The Sea of Genes exhibit helps to unravel the genetic secrets of life in the ocean through interactive displays highlighting the exciting discoveries of Scripps researchers.

One feature of this exhibition is an interactive kiosk that invites the user to display information about specific proteins found in marine organisms. Detailed information about these protein structures is found online in the Protein Data Bank.

This kiosk is the result of a collaboration between the RCSB PDB and the Birch Aquarium (Scripps Institution of Oceanography at University of California, San Diego).

Proteins Highlighted:

**THE FIRST PROTEIN STRUCTURE DETERMINED**
Myoglobin, taken from sperm whale muscles, was the first reported protein structure and resulted in the Nobel Prize in Chemistry in 1962 to John Kendrew.

Why is it so important to know the 3-D structure of a protein? The 3-D structure tells scientists a lot about the biological function and how it interacts with other molecules in the body.

**SEA GENES COULD PRODUCE ANTITUMOR DRUGS**
This protein, called actin–aplyronine A is found in the Japanese Sea Hare. Scientists studying aplyronine A have observed potent antitumor effects in laboratory research and some day hope it will lead to an anticancer treatment. By looking at the 3-D structure of this protein, scientists can make suggestions on how it works.