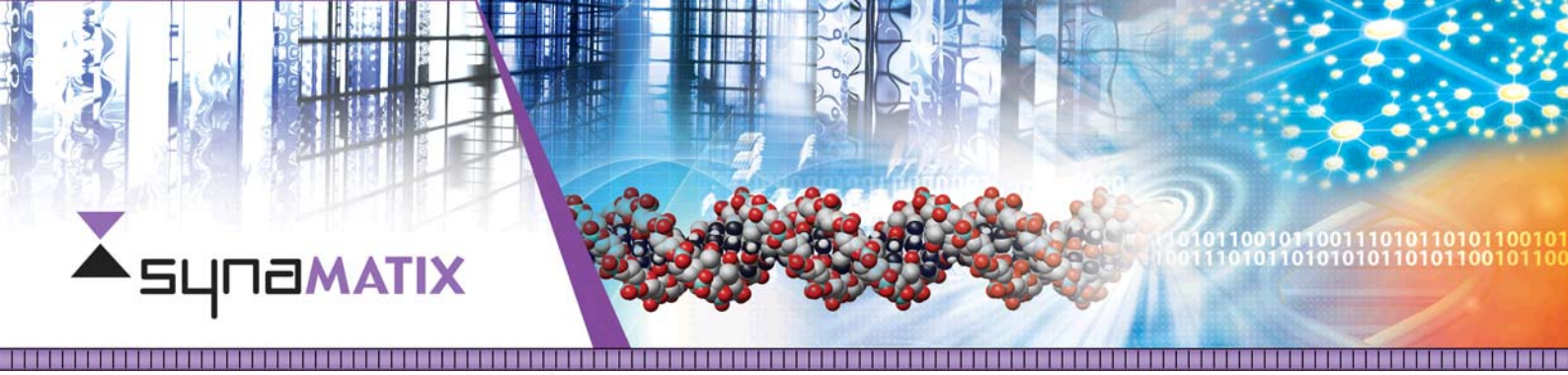


Application Notes

February 2005

Our Roadmap Forward for 2005

Synamatix has been focused on exploring and developing novel approaches towards the storage and high-throughput analysis of biological data based on unique proprietary algorithms. The culmination of years of research had resulted in the commercialisation of the world's first 2nd generation database called SynaBASE™ in March 2004. SynaBASE is a structured network database, whereby patterns and their relationships are maintained in an intelligent network. SynaBASE and tools built to interrogate the system have demonstrated analysis speeds and scalability beyond the scope of conventional technologies.

Our efforts in 2004 were focused on exploring the wide spectrum of potential applications of SynaBASE with the key objective of evaluation and validation of Synamatix's technologies. The monthly in-house Research Newsletters are a reflection of the milestones achieved in key research areas such as ultra-fast functional motif identification, whole-genome haplotype analysis, proteomics, transcriptomics, and microarray chip design through to multi-genome comparative genomics and personalised medicine. Please view Page 2 for some milestone highlights of 2004.

The application-centric focus of Synamatix's 2004 Research Newsletters has helped exemplify the unique capabilities and performance of SynaBASE and its suite of high-throughput analysis tools. However, in 2005 our team of bioinformaticians, scientists and research partners will focus more on the qualitative and quantitative results of their on-going research activities. Through this, a more holistic overview of science and novel discovery through the use of SynaBASE will be demonstrated.

The first in a series of 'Application Note' Newsletters will provide a more in-depth understanding of SynaBASE and how it can be used in a wide array of research environments.

We would like to take this opportunity to thank you for your continued support and interest in Synamatix and our technologies.

Best wishes,

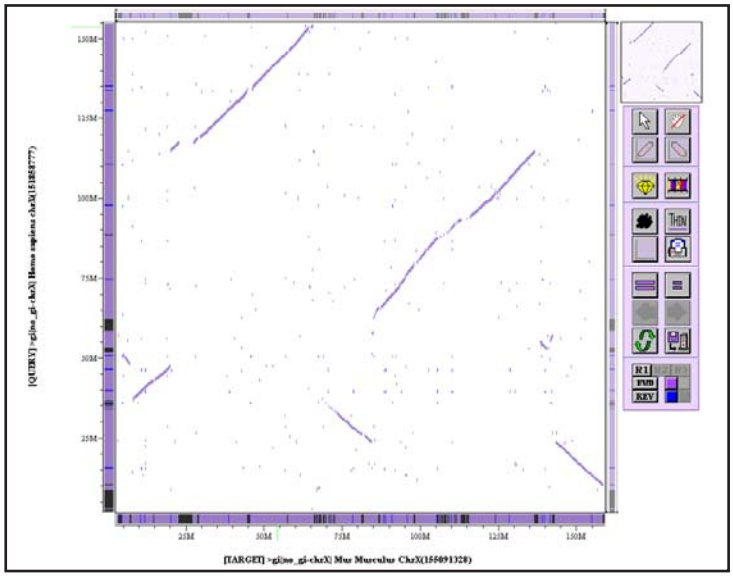
Dr. Arif Anwar
Vice President, Synamatix

