Bioc Technical Advisory Board Minutes

7 October 2021

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

:02 - :03 Previous minutes approved

:03 - :10 Greatest hits

- First set of community reviewers onboarded TAB members, please consider becoming trained reviewers, Lori Kern can facilitate. Instructions and expectations can be found at http://contributions.bioconductor.org/.
- Discussion about good material to learn about S4:
 https://community-bioc.slack.com/archives/C35G93GJH/p1632965408036800.
- R03 funded for Bioconductor Clients for 4DNucleome, GTEx, Illuminating Druggable Genome.
- 2 CZI projects ("Bioconductor: Sustaining a worldwide community of genome data scientists" [Vince/Aedin/Karen Burns White], and "Bioconductor: High Quality Training and Support for a Worldwide Community" [Aedin]) funded, activities start 2 November
- Container for BBS event reproduction with <u>Steffen Neumann</u>.
- Gene Ontology group at Lawrence Berkeley Labs reaching out to collaborate, specific concern about diversity of "GSEA" algorithms, and new "GO-CAM" (causal activity model) annotations.
- 3.14 release schedule available
- Should we have a Developer Forum or TAB invitation regarding BiocParallel and random number generation? There is a broader question of how rapidly developers should adapt to changes going on in deeper infrastructure on the devel branch. Rapid assessment of infrastructure changes on the overall ecosystem should be possible but induces new infrastructure needs. NB: A <u>nice schematic</u> for future BiocParallel redesign steps offered by Jiefei Wang.
- https://opensource.microsoft.com/azure-credits/#credits-apply -- could be useful for your package/ecosystem/team. Can check with Erdal Cosgun about what scale the program is looking for.

:11 - :25 CAB updates; note joint meeting on 14 October 2021, 10am EST

- Matt compiled an FAQ from the meet the CAB session at BioC2021 https://github.com/BioconductorBoards/CABWorkingGroups/discussions/categories/g-a.
- Multilingual Working Group. Discussed adding chapters and translation captions to other languages to BioC2021 and Bioconductor YouTube videos. Kozo to review closed captions, editing and translation. Looking at approaches used by other organizations;

Crowdin, (https://github.com/open-life-science/ols3-cohort-talks-and-transcripts). Galaxy curate text on slides and then use Amazon's polly text to voice - https://docs.aws.amazon.com/polly/latest/dg/voicelist.html Looking at editing #Bioc2021 talks (volunteers: Kozo, Mike, Daniela, Aedin).

- Google translate was included for another project using R markdown: look at top under the title here: https://www.opencasestudies.org/ocs-bp-vaping-case-study/.
- https://www.tidyverse.org/blog/2021/02/modern-text-features/ might be useful for rendering right-to-left/character languages especially in vignettes/books/etc.
- YouTube Annotation Working Group, lead by Kozo. Kozo created a tutorial for the YouTube chaptering workflow. Call for pull requests for <u>a chaptering text file</u>. (The text file name is YouTube video ID).
- Developer Training Committee. 9 mentors signed up so sufficient to start the program. Kevin, Mike and Aedin reviewing.
- Still need a co-organizer of the Developer Forum identified to work with Mike Smith.
- Official liaison with R-ladies? Table for discussion at the joint meeting.
- BiocAwards has been dominated by board members. Proposed to exclude active board members from nomination, expand voting committee, asking Bioc reviewers to nominate "best new package" and creating a new junior award reserved for trainees or recent graduates. Table for discussion at TAB/CAB joint meeting.
- Events (https://bioconductor.org/help/events/)
 - o BioC Asia 2021 (November 1-4) https://biocasia2021.bioconductor.org.
 - EuroBioC 16-18 March 2022 Heidelberg, Germany.
- JEDI Awards (https://www.lifescienceeditors.com/workshops/ #diverseBioc) provide free scientific or language edits of a scientific manuscript or grant proposal for students, postdocs and junior principal investigators. There will be 5 JEDI awards monthly to scientists who face disproportionately high obstacles to career progression in academic science. The deadline is the 10th of every month.
- :25 :30 Discussion of upcoming conferences: <u>BioC Asia 2021</u>, EuroBioC 2022 . Are "proceedings" of conferences already reasonably established via F1000Research, or should we be more detailed with respect to a post-conference publication?
 - Tag by conference, further limit by year when searching at F1000. Example: https://f1000research.com/gateways/bioconductor/bioc?years=2021&collectionId=28
- :30 :50 Items for working group formation/movement
 - General working group <u>repo</u> starting out (thanks Stephanie!);
 <u>http://workinggroups.bioconductor.org</u> may be supported. Ideally all working groups
 (TAB, CAB) in one place (easier for community to figure out where working groups are + start a new one).
 - new "Mass Spectrometry" Working Group: Laurent & Johannes.
 - *Hub API design and deployment; API <u>design for controlling consumption</u> Levi has proposed supporting Quan Wan to advise on this. Evaluate potential for flexible "backends" where resources can be hosted, e.g., obtain URI from server via globus protocol.

