

HIM Celebrates Its 5th Birthday

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A snapshot of the
Hangzhou Institute of Medicine.



Graphic: HIM

On May 8, 2024, the Hangzhou Institute of Medicine (HIM) of the Chinese Academy of Sciences (CAS) celebrated its 5th birthday. The first institution dedicated to medical sciences under the umbrella of CAS, HIM was born five years ago, resulting from a collaborative agreement between the CAS and the Zhejiang Provincial Government – named the Institute of Cancer and Basic Medical Sciences at its founding. Driven by basic sciences and technology, HIM views molecular medicine as the key to solving fundamental problems at

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The last five years have seen HIM growing remarkably, now hosting over 800 researchers and graduate students, including CAS academicians and top scientists who have returned to China from their overseas studies. The founding director of HIM, CAS Member Prof. TAN Weihong, is a renowned scientist in molecular medicine. He pioneered aptamer research and its clinical applications, and is a distinguished scholar in nucleic acid chemistry and molecular medicine. One-third

Researchers are discussing and designing the route of drug synthesis on the glass surface of a ventilator.



Graphic: HIM

of HIM's scientific workforce has been globally recruited, highlighting the Institute's commitment to excellence in science and innovation in technology for medicine.

In 2021, HIM established a nationally recognized independent research center for postdoctoral studies, attracting more than 150 postdoctoral researchers annually. Graduate student training was accomplished through collaboration with such prestigious institutions as the University of Science and Technology of China, Tianjin University, Hunan University and the University of Macau. These collaborations jointly trained nearly 500 doctoral and master's students. Furthermore, operating as a unit of the University of Chinese Academy of Sciences, HIM has secured doctoral and master's degree programs in pharmacy, biology and medicine, further strengthening its educational and research capabilities.

Driven by its commitment to basic science for medicine over the last five years, HIM has made remarkable progress in addressing clinical problems through interdisciplinary integration. Its endeavors in research and development have yielded impressive results. To date, it has spearheaded 15 National Key R&D Projects and undertaken 175 national, provincial, and cross-sector projects.

Among its major achievements is the development of the world's first nucleic acid aptamer-based imaging agent to enter clinical trials. Termed nucleic acid aptamer contrast agents and radiopharmaceuticals, these reagents specifically detect overlooked microlesions and effectively "illuminate" tumors within the human body. Additionally, the Institute has mapped China's larg-

est-scale protein molecular atlas of single cells for triple-negative breast cancer, proposing a new classification scheme for this challenging type of cancer.

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"In the future, the Hangzhou Institute of Medicine will focus on joint research efforts in several important areas, including multi-dimensional single-cell molecular atlases, tumor mRNA vaccines, targeted radionuclide drugs, and blood molecular atlases. The Institute aims to seize the high ground of scientific and technological innovations in the field of life and health", said Prof. TAN Weihong at the 5th Anniversary Academic Event.

Through its close partnerships with medical schools, research institutes, and hospitals, HIM is committed to translational research aimed at addressing real-world medical problems. Moreover, as an integral part of CAS, the linchpin of China's drive to explore and harness high technology and the natural sciences for the benefit of China and the world, the founding of HIM signals a consensus on organized efforts to use scientific advancement to solve real-world medical problems.