Acknowledgement

“Success has many parenthood whereas failure dies as an orphan” – English Proverb

This Thesis would not have been possible without the help of so many people in so many ways. I am using this opportunity to express my gratitude to everyone who supported me throughout the course of my research work. I am thankful for their inspiring guidance, invaluable constructive criticism and friendly advice during the research work. I am sincerely grateful to them for sharing their truthful and illuminating views on a number of issues related to my research work.

A million thanks to the Almighty God, for his everlasting love and grace. I would not have come so far, without His Protection and direction.

Blessings of His Holiness Sri Sri Rajendra Mahaswamiji and His Holiness Sri Sri Deshikendra Mahaswamiji, Sri Kshetra Suttur for their vision of providing quality higher education to common people like me.

I would like to thank Dr. B. Suresh, Vice Chancellor, JSSU, Dr. B. Manjunatha, Registrar, JSSU, Dr. S Balasubramanian, Director Research and Dean Faculty of Life Sciences, JSS University, Dr. H. Basavanagoudappa, Principal, JSS Medical College for giving me admission into the program and to pursue my Ph.D dream. Many leaves have turned in my life since I joined the program. Due thanks for lending a helping hand at all times of need.

“Salutation to the noble guru, who opened the eyes blinded by darkness of ignorance with the collyrium – stick of knowledge.”

I express my profound gratitude to my doctoral committee members: Dr. Nandini N.M, Dr. Subba Rao V. Madhunapantula and Dr. Shylaja M. Dharmesh for constantly mentoring me in my research work.

Foremost, I would like to express my gratitude to my supervisor and guide Dr. Nandini NM Professor, Department of Pathology, JSS Medical College, JSS University. Her care, concern, motivation and encouragement have been useful throughout my research work.

My Co-Guide Dr. Subba Rao V. Madhunapantula, Professor, Department of Biochemistry, JSS Medical College and Hospital, JSS University. His continuous support and constant motivation made me enrol into Ph.D. I will forever be grateful for his amazing mentoring, support and care. Most of the exposures and skills I have acquired throughout the program were all because of his guidance. The opportunity provided me with lots of exposures and skills for my future career. I am especially intrigued about how Dr. Subba Rao V. Madhunapantula set aside his precious time and worked with me for hours on the entire research. I offer my heartfelt gratitude for all that he has done and will continue to do for me.
Besides my guide, and co-guide, I would like to thank Dr. Shylaja M. Dharmesh, Doctoral Committee Member, Department of Biochemistry, Central Food Technological Research Institute (CFTRI), Mysuru, for her immense knowledge, invaluable and constructive suggestions throughout the work. She is a constant mentor, excellent human being who rendered care and concern throughout my research work. I really appreciate her selfless attitude and kindness.

I express my sincere gratitude to Dr. Suma M.N, Professor, Department of Biochemistry, Dr. Prashant Vishwanath, Professor and Head of the Department Biochemistry, Dr. Akila Prashant Professor, Department of Biochemistry, Dr. Devanand Gowda Assistant Professor, Department of Biochemistry, Dr. Manjunath G.V, Professor, Department of Pathology, for their immense knowledge, invaluable, constructive suggestions and help throughout the work.

I express my sincere gratitude to Mrs. Sunitha.K, Mrs. Devagange P.B Lab Technician, Department of Biochemistry and Mr. Vasanth Kumar Lab Technician, Department of Pathology, for their constructive suggestions and help throughout the work.

To all the faculty and staff in the Department of Biochemistry and Pathology, I very much appreciate your guidance and support throughout my studies. I was never turned away by them, especially when I was emotionally weak and down.

I would like to thank JSS University for the award of JSSU Research Fellowship and for providing a research scholars grant to conduct the study.

With Pleasure, I offer my special thanks to Mrs. Preethi G. A for her inputs that helped to progress in my work. I thank my fellow research scholars, Mr. Prashanth M.V, Mr. Venu Gopal Reddy, Mr. Anshu Kumar Yadav and Sumit Kumar for their help throughout the work and for all the fun we had during the conference and workshops that we attended together.

I am grateful to my own family; my Late father Shri. Surya Dev Yadav mother Shrimathi Dharohari Devi for providing the good education, my brother Mr. Arun Kumar Yadav for his patience, care, love and support in all the ways as possible and all friends, relatives for their support in many ways.

My sincere thanks to everyone else whose name is not mentioned here but has been a great part in my intellectual journey. You have endowed me with good things and fruitful experience.......

Mr. Manish Kumar Yadav