Producing world's first digital brain atlas

BANDAR SUNWAY: Malaysian scientists are set to produce one of the world's first digital melecular atlas of the fish brain, through a collaborative between Monash University and MIMOS Bhd.

Under a new partnership the University's Brain Research Institute at Monash Sunway (BRIMS) will provide two dimensional digital fish brain images to MIMOS.

It would use the KnowledgeGRID Malaysia grid computational platform to identify neurons and other parts of the brain to create the three dimensional (3D) map.

The new agreement was signed today at Monash University Sunway campus by Pro Vice-Chancellor and President (Malaysia) Professor Robin Pollard and MIMOS President and CEO, Dato' Abdul Wahab Abdullah.

Professor Pollard said the collaboration between Monash and MIMOS showcased the potential that could be unlocked through strategic partnerships to pool strengths and tap into a wealth of expertise.

"The expertise of BRIMS as a leading neuroscience research centre in the region and MIMOS as the premier applied research centre in frontier technologies makes this ground breaking and ambitious project possible," said Professor Pollard.

"Monash has set its sights on becoming a premier private research intensive university campus that actively contributes to Malaysia and the region. To achieve this, we're keen to expand such strategic collaborations in Malaysia and we look forward to a successful partnership with MIMOS, as well as other institutions in Malaysia."

"As the premier applied research centre in frontier technologies, with a grid computing platform that is part of the European Grid Network infrastructure, MIMOS is proud to be part of this endeavour with Monash to produce the world's first digital atlas," said Dato' Abdul Wahab.

"Gene identification and accurate molecular mapping in 3D can be tedious. With KnowledgeGRID Malaysia, computational techniques that provide for analysis, visualisation, modelling, and simulation can automate and speed up the creation of the 3D molecular neural anatomy."

BRIMS head Professor Ishwar Parhar said the new database, and would be immensely useful for neuroscience research.

Monash University's expertise in neuroscience will be combined with MIMOS technology to produce the three dimensional digital brain map.