LIST OF TABLES

Table I. Immunization Schedule in Rabbits. 75
Table II. Immunization Schedule. 90
Table III. Changes in Total Lipid, Phospholipid, Cholesterol and Lipid Peroxidation in Liver during *P. berghei* Infection. 108
Table IV. Changes in Total Carbohydrate, Glycogen and Glucose contents of Liver during *P. berghei* Infection in Mice. 109
Table V. Changes in Total DNA, RNA and protein contents of Liver during *P. berghei* Infection in Mice. 110
Table VI. Changes in Glutamic Pyruvate Transaminase, Glutamic Oxalotransaminase, Acid Phosphatase and Alkaline Phosphatase Contents in Liver of Mice Infected with *P. berghei*. 111
Table VII. Changes in SGPT, SGOT, Acid Phosphatase and Alkaline Phosphatase Levels in the Serum of *P. berghei* Infected Mice. 112
Table VIII. Antibody Titres in Weekly Sera Samples from Rabbits Immunized Against Normal Mouse RBC Antigen. 122
Table IX. Biomolecule Estimations in *P. berghei* Antigen Preparation. 132
Table X. Total Leucocyte Count. 139
Table XI. Result from IHA and ELISA Tests. 143
Table XII. Leucocyte Migration Inhibition Test. 144
Table XIII. Results of Delayed Type Hypersensitivity Test Reaction. 145
Table XIV. Prepatent Period, Percent Survivors and Peak Parasitaemia in Post Challenge Days. 148
Table XV. Result of Subinoculation Experiments. 149
It is my pleasant duty to thank Professor Sohail Ahmad, my Supervisor and Chairman of the Department of Microbiology, Jawaharlal Nehru Medical College, Aligarh. I am indebted to him for his valuable guidance throughout the period of this work. But for him, this piece of work could not have been carried out.

Thanks are also due to Professor Salahuddin, Chairman, Department of Biochemistry, J.N. Medical College, Aligarh, for the help he gave me from time to time.

I am grateful to Professor Rashid Ali, Department of Biochemistry, for his valuable and helpful suggestions, as also for providing all necessary help which I needed.

I express deep thanks to Professor Mahdi Hasan, Department of Anatomy for allowing me to work in his Brain Research Laboratory.

I am thankful to Prof. Wasim A. Siddiqui of the Medical School, University of Hawai'i, Honolulu, Hawai'i, for giving invaluable suggestions regarding this work. I am also thankful to him for providing innumerable research gifts by way of chemicals and reprints to this laboratory.

I am immensely grateful to Dr. Haris Manzoor Khan, Lecturer in Microbiology, for his continued and sincere
help throughout my work, besides this he has always been friendly and benevolent towards me.

I am also obliged to Dr. (Mrs.) Sahista Vasanwala, Department of Pathology, J.N. Medical College, Aligarh, for painstakingly examining a large number of histopathology slides.

My senior colleagues, Dr. Raka Khanna, Dr. Abbas Ali Mahdi and Mr. Hemant Kumar, also deserve heartfelt thanks for their encouragement and the enthusiasm they have shown throughout my work.

I am also thankful to my other colleagues, Mr. Masudul Hasan Ansari, Ms. Sabiha, Ms. Azra Abid, Ms. Farrah Mirza, Ms. Huma Umar, Mr. Khalid Nasir and Mr. Ghazanfar Ali Khan for their help and cooperation.

I would also like to thank Mr. Shaukat and Mr. Shahabuddin Ali of the Department of Anatomy, J.N. Medical College, Aligarh, for their help in preparation of histochemical and histopathological slides.

The credit for all the photographs in this thesis goes to the staff of Audio Visual Section, particularly to Mr. S. Mujeer, Mr. Mansoor A. Khan, Mr. Wajid Hussain and S. Siddiqui, I am extremely thankful to them for their kind help.
I wish to express my thanks to Mr. Shamimul Hasan and Mr. Wasi Hussain Naqvi, Store Section, Department of Microbiology, for their help.

I am also thankful to our laboratory attendants, Mr. Munna Lal, Mr. Brij Mohan and Mohammad Shakeel for their every day help.

I am thankful to Mr. H.S. Sharma, who beautifully typed this thesis.

Finally, the financial assistance from Indian Council of Medical Research (ICMR) in the form of Junior Research Fellowship is gratefully acknowledged.

Allgarh

November 1991