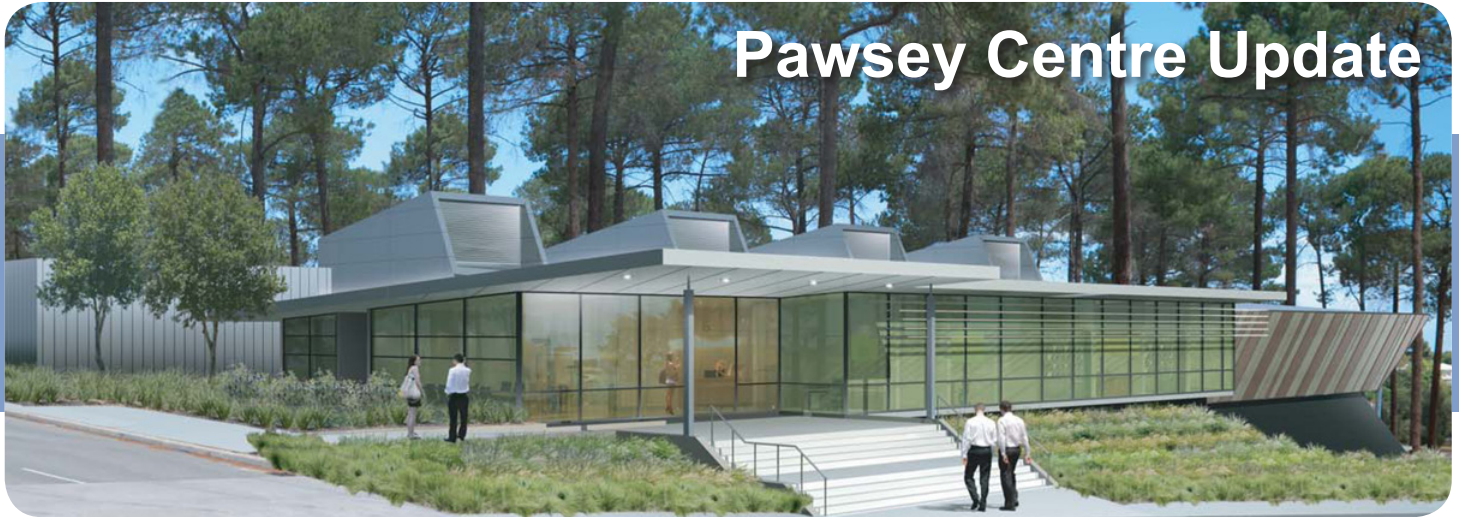


## Pawsey Centre Update



Architects rendering of the proposed Pawsey Centre

### CEO's UPDATE

Welcome to the 5th edition of the iVEC newsletter. It has been quite a long time since the last newsletter but ever since it was announced in the May 2009 Federal Budget that iVEC had been charged with establishing an \$80 million supercomputing Centre, the pace has been frenetic. This is a fabulous opportunity for iVEC and its ever growing userbase to show that we can build and harness the potential of a truly world class supercomputing centre. Since the budget announcement, we have developed a detailed project plan that has allowed the funds to flow and begun both the design of the new centre and the supercomputing systems that will see the capacity within iVEC grow by at least a factor of 250 over the next three years. One very recent key milestone is that the team charged with pulling the project together are now all officially onboard and are profiled in this edition of the newsletter.

Another piece of great news was the 2010 State Budget, where iVEC was awarded over \$3.6 million of funding for 2010/11. This very generous increase in the level of State funding will allow iVEC to provide significantly higher levels of support to our stakeholders and in particular allow us to focus on assisting our researchers make the transition from tera to petascale computing. There will be more details on this and the expansion of iVEC's supercomputing capacity to at least 150 TFlops over the next 12 months in the next newsletter.

Finally, we have finished putting together the public version of the iVEC 2008/09 annual report which you can download from the iVEC website by clicking the links below or visiting [www.ivec.org](http://www.ivec.org).

[iVEC 2008-2009 Annual Report - Low Resolution \(3.5Mb\)](#)

[iVEC 2008-2009 Annual Report - High Resolution \(29Mb\)](#)

### ABOUT THE PAWSEY CENTRE

In 2009 the Australian Government, as part of its Super Science initiative, allocated \$80 million towards the establishment of the Pawsey High Performance Computing Centre for SKA Science. The Pawsey Centre was established with the primary role of hosting new supercomputing facilities and expertise to support SKA (Square Kilometre Array) research and other high-end science. The secondary goal of the Centre is to demonstrate Australia's ability to deliver and support world-class advanced ICT infrastructure and therefore strengthen Australia's bid to host the SKA, which is critically dependant on advanced ICT.

