**Surgical Manipulator Controllability Survey**

**Part I:** Please assign a number from 1 to 5 and include additional comments for each question.

1) **How effectively could you control the overall movement of the robot?**
   
   Comments: __________________________________________________________
   __________________________________________________________

2) **How responsive was the robot to your actions?**
   
   Comments: __________________________________________________________
   __________________________________________________________

3) **How effective was the robot in mirroring your intended action?**
   
   Comments: __________________________________________________________
   __________________________________________________________

4) **How intuitive was control of the robot?**

   Comments: __________________________________________________________
   __________________________________________________________
<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Very Poor(ly)</th>
<th>Average</th>
<th>Very Effective(ly)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5)</td>
<td>How effective was the use of force-feedback in operation?</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td></td>
<td>Comments:</td>
<td>4</td>
<td>5</td>
<td>5</td>
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<tr>
<td>6)</td>
<td>How effective was the visual feedback of the system?</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td></td>
<td>Comments:</td>
<td>4</td>
<td>5</td>
<td>5</td>
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<tr>
<td>7)</td>
<td>How effective was the audio feedback of the system?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Comments:</td>
<td>4</td>
<td>5</td>
<td>5</td>
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<tr>
<td>8)</td>
<td>How accurately could you control the precise position of the robot tip?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Comments:</td>
<td>4</td>
<td>5</td>
<td>5</td>
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</tbody>
</table>
Part II: Please answer these questions based on your experience with the robot.

1) How quickly did it take to understand how to control the robot?

2) What robotic movement was easiest to control? Please describe.

3) What robotic movement was most difficult to control? Please describe.

4) What would make control of the robot more intuitive?

5) How prone were you to making errors with the robot?
6) Which specific features/responses made control easier?

7) Which specific features/responses made control more difficult?

8) Are there any general concerns that you have with regards to having this control system used in a real surgery?

9) Please make any additional comments here:

THANK YOU FOR YOUR TIME AND PATIENCE!