Galaxy Webinar Series Planning

Webinars have become much more of a thing in Galaxy, starting in 2020. They are a superb low-commitment way to reach people, and they can be recorded. This document is a starting point for a discussion on what we should / could do next.

# Big picture

**Anything related to Galaxy is a possible topic**

So there.

A caveat: If a topic fits better under a more specialized series (think Dev Round Table or Proteomics Calls), then suggest / offer to have it presented there first.

**Avoiding Burnout**

We need to avoid hitting the same people over and over. They are already busy being hit over and over for other Galaxy events. In addition to avoiding burnout, this also expands what we might call the “prominent” community to include more people. It’s a win win.

**Scheduling**

These events also require some logistics and a lot of promotion. Avoiding burnout (for speakers and outreachers) argues for less frequent events, at most biweekly, and possibly just monthly. If we did bi-weekly, we could alternate weeks with the Dev round tables.

**Asia / Australia**

Should every nth webinar be at a time that Aussies can make it? Dave C’s thought process led him to: *No*, *not exactly.* Instead of every nth webinar, we do this on an ad hoc basis. AU already has webinars. Just fold them in. Leave scheduling entirely up to Aussies. We don’t even need tight coordination because most Aussie participants won’t be awake for EMEA / Americas webinars.

**Content / Themes**

Opening questions: Do we need themes? Or should we just present whatever strikes our fancy? We could have both - themes and standalone.

As a start Dave C did a random walk through his brain and came up with some ideas he thinks we can make work, and some that sound possible, but that are less clear to him. So, from strongest to weakest in his brain:

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# Galaxy Resources for … Role

This is 4 or 5 webinars that highlight resources for different Galaxy communities. The initial proposal

1. Researchers
2. Trainers & Educators
3. Tool Developers
4. Administrators
5. Galaxy Developers

**1. Galaxy Resources for Researchers (April 14)**

DC could do this.

High-level view of everything useful to people using Galaxy. DC would structure this by

Learning to crawl:

BASIC GTN library + GTN Gitter, and possibly only those resources

Learning to walk:

Topic driven GTN library

Help, Gitter, Communities, Hub, Search, Video Lib

Learning to run:

Workflow / tag / names / collections GTN Lib

API

Working groups (yes, especially domain ones)

**2. Galaxy Resources for Trainers & Educators (April 28)**

Requires GTN leadership contribution (overcommitment warning - OW)

Reached out to Wendi Bacon 2021/04/01 (Thanks Saskia)

Also need to find someone who actually teaches courses with Galaxy

Would also be superb to have prominent contributors.

GTN, GTN, GTN training materials

GTN for Educators

TIaaS

Galaxy Features that support Teaching

Point to future Webinar series

GOAT WG

+ ?

**3. Galaxy Resources for Tool Developers (May 12)**

Who? Martin? Dan? Björn (OW), Devon Ryan, Bérénice (OW), Anthony B, Gildas

Pinged Tools WG. No interest. 2021/03/31

Pinged IUC. 2021/04/01

Possible structure:

* Why Galaxy is good for getting your tool used
  + Maybe cite some numbers from the BioRxiv [paper](https://doi.org/10.1101/2020.11.16.385211)?
* BioConda and ToolShed - Most of the time spent on this.
* Docker instances
* Tool publishing instances - least amount of time spent on this.
* Pointer to future webinar series (see below) and working group.

**4. Galaxy Resources for Administrators / Infrastructure Providers (May 26)**

Who? We could tap admins of lesser involved servers. (DC kinda likes that idea). Maybe paired with Gianmauro to increase his visibility?

2021/04/01 Asked Gianmauro. Suggesting Lucille Delisle as his partner in crime. (Thanks Helena)

GTN materials

Gitter channels

GitHub resources

Dev round tables

Working group

**5. Galaxy Resources for Galaxy Developers (June 9, Maybe)**

For those who want to extend the Galaxy ecosystem.

This one may or may not be worth a webinar.

And it was not included in the original list or graphic.

Who? Dannon (OW), Sergey, Pablo, ...

Training materials,

API

Gitter

GitHub.

What else?

# Make your tools visible with Galaxy

Three webinars from wide open to specialized

* Wrap your tool. (and add to conda?)
* Create your own Galaxy Docker image.
* Create your own Galaxy Instance.
  + Get a tool publishing group to talk about their experience.

