



## Harry Perkins Institute of Medical Research Increases Big Data Analysis with DUG McCloud Partnership

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Oct. 30, 2020 — World-class researchers working at Perth's Harry Perkins Institute of Medical Research are using the high-performance computing expertise of DUG Technology under a partnership that will enable the Institute to achieve more breakthroughs sooner.

The partnership provides the high-performance computer and storage capability needed to conduct analysis using genomics and other bioinformatics heavy technologies.

Bioinformatics combines biology, computer science, information technology, mathematics and statistics to analyse and interpret biological data.

Associate Director of Research, Professor Alistair Forrest, said the new partnership boosts the research output at the Perkins.

"Access to additional high-performance computing significantly increases our research capacity and allows us to expand the amount of data we can analyse," Professor Forrest said.



High-performance computers are used to look for disease mutations, they can help analyse the behaviours of a particular cell type that may be causing disease, or can enable researchers to see the range of cells present in a patient's tumour.

"Affordable genetic sequencing, for example, has resulted in a rapid increase in the amount of genetic data we are analysing," he said.

DUG Technology Managing Director Matt Lamont said the Harry Perkins Institute partnership using the DUG

McCloud platform was a perfect example of the value of high-performance computing to process large, complex scientific data sets.

"We empower scientists to concentrate on the science and in doing so enable powerful thinking to tackle some of the biggest health issues," Dr Lamont said.

"DUG is delighted to work with the first-class team at the Harry Perkins Institute as they strive to improve the health of all Western Australians.



“Our high-performance computing power and the research expertise of groups led by, among others, professors Ryan Lister, Alistair Forrest, and Nigel Laing will be a potent combination.



“We are at the start of what will be an exciting collaboration as we empower researchers to do their best.”

Dr Lamont said momentum was continuing to build around DUG’s High-Performance Computing as a service business, with several companies evaluating the benefits it can provide. He said he was confident that interest would be converted into contracts.

DUG becomes one of a panel of partners available to bioinformaticians at the Perkins. Director of the Harry Perkins Institute, Professor Peter Leedman, said other companies who provide this level of high-performance computing are typically overseas, such as Amazon or Google.

“It is great to be working with a local company headed up here in Perth,” Professor Leedman said.

### **About DUG**

DUG is a technology company at the forefront of high-performance computing with a strong foundation in applied physics. DUG’s innovative hardware and software solutions for the global technology and resource sectors enable clients to leverage large and complex datasets. The company provides cloud-based high-performance computing as a service (HPCaaS), multi-tiered support for technology onboarding and code optimisation, and integrated services. DUG has offices in Perth, London, Houston, and Kuala Lumpur. The company designs, owns, and operates some of the largest and greenest supercomputers on Earth. Visit [www.dug.com](http://www.dug.com)

### **About the Harry Perkins Institute of Medical Research**

The Harry Perkins Institute of Medical Research is one Australia’s leading medical research institutes investigating diseases affecting the community. With over 250 researchers located on three hospital campuses in Perth, the Perkins is uniquely positioned to fast track the development of new discoveries and treatments. Its wholly owned clinical trials facility, Linear Clinical Research, provides international and local pharmaceutical and biotechnology companies the facilities to trial latest drugs and treatments in healthy volunteers and patients. The Harry Perkins Institute of Medical Research is proudly West Australian, providing career opportunities to our best and brightest graduates and bringing to the State international scientists. As a registered charity, the Harry Perkins Institute relies on grants and donations to fund its medical research.

[www.perkins.org.au](http://www.perkins.org.au)