Acknowledgement

I had for years dreamt of this day, when I would be writing my Acknowledgement. Now that the day has arrived, I walk down memory lane to capture my journey of being a Biochemistry student and then a scholar.

I thank the Almighty for giving me the required zeal for completion of this thesis. The one person, who has played the most pivotal role and has been instrumental in making this thesis possible, has been my supervisor, Prof Ahad Noor Khan Yusufi. I would like to register my sincere gratitude to you Sir, for your illuminating scholarly guidance and creative supervision right from its inception to its culmination. I remember that in one particular experiment of mine, Sir worked continuously for 24 hours! It was because of him that our lab was always like an extended family for all of us. Thank you sir, for inculcating in me the spirit to always strive hard.

I am extremely grateful to our Chairman, Prof. S.M.Hadi for providing all the essential facilities to carry on the research work. I am indebted to all my teachers, Prof. Masood Ahmad, Prof. Bilqees Bano, Prof. Naheed Banu, Prof. Qayuum Husain, Dr. Imrana Naseem, Dr. Riaz Mahmood, Dr. M. Tabish, Dr. Fahim Halim Khan and Dr. Farah Khan for their guidance and encouragement, as and when needed.

When I first joined the lab I was completely clueless as to what I was supposed to do and how to do it. I was blessed to have Shubha Apa as my senior, who was more like a sister to me. She helped me in every stage in the best possible manner and was always ready to listen to my problems, however weird they were. Even when she was not around, she would solve my problems over a phone call, whatever time of the day it be. Not just on the work front, we have shared many a silly joke, which have brought tears to our eyes laughing. Thank you so much Shubha Apa for always being there, when I needed advice, for understanding my fears and for being the wonderful person that you are. You have truly been a God sent Angel for me!

Thanks are due to my other labmates Neelam apa, Wasim and Sheeba apa for making the lab environment cordial. Thanks Wasim for always extending a helping hand when I needed it the most and for helping me with those bar diagrams. I was blessed to have some very wonderful seniors, who at one stage taught me to respect, and at the other guided me in the best possible manner. I’m extremely thankful to my “neighbours”- Toshiba apa and Mahreen apa who were always ready to listen, Shamila apa and Eram apa, who with their smile always lightened my mood, Deeba apa, who is always up to date with the ‘real’ world, and is the only silver lining in the dark Biochem cloud. I would like to express my heartfelt gratitude to Showket bhai, Arivarasu bhai, Sarmad bhai, Yasha apa, Aiman apa, Ayesha apa, Sadia
apa, Medha apa, Sabika apa and Nishtha apa and to all my seniors for always lightning my path of research with their invaluable suggestions and for setting high standards for juniors like us to achieve.

Not only had I had such helping seniors, I was fortunate to have very cooperative juniors who have contributed a lot in making my stay in this department memorable. Thank you Aaliya, for brightening my days with your nice compliments, Zoheb for always being ready to help, and Rukhsana, Fahad and Ashraf for their amiable spirit.

I am extremely grateful to my batchmates, Uzma, Shams and Shahnawaz for providing a convivial environment to work in. I am fortunate to be blessed with a friend as honest, encouraging and helpful as Zainab.

I gratefully acknowledge the help extended by Dr Abbas Abidi, Department of Zoology, for providing the necessary facilities for radioactive counting. I would like to thank Zuberi Sahab, Surinder bhai, Waseem bhai, Qadir bhai, Dilshad bhai, Noor bhai, Manzar bhai, Shahansha bhai, Yusuf bhai, Aqeel bhai and Shahnaz mam for their help.

I can just never thank Mummy and Papa enough!! I am extremely grateful for the love and concern that you have always shown. Thank you, Mummy for always being my friend, for encouraging me when I was feeling downright depressed and for always supporting me in my endeavors. I fail to find words to express my gratitude to Salman, who was always there to listen, for doing an indepth analysis of all my problems and for always putting things in perspective. I am truly indebted to Nana and Nani for their love, affection and prayers.

I would like to especially thank Api and Najmi bhai. Though far, they were always with me through thick and thin. Mustafa, Hussain and Hassan for being the most beautiful part of my life.

My deepest gratitude is for Soheb, because of whose understanding, affection and care my dream of a doctorate could be realized. Thank you for bearing with my absence and for always being by my side. Last but never the least, it is said that “God cannot be everywhere and so He created mothers”. I have no words to express my overwhelming gratitude to you, Amma. This work would not have been possible without your prayers and love, you have been the reason for my existence. Daddy and Baji, without you life has never been the same.

Senior/Junior Research Fellowship from the Council of Scientific and Industrial Research (CSIR), New Delhi, is gratefully acknowledged for providing financial help.

In the end, I would just like to say “Enjoy life sip by sip, not gulp by gulp”

(SARA ANEES KHAN)