



# WP5

## LiceBase Introductory Course

### Part 1 Overview

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# Outline

- Overview on LiceBase, getting help
- Terms and definitions
- Basic functions: using Tripal
- Basic functions: using GBrowse
- Basic functions: BLAST
- Advanced topics: BLAST, GO, KEGG, and friends
- Examples: searching genes by functional annotation
- Exercise: finding G O I's, reconstruct pathways
- Annotation guide: RNAi experiment
- Exercise: annotate an RNAi experiment
- Annotation guide, novel genes and gene function
- Q & A

# LiceBase technology

- Based on GMOD tools ([gmod.org](http://gmod.org))



- Genome Browser:



- Genomics web-pages:

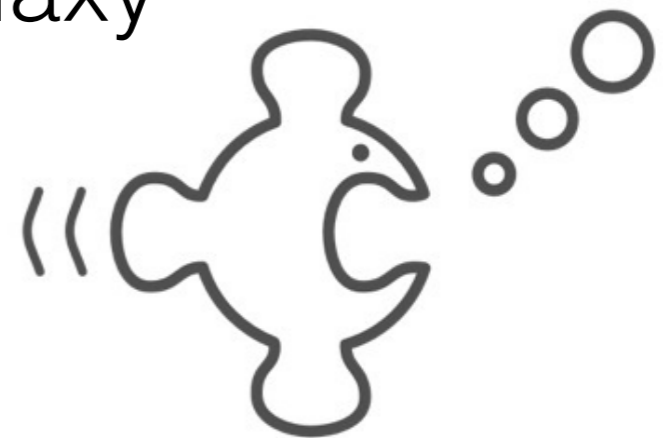


- Database: CHADO

- Analysis:  *elixir* NELS/ aka. Galaxy



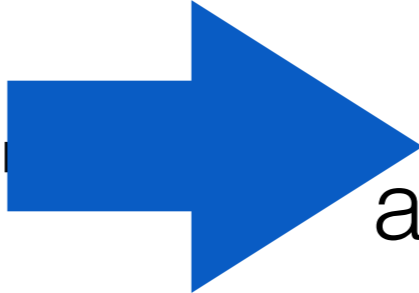
- Authentication: SAML single sign-on



# What to expect

- Search and annotate genes and sequences
- Browse the genome and data tracks
- Search and browse functional data
- Annotate RNAi and in-situ experiments
- Interact with the community

# Data in LiceBase

- LSalAtl2s scaffolded genome assembly
  - Ensembl automatic gene predictions: gene-models, mRNA, exons, utr's, ncRNA
  - Autom. func. annotation: InterProScan, KAAS, GO, Blast runs
  - RNA-seq data from 23 stages and tissues
  - BLAST databases: DNA, Protein, other organisms
  - Developmental Stage Ontology
  - Journal articles
- **RNAi exp. annotation**
  - **user contributed data, blogs, images, errata**
  - **Few manually annotated genes**
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- YOU provide the annotation and data
- This course will enable you to do so

# LiceBase is a web-site

- Documentation is embedded with the site
- You can link to almost all pages, genes of interest, etc.
- You can open it in multiple tabs and windows
- You can contribute content: blogs and forum
- We are the community

# LiceBase is a web-app

- Login and personalized accounts
- Dynamic: content and functionality appears (and disappears) frequently, structure might change, design, colors layout, might change
- Configurable: app remembers your preferences and settings
- Errors: apps can break, throw errors, but data is always safe
- Not everything looks optimal everywhere
- Cookies required
- JavaScript required (not Java)
- You can't use pop-up blockers
- Use on mobile devices (somewhat limited functions)

Ask not, what LiceBase  
can do for you...

...just try it out now.