

Russell N. DeJong, a seminal figure in American neurology

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ABSTRACT

Introduction. Dr Russell N. DeJong was a seminal figure in American Neurology and his career and contributions are worthy of notation.

Methods. Review of various historical documents.

Results. The reviewed documents describe the many contributions made by Dr DeJong.

Discussion. DeJong was one of the “Four Horsemen”, individuals who were pivotal in the development of American neurology and the establishment of the AAN. He graduated from the University of Michigan School of Medicine, trained in neurology there, joined the faculty, and served as professor and department chair from 1950 until 1977. In the process, he trained more than 100 neurologists, at least 35 of whom went on to academic careers and leadership positions.

DeJong authored more than 200 books and articles, including *The neurologic examination* and *A history of American neurology*. He was the first editor-in-chief of *Neurology*. He was a leading figure in neurology in the United States, serving at various times as president of the American Academy of Neurology, the American Neurological Association, and the American Epilepsy Society. He held honorary memberships in the neurological societies of several countries and was an influential leader in the World Federation of Neurology and several Pan American Congresses of Neurology.

KEYWORDS

Neurology, history, writer, Russell N. DeJong, American Academy of Neurology

Introduction

The recent publication of the seventh edition of DeJong's *The neurologic examination* provides both opportunity and impetus to recognize the life and work of Dr Russell N. DeJong, review some history, and acquaint younger generations of neurologists with this remarkable individual. Dr DeJong (Fig. 1) was one of the “Four Horsemen” of American neurology, along with Dr Adolph Saks of the University of Iowa, Dr A.B. Baker of the University of Minnesota, and Dr Francis Forster of Georgetown University and the University of Wisconsin; these individuals were pivotal in the development of neurology in the United States and the establishment of the American Academy of Neurology (AAN). All of the Horsemen were

remarkable individuals, exceptional clinicians, outstanding teachers, accomplished researchers, and visionary leaders. DeJong was in some ways the Chief Horseman; Dr Baker referred to him as “the most scholarly neurologist in the Academy”.

Methods

The historical documents that reviewed the life and career of Dr Russell DeJong and his contributions to the field of neurology included DeJong's book *A history of American neurology*, the *Centennial anniversary volume of the American Neurological Association*, the document *Giants in neurology* published by the American Board of Psychiatry and Neurology, the

article *History of 20th century neurology: decade by decade*, and others.

Results

The reviewed documents describe the many contributions made by Dr DeJong.

Discussion

As Russell DeJong worked on *The neurologic examination* in 1950, the world was not a serene place. President Harry Truman ordered the development of a hydrogen bomb in response to the USSR detonating its first nuclear weapon; Jordan annexed the West Bank; the Knesset passed a resolution declaring Jerusalem the capital of Israel; McCarthy accused the US State Department of harboring 205 communists; and the French were fighting in what would become Vietnam. In Korea, the Communists invaded South Korea and captured Seoul, Truman ordered American troops in, MacArthur landed at Inchon and threatened to use nukes. The first jet-to-jet dogfight occurred in the Korean sky and a USAF bomber accidentally dropped a nuclear bomb over Canada; fortunately it was a dud. The cold war was on, people built bomb shelters and kids hid under desks. These were chaotic times, every bit as bad as or worse than now. Maybe Dr DeJong, spending countless hours in the library, worked to escape the insanity.

In the world of medicine at large, the late 1940s and early 1950s saw momentous changes. Neurology was emerging as a discipline separate from internal medicine and psychiatry. The advent of antibiotic therapy, effective antiepileptic drugs, pneumoencephalography, angiography, and electrodiagnosis was creating a complex field that required specialization.

