بسم الله الرحمن الرحيم

Sudan University of Science and Technology College of Graduate Studies

Phenotypic and Genotypic Characterization of Bacterial Pathogens in Hemodialysis Patients and their Antibiotics Susceptibility

خواص الطراز المظهري والجيني للبكتريا المسقمه عند مرضي غسيل الدم وحساسيتها للمضادات الحيويه

A thesis Submitted in Fulfilment for the Requirements of Doctor of Philosophy (Ph.D) Degree in Microbiology

By

Ebtehag Abd Elgader Merghani Elkhider

(M.Sc in Medical Laboratory Science (Microbiology) – 2009)

Supervisor

Professor Sulieman Mohamed Elsanousi

B.V.Sc.,Dip.,Bact.,phD

Co- Supervisor

Professor Yousif Fadlalla Hamedelnil

Co- Supervisor

Dr. Nahid Ahmed Gornas