

# SUPERCHARGING MEDICAL RESEARCH TO ADVANCE HUMAN HEALTH.

## Background

The Harry Perkins Institute of Medical Research ("Perkins") applies innovative bioinformatics - a field combining biology, computer science and mathematics - to tackle chronic diseases including cancer and rare genetic disorders.

To keep pace with the rapid evolution of bioinformatics, scientists must constantly develop new algorithms and methodologies, resulting in high data throughput.

## Challenges

Bioinformaticians use data in unconventional ways - their mathematical methods are unstructured, with colossal amounts of genomic data stored and analysed via complex access patterns.

Perkins said:  
"We require a fully supported high-performance computing (HPC) system designed to let us store, process and analyse data our way."

## Solutions

We provided Perkins researchers with our tailored HPC expertise and code-optimisation support to ensure their workflows could leverage our state-of-the-art processors and storage systems.

## Results

Our bespoke HPC solution gave Perkins scientists quick and easy access to their huge datasets without computational restriction.

Perkins said:  
"Trusting the technology to the experts at DUG, we can now get back to our number one priority - saving lives."