- Investigation of incorporation of UCRT3 toolchain (compatible with CRAN approach) for windows. Make sure to follow what CRAN is doing.
- Investigation of production of arm64 binaries for M1 mac platform (Kasper).
- NCBI <u>annotation upgrades</u>: do we need to write clients? Anyone attending CSHL Genome Informatics and <u>NCBI workshops</u>?
- Engineering BiocCheck: what code/package events are caught, enhance testing of event detection "check-a-thon". Assist user in selecting/checking suitability of package name.
 - https://github.com/Bioconductor/BiocCheck/issues/140
- Scalability summit or developer forum; treatment of job-specific seeds with BiocParallel.
- Mentoring opportunities and support: Jennifer Wokaty will investigate <u>outreachy</u>; don't forget Google summer of code.
- Abandoning AWS/EC2, CloudFront ...too costly; roles of mirrors (we are already rsyncing from AWS), API design, getting resources from XSEDE in USA, ELIXIR in Europe (current <u>Tools</u>, <u>Compute</u> platforms), etc. Galaxy precedent for localized web content at mirrors. (Have we updated BiocManager so that install doesn't reinstall if version is current (force argument) yes, included in <u>v1.30.13</u>).
- Policy for rsyncing Bioc content (egress costs).
- Brainstorming website redesign with Aedin (Will form working group. Nominate yourself at joint TAB/CAB meeting. We have a budget in the CZI EOSS grant).
- Learn about GO-CAM, propose data structures/interfaces.
- Package "ranges" monitoring take a region of the build report, observe errors/warnings, dialogue with developer - the human touch is very effective in this project. Deprecation is a significant process and should be done efficiently - and infrequently.
- Decoupling biocViews from bioconductor.org site structure; improved curation of biocViews and addition of prose overviews a la CRAN task views.
- Shiny working group: Packages making use of shiny to explore user-provided (e.g. iSEE, InteractiveComplexHeatmap), or as a way to explore data within an ExperimentHub package (is there an example?). Do we have opinions on how these should be organised e.g. as functions within packages, or as separate packages with dependencies. https://contributions.bioconductor.org/shiny.html. Add a specific biocView "shiny" or similar? [Did we ever discuss the AnnotationHub viewer (it can be slow to load)]. Removal of interactiveDisplayBase.
 - "App Store" to link to loaded apps available
 - Guidance on how to implement/integrate shiny apps in Bioc packages
 - How to review packages which contain shiny code/apps
 - slack channel "shiny"

:50 - :60 open floor

- Publication what are possible venues for publishing workflows. Connect with Susan (CAB publication working group).
 - Mike L, Kasper and Susan have followed up with F1000Research to indicate fixing the pipeline break (revisions to workflows have to be submitted as Word documents rather than via Overleaf) is a high priority for Bioc (Oct-7-2021).