Bioc Technical Advisory Board Minutes

2 June 2022

Attending: Vince Carey, Lori Shepherd, Wolfgang Huber, Charlotte Soneson, Levi Waldron, Rafael Irizarry, Laurent Gatto, Nitesh Turaga, Hervé Pagès, Aedin Culhane, Stephanie Hicks, Alexandru Mahmoud, Kasper Hansen, Marcel Ramos, Jennifer Wokaty (from :45)
Regrets: Michael Love, Robert Gentleman, Shila Ghazanfar, Aaron Lun, Hector Corrada Bravo

:03 - :05) Previous minutes approved.

:05 - :07) Update from CAB. CAB Minutes 5-12-22.
- Discussed conference ideas.
- Translation-a-thon event hosted by Kozo.
- TAB election suggestion: should TAB/CAB elections be moved to coincide with the conference? There are the 'meet the TAB/CAB' sessions so it is a good opportunity for potential members to ask questions. However, it may be difficult since the conference does not take place at the same time every year.

:07 - :10) BiocAwards update
- All TAB members should have received an email to vote. If not please check your spam folder for more details - the email is titled: "Bioc2022 Awards". Voting deadline is this Friday June 3rd. There is a link to a spreadsheet of the nomination justification on the voting form. If you need the form please email or slack Lori.

:10 - :17) Presentation with discussion: Rafa
- How do we promote/improve Bioconductor in the single-cell field? E.g. with respect to scalability.
- Tools or tutorials? Mainly in terms of statistical methodology.
- Having a dedicated software developer/research software engineer would be beneficial.
- Branding - capturing a broad audience, releasing tutorials quickly. Seurat incorporates/wraps also many tools/methods developed by others.
- Infrastructure does not bring people to the project, statistical tools do. Need end-to-end flow from data import to "result". Also good documentation (cf. affy, limma, DESeq2 etc.)
- Dimension reduction tools.

:20 - :27) Presentation with discussion: Nitesh. Stable Bioconductor package binaries.
- Can be used with Bioconductor docker images and derived images.
- The images are also used in AnVIL.
- Set environment variable BIOCONDUCTOR_USE_CONTAINER_REPOSITORY to TRUE (to run benchmarking on the same system): 7-8x speed-up of installation.
- Supported from RELEASE_3_14 and upwards, updated weekly on Mondays.
- Approximately 10/2100 packages fail to produce binaries (archived CRAN dependencies, code issues).

- Moving a copy of the binaries from Google Cloud to Azure (increase cadence of binary building, rclone to multiple object stores).
- `BiocManager::install()` will do the magic (recognize if you're in a docker image).
- biocthis provides GitHub Actions - binary packages provides a speed-up.
- Using biocthis, the binary installation will be used by default. Does this also apply to existing GitHub Actions or is there a need to change existing actions? Have to build on release 3.14 or newer. Need to use a bioc derived image.
- Why an environment variable rather than a function argument to `BiocManager::install`? The system variable allows you to turn binary installations off for the test but they are always installed if in the container.
- What about binaries for mac containers?

:27 - :40) Monograph maintenance discussion; example of OSCA, commitments for new monographs coming forth.
- How do we keep OSCA going? Several community members have volunteered to help maintain OSCA. Who will make decisions about e.g. deprecation of specific parts? https://github.com/OSCA-source/OSCA/issues/3.
- Need to look into the reasons for the book failing. Establish best practices for writing a maintainable book. Not worth having sophisticated cross-references if it means the book will fail.
- More modularity would likely be helpful for maintainability - different maintainers for different sections/chapters, easier to remove/add content.
- The book is really long/detailed - split up into intro/advanced/... (already there to some extent).
- Information about when chapters/sections were last updated - "what's new"?
- Some newer content/developments need to be added - the book should be continuously updated.
- OSTA currently uses plain bookdown - content/the field changes quickly.

:40 - :50) TAB Governance revision. Also: scope of working groups - some examples of working groups that could be of value:
- developer forum
- 'Bioconductor in the cloud'
- OSCA book maintenance
- book infrastructure in general?
- website
- GitHub Actions
- microbiome
- sponsorship

:50 - :60) Discussion of nominees