Why did NIH change the review process?*

1. **Peer review criteria had become complex, numerous**
   - Persistent feedback from reviewers; observed by NIH staff
   - Expansion of administrative and policy-compliance aspects in peer review

Detracts and dilutes attention away from the critical, primary role of reviewers to evaluate scientific merit

2. **Undue influence of reputation in NIH peer review**
   - Concerns from the community
   - Center for Scientific Review's (CSR's) "anonymization" study suggested halo effects benefit white investigators
   - NIH review is vulnerable to this bias because federal regulations require evaluation of investigator and environment

Affects judgments of merit by giving big names a pass and unknowns extra scrutiny

**The decision to change the grant review process occurred long before all the other changes at NIH that have occurred since January 2025.*

What changes under the simplified review framework?

1. Existing five review criteria (Significance, Innovation, Investigator, Approach, and Environment) reorganized into three factors.
2. Investigator/Environment are now evaluated as either sufficient or gaps identified ('considered' in the *overall impact score*, but not given an individual score).
3. Some Additional Review Criteria are evaluated as part of Factor 2, (inclusion plan, human subjects and vertebrate animals, biohazards, etc.), but others (select agents, resource sharing, etc.) are handled by NIH staff.

Reviewers Address 3 Key Questions

1. Should it be done?

- **Factor 1:** Importance of the Research (Significance and Innovation)

2. Can it be done well?

- **Factor 2:** Rigor and Feasibility (Approach)

3. Are the expertise and resources in place to do it?

- **Factor 3:** Expertise and Resources (Investigator and Environment)

Slide from SRF Core Training Slides: https://grants.nih.gov/policy-and-compliance/policy-topics/peer-review/simplifying-review/reviewer-guidance

Only factors 1 and 2 receive an individual score (from 1 to 9)

Factor 1: Should it be done?

Combines Significance and Innovation criteria

- **Significance**
  - Evaluate the importance of the research in the context of current scientific challenges and opportunities.
  - Assess the rationale for the proposed study in the context of the current literature and preliminary data.
- **Innovation**
  - Assess whether the proposed work applies novel concepts or approaches in ways that will enhance the impact of the project.

Scored 1-9

Factor 2: Can It be done well?

Assesses the Approach

- **Rigor**
  - Evaluate the potential for the work to produce unbiased, robust, reproducible data based on experimental design and proposed analyses.
  - Considers human subjects and vertebrate animals.
- **Feasibility**
  - Assess whether the studies can be completed well within the proposed timeframes while considering potential challenges and alternative approaches

Scored 1-9

Factor 3: Are expertise and resources there?

Combines Investigator and Environment criteria

Investigator

Evaluate whether the investigator(s) have demonstrated background, training, and expertise, as appropriate for their career stage, to conduct the proposed work.

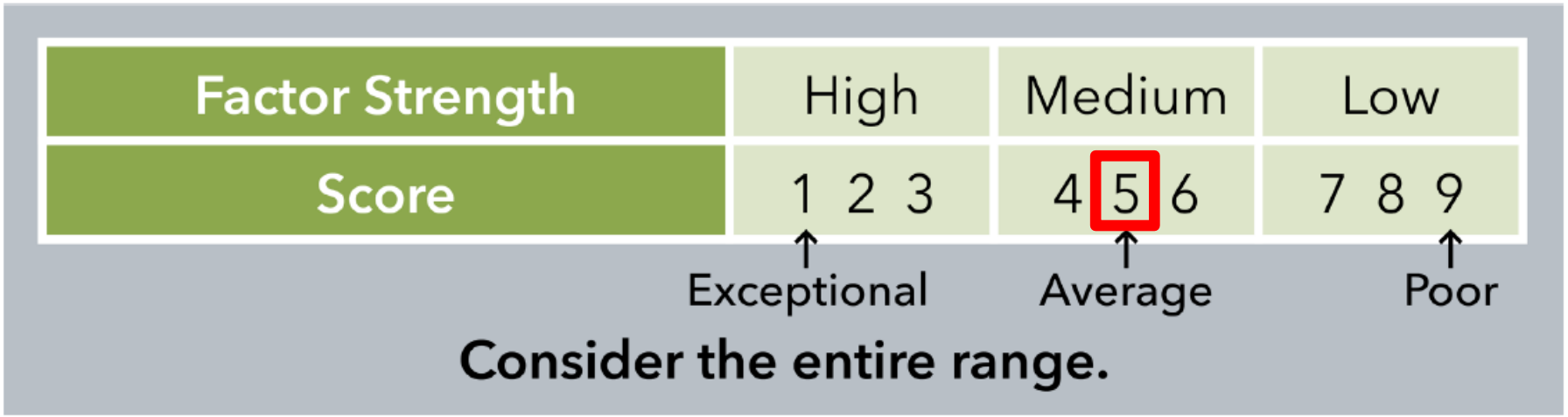
Environment

Evaluate whether the institutional resources are appropriate to ensure the successful execution of the proposed work.

