Bioc Technical Advisory Board Minutes

7 August 2025

Present: Vince Carey, Charlotte Soneson, Lori Kern, Wolfgang Huber, Levi Waldron, Kasper Hansen, Helena Crowell, Hervé Pagès, Ludwig Geistlinger, Henrik Bengtsson, Alexandru Mahmoud, Rafael Irizarry, Andres Wokaty
Absent: Laurent Gatto, Stephanie Hicks, Jacques Serizay, Michael Lawrence, Davide Risso

:00 - :03 Previous minutes approved

:03 - :06 Composition of the TAB
- Nomination deadline August 31.
- Four openings for new members.
- Alex Mahmoud will leave the US by the end of this month; handoff operations proceeding, continuity of some activities also being worked out.

:06 - :07 NHGRI U24 grant must be submitted 25 September.
- Foreign involvement box (letters of support) was not checked in the previous submission.
- Project officers very supportive, formally there will likely be a gap in funding but resources should be available to bridge the gap.

:07 - :09 Move to Discourse for support site.
- How to move legacy information so that it's searchable and usable - should be possible.
- Currently testing in an example setup.
- Components of the current support site are being updated, but it's hard to maintain it without a dedicated group.
- STAN has a discourse site: https://discourse.mc-stan.org - useful to get in touch with them (although they don't have to deal with legacy posts)?
- Galaxy moved to Discourse, but did not move over all old content (old forum was archived).

:09 - :19 Governance
- Should we vote to increase TAB size to 20?
  - Justification: increasing breadth of project activities (number of technologies, compute platforms and strategies, AI).
  - Alternative: more invitations to outside parties for one-off presentations, working group presentations.
- Term limits?
- How to optimally take advantage of the expertise present in the board/core.
- It has been quite difficult for new people to join (typically members are re-elected). Renewal (bringing in the next generation) is important.

- Strike a balance to optimize motivation and experience in the composition.
- Great learning experience for the newer contributors, great opportunity for the more senior members to pass on knowledge and guiding principles of the project to the next generation.
- Working groups provide a path for people to contribute
- Define what the expectations are. Better onboarding procedure - what is the role, how can new members contribute?
- What technical areas are we currently missing?
- For comparison, Galaxy has a technical steering committee (more permanent), committers (people with push access to code).
- U Limerick expanding the community engagement with a developer-oriented position.

:19 - :20 Working group reports
- Spatial working group: short paper (about OSTA) aimed for submission in September.

:20 - :26 CAB updates
- Kozo demoed a new event submission process for adding events to the Bioconductor calendar. People can subscribe to the google event calendar https://bioconductor.org/help/events/.
- Japanese Carpentry workshop confirmed for Osaka University RIMD Aug 5-6.
- Start thinking about how to set up satellite pod/viewing pods for events/conferences.
- GBCC debrief.
- Elections - nomination deadline fast approaching.
- Removing community slack to prevent DM and private messaging happening there too?
    - One reason to keep it for a while would be to allow people who connected with someone to retrieve that contact (messages will not be visible, but the contact is listed under the conversations).
    - Move conversations to Zulip to avoid having too many channels.

:26 - :37 Build system renovation
- https://bioconductor-source.r-universe.dev/builds
    - New main interface for developers.
    - Intention: stop working on bespoke build system.
    - Build products generated automatically at each push.
    - git.bioconductor.org aimed to be redirected to GitHub bioconductor-source (currently only set up for one package for testing).
- Books need separate strategy.
- "Large files" problem for GitHub strategy is being addressed.
- Developer forum on Rust was successful.
- Rust support may come for free with r-universe build system – note https://github.com/SingleRust.

:37 - :41 CPUs

- Be aware of salutary effects of optimized BLAS (can make a big difference for SVD calculations).
- CRAN R uses a non-optimized version of BLAS by default.
- E.g., use accelerate framework on macOS (needs Xcode).
- openBLAS on Linux makes a big difference.
- Handling of special values (e.g. NA) may be different.
- Might be useful to have a small post with recommendations.
- Hervé is running benchmarks.
- r-universe could potentially have test environments with different BLAS versions.
- Can have multiple versions of openBLAS on Linux and switch between them.
  - System-wide setting - harder on a multi-user Linux system.
  - For BLAS: change a symlink in the R installation, so easy to do at the system level, but not on the user level.
  - Could build different flavors of R with different versions of BLAS (could be managed e.g. with environment modules).

:41 - :44 GPUs
- amarone and biocgpu are working well, can invite some more package authors to add 'GPU_reliance: optional' to .BBSoptions.
- Add to the contributor's guide.
- Nice talk in GBCC BOF about avoiding vendor lock-in with GPU: https://github.com/omsai/presentation-hpsf2025/releases/download/release/hpsf2025-pnanda.pdf

:44 - :47 AI
- Big issue: support site maintenance effort is substantial, but probably warranted, LLMs will not replace.
- ellmer, btw very easily used with ollama engine or commercial LLM.
- vitals for evaluation - anyone working with this?
- lawremi/wizrd has an MCP (model context protocol) example; see biocontext.ai; also posit mcptools.
- NSF Jetstream2 allocations cover very large LLM models (e.g., deepseek 700B) and can be used freely thanks to our NSF ACCESS credentials, and we can share these legitimately.
- Blog post from Stephen Turner: https://blog.stephenturner.us/p/r-production-ai.
- Overview of current package landscape: https://luisdva.github.io/llmsr-book/r-pkgs.html.

:47 - :60 Open floor
- Is there already a tentative date for the 3.22 release?
  - Will decide shortly, late October/early November
- Coordination with other conferences/new event types.
  - The location of the useR! 2026 conference will be announced this Sunday August 10 at 16:00 ET.
  - Link with StatGen?

- JSM 2026 is in Boston.
- Subgroup coordinating presence at conferences?
- Monthly science seminar related to Bioc/biotechnology.
- Online lecture series. E.g. like https://generegulation.org/fragile-nucleosome/.