Acknowledgements

First, and foremost, I thank my supervisor Prof. Kiran Kalia (Head, BRD School of Biosciences) for all the hope she has put on me, before I thought I could do any research at all. She has always encouraged me to live intensively, even when I was thinking about doing something else. She has helped me to see life and science in their full depth, and taught me how to appreciate the good scientific work that helps other researchers to build on it. She has enlightened me through her wide knowledge of Clinical Research and her deep intuitions about the subject science to social, keeping the one aim ‘Human Welfare’.

I thank Dr. Harish Padh (Vice Chancellor, Sardar Patel University) for his interactive instructions in 2005, I still remember his wordings “For being something in life quality achievement is more important than anything” which gave me inspiration that turned out to be essential in my research.

It has been a great pleasure to work with Prof. Jyoti Mannary (Head, Department of Medicine, S.K. Hospital and P.S. Medical College), with her companionship I learned about topics of her expertise. I would like to thank other doctors managing “Diabetic club” Group, for their assistance in patients’ selection and discussing the clinical issues, I express my sincere gratitude and sympathy to patients of Diabetes Mellitus who were the source of the clinical material used in the study. I thank all employee of S.K. Hospital for their co-operation during the study and analyzing our samples.

I would like to express my heartfelt gratitude to teaching faculty of BRD School of Biosciences, Prof. Dutta Madamwar, Prof. K.S. Rao and Dr. R.B. Subramanian for their encouragement and moral support. This work would not be possible without help of non-teaching staff. I express my special thanks to Mr. Nitin Solanki, for his technical support. I would like to extend my thank to all other staff members Kazi bhai, Alpeshbhai, Ritaben, and Dr. Hitesh Patel, I really had good time with them.
It was a pleasure to share doctoral studies and life with wonderful people like, Dr. Gaurav Dave, Dr. Dhaval Joshi, Dr. Simon Parmar, Dr. Hitesh Patel and Meghna Patel who are very close friends now. The years spent in Gujarat would not have been as wonderful without my old friends inspiration, including Dr. Sanjay Bansal, Manish Panday, Prashant, Abhisheek, Mannu, Bikesh, Neeraj and Prabal.

I thank to Gujarat State Biotechnology Mission (GSBTM) Gandhinagar, who funded our project. During the development of this PhD thesis I received support of my advisor's GSBTM grant. I also thank to University Grant Commission (UGC), New Delhi, India, for providing me financial support under “Meritorious Student Fellowship for PhD” programme. I further thank to National Institute of Medical Statistics, New Delhi, who supported and guided for the statistical analysis.

Thanks are also to my family, specially my mother Prabha Yadav, father R.D. Singh, sister Shalini Yadav and my loving brother Vijay Mohan, who also accomplished without complaints the endless errands that I asked him to do, even when he was on peaks of stress and lack of sleep because of his studies. Thanks to my mama Sandeep Yadav, whose memory has only increased after so many years of his death, when I was a boy wishing to save the world. I am working on it, still.

Last but not the least, a big thank to all my well wishers without their support I would be a very different person today, and it would have been certainly much harder to finish my research work.

I finish with a final silence of gratitude for my life.

Date:

Place: (Sandesh Mohan)