Russell DeJong was born in Iowa in 1907, moved to Michigan at the age of eight, and never left. He graduated from the University of Michigan College of Literature, Science and the Arts in 1929 and the School of Medicine in 1932. He completed his internship and neurology residency there, under Dr Carl Dudley Camp (1907-1951); he joined the faculty, was promoted to full professor and department chair in 1950, at age 43, and served until his retirement as Professor Emeritus in 1977. In the process, he trained more than 100 neurologists, at least 35 of whom went on to academic careers and leadership positions. His retirement memo stated, "Dr DeJong took charge of the Department of Neurology when it was

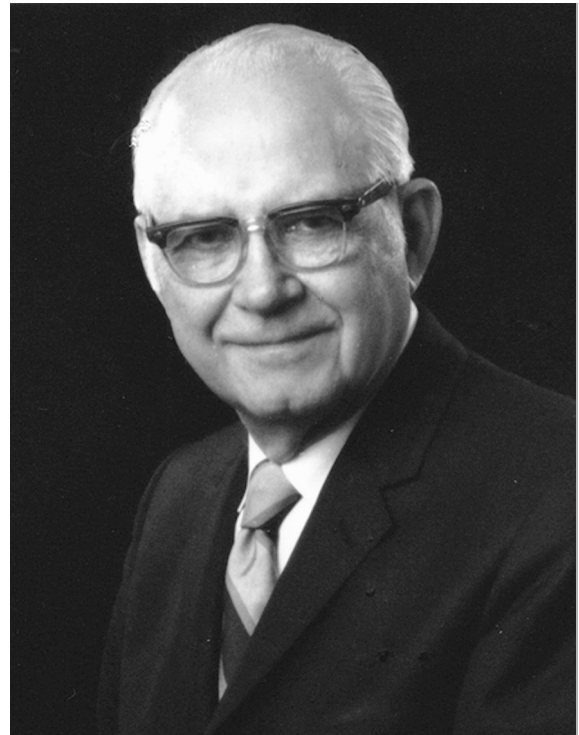


Figure 1. Dr Russell N. DeJong. Image courtesy of the University of Michigan Faculty History Project

miniscule. It now stands as one of the best known and respected departments for the training of neurologists not only in the United States, but throughout the world." This was no hyperbole, and the department has occupied the top tier ever since. He received many honors, both domestic and international, among them becoming a member of the University of Michigan Medical Center Alumni Society Hall of Honor. He died in 1990 in Mount Pleasant, MI at the age of 83.

While Dr DeJong was Chair at the University of Michigan, some of his contemporaries as department chairs in neurology included Drs Baker, Sahs and Forster, as well as H. Houston Merritt, each of whom also wrote major neurology textbooks. Tracy Putnam, who was a neurosurgeon and psychiatrist as well as a neurologist, and who worked with Merritt to discover diphenylhydantoin, had recently been forced to leave his position as head of the Neurological Institute at Columbia University, possibly in part because he refused to fire his Jewish faculty.

In 1950, Lee Eaton was a professor at the Mayo Clinic and Edward Lambert was still doing basic physiology

research. Arnold Friedman's Headache Clinic at Montefiore was three years old. Raymond Adams was about to move from Boston City Hospital to Massachusetts General, where he established the model for the modern academic neurology department and made an astounding number of contributions.

Dr DeJong authored more than 200 books and articles, beginning with a review of nystagmus in 1946. He wrote the classic textbook *The neurologic examination* and also *A history of American neurology*. Dr DeJong dedicated the first edition of *The neurologic examination* to Dr Camp, his mentor in clinical neurology; Dr Elizabeth Crosby, the preeminent neuroanatomist of her day; and Dr Conrad DeJong, his father and "Preceptor in the Art and Practice of Medicine". The most widely-used English-language neurology textbook at the time was Lord Brain's *Diseases of the nervous system*, first published in 1933. Although Cecil's *A textbook of medicine* had been out for nearly 25 years, the first edition of *Harrison's principles of internal medicine* would not be published until 1950. The Neurology section of *Harrison's*, written by Dr Raymond D. Adams, was the closest thing to an American textbook of neurology. Adams's work came to dominate *Harrison's* so much that other section editors protested it had become the "Principles of internal medicine and the details of neurology," and the section was reworked into an independent text.

