Team member names: _____ **Date:** _____

Competition Scoring Rubric

The research and development firm specifies the following requirements for a successful candidate device:

1. The device shall inflict minimal trauma to the patient during insertion. Smaller and fewer incisions heal quicker, are less prone to infection and complications, and are less painful.
2. The device shall not harm internal organs and tissue during exploration of the abdominal cavity.
3. The device must be untethered and remotely operated. Future versions of the device will remain in the body so the prototype must not have any tethering that would prevent the entry incision from being closed.
4. The device shall acquire digital images of the internal anatomy to confirm or disprove the existence of endometriosis.
5. If endometriosis exists, the device must be able to acquire a biopsy of the diseased tissue.
6. Time is of the essence during surgery. Time required for set-up, insertion, analysis, and removal of the device must not exceed 10 minutes.

Criteria	Possible Points	Scoring
Measure the largest dimension of the incision in centimeters. Subtract this value from 20. This is the score. If the score is less than 0, enter 0.	0 to 20	
Inspect the synthetic intestines after each device trial. Subtract 10 points for each sign of damage inflicted by the robot. If the score is less than 0, enter 0.	0, 10 or 20	
If the device is wireless, assess 20 points, otherwise assess 0.	0 or 20	
Ask each team following exploration how many infected sites were identified. Assess points based on the number of correctly identified sites; that is, if 1 of 3 possible endometriosis sites were identified, award points of (1/3) * 20	0 to 20	
Weigh the retrieved biopsy. Assess the team 1 point for every gram of biopsy weight (up to 20 g).	0 to 20	
Using a stopwatch, record the amount of time each team's device is in vivo. Subtract one point from 20 for every minute over 15 that the device is in vivo. If the score is less than 0, enter 0.	0 to 20	
Total possible score	**120**	

Additional notes: