Heartland Bio-Innovation Challenge Poster Regulations

Poster Size

- Posters may be up to **36 inches tall by 48 inches wide** and may be either a flat poster for hanging or mounting or a standard trifold to be placed on a desk.
- Posters **may not** be accompanied by any additional prop, however, **references** may be included as separate printed documents outside of the poster and presenters *may* also provide a single-page .pdf printout of the entire poster to reviewers.

Submission

Submit a PDF of the final poster to Kendra Christman at kendra@biokansas.org by 11:59 pm May 1, 2025.

Scoring Rubrics
Posters will be scored according to a standardized rubric, presented below.

Objective: Evaluate student posters based on clarity, scientific rigor, presentation, creativity, and overall impact.

Poster Pre-Judging:

Before scoring, use the following checklist to ensure that posters adhere to the **Regulations** enumerated above. Posters that do not adhere to all the regulations will not be scored.

- ☐ Poster adheres to size requirements
- ☐ Poster presents topic that was outlined in the application
- ☐ Poster has required elements
    - o Title
    - o Author
    - o Abstract
    - o A clearly expressed scientific question
    - o Methods
    - o Results
    - o Include at least one visual (graph, photo, diagram) that enhances understanding.
    - o Conclusion presented as answering the question
    - o References

Poster Judging:

Category	Criteria	Points
1. Scientific Content (30 points)	**Relevance and Importance (10 pts):** The project addresses a significant scientific question or challenge.	/10
	Depth and Rigor (10 pts): Demonstrates thorough background research, methodology, and data analysis.	/10
	Accuracy (10 pts): Information is factual, well-supported by evidence, and includes references where applicable.	/10
2. Poster Design (20 points)	**Organization (10 pts):** The poster is logically organized, easy to follow, and information flows smoothly. Posters should be simple enough to read and understand without guidance from a presenter.	/10
	Aesthetic Appeal (10 pts): The design is visually appealing, with appropriate use of graphs, charts, and visuals. Images are of high resolution and appropriately cited if not original.	/10
3. Presentation Skills (25 points)	**Clarity (15 pts):** The presenter clearly explains their project in terms of a scientific question, their methods, the data, and a clear summary of findings as an answer to the original question.	/15
	Engagement (10 pts): The presenter maintains eye contact, uses effective body language, and responds confidently to questions.	/10
4. Creativity and Innovation (15 points)	**Originality (10 pts):** The project demonstrates creativity and originality in approach or concept.	/10
	Innovation (5 pts): The project includes novel elements or applications with potential impact.	/5
5. Overall Impact (10 points)	**Impact (10 pts):** The project leaves a lasting impression and conveys its significance effectively.	/10

Scoring Guidelines:

- **Exceptional (90-100 points):** Outstanding performance in all categories; project demonstrates exceptional quality, originality, and impact.
- **Proficient (75-89 points):** Strong performance in most categories; a well-executed and thoughtful project with some room for improvement.
- **Adequate (60-74 points):** Satisfactory performance; meets minimum expectations but lacks depth or polish.
- **Needs Improvement (<60 points):** Significant gaps in one or more categories; requires additional effort and refinement.

Additional Comments Section:
Judges should provide constructive feedback to help students improve their projects and presentations.

Oral Presentation Rubric: Heartland Bio-Innovation Challenge Finalist Selection

Objective: Evaluate the oral presentations of finalists based on content, delivery, engagement, and overall effectiveness.

Category	Criteria	Points
1. Content and Organization (40 points)	**Introduction (10 pts):** The presentation begins with a clear and compelling introduction that outlines the project and its objectives.	/10
	Depth and Clarity (15 pts): Explains the research, methodology, and results comprehensively and logically.	/15
	Conclusion (10 pts): Ends with a strong conclusion that summarizes key findings, implications, future steps, and a connection to original value/purpose of the project.	/10
	Adherence to Time (5 pts): Presentation is within the allotted time limit and appropriately paced.	/5
2. Delivery and Communication Skills (30 points)	**Clarity (10 pts):** Speech is clear, audible, and free of distracting fillers (e.g., "um," "like").	/10
	Confidence and Poise (10 pts): Demonstrates confidence through eye contact, posture, and composure.	/10
	Engagement (10 pts): The presenter connects with the audience through enthusiasm, storytelling, or relatable examples.	/10
3. Visual Aids and Supporting Materials (15 points)	**Relevance (10 pts):** Figures, illustrations, or other visual aids within the poster are relevant, enhance understanding, and support the presentation.	/10
	Design (5 pts): Visuals are clean, professional, and free of errors.	/5
4. Questions and Answers (15 points)	**Knowledge (10 pts):** Demonstrates thorough understanding by confidently and accurately answering audience/judge questions.	/10
	Engagement (5 pts): Responds respectfully and thoughtfully to questions, showing critical thinking.	/5

Scoring Guidelines:

- **Exceptional (90-100 points):** Presentation is polished, engaging, and demonstrates mastery of content.
- **Proficient (75-89 points):** Strong presentation with clear content, effective delivery, and minor areas for improvement.
- **Adequate (60-74 points):** Satisfactory presentation that meets basic expectations but may lack depth or polish.
- **Needs Improvement (<60 points):** Presentation needs significant refinement in content, delivery, or both.

Additional Comments Section:
Judges should provide specific feedback on strengths and areas for improvement for each presentation to support student growth.

Innovation Festival Selection Criteria:

Category	Criteria	Points
1. Scientific Content (30 points)	**Relevance and Importance (10 pts):** The project addresses a significant scientific question or challenge.	/10
	Depth and Rigor (10 pts): Demonstrates thorough background research, methodology, and data analysis.	/10
	Accuracy (10 pts): Information is factual, well-supported by evidence, and includes references where applicable.	/10
2. Creativity and Innovation (15 points)	**Originality (10 pts):** The project demonstrates creativity and originality in approach or concept.	/10
	Innovation (10 pts): The project includes novel elements or applications with potential impact.	/10
	Complexity (5 pts): The project has multiple parts, delves into specific topics, or presents a twist from the general high school curriculum.	/5
3. Overall Impact (10 points)	**Impact (15 pts):** The project has a detailed description of how it could benefit the community, a specific group, or field, with medium to high impact.	/15

Scoring Guidelines:

- **Exceptional (60-70 points):** Outstanding performance in all categories; project demonstrates exceptional quality, originality, and impact.
- **Proficient (40-59 points):** Strong performance in most categories; a well-executed and thoughtful project with some room for improvement.
- **Adequate (35-39 points):** Satisfactory performance; meets minimum expectations but lacks depth or polish.
- **Needs Improvement (<35 points):** Significant gaps in one or more categories; requires additional effort and refinement.

Additional Comments Section:
Judges should provide specific feedback on strengths and areas for improvement for each presentation to support student growth.