

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.



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COVER ILLUSTRATION

The cover shows a dendritic segment of a mouse hippocampal neuron with several dendritic spines and a potential input from an axon. Single neurons in an organotypic slice preparation were infected using a Sindbis virus coding for enhanced green fluorescent protein. As argued in the article by Brandt and Paululat on pp. 217–230 in this issue, spines act as microcompartments in a tissue context by functioning as local units for segregation of responses, by serving as organizing platforms in a temporally and spatially restricted manner, and by being locally regulated through instructions from neighboring cells and extracellular matrix components.

The picture was taken with a Nikon Eclipse TE2000-U confocal laser scanning microscope. Image courtesy of Neelam Shahani and Tobias Wolf, Department of Neurobiology, University of Osnabrück, Osnabrück, Germany.



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