ACKNOWLEDGEMENT

I express my deep sense of gratitude and sincere thanks to God Almighty for his grace and guidance, which helped me in various ways during the course of my project. Research is never the effort of single individual, it is team work and several have put their efforts in many ways for the successful accomplishment of Ph.D thesis. I would like to acknowledge all those who have facilitated the completion of this project.

I would like to express my deep sense of gratitude to Dr. V. V. Umrania, my research supervisor, Associate Professor & Head, Department of Microbiology, MVM Science & Home Science College, Rajkot, for her guidance, encouragement, understanding, advice and the freedom of work she provided all throughout my research work.

This project would never have been possible without the immense and constant support of my Co-Guide Dr. Rakesh M. Rawal, Senior Scientific Officer and Head of Department of Medicinal Chemistry & Pharmacogenomics, Gujarat Cancer & Research Institute. His kind help, matchless guidance, innovative ideas with freedom of work, support, motivation and considerate nature at all steps of my task made this project achievable.

I am extremely thankful to the Director In-charge Dr. Rakesh K. Vyas, Dr. Prabhudas S. Patel, Senior Scientific Officer & Head of Cancer Biology Department and Dr. Geeta Joshi, Deputy Director, Research & Education for giving me an opportunity to work at G.C.R.I. I am also thankful to Department of Surgical oncology, Medical Oncology and Pathology at G.C.R.I, who supported me directly and indirectly to complete this research work. I am very grateful to Gujarat State Biotechnology Mission (GSBTM) for allowing me to conduct sequencing over there.

I am greatly indebted to Prof. Girish Bhimani, member of Academic Council & Syndicate, Saurashtra University, Rajkot, Prof. S. P. Singh, Head,Department of Bioscience, Saurashtra University, Rajkot and Dr. Dhiren D. Pandya, Assistant Registrar, P.G. Section, Saurashtra University for their kind encouragement and valuable guidelines in all times.

I deeply express my gratitude to Dr. K. J. Ganatra, Principal, MVM Science & Home Science College, Rajkot for his constant motivation and precious support.
The good advice, constant support and acquaintance of Ms. Urja Desai and Ms. Krupa Shah, has been invaluable on both an academic and a personal level, for which I am extremely grateful. I am indebted to my colleagues in particular to Ms. Shanaya Patel, Ms Sheefa Mirza, Ms. Kanisha Shah and Mr. Afzal Ansari for their exceptional unconditional support by providing a stimulating and fun filled motivational environment. My special thanks to all the laboratory colleagues and staff members of Medicinal Chemistry & Pharmacogenomics for their cooperation throughout my work. I am also thankful to Dr. Franky D. Shah for her punctual suggestions and valuable guidelines.

Words cannot express how obliged I am to my mother-in law Mrs Sudha Daga, father-in-law Mr. Arjunal Daga and my mother Mrs. Chandrakanta Mundra, for all of the sacrifices that you’ve made on my behalf. Your prayer for me was what sustained me thus far. I am heartily grateful to all of them for coping with my ‘frenzied lifestyle’ with lots of patience and love and bearing my ‘negligence’ in carrying out family responsibilities during the last few months of writing the thesis. My warmest thanks to my in-laws family members who brought me upto this stage through their immense help, support, understanding and blessings.

I am speechless to show thankfulness to my sweetest little angel, Radhika for her smiles encourage me to efficiently overcome the difficulties encountered in my pursuit of the Ph.D Degree. She deserves greatest appreciation for always wishing me ‘All the Best’, innocently and wholeheartedly. She was really attentive and understanding during my peak times of research work.

Finally, and above all, I cannot begin to express my gratitude to my soulmate, Mr Varun Daga, for his continued & unfailing love, support and understanding throughout this process that underpins my persistence in this career. He is the one who constantly encouraged me when the tasks seemed arduous and insurmountable.

Thanks are also due to all those who have not been mentioned by name but have been of invaluable help in their inscrutable ways.

Aditi Mundra