ACKNOWLEDGEMENTS

First and foremost, I wish to convey my profound and heartfelt thanks to Dr.A.V.Ramachandran, Reader, Department of Zoology, M.S.University of Baroda for initiating me into research in the field of regeneration. His deep insight into this problem, his versatility, genius and indefatigable zeal for work alone have brought my task to this stage of fulfilment today.

I am especially grateful to Dr.R.V.Shah, retired Professor and Head, Department of Zoology, M.S.University of Baroda and Co-ordinator of UGC DRS in Developmental Physiology, for being a continuous source of encouragement to me throughout the period of my experimental work and for providing me facilities under the UGC sponsored Departmental Research Support in Developmental Physiology.

Thanks are also due to Dr.P.M. Ambadkar, Professor and Head, Department of Zoology, M.S. University, Baroda, for providing me with all requisite facilities.

I am indebted to Dr.M.S.Swamy for the guidance given in the initial stages of my doctoral work. Sincere thanks are extended to Dr. Bonny Pilo, Professor, Department of Zoology, and present Co-ordinator of UGC DRS

in Developmental Physiology, and Draw.V.Asnani and G.K.Menon, Readers in the Department of Zoology and, Dr.M.Daniel, Reader, Department of Botany, for their never-failing help and guidance at various stages.

I wish to mention particularly my colleagues, Dr. (Miss.) Meena Patel, Chitra Ayyer, John Joseph, Patrick Ndukuba, and Paul, V.F., for their co-operation and assistance throughout.

I thank Dr.Ashok Amin, Amin's Pathological Laboratory, Baroda, for carrying out the RIA for ${\bf T}_4$ and ${\bf T}_3$.

The award of Junior and Senior Research Fellowships by the University Grants Commission, New Delhi is gratefully acknowledged.

All of this present venture would have been impossible, but for the help, best wishes, and prayers of my dear friend Geetha and my family members.