Bioconductor Community Advisory Board (CAB) Minutes

9 April 2020

Attending: Kozo Nishida, Lori Shepherd, Johannes Rainer, Saskia Freytag, Yagoub A. I. Adam, Susan Holmes, Aedin Culhane, Matt Ritchie, Benilton Carvalho, Leonardo Collado-Torres Regrets: -

Summary: The first meeting dealt with general Board governance issues, contributions to the BioC 2020 conference and support for the newly established Community awards. Future activities of the Board were briefly discussed and will be further explored in future meetings.

Schedule

:00 - :05: Welcome!

- :05 :15: Review CAB Terms of Reference
 - Available <u>here</u>. Any edits suggested? Technical Advisory Board (TAB) terms are <u>here</u> for comparison
 - Identify Executive: Co-Chairs (Aedin and Matt), Co-Secretaries (Lori and Yagoub), Representative to report between TAB and CAB (Aedin / Matt)
 - Potential Committees to form (long-term)
 - User Outreach and Education, including the development of guidelines and processes for community-developed material; coordinating trainer and training activities; coordinating meetup and other event awareness.
 - Developer Training, including oversight of the Bioconductor developer forum.
 - Conference Oversight (North American, Asia-Pacific, European)
 - Code of Conduct
 - Potential Working groups to form (short-term)
 - Overcoming barriers to diversity in Bioconductor
 - Enabling community-driven development
 - New package intake

Action: - Update Bioconductor website with information about CAB members and governance once terms have been agreed (Vote on Governance doc at next meeting).

- Revisit committees and working groups after further discussion of activities
- :15 :25: Update from Bioconductor Technical Advisory Board
 - Minutes from previous meeting available here
 - Some activities will shift from TAB to CAB over time (especially around conference organisation and other community related activities)

:25 - :45: Bioconductor Meeting & Community Awards

- Proposal from Charlotte Soneson here and form for nominations here
 - Are CAB members happy to be involved in a) promoting and encouraging people to apply and b) in judging nominations? (Yes and Yes)
 - Nomination Form needs to be improved/expanded/more framing
 - What is the deadline for voting?
 - Suggestion of a popular vote award?

Action: Send feedback to Charlotte on the above.

- Day 1 planning (including suggestions for community activities):
 - Suggestion to have CAB present a report at Bioc2020
 - How to do a pull request

Action: Send suggestions to Charlotte

- :45 :60: Discussion about CAB activities / initiatives
 - Monthly (or more often?) virtual meetup (like <u>Jupyter community calls</u>)
 - Each CAB member organizes the meetup (individually?)
 - Announcement web page: in https://www.bioconductor.org/?
 - Place: Zoom or Google Meet (Live captions in the Google Meet may help communicate with non-English speaking people.)
 - Have a developer tutorial at the beginning (15 minutes?)
 - How to use <u>https://github.com/bioconductor/contributions</u>
 - S4 training material ?
 - In the remaining time, develop their own Bioc package (1 or 2 hours?)
 - Share information about what each person is doing
 - Each CAB summarizes how was the meetup in <u>HackMD public team</u> directory. (or somewhere?)
 - The number of participants (and Bioc authors)
 - The domains of interests
 - ...

-

- Goal: reducing the barrier to entry in, sharing the good practice -> more developers
- Hackathon/meeting to improve interoperability of packages from certain domain
 - For a given analysis task/domain: invite package developers and (power) users.
 - Identify common functionality, tasks, pitfalls.
 - Goal: better reusability of code, less reimplementation -> easier workflows
- Expansion of R/Bioconductor for genomics meetup groups. Membership is paid by R consortium; <u>Boston</u>, <u>NYC</u>. In Europe, facebook group. Other social media
- Education Discussion
 - Need beginner Bioc Courses (eg S4 classes)
 - More Beginner workshops/classes run every year
 - More Technology focussed (eg seurat/osca book)
 - Develop Bioc Cheatsheets (eg RStudio)

- Blogs
- Rweekly
- Podcasts
- Website improvements
 - Currently Hard to find educational materials/workflows
 - Make Distinguishable categories of beginner/intermediate/advanced material (hard to discover in current long list of course material)

Summary of data gathered in recent Bioconductor Community Survey [final results]

- 107 respondents (as at 25th October 2019), mostly male (77.57%), post-docs (32.71%), from Europe (52.33%), dry lab researchers (80.37%), based in academia/university (87.85%), using R for 5-10 years and Bioconductor for 2-5 years (37.38%), use base R (84.11%), tidyverse (39.25%), Rstudio (84 responses) and Python (63 responses).
- Top 3 uses of Bioconductor reported were for bulk RNA-seq (82 responses), single cell genomics (52 responses) and DNA-seq data (41 responses). Help found via vignette/manual (46 responses) or support site (33 responses)
- Satisfaction levels seemed high across most areas (BioC training material was lowest scoring, with a tie between 'OK' and 'Satisfied').
- Barriers to contributing: S4 is mentioned a few times.
- Best aspects of BioC: community occurred many more times under this section than in the 'Worst aspects,' which is good.
- New activities. Hackathons
- Most respondents had not heard of or used ExperimentHub.
- Things to potentially improve: ways to increase female participation, reach more wet lab researchers, S4 training material to help new developers.
- More complete response summary (may need to select an HTML viewer)

-

 Potential to fund ideas that require financial support via a future Chan Zuckerberg Initiative (CZI) Essential Open Source Software for Science (EOSS) grant (next cycle is due to open <u>mid June</u>) for funding between \$50K - \$250K for 1 year. Website <u>here</u>

Action: Allocate majority of time at next meeting to brainstorm and prioritise new initiatives.