ACKNOWLEDGMENT

I am extremely happy to express my gratitude and love to my research supervisor Dr. M. Michael Aruldhas, Professor and Head, Department of Endocrinology, Dr. ALM. Post Graduate Institute of Basic Medical Sciences, University of Madras, Taramani, Chennai - 600 113. I am immensely indebted to him for his guidance in professional and personal life, for his constructive criticisms, encouragement and for his patience in putting up with all my lapses and for being there, at all times of need.

I place on record my sincere thanks to Dr. P. Govindarajulu, Former Professor and Head and presently the Co-ordinator, UGC-SAP, Department of Endocrinology, Dr ALM. Post Graduate Institute of Basic Medical Sciences, University of Madras, Taramani, Chennai - 600 113, for his sustained support and encouragement throughout my stay in the department.

My thanks are also due to the former and present Directors of the Institute for providing me the necessary infrastructural facilities for my research pursuit.

I am also grateful to Dr. N. Srinivasan, Dr. K. Balasubramanian, Professors, Department of Endocrinology, Dr ALM. Post Graduate Institute of Basic Medical Sciences, University of Madras, Taramani, Chennai - 600 113, for their unfailing support and critical comments throughout the period of my study.

I am extremely indebted to Dr. J. Arunakaran, Lecturer, Department of Endocrinology, Dr ALM Post Graduate Institute of Basic Medical Sciences, University of Madras, Taramani, Chennai - 600 113, who has been a source of inspiration, strength...
and support to me. On the personal front, he gave me his invaluable experience, which helped me perceive in a better way many things in life.

My profound thanks are due to Dr. S. Maria Sebastian, Lecturer, Research Department of Zoology, St. Xavier's College (autonomous), Palayamkottai, for introducing me to the field of Endocrinology during the days of graduation. I am extremely indebted to him for his love, care and affection. He has been a friend, philosopher, guide, whose suggestions and directions helped me to focus and build my career as a researcher.

I am extremely thankful to Dr. R. Selvam, Professor and Head, Department of Medical Biochemistry, Dr. S. P. Thiyagarajan, Professor and Head, Department of Microbiology, for permitting me to use the spectrophotometer and scintillation counter facilities in their lab at times of need. I am also thankful to Dr. P. Varalakshmi, Professor, Department of Medical Biochemistry in this regard.

I am grateful to Dr. Gowri Chandrakasan, Deputy-Director, Head, Department of Biochemistry, Central Leather Research Institute, Chennai - 600 020, for her help in providing the spectrophotometric facilities.

My deepest gratitude is also due to Dr. M. A. Akbarsha, Professor and Head, School of Biological Sciences, Bharathidasan University, Thiruchirappalli for his help in the analysis of histological slides and Dr. P. P. Mathur, Professor, Department of Life Sciences, Pondicherry University, Pondicherry, for his help in literature survey on-line.
I wish to express my thankfulness to Dr. T. Malini, CSIR Pool Officer, Department of Endocrinology, Dr. ALM. Post Graduate Institute of Basic Medical Sciences, University of Madras, Taramani, Chennai – 600 113, for her sustained support and whole-hearted help rendered through my study.

I am extremely happy to thank Dr. M. K. Viswanathan, Scientist, ICMR, Chennai for his help, advise and support during a brief period of our association.

I owe a lot to my senior colleagues Dr. F. Feliscis Antony, Dr. M. Gladson, Dr. L. Rajkumar, Dr. D. Antony Jeyaraj, Dr. V. Srikanth, Dr. A. Thiruvengadam who were instrumental in me learning many techniques in the field of Endocrinology, for their persistent support and encouragement.

I wish to express my immense sense of gratitude to my other senior colleagues Dr. A. Ramamani, Dr. N. Kala, Dr. G. Valli, Dr. S. Sudha, Dr. K. Sakhila Banu, Mrs. G. Varalakshmi Mrinalini for their support and encouragement.

I am extremely indebted to my friends Mr. M. S. Lenin Sebas, Mr. S. Arumuga Nair, Dr. K. Ravichandiran, Dr. B. Ravi Sankar, Dr. P. Venakatanarayana, Dr. E. Babu, Dr. A. Govindaraj, Mr. M. Santhosh Kumar, and Mr. R. Velmurugan, who went a long way to help me realize my dream.

I owe a great deal to Ms. Sowmya Muralidharan, Ms. R. S. Maragatha Valli, Ms. R. Nandhini for their moral support and unflinching help.

My immense thanks are also due to Mr. P. Sekhar, Lecturer, Department of Zoology, Voorhees College, Vellore and Mr. B. Jawahar Samuel, Lecturer, Department
of Zoology, St. John's College, Palayamkottai who are currently UGC-FIP scholars in our department, for their considerate help and support

I am extremely thankful to my present junior colleagues Mr. R. Ilangovan, Mr. S. Sitta Djody, Mr. S. Yuvaraj, Mr. R. Sivakumar, Mr. M. Balaganesh, Mr. V. Gopala krishnan, Mr. N. S. Venkatesh, Mr. M. Vijayaraman, Mr. C. Parthasarathy, Mr. P. Kanaga raj, Mrs. P. Mary Julie, Mrs. Arockya Mary Sashi John for their unfailing help and support. My thanks are also due to Dr. Vasanthi who is currently undertaking her Ph.D. programme.

I am also thankful to my junior colleagues, who are currently undergoing M.Phil., and those who have passed out from the department for their constant help and support.

I am extremely grateful to Mr. P. Shanmugasundaram, Scientist, Central Leather Research Institute, Chennai and Dr. T. S. N. Sankaranarayanan, Scientist, Council of Scientific and Industrial Research, Chennai for their unflinching support and help rendered throughout the duration of my study.

I wish to place on record my sincere thanks to Dr. Renuka Govindarajulu for her help in hormone assays and Mrs. Johnny Aruldhas for her help in making the language corrections. My immense thanks are also due to Dr. Jeyaseeli Sebastian, for her constant support and encouragement.

My thanks are also due to my friends in the other departments of our Institute and other Institutes for their help in my research activities.
I owe a lot to Mr. N. Singaravelu, Assistant Office Superintendent for his help and support all through my study period. I am also thankful to Mr. K. R. Narayana Moorthy, who worked as an Office Assistant, for his help and friendliness.

My thanks are also due to the Faculty and Staff of our and other institutional libraries for their help in the literature collection.

I am extremely happy to acknowledge the momentous help rendered by (late) Mr. N. Chandrasekar, Mr. G. Raman, Mr. J. Kannan, Mr. K. Salomon, Mr. R. Narayanan, and Mr. G. Chinnaiah who took it in their personal interest to maintain the animals.

I wish to acknowledge the gracious gift of RIA kits from National Institute of Diabetes, Digestive and Kidney Diseases (NIDDK), Bethesda, USA and Dr. Med. E. Nieschlag, Professor, Department of Reproductive Medicine, University of Münster, Germany for the kind gift of testosterone antibodies. The kind gift of estradiol antibodies from Dr. Bill Lasley, University of California Davis, USA is gratefully acknowledged.

I wish to thank the Eminent Scientists from India and abroad who were kind enough to send me reprints of their publications, which enabled me design and interpret my studies better.

I am profoundly indebted to the members of my friends' family and many of my relatives, for their love, care and affection and making me feel being at home away from home, in this city.
The financial support from Lady Tata Memorial Trust in the form of a Senior Fellowship and Council of Scientific and Industrial Research (in the form of a research project to my supervisor [60(0022)/97/EMR II dated 14.3.1997] is gratefully acknowledged.

I thank God for his bounty and pray for his benevolence.

(S.Subramanian)