



Molecular and Biological Studies of the Effect of Simvastatin and Green Tea Extract and\ or Gamma Radiation on Cancer Cells

A Thesis

**Submitted for the award of Ph.D. Degree in Zoology
(Molecular Radiation Biology)**

By

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(Master of Zoology, 2016)**

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**Zoology Department
Faculty of Science
Ain Shams University
2020**

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

(قَالَ رَبِّ أَوْزِعْنِي أَنْ أَشْكُرَ نِعْمَتَكَ
الَّتِي أَنْعَمْتَ عَلَيَّ وَعَلَى وَالِدَيَّ وَأَنْ
أَعْمَلَ صَالِحًا تَرْضَاهُ وَأَصْلِحْ لِي فِي
ذُرِّيَّتِي إِنِّي تُبْتُ إِلَيْكَ وَإِنِّي مِنَ
الْمُسْلِمِينَ)

(سورة الاحقاف- آية ١٥)



THESIS EXAMINATION COMMITTEE



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**A Thesis Submitted to
Zoology department- Faculty of Science
Ain-shams University**

Supervision Committee

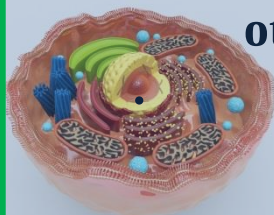
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The scientific work entitled “*Molecular and Biological Studies of the Effect of Simvastatin and Green Tea Extract and/or Gamma Radiation on Cancer Cells*” presented in the thesis embodied results of the original work done by myself for the Ph.D. degree in Zoology. This work has not been submitted in part or in full for any other degree or diploma.



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DEDICATION

I dedicate this work with all my love to my Supervisors, Parents, my wife and my lovely Kids (Yassin & Marium), and for all my friends and those from whom I have learned, whenever and wherever they are.



Ibrahim Y. Abdelrahman