

The Origin of the Name Proteus

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Proteus is a genus of ciliated, motile, non-sporulating, facultatively anaerobic, Gram-negative bacteria. The designated name refers to their morphologic variability. They typically appear as bacilli 1-3 μ by 0.4-0.6 μ on agar, but also as cocco-bacilli singly or in chains, and young forms can be filamentous.

In Homer's *Odyssey*, Proteus was the herdsman of the seals for Poseidon (Neptune). Proteus whose name suggests the 'first', as "protogonos" is the 'firstborn.' Proteus had the gift of wisdom but he would give advice only if he could be captured. Following the Trojan War, a war-weary Menelaus was unable to return home because the winds which propelled his sailing ships had become erratic. So, he stalked and captured Proteus who tried to escape by transforming himself into a lion, a serpent, a leopard, a boar and even water and a tree to elude the grasp of Menelaus (Figure 1). These attempts were unsuccessful whereupon Proteus was forced to advise his captor how to return home. Proteus informed Menelaus that he must make offerings to the gods for a fair wind so his ships could sail. Following Proteus' instructions, Menelaus ultimately sailed home without further incident.

The bacterium was described in 1885 by Gustav Hauser in a 94 page monograph entitled "On putrefactive bacteria and their relationship to sepsis." Hauser was an assistant to Friedrich A. Zenker in the pathology department of the University of Nuremberg in Bavaria. Hauser named *Proteus vulgaris*, *P. mirabilis* (unusual or marvelous), and *P. zenkeri*, after his chief whom he would later succeed. The latter species subsequently was reclassified because it was Gram-positive.

Hauser was a prolific medical writer, but only a few of his publications focused on microbiology. The few included: On the occurrence of *Proteus vulgaris* in a [case of] putrid purulence, and some remarks on the biology of *Proteus* (Münch med Wchnschr., 1892, 39:103-05); On the use of formalin for the conservation of bacterial cultures (Münch med Wchnschr., 1893: 40, 567, 605). Hauser also wrote on the pathogenesis of pneumonia and the staining of tubercle bacilli.

REFERENCES

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Figure 1. Proteus in the grasp of Menelaus

Figure: Proteus in the grasp of Menelaus

(By: Olivia E. Coolidge, 1952. Houghton Mifflin Company, The Riverside Press, Cambridge, Boston)



Illustration by Edouard Sandöz