Home

Welcome

The Bejerano Lab at Stanford University developed the Genomic Regions Enrichment of Annotations Tool (GREAT) and hosts the GREAT web server at http://bejerano.stanford.edu/great.

Many coding genes are well annotated with their biological functions. Non-coding regions typically lack such annotation. GREAT assigns biological meaning to a set of non-coding genomic regions by analyzing the annotations of the nearby genes. Thus, it is particularly useful in studying *cis* functions of sets of non-coding genomic regions. *Cis*-regulatory regions can be identified via both experimental methods (e.g. chromatin immunoprecipitation followed by massively parallel sequencing) and by computational methods (e.g. sequence conservation in a given clade).

News

Read about our newly-available GREAT Version 2.0 release which adds genomic region/gene distribution plots and improves the term details page.

GREAT Help

General

- Overview - When is GREAT useful, and for which uses should I prefer it to other annotation tools?
- Video - Watch a video presentation on GREAT
- Citation - How do I cite GREAT?
- Publications & Reprints
- Version History
- About Us
- Download
- Contact Us - forum information
- Forums - get help from the GREAT userbase

Input

- Genome Assemblies - Which genome assemblies does GREAT support, and can I use other assemblies or species?
- File Formats - What should my test regions and background regions files contain?
- File Size - What data set sizes can GREAT handle?
- Data Integrity - What checks does GREAT perform to ensure my data is valid?
- Background Sets - When should I use an explicit background set in evaluating enrichments?

Output

- Statistics - How does GREAT calculate enrichments, and how should I interpret my results?
- Output - What output does GREAT provide?
- Genes - Which set of genes does GREAT use, and how does GREAT determine a single transcription start site for a gene?
- Visualizations - How can GREAT help you visualize your data for publication or better analysis?
- Ontologies - What is an ontology, and what data do the ontologies in GREAT provide?

Technical

- Web Browsers - Which web browsers does GREAT support, and how can I make my browser work best with GREAT?
- Programming Interface - How can I submit data sets to GREAT automatically through a script or directly from my web site?

Troubleshooting

- Troubleshooting