

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 image shows the molecular modeling of human C1-Inhibitor (C1-INH) solved by X-ray crystallography [Beinrohr, L., Harmat, V., Dobó, J., Lőrincz, Z., Gál, P. and Závodszy, P. C1 inhibitor serpin domain structure reveals the likely mechanism of heparin potentiation and conformational disease. *J. Biol. Chem.* 282 (2007), pp. 21100-21109]. Mutations in this molecule lead to the development of hereditary angioedema (HAE), an autosomal-dominant inherited disease leading to edema attacks with variable severity and localization. The whole coding region of the C1-INH gene (SERPING1) was sequenced in 30 subjects out of 16 unrelated families with confirmed diagnosis of HAE due to C1-INH deficiency. Fifteen different mutations were identified, among which eight mutations were not previously described. The discovery of new mutations in the C1-INH gene will help to establish a more precise and early molecular diagnosis of HAE. For further details see the article by Cagini et al. in this issue on pp. 337–344. The structure was drawn with YASARA View version 14.12.2 [Krieger, E., Koraimann, G. and Vriend, G. Increasing the precision of comparative models with YASARA NOVA – a self-parameterizing force field. *Proteins* 47 (2002), pp. 393–402], using the coordinate file 2OAY.



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