Technical Advisory Board

2 May 2019

Attending: Martin Morgan, Rafael Irizarry, Vincent Carey, Levi Waldron, Matthew Ritchie, Aedin Culhane, Robert Gentleman, Michael Lawrence, Kasper Hansen

Regrets: Wolfgang Huber, Sean Davis

Minutes

Governance

- <u>Governance</u> document was approved in previous meeting
- technical advisory board (TAB) membership and executives will have staggering three-year terms to provide partial continuity. Currently Martin Morgan as Chair, Vincent Carey as Vice-Chair, Levi Waldron as Secretary.
- Existing members: terms will end January 2021. Renewal is a possibility.
 - Martin Morgan Vincent Carey, Levi Waldron, Aedin Culhane, Kasper Hansen, Matthew Ritchey, Michael Lawrence, Rafael Irizarry, Robert Gentleman, Sean Davis, Wolfgang Huber
- Upcoming open solicitation for nominations to expand the TAB. Solicitation form approved by board. Review of process logistics; soliciting nominees.

BioC2019

- robust registration
- have strong contributions from several new people on workshop committee, allowing additional organizing relative to previous years
- have a workshop subgroup convening next week that will be busy until the conference

Important Technical Priorities

Annotation packages

- Updating annotation package pipeline after recent failures. Complex legacy scripts need to be updated.
- Advised that annotation builds should be moved up to sooner before the release.
- Martin will follow up on solution to annotation build problems
- Mentioned MANE- Ensenbl and NCBI <u>http://www.ensembl.info/2019/03/12/coming-soon-mane-select-v0-5/</u>
- Birds of feather arranged for Bioc2019

Scalability aspects

- hail (RStudio) could be interfaced with Bioconductor. Vincent will follow up on hail repo
- altrep: important to be aware of, but early days of development
- discussed Tomas Kalibera article (email) on C++ in R. Useful article, but does not highlight any current deficiencies in Bioconductor core infrastructure, which does not contain a lot of C++ code.
- There are some significant unresolved performance issues in DelayedArray. Using within a for loop is problematic. Chunking must be optimized for specific backend and application, or code can become 100x-1000x slower.
- scalability working group will summarize current issues.

Lessons from the recent release

- Basic stats; check out BiocPkgTools
- A novel hiccup -- CRAN (temporarily and unintentionally) blacklisted our builders
- Another hiccup: annotations
- Additional topics: new package ingestion; package maintenance & deprecation