

CBB Hackathon 2026 — Judging Rubric

Judges: 3 Faculty Judges + 1 AI Judge (Claude)

Total Possible Score: 50 points (10 per category)

Scoring Scale (per category)

Score	Descriptor
9–10	Exceptional — exceeds expectations in a meaningful way
7–8	Strong — clearly meets the standard with notable strengths
5–6	Adequate — meets the basic standard with some gaps
3–4	Developing — partial effort, key elements missing or weak
1–2	Insufficient — minimal engagement with the criterion
0	Not addressed

Category 1: Innovation & Creativity (10 pts)

What we're evaluating: Did the team's approach provide fresh perspectives, a novel methodology, or creative solution to a real data processing problem?

Score Range	Descriptor
9–10	Highly original approach, reframes the problem or introduces a genuinely new technique. Likely to inspire follow-on work.
7–8	Clearly creative, builds on existing methods in a non-obvious way or applies them to a novel context.
5–6	Some novelty present, but the approach is largely derivative or incremental.
3–4	Limited originality, closely mirrors existing methods with minor modifications.
1–2	Little evidence of creative thinking, essentially a re-implementation of known solutions.

Guiding questions:

- Does this solve a problem that isn't already well-served by existing approaches and analyses?
- Is the core idea surprising or thought-provoking?
- Did the team take any intellectual risks?

Category 2: Scientific Merit (10 pts)

What we're evaluating: How significant and impactful is the scientific problem being tackled? Does the solution meaningfully advance our ability to address it? This is about the *importance* of the science, not the technical execution.

Score Range	Descriptor
9–10	Addresses a major open scientific problem, the solution has clear potential to accelerate research, change practice, or unlock previously intractable questions.
7–8	Tackles a genuinely important problem, the solution offers real scientific value even if the scope is focused.
5–6	Problem is meaningful but somewhat narrow or already partially solved, the contribution is incremental.
3–4	The problem is of limited scientific significance, or the solution doesn't meaningfully advance it.
1–2	Problem is trivial, poorly defined, or the solution provides negligible scientific value.

Guiding questions:

- How consequential is this problem for biomedical research or human health?
- Does solving it (or partially solving it) unlock something that wasn't previously possible?
- Would the broader scientific community care about this result?
- Is the scope of the problem well-matched to the ambition of the solution?

Category 3: Technical Quality & Execution (10 pts)

What we're evaluating: How methodologically sound is the approach? This is an evaluation of competency and reproducibility, whether for a data processing tool or an analysis used for a discovery project. How accessible is the output to others?.

Score Range	Descriptor
9–10	Excellent execution regardless of project type: methods are appropriate and correctly applied, assumptions are clearly stated. Results are reproducible, work is well-organized and accessible to others in the field. If applicable, code is clean, well-documented, and usable by a non-expert with minimal friction.
7–8	Solid execution with minor gaps, the methodology is sound and the work could be built upon with modest effort. For code, has minor documentation gaps that don't undermine the core result.
5–6	Adequate execution for the core demonstration, but incomplete in important areas — e.g., reproducibility is unclear, methods lack justification, or outputs are difficult to interpret or extend. Code has limited documentation and/or requires expert knowledge to use.
3–4	Notable methodological concerns, incomplete implementation, or significant barriers to reproducing or using the work. Code is partially functional, difficult to run, and/or has significant gaps in documentation or usability.
1–2	Execution is largely flawed, inaccessible, or scientifically unsound, the work could not be meaningfully reproduced or extended. Code is largely non-functional.

Guiding questions:

- Are the methods or approaches appropriate for the question being asked?
- Are any statistical or computational choices justified and correctly applied?
- Are any discoveries clearly supported by the evidence presented?
- Could another scientist reproduce this work from what's been shared?
- For tools developed: are they functional, robust, and usable by others?
- Can someone unfamiliar with the codebase run this tool from scratch?
- Is the code readable and maintainable?
- How well do the approaches handle unexpected inputs or edge cases?

Category 4: Communication (10 pts)

What we're evaluating: How clearly and effectively did the team communicate their work — both the problem they tackled and the solution they came up with?

Score Range	Descriptor
9–10	Exceptionally clear and compelling; the problem, approach, and results are communicated in a way that engages both specialists and non-specialists. Excellent combination of verbal explanation and presentation visuals.
7–8	Clear and well-structured, most audience members would leave with a good understanding of the work. Good presentation visuals and speaking skills.
5–6	Adequate communication, the core message comes through but lacks clarity in key areas. Visual and verbal components of presentation are satisfactory but do not mesh together well.
3–4	Communication is unclear or inconsistent, requires significant background knowledge to follow. Presentation is disorganized, scant or cluttered with unnecessary information.
1–2	Poorly communicated, the problem or solution is difficult to understand even for domain experts. Visual and verbal aspects of presentation are extremely weak.

Guiding questions:

- Is the problem statement clear and compelling?
- Are the results presented in a way that is interpretable?
- Was the team's presentation easy to follow graphically?
- How well did the team (or team representative) present their work verbally?

Category 5: Interdisciplinary Approach (10 pts)

What we're evaluating: Does the project draw meaningfully on multiple disciplines (e.g., biology, computer science, statistics, clinical science, chemistry, physics)? Does it bridge communities in a useful way?

Score Range	Descriptor
9–10	Seamlessly integrates concepts or methods from 2+ disciplines in a way that is essential to the solution. The interdisciplinary nature is a core strength.
7–8	Clear engagement with multiple disciplines. The cross-disciplinary framing adds real value.
5–6	Some interdisciplinary elements present but not deeply integrated, feels like an add-on rather than a core feature.
3–4	Minimal interdisciplinary engagement, the work is largely siloed within one field.
1–2	Essentially single-discipline, no meaningful cross-domain thinking evident.

Guiding questions:

- What fields does this tool touch, and are they meaningfully integrated?
- Would this tool be useful to scientists from more than one discipline?
- Does the team demonstrate knowledge of the other discipline(s), not just their own?