# **Bioc Technical Advisory Board Minutes**

# 3 February 2022

**Attending**: Vince Carey, Stephanie Hicks, Charlotte Soneson, Lori Shepherd, Laurent Gatto, Levi Waldron, Jennifer Wokaty, Nitesh Turaga, Shila Ghazanfar, Aedin Culhane, Alexandru Mahmoud, Marcel Ramos, Michael Love, Robert Gentleman, Kasper Hansen, Rafael Irizarry, Wolfgang Huber (from :30)

Regrets: Aaron Lun, Hector Corrada Bravo

:03 - :04 Prior minutes approved

:05 - :10 Ad hoc <u>presentation</u>, Vince Link to <u>assignments for future meeings</u>

:10 - :15 Ad hoc presentation, Charlotte

:15 - :25 Directional info (Vince)

- This is a section about "directions" of the project at the highest level, I would say that there are opportunities to expand our access to academically oriented infrastructure like NSF XSEDE, and to collaborate more effectively with galaxy and CZI. This has implications for both how we do things (where is the build system, how do individual packages get maintained, distributed?) and how those non-Bioc projects work (can we help attract users and help define how genomics software/data ecosystems should be effectively designed and deployed?)
- 10 TB at OpenStorageNetwork this <u>resource</u> (see also <u>XSEDE note</u>) can be used for high-speed distribution in USA (everything is accessible from anywhere in the world, just a matter of speed). Long-term plan: world-wide high-speed distribution. Alex Mahmoud is researching approaches to load-balanced content delivery; we will share this with Galaxy. If anyone has a project with large public (or maybe temporarily private) data volume let's talk about how to use this.
- HCA-oriented matrix API planning with CZI/TileDb issue stream.
- La Piana recommendations on governance received. Will be discussed at next governance meeting (21 Feb 7:30am ET).
- Work towards self-service Bioconductor contributor repository maintenance
  - Investigation of gitea as a general repository interface.
  - Adoption of gitea may coincide with conversion of default branch name from master to devel.
  - "Bioconductor identity management system" in discussion.
  - Template GitHub action two issues Martin's observation that rOpenSci has one; Alex has worked on this as well.

- Conversation on Feb 2 with Microsoft representative in the domain of GitHub Codespaces ... prospects for fast access to fully provisioned Rstudio in Azure, and for "developer-oriented" environments.
- Full release and devel software build result in 4 hours using Kubernetes on GKS, Alex and Nitesh and Jiefei tuning the approach.
  - Does not include package checks.
  - Need to assess cost; ratio of compute resources in GKS example to BBS.
- EBI Biostudies used for deep and long-term ('infinite') archiving of legacy Bioconductor releases
  - o Bioc 1.5 and 1.6 submitted (code from 2004-5; see <a href="here">here</a>).
  - Process for submitting more in development.
  - Eliminate storage and management concerns tarballs with metadata there for the taking.
- AWS Open Data proposal by Enis Afgan accepted, he invited us to add to the proposal.
  - Move ExperimentData and AnnotationData packages.
  - Build cloud-native interfaces to make AWS happy.
- Substantial allocation from NSF XSEDE through March, likely will be renewed.
  - Jetstream cloud with openstack.
  - o 10TB "Open Storage Network" storage.
  - o 1000h GPU.
  - Help us to:
    - move away from AWS expenses.
    - improve 'relocatable' aspect of Bioc infrastructure.
    - devise self-hosted content delivery network, capitalizing on Open Storage Network.
- Strengthening interaction with Galaxy.
  - Offer of global distribution of resources.
  - Continuing discussion of governance strategies
  - Strengthen symbiosis: containers, tools, data, workflows de-siloed?
  - Linking to landing page of main Bioc packages from Galaxy tools. Can Bioconductor link to Galaxy instances?
  - Training e.g. shared infrastructure; teaching both running a tool directly in R and via Galaxy as a workflow
- Working Groups / Committee Page for community involvement.
  - http://workinggroups.bioconductor.org/
  - Stephanie initialized. Kevin set up bookdown. Lori populated template starter info. What do we think?
  - List all working groups, with lead, information about how to join or start a new working group.

## :25 - :40 CAB liaison

Discussion of CAB goals for 2022.

- Switch focus from funding to community engagement, new people onboarding and collaboration. Brainstormed community engagement ideas and will develop plans over the next couple of meetings.
- The CSCCE attended part of the meeting and will work more closely with the CAB in 2022 (as part of the CZI EOSS award).
- Education committee (Laurent and Charlotte) will meet with Carpentries to discuss membership on Feb 10th (as part of the CZI EOSS award).
- Election nominations are out to community for new CAB members. Will re-elect/elect new officers, 5 new members. CAB will likely to expand >15 member for 1 year (as detailed in governance docs).
  - Please share:
    - <a href="https://twitter.com/Bioconductor/status/1485598795698167819?s=20&t=C">https://twitter.com/Bioconductor/status/1485598795698167819?s=20&t=C</a> HWEug3cC1FBorSRmrLzcg
    - https://support.bioconductor.org/p/9141753/
- CAB meetings will modify meeting times to accommodate timezones. Plan to switch
  meeting time by 1 hour (coinciding with daylight hours change), so that we have 6
  months of meetings that work better with EST/USA and 6 months with JST/Asia).

### :40 - :50 Comments from core

- How will the working groups engage with the core team should core team be part of working groups? Working groups cover broader set of topics, not just infrastructure-related issues. Raise awareness, make sure that there is no duplicated efforts if possible.
- Get more engaged with/take more advantage of academic cloud providers
  - Europe: European Science Cloud, den.bi
- Communication between working groups and advisory boards. Liaison person, representative on board(s)?

#### :50 - :60 Open

• <u>EuroBioC</u> now 14-16 Sep 2022 in Heidelberg, otherwise mostly unchanged layout and programme. Previously planned date 16-18 March was not tenable due to pandemic travel/planning uncertainty, but we will use this slot for an informal 2-day retreat of the organising committee, also 1-2 junior researchers per PI can attend.