

Table of Contents

- Software Tools for Academics and Researchers (STAR)
 - ◆ About STAR
 - ◆ Visitor map
 - ◆ Products
 - ◆ History
 - ◆ Acknowledgements
 - ◆ Presentations & Outreach Material

Software Tools for Academics and Researchers (STAR)

About STAR

The STAR program at MIT seeks to bridge the divide between scientific research and the classroom. Understanding and applying research methods in the classroom setting can be challenging due to time constraints and the need for advanced equipment and facilities. The multidisciplinary STAR team collaborates with faculty from MIT and other educational institutions to design software exploring core scientific research concepts. The goal of STAR is to develop innovative and intuitive teaching tools for classroom use.

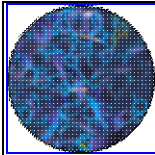
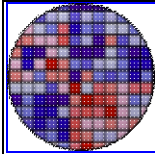
STAR educational tools are FREELY available. To complement our educational software, the STAR website contains curriculum components/modules which can facilitate the use of STAR educational tools in a variety of educational settings. Students, teachers, and professors should feel welcome to download software and curriculum modules for their own use. We welcome your comments and feedback as you explore these educational tools.

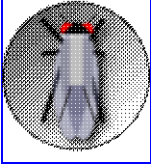
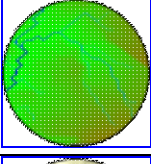
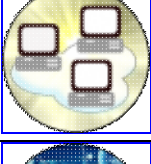
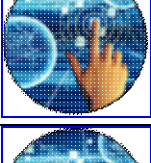

Visitor map

STAR website visitors in the last month.

```
#include <star.home.map.inc.html>
```

Products

	<p><u>StarBiochem</u> is an application that displays molecules from the Protein Data Bank (http://www.rcsb.org/). It allows users to explore fundamental biological research concepts, select parts of the molecule and control how the selected parts are displayed.</p>
	<p><u>StarBiogene</u> provides a set of software tools for analyzing genomics data via the web. It enables the user to take part in the analysis of microarray gene expression data by making usable genomics research software readily available.</p>

	<u>StarGenetics</u> provides a set of software tools for analyzing genetics structure of the organisms. It enables the user to take part in the analysis of gene data by mating wild type and mutant.
	<u>StarHydro</u> is application for distributed hydrological analysis. It allows user to delineate watersheds and explore various watershed statistics.
	<u>StarHPC</u> provides an on demand compute cluster for faculty and students at MIT to use.
	<u>StarMolsim</u> is a collection of molecular dynamics and atomistic materials modeling research software available via the web.
	<u>StarORF</u> is a software that facilitates the identification of the protein encoded within a DNA segment.

History

The Star Program builds on the initial success of the Star teamsâ collaboration with Professor Graham Walker of the MIT Biology Department, Professor John Belcher of the MIT Physics Department, Professor Nicola Marzari of the MIT Department of Materials Science and Engineering, Professor Rafael Bras and Professor Markus Buehler of the MIT Department of Civil and Environmental Engineering, Professor Melissa Kosinski-Collins of the Biology Department of Brandeis University, and the Broad Institute of MIT and Harvard.

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- The Office of the Dean of Undergraduate Education at MIT.

Presentations & Outreach Material

- Star Products Summary Handout
- MacVicar Day (03/02/2007)
- About Star (08/04/2006) (Zipped originals)

#include <star.home.inc.html>