ACKNOWLEDGEMENTS

Many people have contributed to the research work presented in this thesis and I take this opportunity to acknowledge them all.

I express my sincere thanks to my Supervisor, Dr. Taruna Madan, Assistant Scientist, Institute of Genomics and Integrative Biology, Mail Road, Delhi, for giving me the opportunity to carry out work for my Ph.D. thesis. I sincerely acknowledge her constant support, advice and constructive criticism throughout the past years. I admire her cooperation and the friendly atmosphere at the institute and for many scientific and non-scientific discussions. I feel great pleasure to thank her for supervising for my scientific work and for the critical analysis of research manuscripts.

I sincerely express my gratefulness to Dr. W. N. Gade, Co-Supervisor, for his constant support throughout the research work. The research work related to ‘proteomics’ was initially carried out at his laboratory at IGIB, Delhi.

I express my deepest gratitude to Dr. P. Usha Sanna, Scientist Emeritus, Indian Agricultural Research Institute (Formerly Director-Grade Scientist at IGIB, Delhi, for the inspiration and motivation throughout this research work. Her enthusiasm for science, novel ideas, exploration of new techniques to understand biology, constant support to achieve the targets and appreciation to the students has been instrumental for this research work.

I am highly thankful to Dr. Ravi Sirdeshmukh, Scientist, Centre for Cellular and Molecular Biology, Hyderabad for providing me an opportunity to carry out a part of the research work at Proteomics Research Facility, CCMB, Hyderabad. His trenchant critiques, the probing questions, and the remarkable patience have been instrumental for the research work and the manuscripts.

I gratefully acknowledge Dr. C. S. Sundaram, Scientist, CCMB, Hyderabad, for carrying out mass spectrometric analysis, the substantial part of the research work.

I sincerely acknowledge Dr. Ashok Shah, Department of respiratory medicine, Vallabhbhai Patel Chest Institute, University of Delhi, Delhi, for providing the clinical samples and data used to carry out a part of the research work. His guidance and constructive discussions have been helpful to the research manuscript.

Within the institute, I would like to further address sincere thanks to Dr. Y. Singh for the invaluable help and support during all the years of the research work. I also express thanks to Dr. M. A. Q. Pasha and Dr. G. L. Sharma for providing good environment in the laboratory.

I acknowledge Council of Scientific and Industrial Research (CSIR) for providing financial assistance, various opportunities (to attend conferences and carrying out the
collaborative work at CCMB, Hyderabad) and an invaluable experience in science during the research work.

The road to my thesis work has been long and winding. I would also like to thank Dr. Shailly Nigam and Dr. Shweta Saxena from the early days. Dr. Mamta Singh, DST young scientist, has been supportive and concerned throughout the period.

I would also like to thank my colleagues Dr. Jata Shankar, for his positive criticism and support, Dr. Neel Kamal for her everready help and warm attitude, Dr. Savneet Sukhija for sharing ideas on various aspects and Mudit for his valuable suggestions. I personally appreciate Lakshna Mahajan and Santosh Sr. Upaday for their scientific aptitude. I am thankful to them for the scientific discussions and the experimental troubleshootings during the research work.

I also wish to make a special note of thanks to members of my laboratory, Dr. Azim, Dr. Arif, Dr. Charu, Karamjeet, Jaishree, Ehtesham, Aparna, Manoj, Vibha, Jyotsana and Manish for the help extended by them during my Ph. D. tenure.

I would also like to acknowledge my colleagues in other laboratory Neetu, Jai Shankar, Vidhu, Sudha, Amit, Dolly, Anamika, Abhinav, Deepshikha and Prabhanshu for their kind help.

I would also like to acknowledge the trainees who worked with me especially Wazid Hassan and Sourabh Dhinagaa who were of great help during my research work.

In addition to the people in IGIB, I acknowledge my colleagues at CCMB, Hyderabad, Dr. Suhasini, Anjana, Rakesh, G. Sriramini, Dolly, J Arun Thomas for their help at CCMB.

Finally, I would like to thank those closest to me, whose presence helped make the completion of my thesis. Most of all, I would like to thank my parents and brothers for encouragement and their absolute confidence in me. I would also like to thank Bhawani for their positive outlook and cheerful attitude. Special thanks to my naughty nephew Mehul and niece Preksha, as playing with them simply relieves me with all my stress.

(Poonam Gautam)