

Phylogeny visualization

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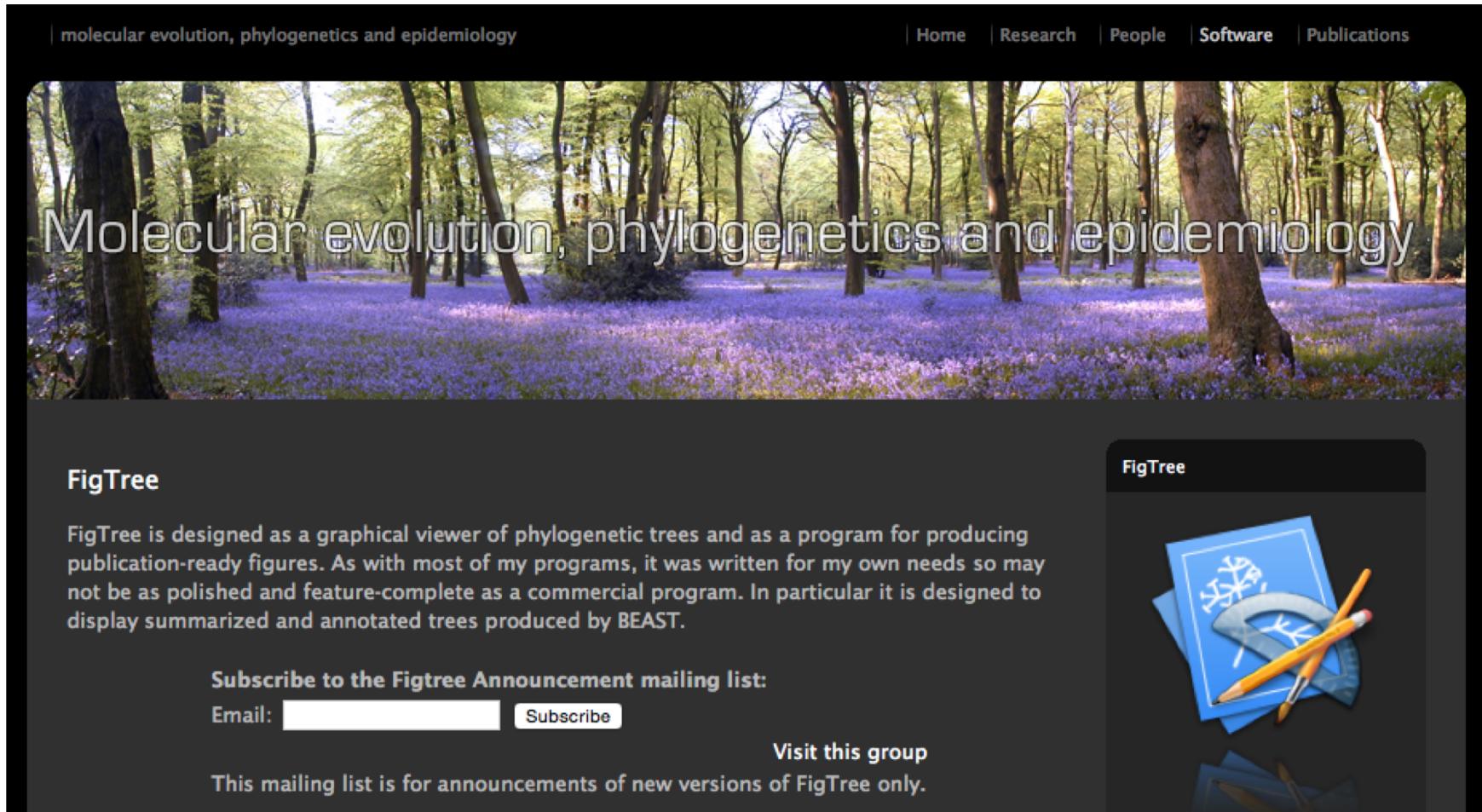
Researcher

DTU Food

27-05-2022

FigTree

<http://tree.bio.ed.ac.uk/software/figtree/>



The screenshot shows the FigTree website homepage. At the top, there's a navigation bar with links for Home, Research, People, Software, and Publications. Below the navigation is a large banner image of a forest floor covered in blue flowers. Overlaid on this image is the text "Molecular evolution, phylogenetics and epidemiology". The main content area has a dark background. On the left, there's a section titled "FigTree" with a description of the software. On the right, there's a "FigTree" icon featuring a pencil and a DNA helix. At the bottom, there's a call-to-action for subscribing to the mailing list and a link to visit a group.

molecular evolution, phylogenetics and epidemiology

| Home | Research | People | Software | Publications

Molecular evolution, phylogenetics and epidemiology

FigTree

FigTree is designed as a graphical viewer of phylogenetic trees and as a program for producing publication-ready figures. As with most of my programs, it was written for my own needs so may not be as polished and feature-complete as a commercial program. In particular it is designed to display summarized and annotated trees produced by BEAST.

