ACKNOWLEDGEMENTS

This thesis is the outcome of the research work carried out by me under the wise and excellent guidance of Dr. M.V. Rao, Professor and Head, Department of Zoology and Director, Biomedical Technology Course, University School of Sciences, Gujarat University, Ahmedabad-380009. With heartfelt gratitude and respect, I thank Prof. M.V. Rao for his sincere approach and tireless interest, which enabled me to complete the task successfully.

I am grateful to Prof. Dr. (Miss) N.J. Chinoy, Ex-Director, University School of Sciences and former Head, Department of Zoology, Gujarat University, Ahmedabad, for her help, suggestions and encouragement at various stages of my work.

All staff members of this Department who rendered constructive advice and suggestion during the time of this work are also acknowledged.

I also wish to express my sincere thanks to Dr. Sunita Chawla, Research Associate of RIA laboratory for her continuous assistance and support.

The willing co-operation, love and affection of my past and present colleagues Ms. Mitali Rajvanshi, Ms. Sheetal Parekh, Ms. Seema Sharma, Ms. Avani Gopalkrishnan, Mr. Burzin Kavina, Ms. Bindu Nair, Ms. Hemlata Tiwari and Ms. Dimple Damore is greatly acknowledged.

My sincere thanks are also due to other colleagues in Cell Biology laboratory for their encouragement.

The financial assistance by the award of Junior Research Fellowship (JRF) and further upgradation to Senior Research Fellowship (SRF) by Council of Scientific and Industrial Research (CSIR), New Delhi, is gratefully acknowledged.
I would also like to acknowledge Mr. K.R. Nambiar who greatly aided the word processing of manuscript.

I am very thankful to my parents Mrs. and Mr. Prabhakar Bhatt and Mrs. and Mr. Ved Prakash Mahich and my sisters and brothers Shreya, Poonam, Nutan and Vivek respectively and other members of my family for their care, concern, inspiration and patient understanding without which I could not have completed this task. Finally, I owe a great deal to my husband Mr. Jai Prakash Mahich who is an invaluable source of strength and inspiration during the most difficult hours and for his sacrifice, love and encouragement, which have been the major impetus in my studies that enabled me to complete this task.

(NAMRATA BHATT)