

Preface

It has been a decade since the last edition of the present atlas. During this time, we have become more familiar with the brain. In constructing this book, we had at our disposal the cognate publications *Atlas of the Developing Mouse Brain* (Paxinos et al., 2007), *The Mouse Brain in Stereotaxic Coordinates*, 4th ed. (Paxinos and Franklin 2013), *The Rat Brain in Stereotaxic Coordinates*, 7th ed. (Paxinos and Watson, 2014), *The Rat Nervous System*, 4th ed. (Paxinos, 2014), *MRI/DTI Atlas of the Rat Brain* (Paxinos et al., 2015), *Atlas of the Human Brain* 4th ed. (Mai et al., 2016) and *The Chick Brain in Stereotaxic Coordinates* 2nd ed. (Puelles et al., in press). We made use of the above works in constructing the present edition and we retained the same names and abbreviations for homologous structures across these species and ages.

All diagrams of the previous edition were thoroughly revised for the current edition with addition of rhombomeres where appropriate. The website contains everything in the hard copy of the atlas.

Reproduction of Figures by Users of the Atlas

For permission to reproduce figures contained in this publication, please contact the publisher via the information on the following website: http://www.elsevier.com/wps/find/supportfaq.cws_home/permissionusematerial

Permission to reproduce a limited set of figures is usually a routine matter. Please identify the figures you wish to use and allow approximately 4 weeks for your request to be processed.

The same procedure should be followed for reproduction of figures from *Atlas of the Developing Mouse Brain* (Paxinos et al., 2007), *The Mouse Brain in Stereotaxic Coordinates*, 4th ed. (Paxinos and Franklin 2013), *The Rat Brain in Stereotaxic Coordinates*, 7th ed. (Paxinos and Watson, 2014), *The Rat Nervous System*, 4th ed. (Paxinos, 2014), *MRI/DTI Atlas of the Rat Brain* (Paxinos et al., 2015), *Atlas of the Human Brain* 4th ed. (Mai et al., 2016) and *The Chick Brain in Stereotaxic Coordinates* 2nd ed. (Puelles et al., in press).

The authors would like users of the atlas to consider the suitability of the nomenclature and abbreviation scheme in this book for their own work. The scheme used here is systematic and is based on the principles of the construction of abbreviations for the elements of the periodic table and abbreviations of compound words such as acetylcholinesterase (AChE).

Acknowledgements for the Current Edition

The *Atlas of the Developing Rat Nervous System* 4th edition includes all plates and diagrams of the *Atlas of the Developing Rat Brain* and the *Atlas of the Developing Rat Nervous System* 2nd and 3rd editions and, therefore, we incorporate below the Acknowledgements for those books. The present book contains a complete review of delineations of all diagrams from the previous edition. We thank Natalie Farra and Andrew Riley of Elsevier for their commitment to excellence.

We acknowledge grant support by the Australian Research Council CE140100007 and National Health and Medical Research Council APP1043626, APP1086083, APP1086643, NIH U01-MH105971.

Acknowledgements for the 1st Edition

We wish to express our gratitude to Jack D. Barchas in whose laboratory the project commenced while one of us (GP) was on sabbatical (1988). Jack's long-term view of research created an atmosphere in which we could embark on a project without immediate reinforcement.

Amongst the people attracted to the congenial environment which Jack Barchas had created in his laboratory was Alicia Fritchle, a graphic artist with a strong background in the fine arts. Alicia urged us to proceed with the construction of the atlas even when the atlas project was one of the more remote possibilities under consideration. She commenced with the staining of the tissue for the atlas and continued with the photography of sections, finally coming to Sydney to enter our pencil drawings on a Macintosh computer. Photographing developing tissue proved difficult and it was due to her perseverance that the project was completed within three years after its commencement. Alicia dedicates her work in this book to the memory of her father, Frank P. Fritchle.

Dianne and Pete Ralston (Anatomy Department, University of San Francisco) were two essential persons for the construction of this atlas because they allowed us generous access to their Department's Nikon Multiphot, Durst enlarger and paper processor for the production of nearly all the photographs.

Joseph Altman attended closely to some brain regions of ages E14 and E19 and he generously made available to us for inspection his outstanding collection of embryonic brains cut in the three cardinal planes.

We are also pleased to acknowledge assistance with delineations provided by: Elizabeth Taber-Pierce, John Pintar, Ian Curthois, Dzung Vu, Liz Tancred, Richard Robertson, Bill Mehler, David Rapaport and Christine Gall. We thank Paul Halasz and Annette Dorfman for organizing lists of abbreviations and index.