A HOLE IN THE HEAD

More Tales in the History of Neuroscience

CHARLES G. GROSS

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Preface

My interest in the history of neuroscience began when I was an undergraduate and extended for more than 50 years throughout my career as an experimental neuroscientist specializing in vision and the functions of the cerebral cortex. This is my second collection of history of neuroscience papers; the first, published in 1998, was entitled *Brain, Vision, Memory: Tales in the History of Neuroscience.*

This collection differs from the previous one in including postscripts that endeavor to bring the papers up date, even those that deal with events over a thousand years ago. For example both the study of trephining, cutting holes in the skull, and of the Greek physician and scientist Galen of Pergamon remain active and often controversial fields of research with continuing interesting new developments.

Part I deals with early developments in neuroscience that are still relevant today. The articles in part II deal with the interactions of art and science. Part III tells the stories of neuroscientists whose ideas were so advanced as to be ignored or even inconceivable to their contemporaries.

In general, for the chapters previously published I have made only a few minor corrections and changes other than to eliminate the abstracts, add cross-references, make the citations consistent, and provide a consolidated reference list. Chapter 6 was coauthored with Marc Bornstein and Chapter 9 with Michael Colombo and his father Arnaldo Colombo. Chapter 4 arose, in part, from a collaborative effort with Charlotte Taylor.

Many friends and colleagues made suggestions or helped with the original articles or postscripts including T. Albright, S. Alisharan, M. Bentivoglio, G. Berman, B. Campbell, D. Cooke, J. Cooper, J. E. Cottrell, R. Desimone, R. Galambos, S. Gandhi, A. Ghanzanafer, E. Gould, M. Graziano, A. Grinnell, D. A. Gross, M. Hauser, F. L. Holmes, X. T. Hu, E. Isaac, G. Krauthammer, S. Landes, M. Mugan, J. C. Oates, R. Payne, G. E. Peierls, R. E. Peierls, A. Repp, H. R. Rodman, L. Seacord, T. Sejnowski, J. Simmons, M. Sommer, H. Terrace, S. Waxman, G. Winer, and R. M. Young.

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