Selection of either 'Appropriate' or 'Gaps Identified' (if gaps are identified, a specific explanation is required, otherwise no comments are permitted)

Fitting it Together

Scoring Factors 1 and 2



Overall Impact is NOT the average of factors 1 and 2, instead:

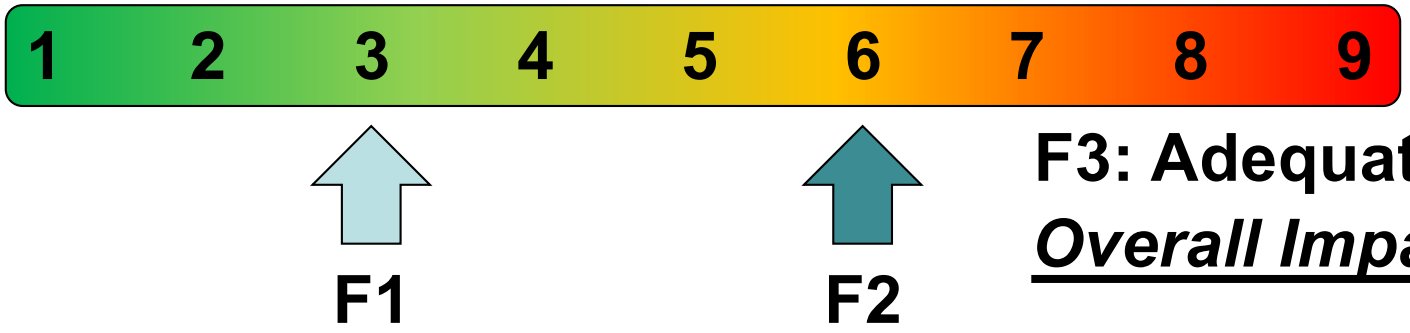
Factor 1 **is your best possible score, if everything worked out as planned.**

Factor 2 **is how good your proposal is at addressing the questions raised; even if this part is perfect, your overall impact factor cannot be better than your factor 1 score (because if the question isn't interesting, it doesn't matter how well you answer it).**

Factor 3 **cannot improve your overall score, only weaken it (if gaps are identified).**

Scoring Examples

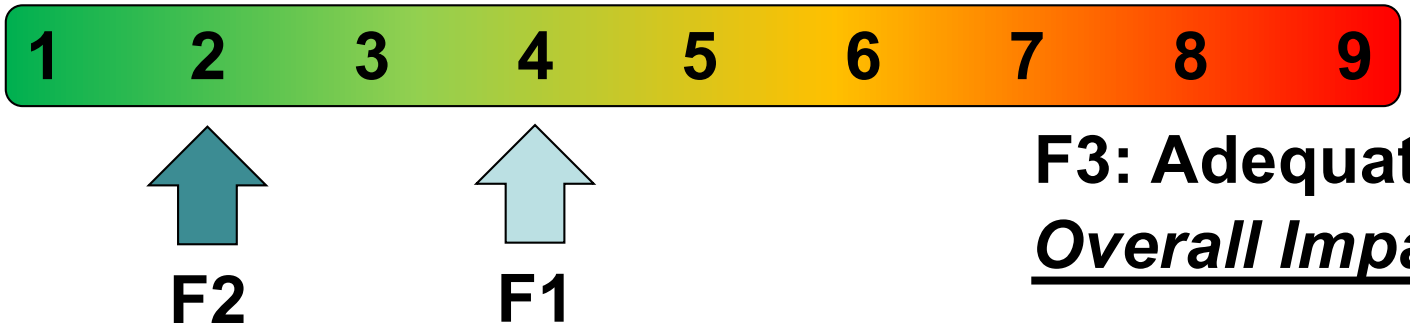
Ex1:



F3: Adequate

***Overall Impact*: 4 or 5**

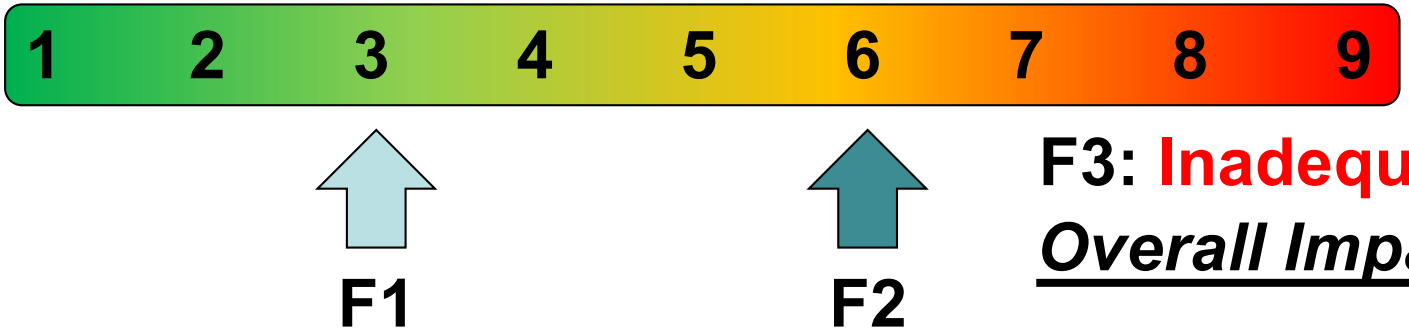
Ex2:



F3: Adequate

***Overall Impact*: 4**

Ex3:



F3: Inadequate

***Overall Impact*: 6**