

# The Development of Neurosurgery in the State of Hawaii Christian Swinney BA; William G. Obana MD University of Hawaii School of Medicine, Division of Neurosurgery

#### Introduction

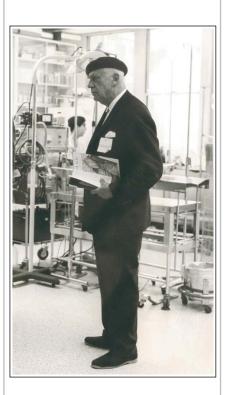
Since its formal inception in the early 20th century the field of neurological surgery has experienced rapid growth. This development has been traced on a variety of scales, including individual hospitals, universities, and states. The history of neurosurgery in the Hawaiian Islands is particularly unique, given the state's remote location, indigenous population, and military presence.

Documentation of this history has been limited. There was a brief personal reflection published by the noted Dr. Cloward, Hawaii's first full time neurosurgeon, in the late 20th century. However, a more comprehensive review of neurosurgical history in Hawaii has not been conducted.

Herein, we review the history of Hawaii's first neurosurgeons, with special attention to Dr. Frederick Reichert; a comprehensive review of Dr. Cloward's contributions to the field; and finally, a brief review of the current state of neurosurgery in Hawaii and the Pacific islands.

# The Early 20th Century

Information is relatively sparse on neurosurgical efforts in the Hawaiian Islands before Dr. Cloward. The limited neurosurgical care available during this period came in the form of transient traveling surgeons. A notable example is Dr. Frederick Reichert. Dr. Reichert trained under the prominent surgeon Walter Dandy, at Johns Hopkins, before moving to Stanford University, where he became chief in 1926. He would make annual trips to the Hawaiian Islands to provide care to the local population.



### Hawaii's First Full Time Neurosurgeon

Any discussion of Neurosurgery in the Hawaiian Islands would be incomplete without an in depth review of Dr. Ralph B. Cloward, arguably the most influential neurosurgeon to practice in the State. He made extensive contributions to neurosurgical clinical knowledge, surgical techniques, and operative instrumentation. In his personal reflection, written in 1984, Dr. Cloward provides valuable insight into both his own career and the development of Hawaiian Neurosurgery. He describes moving to the Hawaiian Islands in 1926, at the age of 18, to accompany his father, an ophthalmologist and otolaryngologist for the U.S. Army.

The young Cloward remained in Hawaii for the start of his education. After finishing high school, he began his post-secondary education at the University of Hawaii, the eventual home of Hawaii's first and only medical school. After 2 years in Hawaii he transferred to the University of Utah. He began his medical school in Utah, before moving to Chicago to complete his education at Rush Medical College. He stayed in Chicago for his residency, at the University of Chicago. It was at the age of 30, in 1938, that Dr. Cloward returned to Hawaii to practice neurology and neurosurgery at "The Clinic," where his father had worked. He pioneered multiple techniques. He also provide unique contributions to the leprosy colony and during the attacks on Pearl Harbor.

#### Summary

From its humble beginnings in the early 20th century to the present day, neurosurgery has a rich history in the state of Hawaii. The field first came to Hawaii in the form of travelling surgeons from California, such as Dr. Reichert. Then, in the 1920s, Dr. Cloward became the first full time surgeon in the islands. Dr. Cloward made substantial contributions to the field and worked in many unique environments while in Hawaii. He was actively involved with the leprosy colony and played a key role during the attacks on Pearl Harbor at the start of World War 2. A comprehensive manuscript, which details the contributions of these early neurosurgeons, is currently being drafted. Neurosurgery has continued to grow at the University of Hawaii and its associated training sites, making the state one of the Pacific's a premier destinations for such services.



