## Functional Decomposition

**Needs Statement:** There is a need to clearly identify the boundary between the rhabdosphincter and the prostate in patients undergoing radical prostatectomies to reduce the severity of post-procedural urinary incontinence.

**Solution:** A device to clearly identify the boundary between the sphincter and the prostate to guide surgical incisions during radical prostatectomies using robotic surgery techniques

1. **Measurement** of mechanical stiffness of a medium

2. **Differentiation** between the two anatomical structures through detecting differences in mechanical stiffness

3. **Identification** and **registration** of the location of the boundary between the two structures

4. **Detection** of the position of a surgical tool relative to the boundary

5. **Provision** of visual feedback to guide surgical incisions towards the boundary