Acknowledgement

It is a pleasure to thank the many people who made this thesis possible.

It is difficult to overstate my gratitude to my thesis advisor, Dr. Anand Ranganathan, whose constant supervision, guidance and sound advice has been the most instrumental in bringing this project to fruition. His enthusiasm, supporting and encouraging attitude and out of the box thinking has always been a source of encouragement and inspiration to me. I have always admired his unique ability to squeeze the best out of his students, while at the same time giving them complete freedom for work and ideas. His words of encouragement and ability to find silver linings in darkest clouds have inspired me to keep putting in my efforts even when things appeared impossible. Doing science has been a pleasure with him because of the cheerful environment created by him. I cannot thank him more for his unfailing patience and words of wisdom when I needed them the most.

I would like to acknowledge Dr. Navin Khanna and Dr. Swaminathan, for their valuable suggestions whenever sought for.

I extend my heartfelt thanks to Prof. V. S. Chauhan, Director, ICGEB for providing the excellent research facilities within the institute.

I am indebted to my seniors, ‘Dr. Geeta’ and ‘Dr. Kris’, who had very patiently helped me understand the nitty-gritty of molecular biology and at the same time provided a stimulating and fun environment to learn and grow. My colleagues Anamika, Kuhulika and Sachin, I know they are the most curious lot to read this section of my thesis, after having read for the innumerous times, my ‘other’ manuscripts! 😊 I would not be surprised, if I get conspired against and killed for not giving them special space here. So here I declare most honestly, that these people have been the best colleagues one can have! I owe more than my sincerest gratitude to them for their generous support both professionally and personally, for the very stimulating discussions, for the incessant chit-chats, for the non-stop entertainment and above all for keeping me “in-sane”!
Life in RGP had been so much fun with its incredibly lively bunch of members Chandra, Poornima, Niyati, Rajan, Upasna, Mani, Lav, Sushil, Aravind, Aashiya, Anil, Meena, Gaurav; and the newbies: Karthik, Viswa, Shobha, Arti, Puja, Priyanka and Sathish. My heartfelt thanks to all these people for their great company and for the wonderful time I had with them at RGP. I also acknowledge my numerous friends outside RGP: Anuj, Pavnish, Surender, Richa, Neha, Hardeep and Vandana for their good and cheerful company.

This chapter of my thesis would remain incomplete without mentioning the names of the very special and great friends I have had during my stint at ICGEB. I owe sincere gratitude to my friends Satty, Swetha, Tanu, Neha, Varsha, for helping me get through difficult times and for all the emotional support and camaraderie they provided.

A million thanks are extended to Jogi Bhaiya and Dinesh for making my research efforts a lot easier and a lot simpler.

I would also like to thank DBT for providing financial support for pursuing my thesis.

My parents are undoubtedly the best parents anyone could have. Their unconditional nurturing of me and my aims and the love and support of my brother Mayank and sister Pooja, has been my biggest strength and asset. ‘Thanks’ is too small a word to express my gratitude towards them.

Special and sincere thanks are extended to my parents-in-law for being so understanding and caring.

Finally, with affection unlimited I would like to thank my husband, Piyush, whose unconditional love, constant support and undying faith has helped me drive away my worst fears and jitters. His contagious patience helped me face and walk through all the inevitable frustrations of scientific research with so much ease. Without him, I might have written this thesis, but would not have been happy in the process.