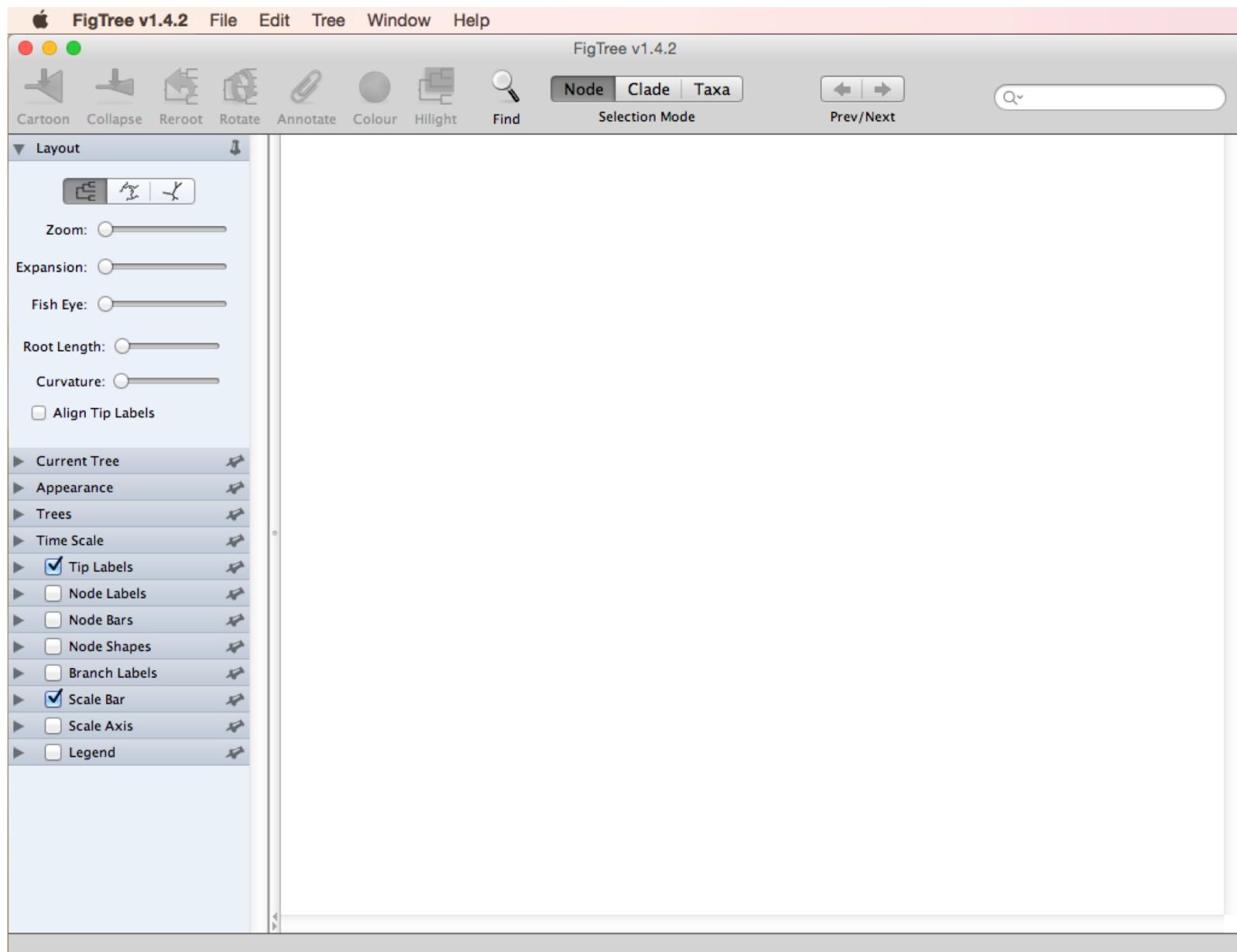
Subscribe to the Figtree Announcement mailing list:

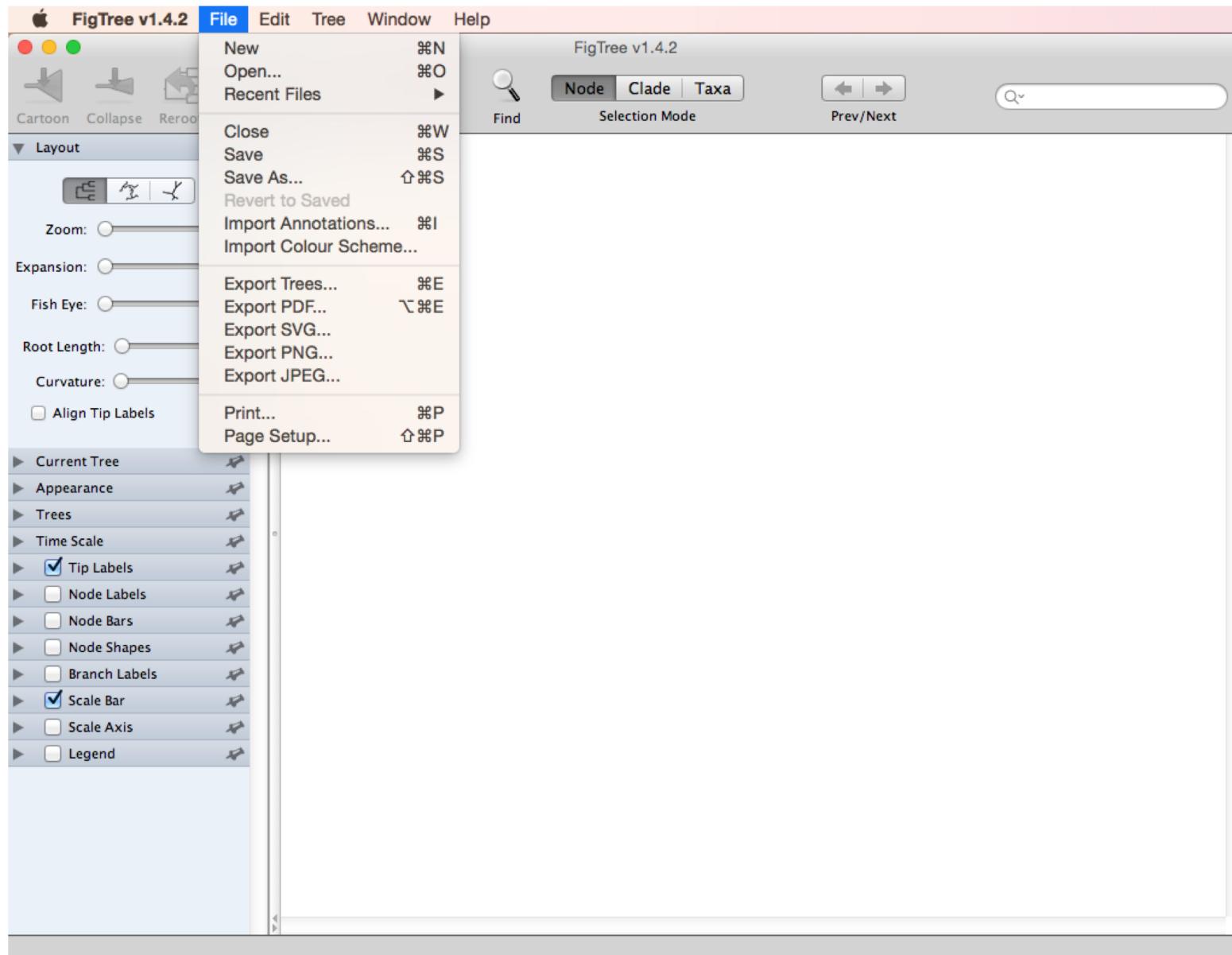
Email:

Visit this group

This mailing list is for announcements of new versions of FigTree only.





