

PublisherInfo		
PublisherName	:	BioMed Central
PublisherLocation	:	London
PublisherImprintName	:	BioMed Central

BLAST off

ArticleInfo		
ArticleID	:	4390
ArticleDOI	:	10.1186/gb-spotlight-20020201-01
ArticleCitationID	:	spotlight-20020201-01
ArticleSequenceNumber	:	56
ArticleCategory	:	Research news
ArticleFirstPage	:	1
ArticleLastPage	:	2
ArticleHistory	:	RegistrationDate : 2002-2-1 OnlineDate : 2002-2-1
ArticleCopyright	:	BioMed Central Ltd2002
ArticleGrants	:	
ArticleContext	:	130593311

Christopher Thorpe

Email: Christopher.Thorpe@cursci.co.uk

Molecular biologists using Apple computers can receive a speed boost if they use an optimized version of BLAST and the new Mac operating system OS X on a Macintosh G4. The new version of BLAST, called A/G BLAST, was engineered by Apple's Advanced Computation Group in conjunction with Genentech and was announced on 29 January at the [O'Reilly Bioinformatics Technology Conference](#) in Tucson Arizona. A/G BLAST is optimized to take advantage of the G4 processor's Altivec or 'Velocity Engine' components to substantially increase the speed and efficiency of running BLAST queries.

A/G BLAST outperformed BLAST dramatically in a test case of a homology search of mouse chromosome 16 against human chromosome 21 using the NCBI word size of 11 nucleotides. The optimized BLAST required only 45 minutes, compared to [NCBI-BLAST](#) on the same machine, which took over four hours.

Steve Jobs, iCEO of Apple, recently announced that Genentech were the first customers for the G4 iMac, having placed a pre-order for 1000 machines. The optimized software is available for immediate download either as source code or executable, from the [Apple Advanced Computation Group](#) website.

References

1. O'Reilly Bioinformatics Technology Conference, [<http://www.oreillynet.com/biocon2002/>]
2. NCBI-BLAST , [<http://www.ncbi.nlm.nih.gov/BLAST/>]
3. Apple Advanced Computation Group, [<http://developer.apple.com/hardware/ve/acgresearch.html>]