Some Milestone Snapshots From 2004

Ultra-fast multi-genome comparative genomics

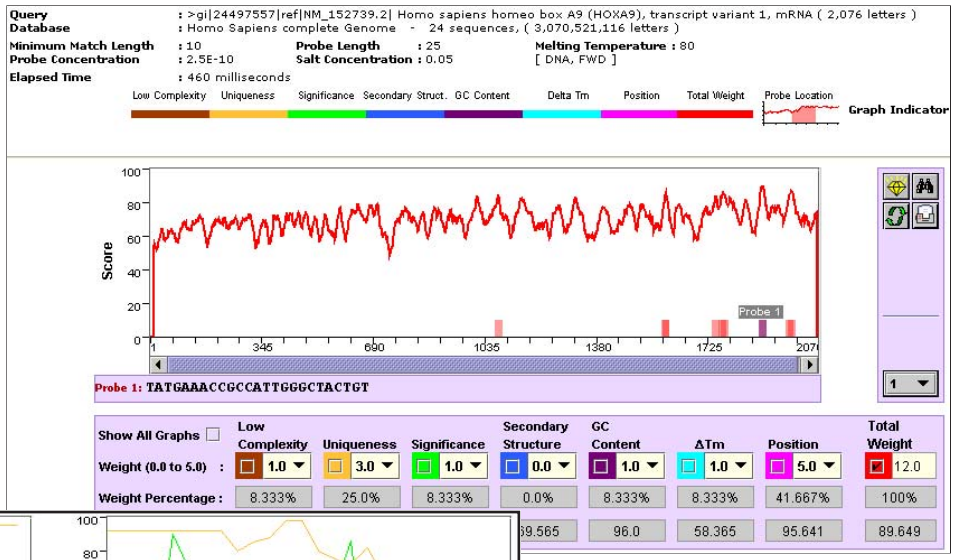
Human Chromosome X against Mouse Chromosome X was aligned in less than 3 minutes.

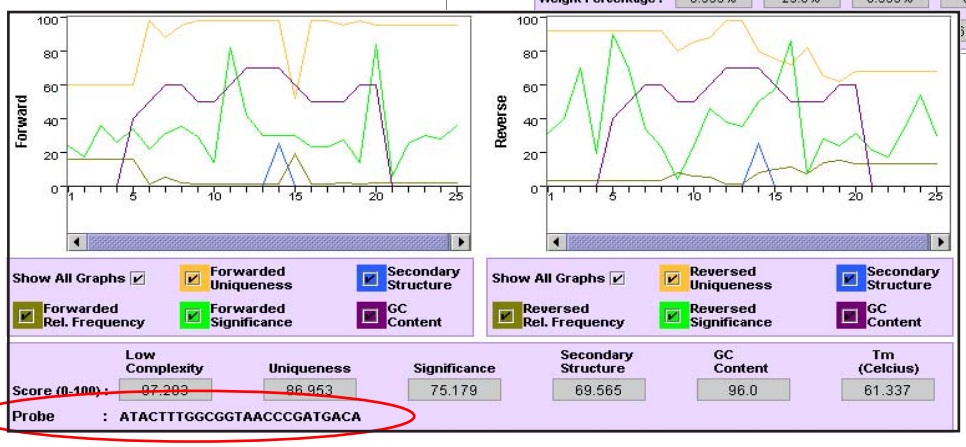
Human Chromosome X against the entire human genome (all 22 chromosomes) in just 21 minutes and 18 seconds.



Optimised microarray probe design enabling fast identification targets in cancer genomes and diabetes

Probe candidates such as that for HOXA9 gene searched against all available patterns in the human genome in 460 milliseconds.





Scalability of SynaBASE has facilitated *in silico* whole-genome-array design in under 5 hours.

As more genomes are updated, hardware cost inevitably increases and speed bottlenecks are encountered.

VS.

A SynaBASE ported on a HP Itanium single CPU server outperformed 180 high-performance servers (of a leading US Pharmaceutical Company) in the maintenance and updating of their internal genome mapping and assembly applications.

SynaBASE has demonstrated its advanced qualities in storage and ultra-high-throughput analysis of biological data in a wide array of applications.

In 2005, with the help of our research partners, it will become our mission to define and further enhance the unique capabilities and application parameters of SynaBASE. The potential scope of SynaBASE is yet to be defined.