

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 MMTV-PyMT multicellular tumour spheroids, embedded in Matrigel, representing a three-dimensional *in vitro* model of tumour invasion. The spheroids express high amounts of cathepsin B and show steady growth during the course of the experiment, forming radially invasive strands into Matrigel in a sunburst-like pattern (left panel). The addition of cathepsin B inhibitors, which impair the endo- and exopeptidase activities of cathepsin B, significantly reduces spheroid growth as well as the length of invasive extensions (right panel), confirming that both activities are needed for tumor growth and progression. For further details on the function of cathepsin B proteolytic activities on intracellular and extracellular collagen degradation and the possible impact of their inhibition on invasive tumour progression see the article by Mitrović et al., this issue pp. 165–174.



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