ACKNOWLEDGEMENT

First and foremost, I would like to give Glory to God Almighty for His Grace and help in all my endeavours and for bringing me this far in my academic career.

I take this privilege to express my thankfulness to all those people involved in this endeavour.

I am bereft of words to find befitting and to show my deep sense of gratitude towards my guide Dr. Anila Dwivedi, Scientist E-I, Division of Endocrinology, CDRJ, Lucknow. I shall remain ever indebted to her for her creative and expert guidance, constant encouragement, incessant discussion, everlasting moral support, constructive criticism, valuable suggestions, kindness and her trust on me. I learnt many things from her during this course of study.

I am deeply grateful to Dr. C.M. Gupta, Director, CDRJ, Lucknow, for providing me all the laboratory facilities for the pursuance and completion of the study.

I am thankful to my unsparing critic Dr. V.P. Kamboj, Former Director, CDRJ, Lucknow, for his tough comments, accompanied with gentle support.

I acknowledge my thanks to Dr. M.M. Singh, Head, Division of Endocrinology and Dr. S.R. Chowdhury, Former head, Division of Endocrinology for taking interest in this study.

My sincere thanks go to Dr. Saman Habib, Scientist, Division of Molecular and Structural Biology, CDRJ, Lucknow for valuable suggestions and help during the initial phase of this work.

I also express my gratitude to Dr. Neena Goyal, Scientist, Division of Biochemistry, CDRJ, Lucknow, who generously gave me all cooperation and instrument facility for the completion of this work.

I gratefully acknowledge Mr. S.N.H. Naqvi and Mr. Karunesh Rai of Animal house, CDRJ, Lucknow for providing me animal facilities without which this study would have not been possible.

I would like to record my sincere thanks to Dr. P.K. Mehrotra, Dr. B. Malviya, Dr. A. Srivastava and Dr. G. Gupta for their kind cooperation during the work.

I would also like to express my thanks to the members of our lab Mr. B.P. Deoli and Mr. P.K. Bhattacharya for their technical assistance during animal work.

My most sincere thanks are due to my junior and friend Blesson for his untiring help and suggestions throughout my studies and in the preparation of this dissertation.

I wish to express my sincere gratitude to my senior Rekha and my juniors Amita and Geetika who gave their unstinted support in one way or the other.
I also express my gratitude to Mrs. S. Vaishnnavi, Mr. P.K. Dasgupta, Mr. M. Tiwari and Ms. Kanaklata of Instrument room, Mr. H.K. Checker and Mr. P.C. Patni of the division, who were kind enough to assist me. I would like to thank Mr. S.B. Dey for radioactive counting.

I am thankful to my colleagues and friends Anuradha, Surojeet, Srinivasan, Abhishek, Murthy, Rajeev, Tanaya and Sudhir of the division for their cooperation and support.

My heartfelt thanks go to my friends Shikha, Priti, Shikha Awasthi, Upasana, Divya, Jyotsna, Chhavi, Rohi, Smita, Himanshu, Mukesh & Anvita with whom I shared all type of moments of life like joy, sadness, failure and victory.

I am also thankful to Ministry of Health and Family Welfare and Council of Scientific and Industrial Research for financial support.

My vocabulary is not wide enough to reflect all my sense of regards and infinite gratitude to my mother Mrs. Uma Awasthi & my father Mr. S.K. Awasthi for their love, affection, blessings, pivotal role in shaping my academic career, guidance for the right path, tremendous moral boosting and sacrifice. I am thankful to them for making me a self-reliant, positive and optimistic human being.

Words fail when I try to express my deep sense of gratitude to my sister, Manisha, my first teacher who taught me to struggle in the life boldly & my little brother Gaurav, my best friend, for their selfless love, diligent enthusiasm, moral support and inexhaustible encouragement. They always stood by me in every hard moment of life and filled me with confidence. It would be ingratitude on my part, if I don't record my heartfelt thanks to my brother-in-law Dr. Lokesh Shukla for his constant encouragement and moral support.

Lastly, if I do not acknowledge the silent sacrifice of all animals during the course of study, it shall be callous indifference and cruel apathy towards them.

Smita Awasthi