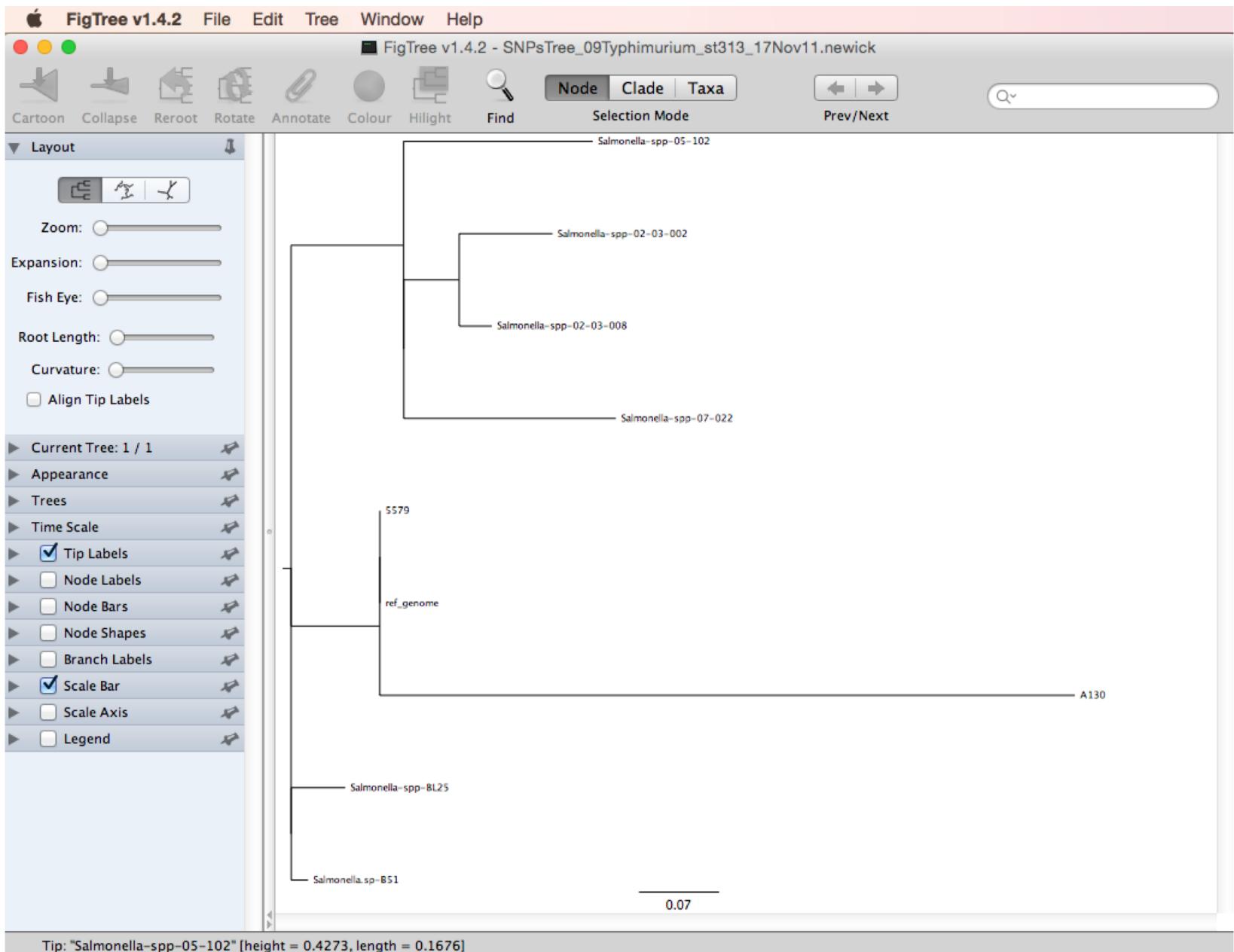


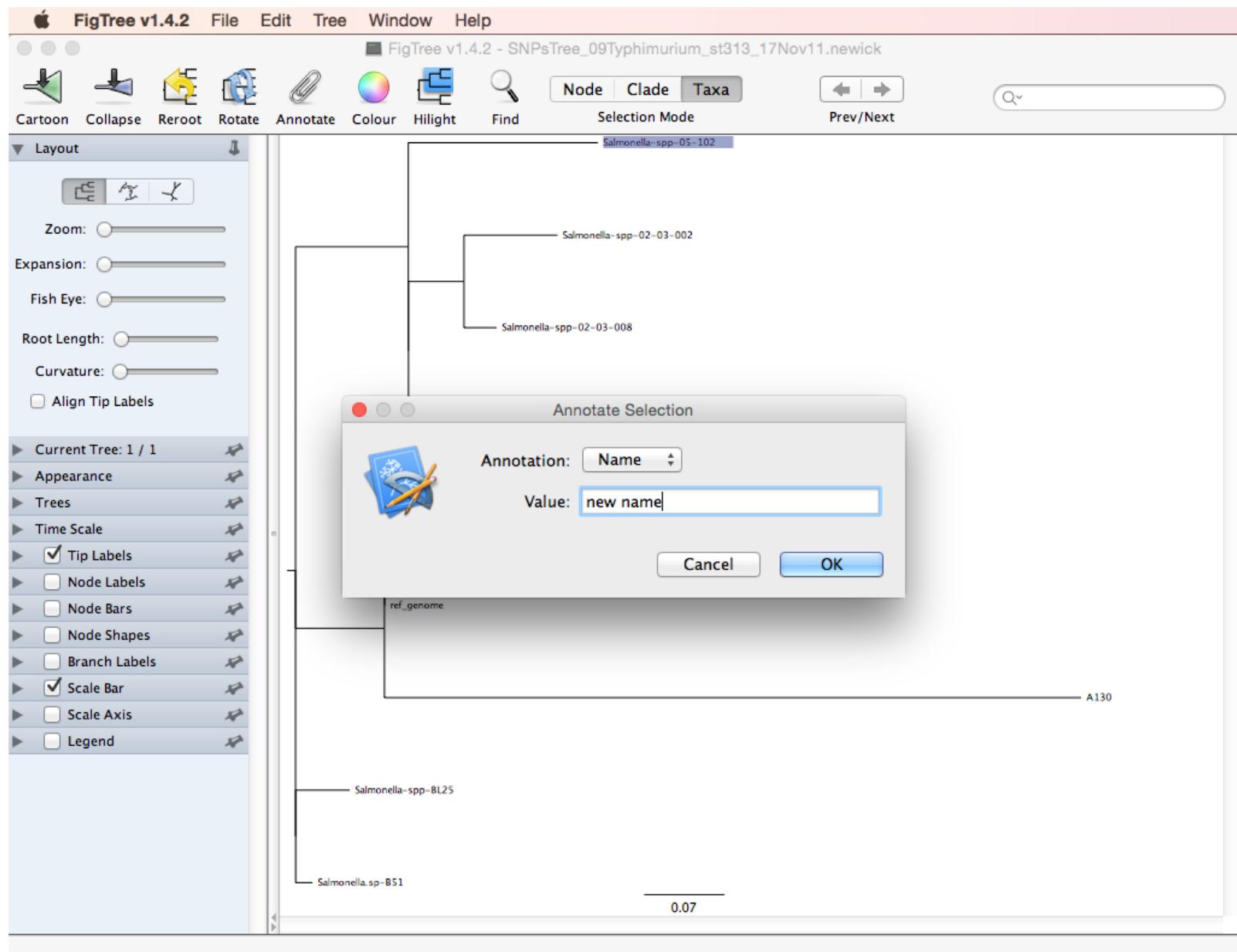
SNPsTree_09Typhimurium_st313_17Nov11.newick

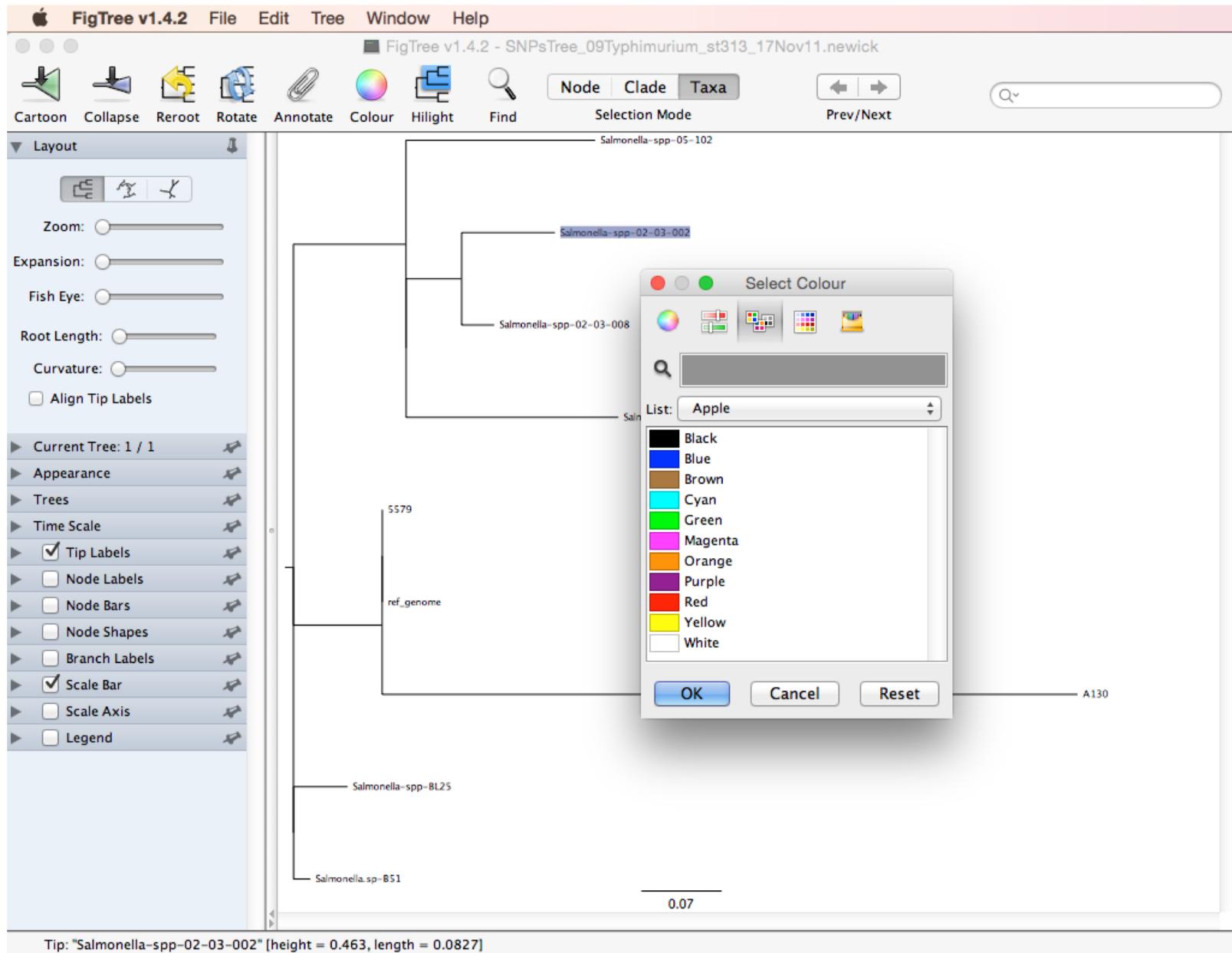
File Path ▾ : ~/Lab/132_Training_WHO_Thailand/78_workshop_Thailand_2015/computer_exercises/manual/figTree/SNPsTree_09Typhimurium_st313_17Nov11.newick

