ACKNOWLEDGEMENT

As is rightly said, no duty is more urgent than that of returning thanks...

At the outset, I would like to thank Dr. Satish Kumar Adiga, Professor and my Guide, for his guidance and involvement in this research work. I am indebted to my co-guide Dr. Pratap Kumar, who has been ever so patient enough in listening to my words and offering me valuable guidance, when I had requested for a meeting to discuss key findings of this research work.

With a deep sense of gratitude, I wish to express my sincere thanks to Dr. Ullas Kamat, who was the Deputy Registrar (Academics), Manipal University at the time of my Ph.D registration. Without his help that gained me an approval to partially deviate from objectives and methodology in a research work planned earlier, I would have no reason to express myself in this section.

I am very grateful to the Registrar of Manipal University, Dr. Vinod Bhat and Deputy Registrar (Academics), Dr. Ranjini Kuduva. Their acknowledgement and consideration of my financial constraints during the final stages of my tenure helped me steer clear of the pressure, allowing me to devote attention to the more important task - Thesis writing. I am also obliged to Mrs. Sujatha from the Deputy Registrar Office, for all the support extended.

I gratefully acknowledge the help and cooperation extended by Dr. H. Krishnamurthy, National Centre for Biological Sciences, Bangalore and his staff Mr. BS Srinag and Ms. Navya Jain in helping me carry out flow cytometry based experiments in the present research work. I fondly recollect my first visit to his lab. Scientist aside, I realized the person he was when he bought me lunch and sat down to eat along with me and Srinag. His constructive criticism and integral view on research has indeed made a deep impression on me.

The help rendered by Dr. Sudha Srivastava, Dr. HM Sonawat and his students – Mr. Arjun Sengupta, Ms. Soumita Ghosh in the execution of nuclear magnetic resonance spectroscopy on seminal plasma samples at National NMR facility, Tata Institute of
Fundamental Research, Mumbai is sincerely acknowledged. Their enthusiasm and able guidance in planning and implementation of the same added a great deal of confidence and has made me introspect and question my perception of research in general. My heartfelt thanks are also due to administrative and research staff of the National NMR facility-Mr. Jayesh Malkan, Mrs. Mamtha and Mr. Deviprasad who supported me in various ways during my stay in Mumbai.

I would like to acknowledge the help rendered by the academic staff of the Division of Reproductive Medicine - Dr.Guruprasad Kalthur, Mr. Shyam, and Mr. Dayanidhi Kumar. My warmest and sincere thanks are also due to the technical staff - Mrs. Jayalakshmi Pai, Mrs. Sandhya Patil, Mrs. Keerthi G Patil, Mrs. Geetha, Ms. Geetha Shetty and Ms. Anitha, for their help and co-operation during the study tenure. I specially thank the support staff of the Department of Obstetrics and Gynecology-Mrs. Elizabeth John, Mrs. Srilatha, Mrs. Ruth, Mrs. Annette, Mrs. Sandhya and Mrs. Uma, who always cheered me when my energy levels were low and helped me, stay focused. I also thank the post-graduate students of Clinical Embryology and for their support and care. I specially thank all the staff of Medical Records Department, KMC for their assistance in data collection.

Financial assistance provided by the Indian Council of Medical Research under the Ad-hoc scheme (No.5/10/7/2003-RHN) and Senior Research Fellowship (No.3/1/2/5/2010-RHN, IRIS ID 2009-06740) is sincerely acknowledged.

As gratitude is more a memory of the heart; less aptly described in words, I prefer not to mention my family and friends, whose love and encouragement I have received and hope to reciprocate forever…

There have been times during the tenure of this thesis that I have felt like giving up or wondering what this degree can possibly offer. It was exactly during these difficult phases that I have been accompanied and supported by many people, known and unknown, reminding me the necessity of hope and perseverance… At this juncture, I would like to thank all those, whose names aren’t mentioned here, but nevertheless help rendered by them in one way or the other, has made this doctoral thesis possible.

J Varshini
Education consists mainly of what we have unlearned

~Mark Twain