Communiqués de presse

IBM annonce sa collaboration avec les plus grandes institutions australiennes afin de repousser les limites de la Recherche Médicale

Les scientifiques de l'université de Melbourne utiliseront les technologies de calcul haute performance d'IBM pour leurs recherches sur les maladies humaines

Melbourne, Australia - 11 févr. 2010: IBM (NYSE: IBM) today announced a Research collaboratory in Melbourne, Australia, where scientists from the Victorian Life Sciences Computational Initiative (VLSCI) at the University of Melbourne and the IBM Research Computational Biology Center will use high performance computing – including IBM's Blue Gene supercomputer – to study human disease.

The collaboratory – where IBM Researchers co-locate with a university, government, or commercial partner and share skills, assets, and resources to achieve a common research goal – will enable collaboration between the 10,000 world-class life sciences and medical researchers in the Melbourne area, and IBM's computational biology experts, who are renowned for applying high performance computing to biological discoveries.

The collaboration is dedicated to dramatic improvements in human health through technology innovation in medical diagnostics, drug discovery and drug design, underpinned by a deep understanding of disease. Scientists from VLSCI and IBM Research will work to accelerate the translation of our fundamental understanding of biology to improvements in medical care and health outcomes, with projects such as:

· Medical Imaging and Neuroscience: high performance computers are used to analyze images from the devices such as Magnetic Resonance Imaging (MRI), Positron Emission Topography (PET) and the synchrotron.

· Clinical Genomics: the identification of combinations of genes implicated in disease and the ability to predict susceptibility to disease and treatment outcome from an individual's genome and medical history.

· Structural Biology: understanding the structure and shape of biological macromolecules, fundamental to pharmaceutical discovery.

· Integrated Systems Biology: understanding and modeling the dynamic behavior of complex systems, from genes, proteins, cells, tissues and organs to organisms:

The Premier of Victoria John Brumby said the supercomputer, to be based at Melbourne University in Parkville, would further boost Victoria's reputation as a global centre for excellence in life sciences research.

"The Victorian Life Sciences Computational Initiative (VLSC) will provide Victoria's researchers with the necessary tools to solve some of the biggest challenges facing our health system and impacting our quality of life", Mr Brumby said.

“The Victorian Government is taking action to support our world-class researchers and to invest in innovative projects that secure the state’s economy.

University of Melbourne Vice-Chancellor Professor Glyn Davis says the University is delighted to link with IBM in this partnership which will help to put Victoria – and Australia – firmly on the international map as a life sciences precinct equal to the best in the world. “The outcome of this partnership will be a significant strengthening of the research capabilities of Victoria's life sciences researchers and a dramatic expansion of their capacity to carry out world-class life sciences research right here in Melbourne."

“At IBM, we believe that giving our researchers the opportunity to go outside of the walls of our labs and collaborate with other institutions will further the reach and impact of our research,” said Tilak Agerwala, Vice President, IBM Research. “As the largest IBM Research collaboration in life sciences, the Victorian Life Sciences Computational Initiative holds great potential for driving new breakthroughs in the understanding of human disease and translating that knowledge into improved medical care, and gives IBM Research the opportunity to expand the impact of our Computational Biology Center.”

IBM’s Blue Gene/P supercomputer will serve as the high performance computing foundation for much of the VLSCI and collaboratory’s work. Blue Gene's speed and scalability have enabled business and science to address a wide range of complex problems and make more informed decisions -- not just in the life sciences, but also in astronomy, climate, energy and many other areas.

The collaboratory will be fully operational in 2010 and will be located on the campus of the University of Melbourne. It is being established jointly by the University of Melbourne and IBM through the VLSCI, which was made possible through the Victorian State Government in Australia. In addition to the University of Melbourne, the collaboratory will also work with researchers from leading institutions participating in the VLSCI.

This is the sixth IBM collaboratory. Other IBM collaboratories worldwide are located in Dublin, Ireland; Shenyang, China; Shanghai, China; Taipei, Taiwan and Hyderbad, India.

IBM has been a leader in providing technology and services to healthcare and life sciences organizations for more than fifteen years, and IBM Research devotes significant resources to work that will help pioneer the future of medicine and healthcare. IBM is working with organizations around the world on areas such as: bioinformatics, genomics, proteomics, biochemistry, drug discovery, cancer research, brain research, avian influenza and pandemic research, information based medicine, and health informatics.

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