

## ACKNOWLEDGEMENT



I would like to express my deep and sincere gratitude to my **Guide and Guru Professor A. V. Ramachandran** for his commendable support as a supervisor and philosopher throughout the course of present investigation. His vast ocean of knowledge and his logical way of thinking have been of great value to me. His understanding, encouraging and personal guidance has provided the necessary direction and orientation not only in research but in all the fields of life. Apart from Science, I have learned several key concepts of spiritualism and "Ultimate" which is beyond the scope of science.

I would like to sincerely thank **Prof. R.V. Shah Sir** for his constant encouragement all through the PhD work.

Words fall short for expressing immense gratitude in thanking my friend **Niraj and Raktim** whose constant support and assistance helped me complete my thesis. Their co-operation gave me the determination necessary in conducting all the experimental procedures throughout. I would never be able to thank both for their help during college times and off the times.

I would like to thank **Prem** for his unfailing support and guidance during the completion of my thesis. Prem, who was more like a 'Younger Brother' made me learn few very important things of life which no one will teach. His enlightening and always joyful nature helped me in those difficult times.

I heartily thank **Jagruti (Jaggu)** for all the help and specially the computer help during the last stages of the thesis and **Sonal** for lightening my mood and helping me throughout my research work. Their support and encouragement made this thesis possible.

*Sincere thanks to Darshee for her help in the evaluation of serum parameters and her presence during the killings: for sparing her valuable time. Chandni, Nirjara for help in the laboratory and all the three for their afternoon lunch.*

*My junior colleagues Ansar, Raviraj, Deepak for helping me make the thesis more perfect and accurate. Special thanks to Ansar for the help in arranging the photographs which was a tiresome job. Thank you all the sleepless nights that you all have spared for the cause of this thesis. Menaka and Kiran for letting me do my work in the laboratory whenever I needed as per schedule help me whenever required.*

*A special mention is needed for Sunny and Vandana for helping me whenever required. Also, Hemangi and Pradnya for their support. Special thanks to Palak for her constant and never-ending support all throughout the time of my work and continues even today.*

*I am also grateful to Dr. Shiva Kumar for his supportive encouragement to Prakash for the healthy discussion during the early phase of my work. These discussions with Prakash and Shiva were of greatest help to me. Yashkamal, for her help in my research my work.*

*I would like to thank Gulabani Madam, Sunita Madam and Geeta Madam for their help and support.*

*Support from the Non-teaching staff is appreciated without whom the work would have been incomplete.*

*I feel highly obliged to Prof. M.M. Aruldas and Prof. K. Balasubramaniam of department of Endocrinology, University of Madras, Taramani, Chennai for their help in finishing off my work related to Western Blot and Cell culture and the chemicals which are required by me.*

*I would like to heartily thank **Dr. T.G. Srivastava** from NIH(FW), New Delhi for his constant support and help in doing ELISA as well as RIA in his laboratory and learn the techniques from him.*

*I would like to thank **Dr. S.K. Chaube** from BHU, Varanasi for his help in doing the Caspase 3 activity and help me by providing the important chemicals which would have taken years together to get.*

*A special thanks to **Dr. T. Sivannadappa** for his criticism in the work done and his academic suggestions to make it further interesting.*

*I heartily thank **Stanley, Sridhar, Kadresh and Selvaraja** from Chennai for their help during my stay and part of my research work that was carried out there.*

*I would like to thank Sun Pharmaceuticals for providing me animals which was most importantly needed for my work.*

*I would also thank **Bhavinbhai** for providing chemicals as and when required even at nights and to **Senthil Ganesh**- the technician from Cryoscientific, for his help in maintaining the ultracool refrigerator.*

*I would like to heartily thank **Dr. Angshuman Pal (Nano), Dr. Sunil Shah, Tamal, Polash Pal, Dr Kiran, Dr Indrajit Shown and Manish** for their ever timely help as and when required by me.*

*I would also like to thank **Sanjay Chandorikar (Sanjaybhai)** for his constant support and encouragement for fulfilling the thesis; Will remember the parties given by him any time whenever we meet.*

*It gives me great pleasure in thanking **Dr. Hiren, Dr Chirayu, Niraj Bhatt, Hemendra** from Biochemistry for helping me never ever required by me. **Mayur and Harish** from Chemistry for helping me in getting few chemicals were and there.*

*I would like to thank **Dr. Debasis Bagchi** for his constant encouragement. His E-mails packed with academic suggestions helped me a lot. His provided me with some chromium picnolate which was of great help to me.*

*My heart goes out for the animals who sacrificed their life for making a successful work for the thesis.*

*Last and not the least I would like to put out my heart for my family who supported me till the end of thesis and the credit goes to my **MA, BABA, DADA** and **BOUTHAN**. Thank you especially to **MA** for allowing me to do the work,*

*I would also like acknowledge **UGC** for providing me the Fellowship during my research work,*

**Sudip Banerjee**