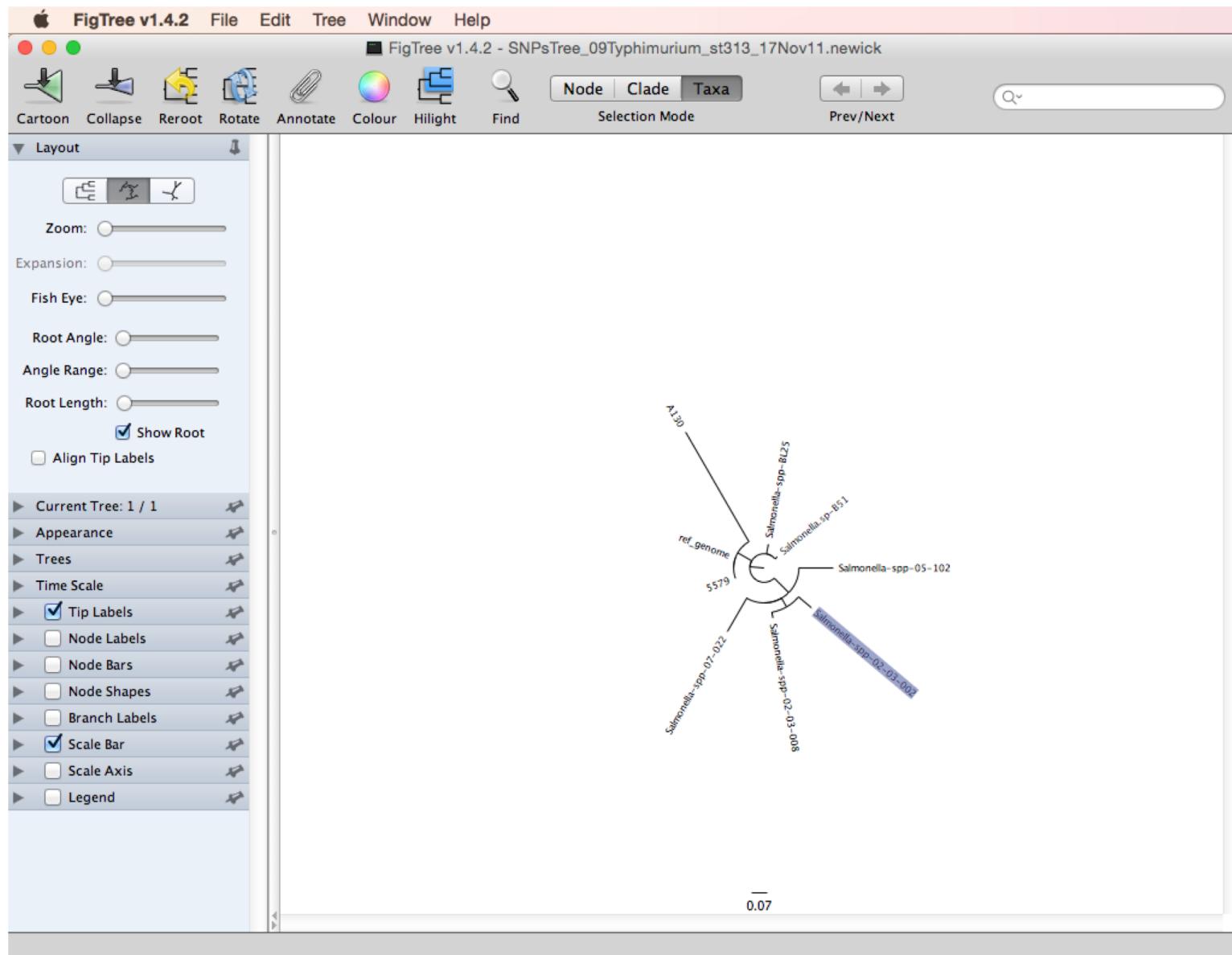
```
((Salmonella-spp-05-102:0.16761, ((Salmonella-spp-02-03-002:0.08267, Salmonella-spp-02-03-008:0.02882)0.909:0.04912, Salmonella-spp-02-03-001:0.01111))0.011:0.00001, ((Salmonella-spp-02-03-005:0.01111, Salmonella-spp-02-03-004:0.01111)0.011:0.00001, ((Salmonella-spp-02-03-003:0.01111, Salmonella-spp-02-03-006:0.01111)0.011:0.00001, Salmonella-spp-02-03-007:0.01111))0.011:0.00001))0.011:0.00001
```

