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
Human serum albumin (HSA) is a major protein of human blood with very important physiological and biochemical functions. HSA also plays a fundamental biological role as a universal carrier and reservoir in blood plasma, tissues and secretions. It is a unique universal protein interacting with a variety of endogenous and exogenous ligands such as fatty acids, metal ions, pharmaceuticals, metabolites and many other blood components. HSA can bind bases, nucleotides, RNA and DNA and also shows RNase and DNase activities. In their article on pp. 347–360 in this issue, Alinovskaya et al. demonstrate that HSA possesses two different nucleic acid-binding sites and estimate the relative contributions of the nucleotide links of $(pN)_n$ to their total affinity for these binding sites. The results presented shed light on the binding mode of nucleic acids of different length and composition to HSA. The cover shows the molecular docking result between HSA and the dinucleotide d(pTpC) to the Sudlow site I using the crystal structure of HSA complexed with indoxyl sulfate (coordinates 2BXH and 3K71) as reference.

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