ACKNOWLEDGEMENTS

To acknowledge, in words, all the debts intellectual, moral and financial which one incurs while undertaking a venture like this is no more than a mere ritual. So continuing this tradition, I take this unique opportunity to thank a host of individuals who have directly or indirectly contributed towards the completion of this thesis, and without whose efforts this work would not have seen the light of the day.

I can hardly express the sense of gratitude that I feel for my esteemed teacher and guide Dr. R.C. Sobti Co-ordinator, Centre for Biotechnology, P.U., Chandigarh for his patience and meticulous scrutinization of my work. It has been an honour and a privilege to have worked under his kind and able supervision. I am indebted to him for giving untiring inspiration, ever encouraging support and guidance that stood me in good stead through out the course of this study.

I am extremely grateful to my revered Co-guide Dr. V.K. Vinayak, Additional Professor, Dept. of Experimental Medicine, PGIMER, Chandigarh and now Advisor (Medical), DBT, Govt. of India, who first initiated me to the subject of parasitic immunology and was singularly responsible for generating interest to undertake this work. It is infact through his genial modesty, most efficient guidance and constant encouragement that enabled me to execute this work with finesse. He is a treasure of creative ideas and I have ample admiration for his extreme intelligence and foresight to tackle any problem. I thank him for providing to me necessary laboratory facilities and opportunities.

I would also like to thank Dr. Deepak Bhasin, Additional Professor, Dept. of Gastroenterology, PGIMER, Chandigarh for providing the clinical samples required for the study.

My thanks are due to Dr. G.C. Varshney, Scientist C, Institute of Microbial Technology, Chandigarh for providing the myeloma cell line used in the present study.

My friends and colleagues Usha, Geeta, Sarah, Shandil, Parmesh, Jagat, Deepika, Sam, Harpreet, Karnail, Anu, Nidhi and Gaurav deserve special thanks for their companionship, support and encouragement during my stay in the Institute.

To my Papa, Mummy & brother Surat, I say, I love you for giving me the best of everything in life. My sister Poonam and brother-in-law Sanjiv deserve special thanks for being there always when I needed help. I owe more to my loving parents-in-law and other members of my family than I can say. The whole credit for this achievement goes to them.
My special thanks are reserved for my husband Rakesh, for meticulous proof reading of the script, providing moral support and sharing all the tension that went along with this pursuit. He has been a constant source of inspiration and encouragement to bring back the spirit of cheer. Arpit, my son, I am sorry for neglecting you, at times, while writing my thesis.

Among those who have also contributed in shaping of this thesis in its present form the foremost is Mr. Surinder Pal Singh of UNIVAC, Sector 11, Chandigarh, who has very diligently taken his responsibility.

I am extremely obliged to those suffering individuals who were the building blocks of this study.

The financial help rendered by CSIR (CSIR award No. 9/135/(170)90-EMR-I), is gratefully acknowledged.

VANDANA KAUSHAL (NEE MEHTA)