**Make your tools visible with the Galaxy Tool Shed**

Who? Superstars of the IUC (OW, OK, maybe not. There are lots of members.)

Talk about the tool shed, and then the process of wrapping tools, Planemo.

Would not be hand-on, or even a guided demo. Maybe just an explanation of features. And then how the tool shed is used by Galaxy Admins.

**Make your tools visible in a Galaxy Docker Image**

Who: someone who has created tool publishing Docker image

Next webinar would be about how to create a docker image that highlights your tool. Start by assuming the tool is already wrapped. Talks about base image, folding in your tool, example datasets, workflows, and anything else, and then creating and publishing that image.

Some concern about not having enough to fill a webinar. Description might say, if you have already created Docker images then you may not get much out of this.

**Make your tools visible with a public Galaxy Server**

Who: someone who runs a public Galaxy tool publishing server. Huttenhower or RepeatExplorer admins would be ideal.

What’s involved and what do you gain by doing this.

This one might not get enough attention to justify?

# Training and Education with Galaxy

This one is also well developed, but given how swamped the GTN leads are we might want to do this after GCC.

Topics could be

* GTN in general
* TIaaS
* Smorgasbord model
* Charlie Wray’s Experience? Someone else’s?
* Galaxy Features that support Teaching and training. (This could include TIaaS)

**The Galaxy Training Network Library**

Who: GTN Leadership (OW), prominent contributor(s)

A walkthrough the library and a description of the features in slides and tutorials.

**Galaxy Features for Training and Education**

Who: ?

Highlight things like sharing and publishing by participants, pre-loading datasets, publishing incremental and complete histories and workflows.

Highlight public servers, community support

Hmm. That might be thin.

**Galaxy for Training**

Who: GTN leadership (OW)

Cover TIaaS and Smorgasbord / Admin model.

**Galaxy for Education**

Who: Educators who have done this., GTN Leadership (OW)

Go wherever this goes.

# Galaxy Fundamentals

Cover the prerequisites for the Advanced Series. :-) Really, each could end with a pointer to one or more advanced features recordings.

**Getting Data into Galaxy**

Who: almost anyone

Cover the 8 billion ways to get data into Galaxy.

Start with what Galaxy is. Launch a tool, and show how it needs data.

**Histories and History Management**

Who: almost anyone

Introduce histories by running a very simple analysis. Then go into anything not covered in advanced webinar. Can also talk about tools and tool forms.

**Workflows**

Who: almost anyone

Basics of creating workflows from histories and from scratch, running them, publishing them. This one runs the risk of serious overlap with the advanced features webinar.

**Visualization**

Who: Sam?

External tools, internal tools,

Point to advanced features for Interactive Tools.

**Sharing and publishing**

But, Dave thinks this could be distributed across history and workflow sections.

# Research with Galaxy

A series of webinars featuring researchers talking about research that they have done, and that used Galaxy. Suggest that talks don’t need to be Galaxy centric per se, just be interesting.

Highlights to the community that we value supporting them.

Dave C favors doing this one after GCC, because anyone we can identify before GCC we should encourage to present at GCC.

# Galaxy for Domains

This series would highlight resources *and workflows* for different domains. I can see a couple of ways to go here.

1. General topics like Differential Gene Expression, Chip-Seq, variant calling, etc that can be run in lots of places.
2. “Technology” focused like ONT, Single Cell.
3. “Technology” like Machine Learning.
4. Focused on particular public servers.

I dunno. Getting fuzzy. The first 3 options are huge.

**Some thoughts on the public servers options:**

Here’s one set based on **domains with public servers:**

* Metagenomics with the HutLab
* Repetitive element analysis with RepeatExplorer
* Metabolomics with W4M
* Proteomics with ProteoRE
* And on and on.

Another public server option: **different parts of the tree of life**. This would require a lot of outreach as we are reaching out to different specific communities.

* CPT (Phage)
* ARGS-AOP (antibiotics)
* VEUPathDB (pathogens)
* Hardwood Genomics (trees, might be a stretch)
* Human Cell Atlas
* RiceGalaxy or SouthGreen (plants, crops)
* NGPhylogeny or Osiris The tree of life itself!

# Galaxy for Your Domain

Maybe two webinars:

* Galaxy for life science domains
  + Targetted at people who might want to set up a new public server for their organism, or their community, or the newest cool thing.
* Galaxy outside life science

The outreach on this would have to be significant.