to advanced neuroscience studies, comprehensive multi-person motion capture and analysis, and immersive multisensory engagements blending art and technology.



Advanced Life Sciences and Mass Spectrometry Laboratory

Equipped with state-of-the-art mass spectrometers, confocal microscopes, and MALDI imaging systems, the Centre offers a dynamic platform that brings together diverse researchers to drive innovation and deliver impactful, practical solutions.



Learn More



Centre for Exercise Science and Medicine

The Centre is a transdisciplinary research hub revolutionising sports science, sports medicine, and public health. Recognised by the International Federation of Sports Medicine as Hong Kong's first Collaborating Centre of Sports Medicine, the third in the Nation, and one of only 29 worldwide, the Centre exerts an influence worldwide in elite sports and human health.



Learn More



Frontier Translational Medical Research Institute

To bring groundbreaking medical research to real-world applications more quickly, the Institute works to bring promising medical biotechnology discoveries from the laboratory to the public. Serving as an R&D and commercialisation hub, it focuses on medical devices, diagnostics, vaccines, integrative and Chinese medicine, and biomedical sciences.



Learn More

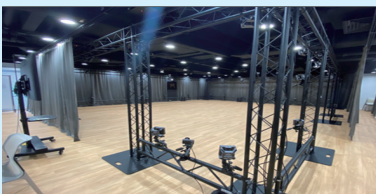


Life Science Imaging Centre

Equipped with advanced facilities, including a 3T Magnetic Resonance Imaging (MRI) scanner, Electroencephalogram (EEG), functional Near-Infrared Spectroscopy (fNIRS), and Transcranial Magnetic Stimulation (TMS) system, the Centre supports academics across disciplines to translate these cutting-edge tools into impactful research projects that address emerging global issues.



Learn More



Motion Capture and Visualization Laboratory

The Laboratory is a comprehensive base for multi-person motion capture, AR/VR/XR applications, and cognitive-driven generative creativity. As one of HKBU's spearheading forces in art technology, it drives interdisciplinary research with international impact using the world's first and largest Labanotation-annotated 3D motion capture dataset.



Learn More

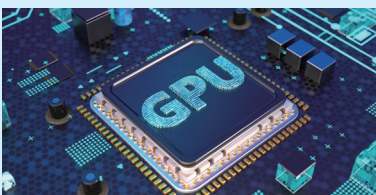


Visualization Research Centre

A transdisciplinary initiative at the intersection of immersive interactive visualisation, aesthetics, culture, and computer science, the Centre develops multisensory engagement through art and technology platforms, and deploys fully immersive displays, spatialised sound, multimodal sensing, and AI-informed HCI to innovate leading-edge, post-cinema frameworks and cinematic experiences for the 21st century.



Learn More



High-Performance Graphics Processing Unit

A high-performance Graphics Processing Unit (GPU) cluster is critical for advancing the university's transdisciplinary computational capabilities. As data processing demands increase exponentially, this robust GPU cluster accelerates research outcomes across diverse disciplines significantly, including but not limited to computational biology, data science, artificial intelligence, and simulation modelling in physics.



For Inquiries

科研核心動力

重點研究設施



研發辦公室

浸大精心設計的专业中央研究基础设施旨在支援并提升跨学科研究，致力於先进脑科学研究、尖端的多入动作捕捉与分析，以及融合艺术与科技的沉浸式多感官体验。



先进生命科学与质谱实验室

致力於提升卓越科学成就，促进跨学科合作，该实验室配备了先进的质谱仪、共聚焦显微镜和 MALDI 成像系统，提供了一个平台将来自不同领域的科研人员汇聚一堂，共同推动创新，并提供具影响力的解决方案。



了解更多



运动科学与医学中心

致力於运动科学、运动医学及公共健康领域的跨学科研究，中心作为获国际运动医学联會认可的香港首間、全国第三間，以及全球 29 間之一的「运动医学合作中心」，在精英运动和人类健康领域具有全球影响力。



了解更多



前沿转化医学研究院

为了加快将开创性的医学研究成果转化为实际应用，研究院致力于将具有前景的医疗生物技术发现从实验室推向公众。作为研发与商业化中心，研究院专注于医疗器械、诊断、疫苗、整合医学与中医药，以及生物医学科学领域。



了解更多

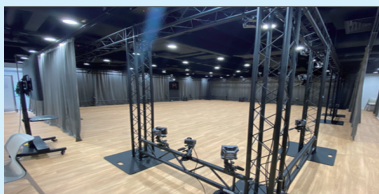


生命科学成像中心

作為跨学科神经科学研究的重要研究基础设施，中心配备了先进的设施，包括 3T 磁共振成像扫描仪、脑电图、功能性近红外光谱，以及经颅磁刺激系统，支持跨学科的学术人员将这些前沿工具转化为具有影响力的研究项目，应对不断涌现的全球性问题。



了解更多



动作捕捉与可视化实验室

实验室为多人动作捕捉、AR/VR/XR 应用，以及认知驱动生成式创意的全面基地。作为浸大在艺术科技领域的领军力量之一，它通过利用全球首个且最大的拉班舞谱标注 3D 动作捕捉数据集，推动具有国际影响力的跨学科研究。



了解更多

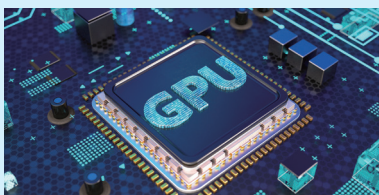


视觉化研究中心

融合了沉浸式交互视觉、美学、文化与计算机科学的跨学科元素，中心通过艺术与技术平台打造多感官体验，并采用了全沉浸式显示、空间化声音、多模态感知，以及人工智能驱动的人机交互技术，旨在创新 21 世纪前沿的“后电影”框架与电影体验。



了解更多



高性能图形处理器集群

高性能图形处理器（GPU）集群对于提升大学的跨学科计算能力至关重要。随着数据处理需求呈指数级增长，强大的 GPU 集群显著加速了各个学科的研究成果产出，其中包括但不限于计算生物学、数据科学、人工智能以及物理学中的模拟建模。



如有查詢