The History of Neuroscience in Autobiography

Volume 14

The History of Neuroscience in Autobiography

Volume 14

Edited by Thomas D. Albright
and Larry R. Squire

Society for Neuroscience

Society for Neuroscience

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Previous Contributors

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Denise Albe-Fessard
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Theodore H. Bullock
Irving T. Diamond
Robert Galambos
Viktor Hamburger
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Ainsley Iggo
Jennifer Lund
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Patrick D. Wall
Wally Welker

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Gerald Westheimer

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Nicholas C. Spitzer

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György Buzsáki
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Robert Desimone
Charles Douglas Gilbert
Daniel Johnston
Mu-Ming Poo
Joseph S. Takahashi
Shimon Ullman

Preface to Volume 1

Before the Alfred P. Sloan Foundation series of books began to appear in 1979, the scientific autobiography was a largely unfamiliar genre. One recalls Cajal's extraordinary *Recollections of My Life*, translated in English in 1937 and the little gem of autobiography written by Charles Darwin for his grandchildren in 1876. One supposes that this form of scientific writing is scarce because busy scientists would rather continue to work on scientific problems than to indulge in a retrospective exercise using a writing style that is usually outside their scope of experience. Yet, regardless of the nature of one's own investigative works, the scientific enterprise describes a community of activity and thought in which all scientists share. Indeed, an understanding of the scientific enterprise should in the end be accessible to anyone because it is essentially a human endeavor, full of intensity, purpose, and drama that are universal to human experience.

While writing a full autobiographical text is a formidable undertaking, preparing an autobiographical chapter, which could appear with others in a volume, is perhaps less daunting work and is a project that senior scientists might even find tempting. Indeed, a venture of this kind within the discipline of psychology began in 1930 and is now in eight volumes (*A History of Psychology in Autobiography*). So it was that during my term as president of the Society for Neuroscience in 1993 to 1994, I developed the idea of collecting autobiographies from senior neuroscientists, who at this period in the history of our discipline are in fact pioneers of neuroscience. Neuroscience is quintessentially interdisciplinary, and careers in neuroscience come from several different cultures, including biology, psychology, and medicine. Accounts of scientific lives in neuroscience hold the promise of being informative and interesting, and they could be a source of inspiration to students. Moreover, personal narratives provide for scientists and nonscientists alike an insight into the nature of scientific work that is simply not available in ordinary scientific writing.

This volume does have a forerunner in neuroscience. In 1975, MIT Press published *The Neurosciences: Paths of Discovery*, a collection of 30 chapters in commemoration of F. O. Schmitt's 70th birthday, edited by F. Worden, J. Swazey, and G. Adelman. The contributing neuroscientists, all leaders of their discipline, described the paths of discovery that they had followed in carrying on their work. While writing in the style of the conventional review article, some authors did include a good amount of

anecdote, opinion, and personal reflection. A second, similar volume, *The Neurosciences: Paths of Discovery II*, edited by F. Samson and G. Adelman, appeared in 1992.

In any case, neuroscience writing that is deliberately and primarily autobiographical has not been collected before. This project, *The History of Neuroscience in Autobiography,* is the first major publishing venture by the Society for Neuroscience after *The Journal of Neuroscience*. The book project was prepared with the active cooperation of the Committee on the History of Neuroscience, which serves as an editorial board for the project. The first chairperson of the committee was Edward (Ted) Jones; its members were Albert Aguayo, Ted Melnechuk, Gordon Shepherd, and Ken Tyler. This group compiled the names and carried out the deliberations that led to the first round of invitations. In 1995 Larry Swanson succeeded Ted Jones as chair of the committee, and as we go to press with Volume 1 the committee members are Albert Aguayo, Bernice Grafstein, Ted Melnechuk, Dale Purves, and Gordon Shepherd.

