

2018 MVTPC Showcase: Medical Bioscience Judging Form

| KNOWLEDGE ACHIE | VED | | Individual Judge's Score | | | | |
|--|--|--|---|---|--|--|--|
| Superior 10 – 9 points Outstanding use and understanding of terms and principles Project far exceeds grade level understanding and depth of knowledge Extensive literature search and source/literature citations Supplements answers with additional relevant information | Excellent 8 - 6 points Great use and understanding of terms and principles Project exceeds grade level understanding and depth of knowledge Additional literature search and source/literature citations Supplements answers with relevant information | Good 5 – 3points Good use and understanding of terms and principles Project meets grade level understanding and depth of knowledge Minimal literature search and source/literature citations Minor supplementation of answers with relevant information | No Evidence 2 – 1 points Substandard use and understanding of terms and principles Project does not meet grade level understanding and knowledge Little to no literature search and sourcing literature citations No supplementation of answers | □1 □2 □3 □4 □5 □6 □7 □8 □9 □10 | | | |
| USES OF SCIENTIFIC METHOD | | | | | | | |
| Superior 10 – 9 points Question clearly focuses on the scientific problem Hypothesis clearly states an educated guess Procedure clearly define the steps involved in the experiment Data Analysis summarizes several trials/samples and presents data in tables, graphs, etc. Conclusion is detailed and represented by a summary of the data | Excellent 8 - 6 points Question identifies the scientific problem Hypothesis states a guess with some backup info Procedure needs some explanation of steps involved in the experiment Data Analysis summarizes one or two trials/samples and presents some graphic forms Conclusion is somewhat detailed and represented by a summary of the data | Good 5 - 3 points Question identifies the scientific problem Hypothesis states a guess without substantiation Procedure defines the steps involved with gaps Data Analysis summarizes one trials/sample and presents data in only a few types of graphic form Conclusion is provided with some reference to the data and hypothesis | No Evidence 2 - 1 points Question identifies no scientific problem Hypothesis is missing Procedure defines the steps involved with many gaps Data Analysis summarizes data with no graphic representation Conclusion: No conclusion was apparent OR important details were overlooked. | □1 □2 □3 □4 □5 □6 □7 □8 □9 □10 | | | |
| CLARITY OF EXPRESSION | | | | | | | |
| Superior 10 – 9 points Lab Journal/ data record book clearly shows experimental procedures, materials used, and shows the data Visual Display: Includes title, abstract, Hypothesis, Material List, Procedure, Data Analysis and Conclusion Oral Presentation: Uses the scientific method to present experiment; questions answered correctly & clearly, & shows good eye contact | Excellent 8 - 6 points Lab Journal/ data record book shows experimental procedures, materials used, and shows the data Visual Display: Is missing one of the important aspects from the superior rating Oral Presentation: Uses the scientific method to present experiment; questions answered correctly and clearly and eye contact minimal | Good 5 - 3 points Lab Journal/ data record book has gaps in experimental procedures, materials used, and shows minimal data Visual Display: Is missing two or three of the important aspects from the superior rating Oral Presentation: Uses the scientific method to present experiment; questions answered with unclear mastery of the subject, little eye contact | No Evidence 2 - 1 points Lab Journal/ data record book little evidence of experimental procedures, materials used, and data Visual Display: Is missing many of the important aspects from the superior rating Oral Presentation: Little evidence of scientific method, questions unanswered, eye contact minimal | □1 □2 □3 □4 □5 □6 □7 □8 □9 □10 | | | |
| <u> </u> | MORE | CRITERIA OVER | | | | | |

| ORIGINALITY, CREATIVITY | | | | Individual Judge's Score |
|--|---|---|--|--|
| Superior 10 – 9 points New idea, concept, principle, hypothesis, or insight Novel association or relationship of previous discoveries or knowledge Rigorous and exhaustive analyses of extensive or robust data or results that reveal previously unknown relations Inquiry or design based experiment rather than a summary of knowledge Relates to the scientific community or business TEAMWORK Superior 10 – 9 points Partnerships were exemplary, clearly demonstrating an <u>assortment</u> of project partners/ business or industry advisors Complete team work explained and demonstrated by project evaluation and team members answers to judges questions | Excellent 8 - 6 points Different idea, concept, principle, hypothesis, insight or approach Conventional association or relationship of previous discoveries Routine analyses of data or results previously known Some inquiry or design based experimentation used but relies on summary of previous knowledge Somewhat related to the scientific/business community Excellent 8 - 6 points Partnerships were <u>evident</u>, clearly demonstrating project partners/business or industry advisors Adequate teamwork explained and demonstrated by project evaluation and answers to judges questions | Good 5 – 3points Ordinary idea, concept, principle, hypothesis, insight or approach Familiar association or relationship of previous discoveries Routine analyses of data or results that previously known Slight inquiry or design based experimentation used but relies on summary of previous knowledge Little relationship to the scientific/business community | No Evidence 2 – 1 points Non-novel idea, concept, principle, hypothesis, insight or approach No association or relationship of previous discoveries No analyses of data or results that previously known No inquiry or design based experimentation used but relies on summary of previous knowledge No relationship to the scientific/business community | □1 □2 □3 □4 □5 □6 □7 □8 □9 □10 □1 □2 □3 □4 □5 □6 □7 □8 □9 □10 |
| | | PROJECT SCORE (5 -50 POINTS) | | |
| | | SUMMARY SCORE (1 - 5 POINTS) | | |
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Comments from judge (optional):