# Remembering Scientists in Woods Hole: A Map of Their Resting Places

This document serves as a guide to the tombstones of famous scientists in Woods Hole, Massachusetts. Many of these scientists have notable ties to the Marine Biological Laboratory, and their work influenced the world of science and contributed to the world around us. The cemetery where their graves can be found is located next to the Church of the Messiah, 22 Church St., Woods Hole, MA 02543.

<u>Data collection by:</u> Emma Paulini, Pomona College; Jordan Bolling, University of Alabama; John Wang, Columbia University. <u>Map and guide created by:</u> Emma Paulini and Jordan Bolling.

View an interactive map! Locate the graves in real time and access the information about each scientist via this link:

 $\frac{\text{https://www.google.com/maps/d/viewer?mid=12nlyRRiWItbxRSoHmKDliOkuEFHn2Y3b\&usp=sh}}{\text{aring}}$ 

#### 1. Prince Sears Crowell, Jr.

1909-2002

http://www.mbl.edu/obituaries/prince-s-crowell-jr/

Crowell, Jr. had strong ties to Woods Hole, having taken classes at the Children's School of Science when he was young, worked at the MBL as a teen, and continued research at the MBL as an adult. At Indiana University, where he was a professor, Crowell Jr. taught "invertebrate zoology as well as embryology, anatomy, ornithology, and introductory zoology." He was also the first program officer of the American Society of Zoologists. When Hirohito, the Emperor of Japan, visited MBL, Dr. Crowell was one of his hosts. Hirohito studied marine hydrozoans and published several papers on them. You can find these papers in the MBL library.

Location Coordinates: 41°31′20″ N 70°39′47″ W or 41.52164, -70.66287

2. Hans Albert Einstein
1904-1973

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https://en.wikipedia.org/wiki/Hans Albert Einstein

Son of physicist Albert Einstein, Hans Albert Einstein was a hydraulic engineer and professor at the University of California, Berkeley.

Location Coordinates: 41°31′20″ N 70°39′41″ W

or 41.5222, -70.66108

### 3. Viktor Hamburger

1900-2001

https://www.nytimes.com/2001/06/14/us/viktor-hamburger-100-dies-embryologist-revealed-architecture-of-nervous-system.html
https://en.wikipedia.org/wiki/Viktor\_Hamburger

A German scientist, Hamburger studied the origin of behavior using chick embryos, going beyond the knowledge and beliefs at the time with his discovery that chick embryos move predictably and spontaneously. In collaboration with Dr. Rita Levi-Montalcini, Hamburger identified nerve growth factor, the protein that contributes to the growth and maintenance of certain neurons. Hamburger spent most of his career as a faculty member at Washington University in St. Louis. Hamburger was both an instructor and a course director in the MBL Embryology Course.

Location Coordinates: 41°31′18″ N 70°39′43″ W or 41.52168, -70.66202

#### 4. Ethel Browne Harvey

1885-1965

https://en.wikipedia.org/wiki/Ethel\_Browne\_Harvey

A notable female in the field of biology during the early to mid-1900s, Ethel Browne Harvey was an embryologist who used sea urchins for her research on cell division. As a graduate student at Columbia University in the lab of Thomas Hunt Morgan, Browne carried out the first experiments

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demonstrating an axial organizer in an animal, using grafting of *Hydra*. A discussion of these experiments can be found in the following article:

Lenhoff, Howard M. "Ethel Browne, Hans Spemann, and the Discovery of the Organizer Phenomenon." *Biological Bulletin*, vol. 181, no. 1, 1991, pp. 72–80. *JSTOR*, JSTOR, www.jstor.org/stable/1542490.

Browne received her Ph.D. for work she did in the laboratory of E.B. Wilson, who is also buried in the Woods Hole Cemetery (Grave 10 on this list). Browne spent many summers at MBL and served as a member of the MBL Corporation and as an MBL Trustee.

Location Coordinates: 41°31′17″ N 70°39′44″ W or 41.52221, -70.66184

#### 5. Stephen William Kuffler 1913-1980

https://en.wikipedia.org/wiki/Stephen\_Kuffler

A Hungarian-American scientist, Kuffler is sometimes referred to as the "Father of Modern Neuroscience" for his research on topics including the neurotransmitter GABA, neuromuscular junctions, and neural coding.

Location coordinates: 41°31′17″ N 70°39′44″ W or 41.52189, -70.66198

6. Otto Loewi 1873-1961

https://en.wikipedia.org/wiki/Otto\_Loewi

"A German-born pharmacologist and psychobiologist, [Loewi] discovered the role of acetylcholine as an endogenous neurotransmitter. For his discovery he was awarded the Nobel Prize in Physiology or Medicine in 1936, which he shared with Sir Henry Dale."

Location Coordinates: 41°31′22″ N 70°39′47″ W or 41.52236, -70.66228

## 7. Albert I. Szent-Györgyi 1893-1986

https://en.wikipedia.org/wiki/Albert Szent-Györgyi

Szent-Györgyi was a Hungarian biochemist who discovered Vitamin C and the occurrences and components within the Krebs Cycle (a process of metabolism in cells to break down energy for use). He won the Nobel Prize in Physiology or Medicine in 1937.

Location coordinates: 41°31′22″ N 70°39′47″ W or 41.52204, -70.66175

#### 8. John Philip Trinkaus 1918-2003

https://embryo.asu.edu/pages/john-philip-trinkaus-1918-2003

Trinkaus was a developmental biologist who studied cell migration and gastrulation, specifically in teleost fish. He both took and taught in the Embryology Course at MBL. Trinkaus was a professor at Yale University and had a summer research lab at MBL for many years. Trinkaus's papers (including his autobiography) are available on-line at:

https://hpsrepository.asu.edu/handle/10776/6583/browse?type=dateissued

Location Coordinates: 41°31′17" N 70°39′44" W or 41.52168, -70.66198

#### 9. Byron Halsted Waksman 1919-2012

http://www.aai.org/About/History/Past-Presidents-and-Officers/ByronHWaksman

"Waksman studied multiple sclerosis and other inflammatory diseases as a faculty member at both Harvard and Yale Medical Schools before becoming an administrator and public spokesman for science." He was president of the American Association of Immunologists from 1970 to 1971 and founded the Science Writing Program at the MBL in the 1990s.

Location Coordinates: 41°31′20″ N 70°39′40″ W or 41.52217, -70.66097

The original grave I indicated was for Byron's father Selman Waksman, who is buried next to Byron. I didn't even notice Byron's grave, but I'm glad you included it because he also has important MBL connections. So we need an entry for Selman as well. The same GPS coordinates should serve for both, since they are right next to each other.

10. Edmund Beecher Wilson

1856-1939

https://en.wikipedia.org/wiki/Edmund Beecher Wilson

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Wilson was an American zoologist and geneticist who wrote "one of the most famous textbooks in the history of modern biology, *The Cell."* In subsequent editions, the book acquired the title "The Cell in Heredity and Development."

Location Coordinates: 41°31′18″ N 70°39′45″ W or 41.52191, -70.66203