## A Story of Memory Never to be Forgotten

Victoria Egedus\*
Department of Biology
Lake Forest College
Lake Forest, Illinois 60045

In Search of Memory is the autobiographical piece Dr. Eric Kandel wrote upon receiving the Nobel Prize in Physiology or Medicine in 2000. It is a masterfully written work describing his journey from childhood, leading up to his most recent work on the research forefront. Published in 2006, this work demonstrates a superb level of writing product of the experience of an author that has acquired 77 years of age. Kandel's novel takes the reader on a pleasant and unforgettable journey across the ocean, across the greater part of a century, and into an uncharted era of mind science.

Before beginning Dr. Kandel's book, a reader may expect to find a short description of the years leading up to his riveting work. Perhaps several pages of his childhood and adolescence, a few more about his developing passions, and an expanse of the subject he knows best, his own research. However, Kandel eloquently invests instead in a fluid story, which the reader follows as naturally as a novel. We begin with his childhood in Vienna, followed by the guick fleet to New York after Nazi invasion. Next we follow him in each step of his American education all while watching his developing passion to explore the topic of memory and learning. Through a life story and respective historical context of the young Kandel, the reader becomes invested in his initially tragic, and continually exciting and challenging experiences. Seamlessly woven into this storylike background are the gradual discoveries found in the science labs based on memory and learning as well. We get an evolving, and expanding picture of the progression on the very topic to which Kandel himself will contribute. Because the background covers work beginning with Freud's input on psychoanalysis (1930's), Kandel presents a literature review across the last 70 years. I found this review to be highly fascinating because the science was told as if it was purely history.

To a young reader with many goals and aspirations, Kandel's life story provides a timeline example of the many steps on his journey to success. We see his development in unprofessional education, medical school training, and scientific mentorship, all leading to his ultimate authority and confidence in the field. He expresses his ups and downs, struggles, and the sacrifices that would ultimately compensate for his progress. Above all, we notice an unwavering dedication to his lifelong passion, and the priority he placed on learning everything he could about that beloved idea of memory. Furthermore these traits yielded his utmost appreciation of and dedication to scientific progress.

Without a doubt, the format Kandel implements is so precise and efficient, many readers have never come so close to understanding specialized scientific jargon. The general public often does (I think it was correct, plural)not know the area of science to which terms belong, let alone the definition of terms, such as voltage-gated ion channel, cAMP or PKA. Yet through his didactic verse, Kandel leads the reader to grasp an understanding of these structures, aided by easy-to-follow figures and diagrams. Although a reader uninterested in science may not find the technicalities crystal clear, at least they can manage to follow through the story with an appreciation for the novel discoveries. In addition to useful simple figures with clear, concise legends.

Kandel provides many photographs of the key people and events in his life. These photographs are a nice contrast among the lines and lines of text, serving as a connection between the mentioned people and a face, personalizing the journey.

In addition to the six parts of the story, Kandel includes a glossary with many of the exact words needed to understand his scientific lingo. It serves useful to those who are unfamiliar with, or need a refresher on the definitions. The "notes and sources" section is a fairly exhaustive list of references and additional notes on the literature, which would not have constructively fit within the text. These pages are the perfect place to begin for a reader serious about exploring a given subtopic in the story. The extensive index is the last section of his work, and completes the thoroughness of all ideas present in the book. One can use it to find any person, idea, method or discovery discussed, and save time in locating key items. Overall, these sections enhance user-friendliness and make the book more like a useful textbook of sorts.

This book is written as a memoir as well as an instructional guide to understanding Kandel's area of scientific contribution to memory. Among others, the most appropriate audience for this book includes those interested in: the life of a Jew growing up in Vienna during World War II, the life and pathway of a successful neuroscientist, the growth and refinements that accompany long-term research, and the cell and molecular biology behind long and short term memory.

Kandel would argue that the memories each person holds are directly responsible for their views on the world and the life they lead. It is sentimental and mildly ironic to take the journey with Kandel as he explores that very aspect, the memories of his world, which have led him to make such critical and influential advances in our understanding of memory today.

Note: Eukaryon is published by students at Lake Forest College, who are solely responsible for its content. The views expressed in Eukaryon do not necessarily reflect those of the College. Articles published within Eukaryon should not be cited in bibliographies. Material contained herein should be treated as personal communication and should be cited as such only with the consent of the author.