



Asmal turns on Africa's largest supercomputer

[Johannesburg, 8 July 2002] - The University of the Western Cape () took a major step forward for its bioinformatics arm, the South African National Bioinformatics Institute (), when education minister *Kadar Asmal* switched on the Cray SV1 Supercomputer this morning. SANBI says it is now the first site on the African continent with a dedicated research supercomputer.

The installation of the Cray supercomputer is result of collaboration between the US-based Cray and SANBI's director and professor of Genomics and Bioinformatics, Winston Hide.

Cray originally approached UWC late last year to collaborate with Hide on the development of his "world-class" biotechnology algorithms used to discover genes. The growing information-based genomic biotechnology market is an area in which Cray is eager to establish itself.

Hide says: "A key mission for researchers is determining the number of genes in the human genome. Unfortunately, most approaches to this problem have failed due to the limited availability of required computing power to enable exhaustive analysis of each of the five billion known residues of human DNA. The Cray technology will allow us to develop forceful new algorithms, providing UWC with new insight into the number, structure and function of human genes and their relationship to diseases such as HIV."

SANBI's key research areas focus on the causes of genetic diseases, vaccine development for HIV and research into the causes of cancer.

The installation of the Cray will also boost the work of the Electric Genetics software company, a bioinformatics development business housed at UWC. Through Electric Genetics, SA contributes much software to the US biotechnology market to aid in the design of gene chips.

UWC rector *Brian O'Connell* says: "UWC is rapidly developing a leadership position in the delivery of cutting-edge informatics and biotechnology. The arrival of the Cray supercomputer provides a powerful addition to UWC's innovative portfolio, making it possible for students coming to UWC to perform supercomputer class analyses without having to rely on scarce time availability on foreign supercomputers."