

Criteria	Ratings				
Section 1: KEGG database (20 pts)	Excellent	Good	Acceptable	Needs Improvement	Not Done
	Discusses the different types of pathways. It should highlight the most common functions: Genetic and Environmental Information Processing.	Discusses the different types of pathways. It should highlight the most common functions: Genetic and Environmental Information Processing.	Discusses the different types of pathways. It should highlight the most common functions: Genetic and Environmental Information Processing.	Discusses the different types of pathways. It should highlight the most common functions: Genetic and Environmental Information Processing.	Does not answer at least 3 of these questions.
	Indicates a pathway that is surprising. Explains why it is surprising.	Indicates a pathway that is surprising. Explains why it is surprising.	Indicates a pathway that is surprising. Explains why it is surprising.	Indicates a pathway that is surprising. Does not explain why it is surprising.	
	Indicates that the pathway is sparsely populated, indicating that it is likely not functional.	Does not indicate that the pathway is sparsely populated, indicating that it is likely not functional.	Does not indicate that the pathway is sparsely populated, indicating that it is likely not functional.	Does not indicate that the pathway is sparsely populated, indicating that it is likely not functional.	
	Identifies that likely the gene involved overlaps with other pathways that are found in <i>S. aureus</i> .	Identifies that likely the gene involved overlaps with other pathways that are found in <i>S. aureus</i> .	Identifies that likely the gene involved overlaps with other pathways that are found in <i>S. aureus</i> .	Does not identify that likely the gene involved overlaps with other pathways that are found in <i>S. aureus</i> .	
	Provides images to support their	Provides images to support their	Does not provide images to support	Does not provide	

	conclusions.	conclusions.	their conclusions.	images to support their conclusions.	
Section 2: Antibiotic resistance genes (30 pts)	Excellent	Good	Acceptable	Needs Improvement	Not Done
	<p>Identified at least one pathway, though ideally two (some species only have one) for two of the 6 species.</p> <p>Identify the members of the pathway that are present in this organism.</p> <p>Discusses similarities and differences between species.</p> <p>Identifies that it is methicillin-resistant.</p> <p>Explains which genes provide resistance for this organism.</p>	<p>Identified at least one pathway, though ideally two (some species only have one) for two of the 6 species.</p> <p>Identifies the genes in the organism in the pathway, but doesn't identify the ones that are not.</p> <p>Discusses only similarities or differences, but not both.</p> <p>Identifies that it is methicillin-resistant.</p> <p>Explains which genes provide resistance for this organism.</p>	<p>Identified at least one pathway for two of the 6 species.</p> <p>Identifies the genes in the organism in the pathway, but doesn't identify the ones that are not.</p> <p>Discusses only similarities or differences, but not both.</p> <p>Identifies that it is methicillin-resistant.</p> <p>Explains which genes provide resistance for this organism.</p>	<p>Identified at least one pathway for two of the 6 species.</p> <p>Identifies the genes in the organism in the pathway, but doesn't identify the ones that are not.</p> <p>Discusses only similarities or differences, but not both.</p> <p>Identifies that it is methicillin-resistant.</p> <p>Doesn't explain which genes provide resistance for this organism.</p>	<p>Identified at least one pathway for two of the 6 species.</p> <p>Does not identify the genes in the organism in the pathway, but doesn't identify the ones that are not.</p> <p>Doesn't discuss similarities or differences between these organisms.</p> <p>Identifies that it is methicillin-resistant.</p> <p>Doesn't explain which genes provide resistance for this organism.</p>
Citations 2 pts	Excellent		Acceptable		Needs Improvement
	Cites Prokka CARD, KEGG Koala,		Cites three of the 4 tools, and other		Does not cite tools.

	and all other sources	sources used.	
Well written and clear 3 pts	Excellent	Acceptable	Needs Improvement
	Answers to each section written in paragraph form. Clearly written and easy to understand.	Answers to each section written mainly in paragraph form. Mostly clearly written and easy to understand.	Answers to each section written in bullet form. Difficult to understand.