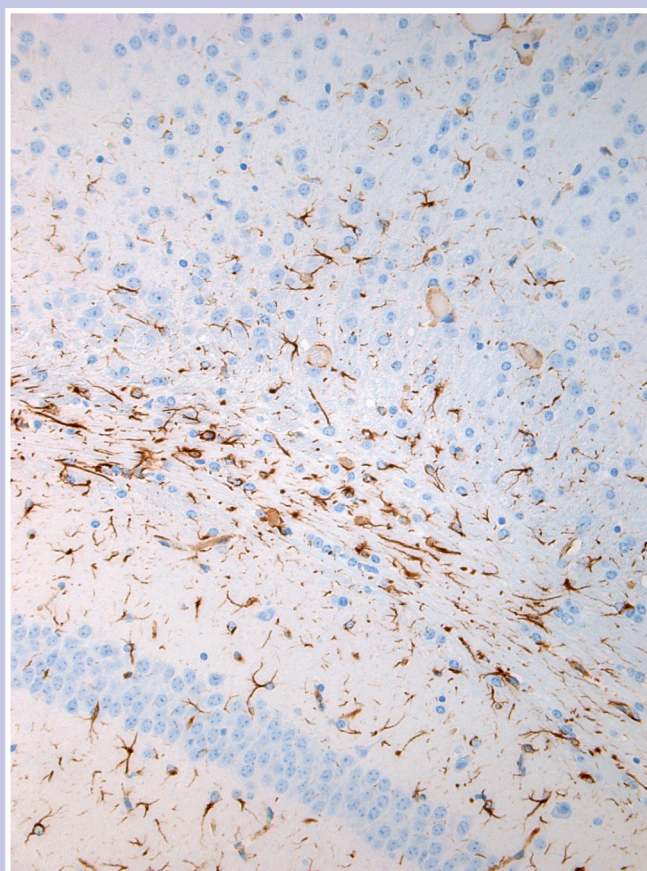
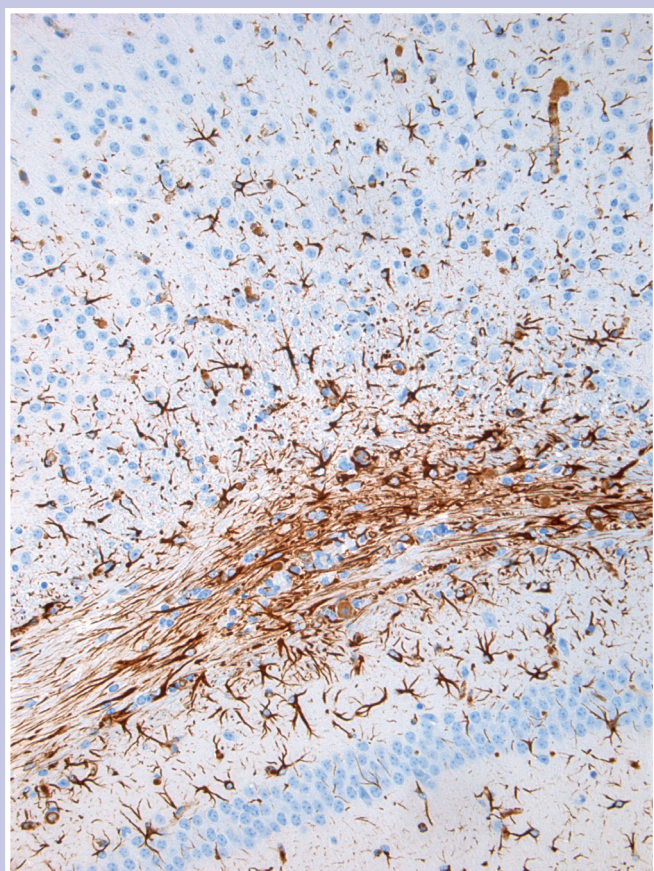


# BIOLOGICAL CHEMISTRY



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# BIOLOGICAL CHEMISTRY

*Founded in 1877 by Felix Hoppe-Seyler as  
Zeitschrift für Physiologische Chemie*

Felix Hoppe-Seyler (1825–1895) was a pioneer of biochemistry, remembered not only for his discovery of hemoglobin and his contributions to the chemical characterization of many other biological compounds and processes but also for having been the mentor of Friedrich Miescher and Albrecht Kossel. In his preface to the first issue of *Zeitschrift für Physiologische Chemie*, Felix Hoppe-Seyler coined the term *Biochemistry* ('Biochemie') for the then newly emerging discipline.



Biological Chemistry is associated  
with the Gesellschaft für Biochemie und  
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#### COVER ILLUSTRATION

Farber disease (FD) is a very rare lysosomal storage disorder resulting from acid ceramidase deficiency and subsequent ceramide accumulation. FD clinically presents with deformed joints, subcutaneous nodules and progressive hoarseness. Due to the low incidence, the pathogenesis of FD is still poorly understood. On pp. 1183–1202 in this issue, Beckmann et al. report a novel acid ceramidase mutant mouse model that enables the study of pathogenic mechanisms of FD and ceramide accumulation. They provide a detailed description of the pathological manifestations in their mouse model that correspond to manifestations reported in the literature. This new mouse model promises to become a valuable tool in FD research in the future and impact research into the role of acid ceramidase in various other mechanistic contexts. A key histological feature of FD is the infiltration of tissues with foamy macrophages. These were also found in the central nervous system (CNS) of the FD mice. The front cover depicts a glial acid fibrillary protein (GFAP) immunohistochemistry staining of the central nervous system of Farber (left) and of healthy (right) mice. Positive staining (brown) indicates astroglial activation, which accompanies the infiltration with ballooned macrophages in the CNS.

Images courtesy of Walter J. Schulz-Schaeffer, Institute of Neuropathology, University of the Saarland, Homburg, Germany.



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