ACKNOWLEDGMENTS

Working on a PhD and writing a thesis is certainly a formidable endeavour. However, the last six years have been very enjoyable and a number of people have helped me reach this point.

I would like to thank my guide, Dr. A. Hannah Rachel Vasanthi, Associate Professor, Department of Biotechnology, Pondicherry University, Puducherry for giving me the freedom to pursue interesting avenues of inquiry but also keeping me on track. The freedom to follow up on different ideas and her advice has helped me out of seemingly dead ends and I have certainly learnt a lot about the process of research from our conversations.

A very special thanks to my Research advisory committee members, Prof. R. Rengaswamy, Director, CAS in Botany, University of Madras, Chennai and Dr. M. Xavier Suresh, Associate Professor, Dept. of Bioinformatics, Sathyabama University, Chennai. Dr. Xavier really helped me learn the ropes of a lot of things, ranging from running creating a database to docking. I am grateful to Prof. M. Micahel Gromiha, Department of Biotechnology, Indian Institute of Technology, Chennai for inspiring me to work on QSAR.

I place on record my sincere gratitude to Dr. Arul Vadivel, Research Associate, Ottawa Hospital Research Institute, Ontario, Canada for his continuous support in mailing me all the research articles I requested, which has helped me immensely in creating the database. I’d also like to thank Dr. Gunasingh Jeyaraj, Post doc, Department of Neurology, Yerkes National Primate Research Center, Emory University, Atlanta, USA for his guidance and I have a learnt a lot from him. Dr. Philip J Ebenezer, Post doc, Department of Comparative Biomedical Sciences, School of Veterinary Medicine, Louisiana State University, USA has been a source of great encouragement.
I owe my respectful thanks to the Chancellor, Professor of Eminence & Dean (Research), Vice Chancellor, Registrar, Dean of Faculties, Controller of Examinations and Deputy Registrar (Examinations) for permitting me to carry out my research work at our esteemed University. I acknowledge all the officials of this University for their moral support during my research work.

I am fortunate to have been surrounded by a wonderful set of people with as much exceptional scientific calibre and grace as once could ever hope for. My heartfelt gratitude and thanks to Prof. PK. Ragunath, Head, Bioinformatics, Prof. T.S. Lokeshwari, Head, Biotechnology, Prof. Solomon F.D. Paul, Head, Human Genetics and all my colleagues Dr. W. Charles Emmanuel Jebaraj, Dr. D. A. Ben Sundra Ashok, Dr. L.V.K.S. Bhaskar, Dr. V. Arun, Dr. A. Sumathy, Dr. Elizabeth Rajesh, Mrs. C.R. Hemalatha, Mr. S. Venkatesan, Mrs. M. Arundhati, Ms. Premavathi, Mr. P. Kumar, Mr. Y. Babu, Ms. D. Kalaivani, Mr. C. Benedict Paul and Mr. R. Gnanasambandan.

I sincerely acknowledge the research scholars in the Herbal Research Laboratory Mr. R. Lakshmi Sundaram, Dr. M. K. Sangeetha, and Ms. R.P. Parameswari for their valuable support during the course of my work. I acknowledge CLC bio, Denmark and VLife Sciences Technologies Pvt. Ltd., Pune for providing trial license for the Molegro Virtual Docker and VLifeMDS software respectively.

I would like to express my gratitude to my parents, sister and brother who encouraged me to reach higher and this work is a result of their encouragement. I thank them for giving me wholehearted love and most important for instilling and nurturing a childhood dream deep in my heart. I’m thankful to all my brothers and sisters in Shalom Family Enrichment Mission for holding me constantly in their prayers. Finally I would like to thank my wife for her love and support she has given me and my children for their prayer support all these years.