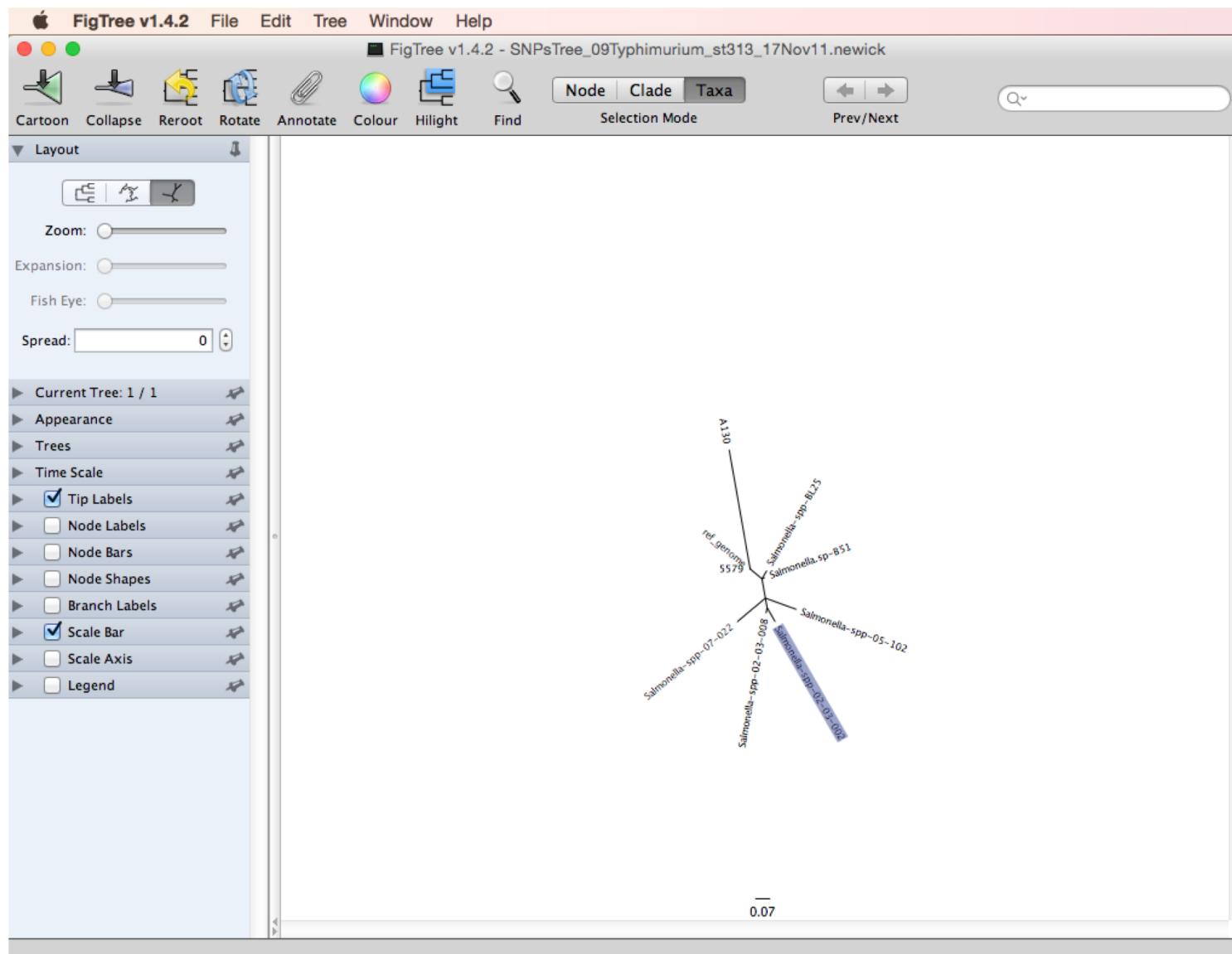
Line 1 Col 1 | (none) | Unicode (UTF-8) | Unix (LF) | Last saved: 17/11/11 15:11:56 | 305 / 62 / 2 |



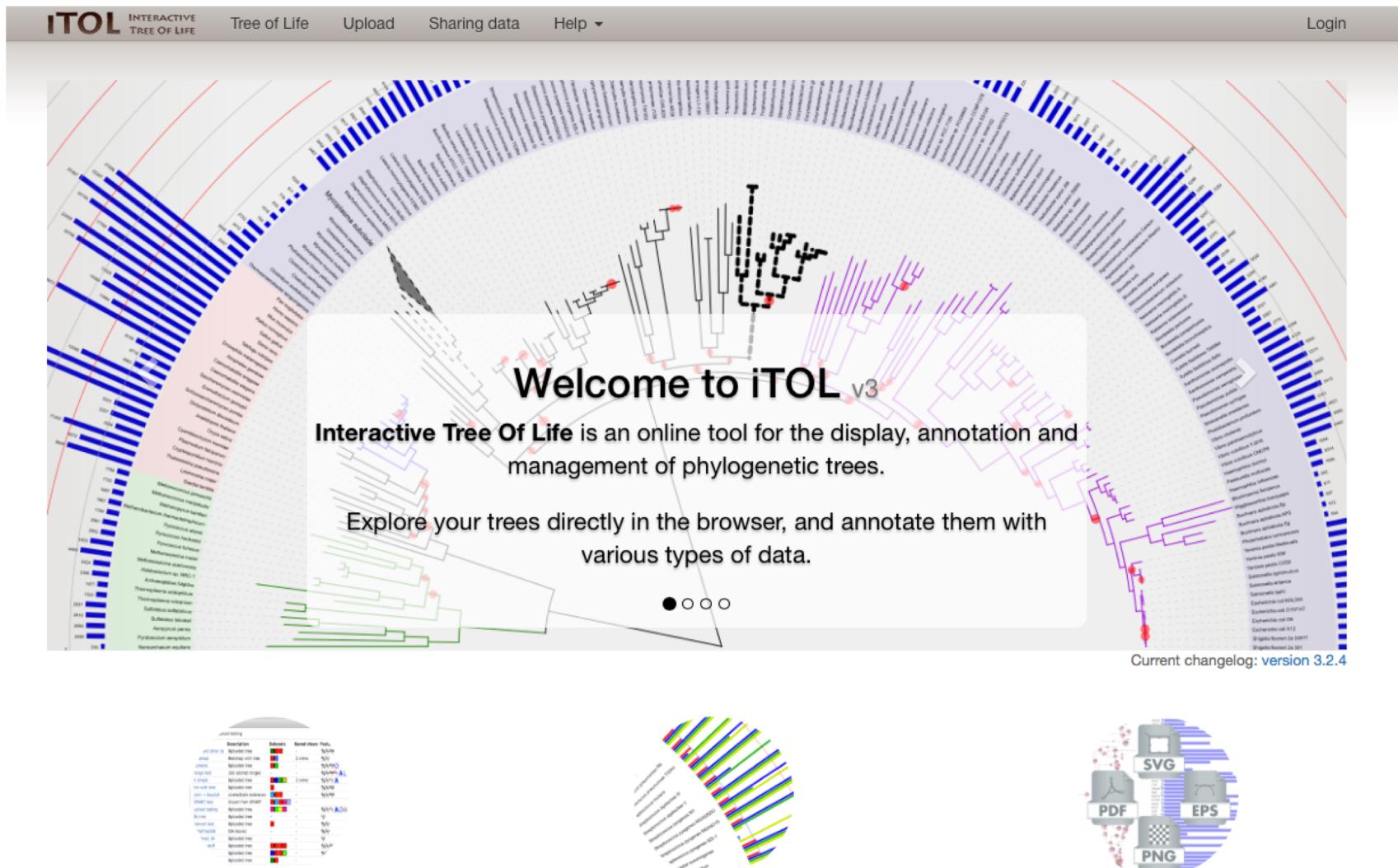








<http://itol.embl.de>



The screenshot shows the iTOL v3 interface. At the top, there is a navigation bar with links for "Tree of Life", "Upload", "Sharing data", "Help", and "Login". The main area features a large circular phylogenetic tree with many branches. A central callout box contains the text:

