

شبكة المعلومات الجامعية







شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



شبكة المعلومات الجامعية

# جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

## قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها على هذه الأفلام قد أعدت دون أية تغيرات



يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار في درجة حرارة من ١٥-٥٠ مئوية ورطوبة نسبية من ٢٠-٠٠% To be Kept away from Dust in Dry Cool place of 15-25- c and relative humidity 20-40%



# بعض الوثائـــق الإصليــة تالفــة



# بالرسالة صفحات لم ترد بالإصل

#### FREE RADICALS AND HYALURONIC ACID RELATIONSHIP IN RHEUMATOID ARTHRITIS AND THE EFFECT OF CORTICOSTEROID THERAPY

Thesis

Submitted for fulfillment of Ph. D. Degree

By 622

In Biochemistry

By
Ehab Moustafa Mohammed Ali
(M.Sc., 1994, in Biochemistry)

Supervised By

*Prof.Dr. Abdel Halim A. Moustafa*Professor of Biochemistry
Faculty of Science, Ain Shams University

*Prof. Dr. Mona S. Khalil*Professor of Chemical Pathology
Faculty of Medicine, Cairo University

*Prof. Dr. Samia M. H. Fada*Professor of Rheumatology & Rhehabilitology
Faculty of Medicine, Cairo University

Dr. Omneya M. S. Hosny
Lecturer of Biochemistry
Faculty of Science, Ain Shams University

Sama Jada

Omneya

Ain Shams University Faculty of Science Biochemistry Departement

1998



#### Faculty of Science Ain Shams University

Name: Ehab Moustafa Mohammed Ali

**Date of Graduation:** 1985

Degree awarded: Ph.D.

Departement: Biochemistry

Date of registration: 1995

Date of acceptance: 1998



# TO MY PARENTS



#### ACKNOWLEDGEMENT

I would like to express my deepest thanks, gratitude and appreciation to *Prof. Dr. Abdel Halim A. Moustafa* Professor of Biochemistry, Faculty of Science, Ain Shams University, for his sincere supervision, helpful suggestions, valuable effects and constructive criticism which inspired me to carry on this work with keen interest.

The words fail to express my grateful thanks and respect to *Prof. Dr. Mona S. Khalil*, Professor of Chemical Pathology, Faculty of Medicine, Cairo University for her generous contribution, continuous encouragement and for her kind support, advice valuable criticism and precious time, she offered me through out this work.

I would like to express my special regards and deepest thanks to *Prof. Dr. Samia M. H. Fada*, Professor of Rheumatology & Rhehabilitology, Faculty of Medicine, Cairo University, for her invaluable aid, and her help in performing the rheumatology part of this work.

My sincerest thanks are also due to *Dr. Omneya Hosny* lecturer of Biochemistry, Faculty of Science, Ain Shams University, for her kind assistance, valuable guidance and comments.



### **CONTENTS**

	page
INTRODUCTION AND AIM OF THE WORK	1
REVIEW OF LITERATURES	15
SUBJECTS & MATERIALS AND METHODS	50
RESULTS	88
DISCUSSION	136
SUMMARY	180
REFERENCES	187
ARABIC SUMMARY	