Merritt's *A textbook of neurology* and Baker's *Clinical neurology* both appeared in 1955. Since no new edition of *Bing's local diagnosis in neurological disease* has been published in some years, it appears *The neurologic examination* has remained continuously in print longer than any other major American neurology textbook, and it is the same age as *Harrison's*.

The fifth edition was written by Dr Armin F. Haerer (1934-2012) and published in 1992. Dr Haerer, one of Dr DeJong's former residents, was Professor of Neurology at the University of Mississippi (Jackson, MS) and Chief of Neurology at the Jackson Veterans Affairs Medical Center. Dr Haerer was also a classical musician and former first violinist for the Jackson Symphony Orchestra. The seventh edition appeared in 2013.

Dr DeJong helped launch *Neurology* and served as its founding editor from 1951 to 1976. In his tribute to DeJong's editorship, A.B. Baker emphasizes the role played by Dr Robert Wartenberg. At the time, there was no journal devoted exclusively to neurology and it was

not clear there was any need for one. Under Wartenberg's constant urging a number of publishers were approached about publishing a strictly neurologic journal, and most declined. Modern Medicine Publications ultimately agreed to start the new journal as the official scientific publication of the AAN. Choosing the first editor was critical and DeJong was chosen without hesitation.

Baker enumerated the qualities that made Russell DeJong such an excellent and successful editor-in-chief. His talents at leadership and administration were critical. He was a widely read scholar with a thorough knowledge of the field, and he possessed fine editorial judgment. His language ability and writing skills helped to encourage authors to explain complex neurological subjects clearly and directly, and he was able to rewrite material when necessary. Lastly he had the requisite energy and commitment to the task. The publisher summarized by stating that Dr DeJong had the unique requirements and qualifications of vision, judgment, balance, and execution. He was considered one of the outstanding medical editors in the U.S., if not the world. He also served as one of the editors of the *Yearbook of Neurology, Psychiatry and Neurosurgery*.

What DeJong accomplished in 1950-1951 alone is worthy of note. He was supervising the monumental task of launching the new journal. Volume 1 appeared in 1951. At the same time, he was finalizing *The neurological examination* for publication. This task required enormous focus, energy, and attention to detail. The last steps entailed extensive proofreading and refinement of a manuscript that resulted in a book 1037 pages long, which was published in 1950. Either of these undertakings would tax most men, but DeJong managed to do both at the same time.

Dr DeJong was a leader in American neurology, serving at various times as president of the AAN, the American Neurological Association, and the American Epilepsy Society. He was a member of the AAN Board of Directors from 1951 to 1958 and again from 1971 to 1972. Between 1951 and 1958, he served with such luminaries as Forster, Bernard Alpers, Knox Finley, and Paul Yakovlev. The latter developed a giant microtome and serially sectioned more than 900 brains; this scientific treasure is now housed by the Armed Forces Institute of Pathology in Washington, D.C. DeJong was the first of the Four Horsemen to serve on the American Board of Psychiatry and Neurology, held honorary memberships in the neurological societies of several countries, and was

an influential leader in the World Federation of Neurology and the Pan American Congresses of Neurology.

Dr DeJong possessed warm personal qualities that endeared him to many. He was described as a gentleman and scholar in the best tradition – modest and conscientious. He was a truly kind man who was concerned about any student, resident or colleague who might have a problem and he helped numerous faculty members weather periods of crisis.

In conclusion, Russell N. DeJong was a heroic figure. The volume of his writings, in the days before dictaphones, word processors, and PubMed, testify to his intelligence, energy level, focus, persistence, and ability to organize a busy schedule. The department, the book, and the journal that he birthed live on and prosper.

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Conflicts of interest

There is no commercial involvement, source of funding or other conflict of interest.

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