

## LIST OF FIGURES

Figure 2.1 Implantable Medical Devices Applications.....	6
Figure 2.2 Patch Variation.....	8
Figure 3.1 Research Flowchart.....	13
Figure 3.2 Microstrip Antenna for WCE Design.....	20
Figure 3.3 Initial antenna design on a scalp phantom: front view and back view.....	25
Figure 3.4 Initial antenna design on a Small Intestine phantom: front view and back view.....	26
Figure 3.5 Top view of the Scalp Phantom Capsule: Side view of the Scalp Phantom Capsule.....	28
Figure 3.6 Top view of the Small Intestine Phantom Capsule: Side view of the Small Intestine Phantom Capsule.....	29
Figure 3.7. Scalp Phantom.....	30
Figure 3.8. Small Intestine Phantom.....	31
Figure 4.1. SAR in Small Intestine Phantom at 2.4 GHz.....	36
Figure 4.2. SAR in Small Intestine Phantom at 5.8 GHz.....	36
Figure 4.3. SAR in Scalp Phantom at 5.8 GHz.....	36
Figure 4.4. Chart of Return Loss Value from Simulation.....	39
Figure 4.5. Chart of VSWR Value from Simulation.....	40
Figure 4.6. Antenna Radiation Pattern on the Scalp Phantom for a Frequency of 5.8 GHz.....	41
Figure 4.7. Antenna Radiation Pattern on the Small Intestine Phantom for a Frequency of 2.4 GHz and 5.8 GHz.....	42