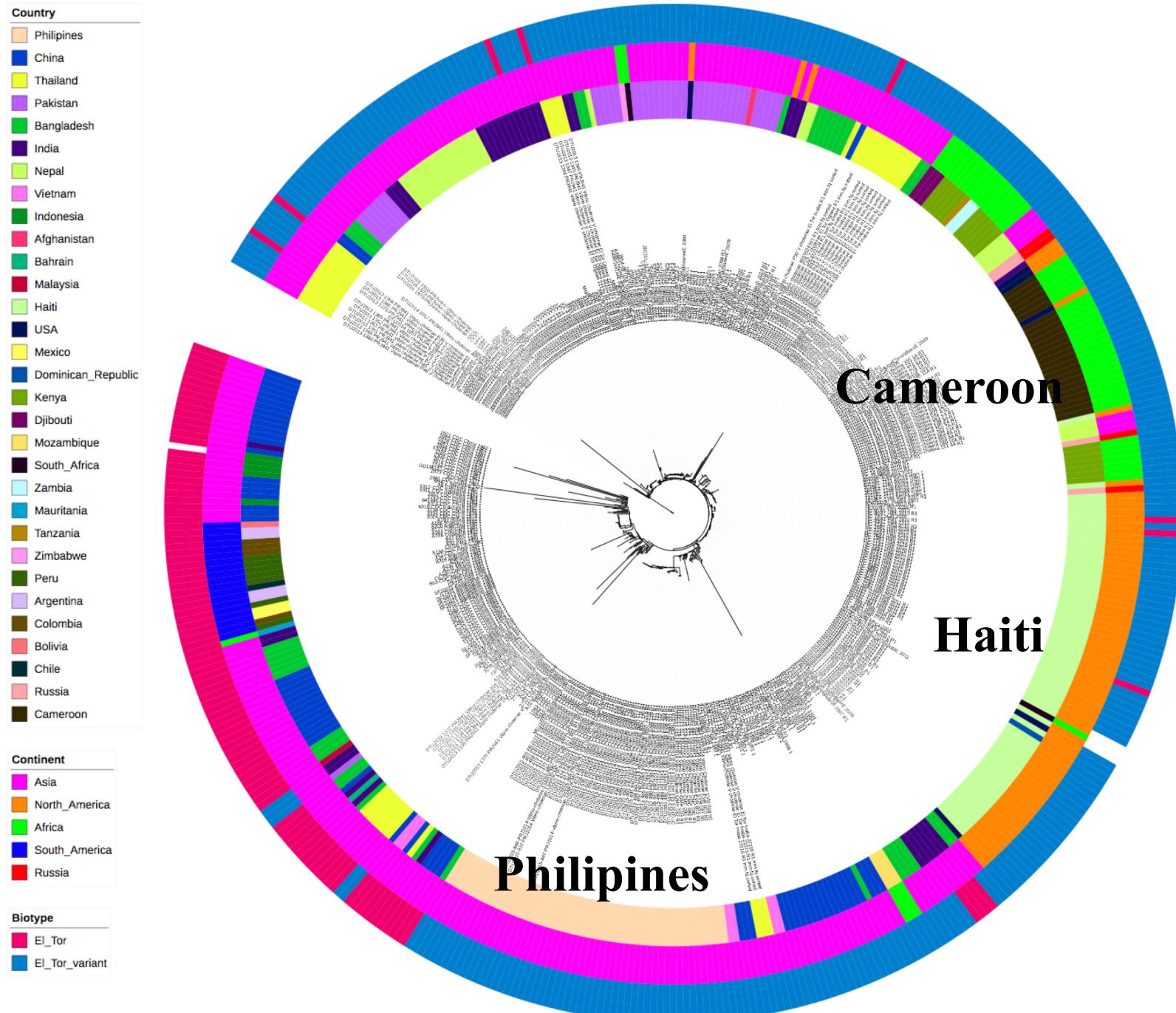
Welcome to iTOL v3

Interactive Tree Of Life is an online tool for the display, annotation and management of phylogenetic trees.

Explore your trees directly in the browser, and annotate them with various types of data.

