

## Sheldon McKay



I am a computational biologist, trained as a geneticist and phylogeneticist and my interests are focused on comparative genomics and evolution. I have used bioinformatics techniques extensively for genome analysis, genome annotation, and comparative genomics. I develop and use scientific software tools for data analysis and visualization. I also do research in genome structure and evolution and have ongoing collaborations with large-scale cross-species RNAi, RNA-Seq and EST-based gene expression analysis. I am active in the Generic Model Organism Database (GMOD) Project.

I am an open source and data interoperability advocate and contribute to a number of collaborative software development projects. I also do outreach to promote adoption of [iPlant](#) and GMOD tools and software, in particular the Generic Synteny Browser ([GBrowse\\_syn](#)), for which I teach at the GMOD summer schools.

## More Information

- Click on a section title below to open:

### Research

- Evolutionary genetics
- Functional and comparative genomics
- Scientific software development

### Computational

- Object Oriented Perl; Perl/CGI, Perl/DBI
- JavaScript; AJAX; CSS
- MediaWiki and PHP
- SQL and database design
- Massive Parallel Computing with PBS and SGE
- Genome database mining (NCBI, Ensembl)
- Gene Ontology and KEGG pathway analysis
- Genome and Comparative Genome data visualization
- Phylogenetic inference methods
- Digital signal processing of DNA

User:Mckays

The Mediawiki extension that opens and closes these sections

Email: sheldon.mckay@gmail.com

- Active in the [GMOD](#) and [iPlant](#) consortia
- [GBrowse\\_syn](#) primary developer
- [GBrowse\\_karyotype](#) primary developer
- [GBrowse](#) core developer
- [GBrowse PrimerDesigner plugin](#) for inline design and selection of PCR primers
- [GBrowse Spectrogram plugin](#) for spectral analysis of DNA
- Annoying [Popup Balloons](#)

[View on Google Docs](#)