

بسم الله الرحمن الرحيم

**Sudan University of Science and Technology**

**College of Graduate Studies**

**Detection of  $\beta$ -Lactamases among Bacteria  
Isolated from Stethoscopes**

الكشف عن انزيمات البيتا - لاكتاميز في البكتريا المعزولة من السماعات الطبية

A dissertation submitted in partial fulfillment for the requirements  
of MSc in Medical Laboratory Science (Microbiology)

**By:**

**Huda Sayed Eltahir Ali**

B.Sc. in Medical Laboratory Science, Sudan University of Science and Technology, 2004

**Supervisor:**

**Prof. Humodi Ahmed Saeed**

Professor of Microbiology

**2015**