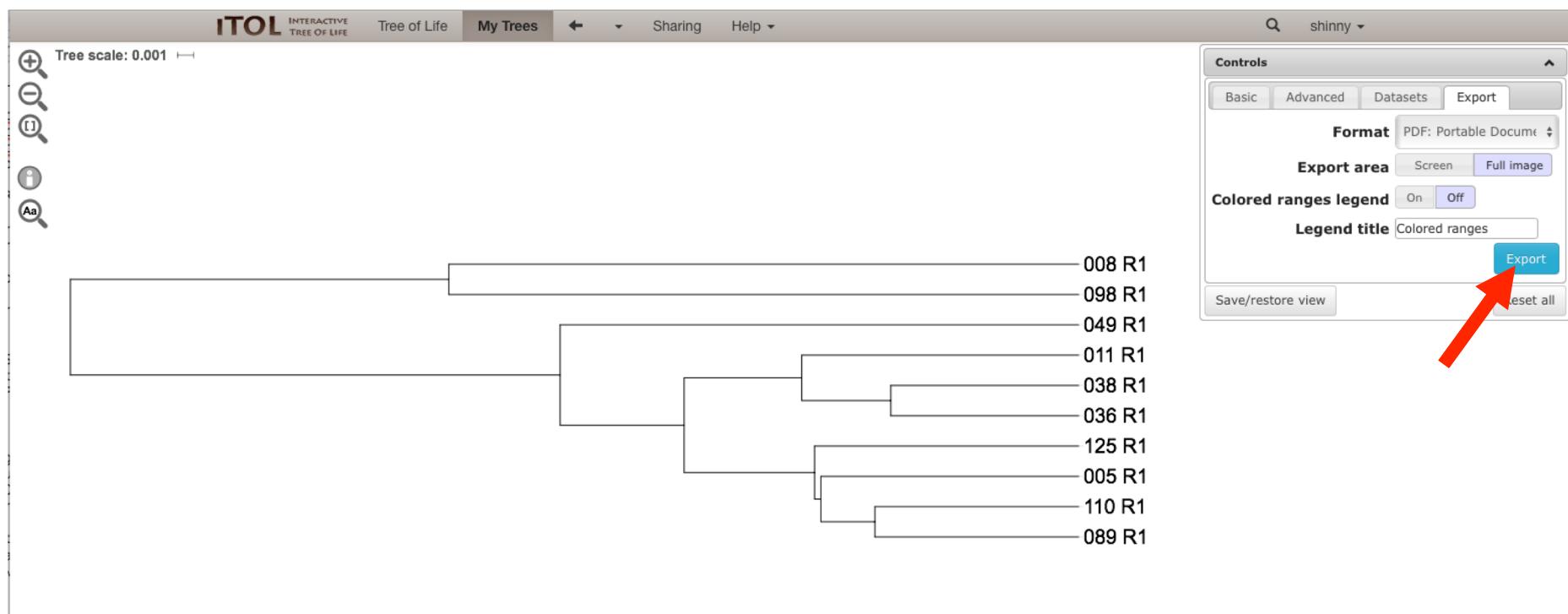
At the bottom right, there is a link to the "Current changelog: version 3.2.4".

On the left side, there is a legend for "Level testing" and a color key for "Annotations". On the right side, there is a circular icon with various file formats: SVG, PDF, EPS, and PNG.



cgMLST_tree_edit.newick	No description	10	-	-	%	2018-09-21	
SNP_tree_008_edited.txt	No description	10	-	-	%	2018-09-22	
cgMLST_tree.newick	No description	10	-	-	%	2018-09-22	

Paste tree text Upload tree files or drag & drop the tree files here



iTol annotation

- [Link to example of iTol files](#)

```
DATASET_COLORSTRIP
SEPARATOR TAB
BORDER_WIDTH 0.5
COLOR #bebada
DATASET_LABEL country
LEGEND_COLORS #a6cee3 #1f78b4 #b2df8a #33a02c #fb9a99 #e31a1c #fdbf6f
LEGEND_LABELS Denmark France Germany Italy Netherlands Poland Spain
LEGEND_SHAPES 1 1 1 1 1 1 1
LEGEND_TITLE country
MARGIN 5
STRIP_WIDTH 25
DATA
DTU2018-1435-PRJ1147-Escherichia-coliform-801802016_S19_L001 #a6cee3 Denmark
DTU2018-1436-PRJ1147-Escherichia-coliform-801303004_S20_L001 #a6cee3 Denmark
DTU2018-1316-PRJ1147-Escherichia-coliform-802802020 #a6cee3 Denmark
DTU2018-1310-PRJ1147-Escherichia-coliform-802802008 #a6cee3 Denmark
DTU2018-1303-PRJ1147-Escherichia-coliform-802402014 #a6cee3 Denmark
DTU2018-1308-PRJ1147-Escherichia-coliform-802802004 #a6cee3 Denmark
DTU2018-1299-PRJ1147-Escherichia-coliform-802402006 #a6cee3 Denmark
DTU2018-252-PRJ1147-Escherichia-coliform-800103010_S44_L001 #a6cee3 Denmark
DTU2018-1248-PRJ1147-Escherichia-coliform-802303004 #a6cee3 Denmark
DTU2018-1309-PRJ1147-Escherichia-coliform-802802006 #a6cee3 Denmark
DTU2018-1312-PRJ1147-Escherichia-coliform-802802012 #a6cee3 Denmark
```

iTOL_colorstrip-country.txt

Make iTol annotation

- Using R script (table2itol.R)

annotation_country.txt

ID	country
DTU2018-1435-PRJ1147-Escherichia-col <i>i</i> -801802016_S19_L001	Denmark
DTU2018-1436-PRJ1147-Escherichia-col <i>i</i> -801303004_S20_L001	Denmark
DTU2018-1316-PRJ1147-Escherichia-col <i>i</i> -802802020	Denmark
DTU2018-1310-PRJ1147-Escherichia-col <i>i</i> -802802008	Denmark
DTU2018-1303-PRJ1147-Escherichia-col <i>i</i> -802402014	Denmark
DTU2018-1308-PRJ1147-Escherichia-col <i>i</i> -802802004	Denmark
DTU2018-1299-PRJ1147-Escherichia-col <i>i</i> -802402006	Denmark
DTU2018-252-PRJ1147-Escherichia-col <i>i</i> -800103010_S44_L001	Denmark
DTU2018-1248-PRJ1147-Escherichia-col <i>i</i> -802303004	Denmark
DTU2018-1309-PRJ1147-Escherichia-col <i>i</i> -802802006	Denmark
DTU2018-1312-PRJ1147-Escherichia-col <i>i</i> -802802012	Denmark
DTU2018-1313-PRJ1147-Escherichia-col <i>i</i> -802802014	Denmark
DTU2018-1243-PRJ1147-Escherichia-col <i>i</i> -801303014	Denmark

```
source("table2itol.R")
create_itol_files(infiles= "annotation_country.txt", identifier = "ID", directory = "itol_out")
```

- Go to iTol website
- Upload ‘tree.newick’
- Drag and drop the ‘iTOL_colorsrtip-country’ generated from R command line