In the inaugural volume of the series, we are delighted to be able to present together 17 personal narratives by some of the true pioneers of modern neuroscience. The group includes four Nobel Laureates and 11 members or foreign associates of the National Academy of Sciences, USA. The contributors did their scientific work in the United States, Canada, England, Australia, France, and Sweden. It is difficult to imagine a finer group of scientists with which to inaugurate our autobiographical series. The autobiographical chapters that appear here are printed essentially as submitted by the authors, with only light technical editing. Accordingly, the chapters are the personal perspectives and viewpoints of the authors and do not reflect material or opinion from the Society for Neuroscience.

Preparation of this volume depended critically on the staff of the book's publisher, the Society for Neuroscience. The correspondence, technical editing, cover design, printing, and marketing have all been coordinated by the Society's central office, under the superb direction of Diane M. Sullenberger. I thank her and her assistants Stacie M. Lemick (publishing manager) and Danielle L. Culp (desktop publisher) for their dedicated and skillful work on this project, which was carried out in the midst of demands brought by the first in-house years of the Society's *Journal of Neuroscience*. I also thank my dear friend Nancy Beang (executive director of the Society for Neuroscience) who from the beginning gave her full enthusiasm to this project.

Larry R. Squire
Del Mar, California
September 1996

Preface to Volume 14

In this 14th volume of *The History of Neuroscience in Autobiography*, we are pleased to present 12 personal narratives by leaders in our field of science. This distinguished group includes six members of the National Academy of Sciences, three members of the National Academy of Medicine, one member of the National Academy of Engineering, two members of the American Philosophical Society, four members of the Royal Society of London, and a former president of the Massachusetts Institute of Technology (MIT).

This autobiographical series was founded over three decades ago by Larry Squire during his tenure as president of the Society for Neuroscience. From the beginning, the Society leadership understood the importance of documenting the explosive modern growth of a field that brings innovation to medical practice and resonates with a public eager to understand the workings of the brain. Larry's key insight was that the historical record need not simply reflect the timeline of discoveries; there is also value in recording the "activity and thought in which all scientists share," for science itself "is essentially a human endeavor, full of intensity, purpose, and drama that are universal to human experience."

Collectively, the chapters contained in this series provide first-hand chronicles of a bold venture in biomedical research, as it has played out in the late 20th and early 21st centuries. Individually, they are treasures, for they are cast in the irresistible and uniquely human form of expression: the story. As such, they not only connect the dots along paths of scientific discovery but also convey the human elements behind those connections, the rich drama and comedy of interpersonal relationships, the sudden flashes of insight, the folly of hubris and the pain of missed opportunities, the beauty of new ideas, and the raw excitement of discovery. These stories are populated by imposing and quirky characters, magnified by the lenses of memory and attention. There are tales of brilliance, fantasy, risk, sacrifice, triumph, and camaraderie, but the theme that binds every one of the chapters in this series is success. Thus, these chapters not only entertain in the way that only good stories can but also offer appealing models and nuanced lessons for success in the human side of science for the next generation of vanguards in our field.

Tom Albright joined Larry as coeditor beginning with Volume 9. With the publication of Volume 14, the library of chapters now numbers 192.

Many more great stories are in the making, of course, as the field of neuroscience bounds ahead, and we look forward to curating them in these pages.

Beginning with Volume 8 in the series, the Society for Neuroscience assumed full responsibility for this project. Volume 14 was prepared with the advice of the Society's Publications Committee, which serves as the editorial board for the project. With input from this committee, from the Council of the Society for Neuroscience, and many others, names were compiled for Volume 14. Production was overseen by Michelle Humble, who serves as the Society's director of scientific publications.

Autobiographical chapters contained in Volume 14 are freely available from the Society website, along with the 180 chapters that appeared in the first 13 volumes of the series. From the Society homepage, chapters can be accessed using the "Publications/History of Neuroscience Autobiographical Chapters" or the "About/History of Neuroscience" menu tabs. They can also be accessed directly at www.sfn.org/about/history-of-neuroscience/autobiographical-chapters. Hardbound copies of Volume 14 are available for purchase (send inquiries to jn@sfn.org).

We hope readers will find Volume 14 as interesting and useful as the earlier volumes.

Thomas D. Albright and Larry R. Squire
Del Mar, California
April 2026