The Pawsey Centre will have the capacity to host new supercomputing facilities and other expertise to provide immediate support to the Australian SKA Pathfinder and Murchison Widefield Array radio astronomy telescopes as well as other high-end research areas of computational and data-intensive science, particularly nanotechnology, biotechnology and geosciences. The SKA is one of the largest scientific projects undertaken anywhere in the world, with the international SKA project community expecting to make a decision on its location (in either South Africa or Western Australia) in 2012.

The Pawsey Centre will comprise a purpose-built building, housing a petascale supercomputing system and associated works at Kensington, Western Australia. It will be constructed on CSIRO owned land adjacent to the CSIRO's existing Australian Resources Research Centre facility at Technology Park, Bentley, which is located approximately six kilometres from Perth's CBD.

The new facilities will incorporate initiatives to minimise impact on the environment and best practice technologies to minimise energy usage.

## MEET THE PAWSEY CENTRE TEAM



L to R: Andrew Rohl, Mal Bryce, Guy Robinson, Nick Chambers, Des Marsh

### NICK CHAMBERS Project Director

After studying at Cambridge and Warwick universities in the UK, Nick started his working career undertaking engineering and IT projects as a Chartered Manufacturing Engineer with Rolls-Royce.

He has held Business Unit Director roles within Deloitte Consulting and Hatch, leading the implementation of Enterprise IT systems and related infrastructure, application software and services for Rio Tinto, BHP Billiton and the Water Corporation of Western Australia.

He has also undertaken various other IT Project Management consulting assignments for Mining, Engineering and Health Care providers.

After growing up immersed in supercomputing as the son of a Nuclear Physicist, Nick now relishes the chance to build a world-class supercomputer here in Perth.

### GUY ROBINSON HPC Systems Architect

Guy has some twenty years' experience in planning and implementing leading edge supercomputing environments at centres supporting scientific, technical, and business activity. His expertise embraces strategic planning, system architectures, design, deployment and operation of supercomputing systems. He also has complementary skills and experience in ICT project management, leadership within a research environment, and government ICT procurement processes.

Since June 2008 Guy has been working at the IBM Dublin Software Laboratory as an Application Specialist/System Architect with specific focus on BlueGene systems in the academic and industrial communities.

Guy has worked with the British Numerical Algorithms Group (NAG), which provides the Computational Science and Engineering (CSE) Support Service for the UK's national academic supercomputing service, HECToR. Prior to this, Guy spent seven years with the Arctic Region Supercomputing Centre (ARSC), at the University of Fairbanks, Alaska, USA.

### DES MARSH Building Project Manager

Des Marsh is the building Project Manager for the Pawsey Centre. He is a Senior Consultant with Thinc Projects, an international management consultancy specialising in the delivery of complex capital works projects.

Des has over 15 years of experience in the design and construction of major infrastructure projects for government clients. His clients have included Defence, the Bureau of Meteorology and the AFP amongst others.

Des has recently relocated from Sydney with his family. Having spent a good deal of time in Perth in his youth, he is keen to reacquaint himself with all this fine city has to offer. When he is not busy delivering projects, he can be found bushwalking or on the water with his young family. Des is looking forward to the challenges of delivering this world-class project and is excited at the significant boost in capability it will provide to iVEC and its partners.

## Review of the 3rd Annual iVEC eResearch Forum

This year's Forum was held on the 19th of February and included an update on the Pawsey HPC Centre for SKA Science by Prof Julian Gale as well as keynote presentations by Dr Florian Füsseis (X-ray Tomography) and Kevin Vinsen (ICRAR Challenges). The eResearch Forum also included final presentations by the iVEC Research Interns for 2009-2010. iVEC supported fourteen interns this year, increasing the number of places from previous years with the support of the International Centre for Radio Astronomy Research (ICRAR), Professor Lister Staveley-Smith, Professor Igor Bray and A/Prof Ricardo Mancera.



The audience at the ARRC Auditorium included researchers, academics, industry and government, reflecting the increased interest in eResearch in Western Australia.

The Forum closed with the traditional sundowner and poster session with students, researchers and attendees relaxing in an informal setting to discuss the day's topics.

To find out more about the iVEC eResearch Forum 2010, or to see the interns podcasts please visit:  
<http://ivec.org/forum2010>.

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