Acknowledgments

It is my honor to express my deep sense of gratitude to a number of people who helped me to accomplish this study for my Ph. D. (Sc) degree.

First of all, I am indebted to my supervisor, Prof. Mitali Chatterjee, for giving me the opportunity to pursue my doctoral work in her laboratory. I am thankful for her critical guidance, her eye for detailing, immense knowledge and logical way of constructing research hypothesis, which collectively were of great value to me.

I express my sincere gratitude to the Director, Institute of Post Graduate Medical Education and Research, for sanctioning my research work, the present and past departmental heads (Pharmacology), Prof. Amal Kanti Das and Prof. CN Islam, for not only ensuring unfettered access to the departmental facilities but also showering their wit and affection on me, Prof. Avijit Hazra and Prof. Suparna Chatterjee, for sharing their sound knowledge, encouragement and support; all teachers and technical staffs in the Dept. of Pharmacology, IPGME&R also deserve my earnest thanks.

I am also grateful to Dr. Simanti Datta, my Ph. D. co-supervisor for her valuable advice and guidance. I also wish to express my warm and sincere thanks to the fellows of Centre for Liver Research, School of Digestive and Liver Diseases, especially Priyanka di for her kind help.

I am thankful to Dr. Souvik Mukherjee for his immense guidance and valuable suggestions. In addition, it has been my privilege to have been
worked with all the staffs and fellows of Biomedical Genomic Centre, Kolkata and Dept. of Human Genetics, Indian Statistical Institute, Kolkata.

I feel extremely fortunate and privileged to have got lovely co-workers, past and present seniors, contemporaries and juniors Hari da, Piu di, Debjani di, Avijit da, Alak da, Sunanda di, Debanjan, Susmita Roy, Soumita, Shibabrata, Dibyendu, Suhana, Sourav, Sritama, Sneha, Indrani, Srija, Uttam and many summer students. I will always treasure the experience of working in their delightful company, valuable support such as critical evaluation and invaluable suggestions for making presentations. I particularly thank Rupashree di for helping me to start my career in this laboratory. A special thanks to Richeek for his friendly support for the last 5 yrs.

Most importantly, I would never have come this far without my husband Dr. Subhrangshu Guhathakurta, who remained my strongest supporter and critic in all aspects of my life. I am also thankful to my mother-in-law Mrs. Bina Guhathakurta for helping me to take the right decision in every critical situation. Last but not the least, greatest thanks to my parents Mr. Narayan Chandra Ghosh and Mrs. Jogmaya Ghosh for being my all-time supporter and source of positive energy.

Susmita Ghosh