

ACKNOWLEDGEMENT

Completion of a PhD thesis is an important milestone in one's life and as one treads towards it, every single step is facilitated by one or more people without whom the journey would be impossible.

At the outset, I thank the Hon'ble Vice Chancellor and authorities of this university for granting me the permission to enrol for the PhD programme.

Although my words would be extremely inadequate, I take this opportunity to express deepest gratitude to my guide **Dr. P.M.Bulakh**, Professor of Biochemistry and Director, BCUD, Bharati Vidyapeeth Deemed University for his invaluable guidance and constant encouragement during this work. I am greatly indebted to him for his tremendous support and mentorship not just for the thesis but my professional career as well. The trust and confidence he has shown in my work has always motivated me and helped me grow as an individual too.

It has been a proud privilege to be associated with the Department of Biochemistry, Bharati Vidyapeeth Deemed University Medical College, Pune where I have several memories to cherish for a lifetime. My sincere thanks to **Dr. V.A.Saoji**, Dean BVDUMC Pune for permitting me to undertake this study in the institute. I thank **Dr. Mrs R.R. Melinkeri**, Professor and Head, Department of Biochemistry, BVDUMC Pune for her support and for making the necessary chemicals and other infrastructure available for the study. A special thanks to **Dr. Meghana Padwal** for her encouragement and insightful comments and suggestions towards the completion of the thesis. I wish to make a kind mention about my colleagues **Mrs. Neela Vaidya**

and **Mrs. Pradnya Padalkar**, working with them was a fun-filled learning experience. I am also grateful to all the support staff of the department for their kind help.

My sincerest thanks to **Ms. Nisreen Nagarwala**, her friendship and assistance has meant more to me than I could ever express. I would also like to take this opportunity to thank **Dr. S.M. Ranade** and **Dr. A.K.Tandon** for the motivation and best wishes they have bestowed upon me all the time.

I also acknowledge with gratefulness, **Dr. Umesh More** and **Dr. Abhay Jagtap** for their help during the standardization of techniques and methods for the assay.

I am particularly grateful for the expertise and help in statistical analysis given by **Mr. Shrivallabh Sane** and **Dr. Mohan Joshi** without which this work would be incomplete.

On a personal note, I am deeply indebted to my parents, my mother –in law and my husband for their unconditional love and support that has helped me complete this work. A big ‘Thank You’ goes out to all my family and friends.

Last but not the least; I thank the Almighty for their blessings and for taking me through this journey smoothly.

Arti. M. Hajarnavis.