
Genebook Documentation

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CHAPTER 1

Installing Genebook

Genebook is a [Meteor.js](#) application at its core. This means it is completely written in javascript. It requires [Node.js](#), [MongoDB](#) and ofcourse Meteor itself.

Installing this on a Mac is as easy as:

```
brew install mongodb
brew install node
curl https://install.meteor.com/ | sh
git clone https://github.com/holmrenser/genebook
```

Check [this](#) if you run into npm user persission problems.

The following will let you run a development version on your local machine:

```
meteor
```

While the app is running you can run the following script to load some example data:

```
bash scripts/load_testdata.sh
```

Information on compiling a full standalone build will be added soon

Key Genebook features

Genebook is a database system and user interface for browsing and querying:

- Genome sequences
- Structural genome annotations (i.e. protein coding genes and their exon structures)
- Functional annotations of genes (i.e. protein domain information from InterproScan)
- Orthogroup information
- Gene expression data from RNA sequencing experiments

In addition it features:

- User accounts with access levels, like admin level access for configuration and curator level access to modify annotations
 - Easy data loading with parsers for common file formats
 - Automatic generation and configuration of BLAST to search genome and annotation sequences
 - Semantic URLs
 - Intuitive user interface
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CHAPTER 3

Background

Genebook is a resource for collaborative genomics research and is meant to allow a group of researchers to access their data in a simple and effective way. As a biological database system and user interface, Genebook can handle reference genome sequences and accompanying structural annotations, functional annotations, orthogroup information and expression data. Available information can be manually curated in a safe manner since all changes are tracked in a version history system.

This is an [example](#) of Genebook in action.