Editorial

A journal devoted to the pathophysiology of haemostasis and thrombosis exploits the frontier zone between clinical and basic sciences. This has its charms as well as its risks. Among the risks is that of getting manuscripts from investigators venturing far outside their original discipline and therefore requiring careful, sympathetic but exacting reviewing from a multidisciplinary team. Among the charms is the novel and unexpected insights that such manuscripts can lead to.

When illness and disease are regarded as experiments of nature and used to understand physiology, paradoxically, a keen eye for clinical observation may be one of the most powerful tools in the biological sciences. Recognition of the clotting factors in the first half of the last century was a prime example of using knockout genetics for understanding the physiology of blood coagulation.

Inversely, application of basic science can lead to a better grasp of what is happening in the patient. From the discovery of X-rays to the calibrated automated thrombography, the wish to apply basic science in the clinics has provided the clinician with powerful tools for diagnosis and for understanding pathophysiology.

Like any real frontier zone, the area attracts adventurous-minded pioneers with a propensity to the unconventional. If we may believe one of the pioneers in the field of haemostatic pathophysiology, the late R.G. Macfarlane, the results have a tendency to be like the weather in Scotland, which he characterised as 'Usually the weather is good – and if it is not good it at least is interesting'.

The articles in this special issue are devoted to thrombin generation. This is one of the oldest techniques used in coagulation research. In 1892, Cornelis Pekelharing, (Professor of Physiological Chemistry at the Medical Faculty of Utrecht, The Netherlands) reported to the Dutch Royal Academy an experiment on plasma fractionation. He had obtained two fractions, neither of which would clot upon recalcification, but one of which, when incubated with tissue extract and calcium, acquired the property to clot. Although undoubtedly far from having pure clotting factors in hand, he had nevertheless obtained a crude fibrinogen and a crude prothrombin preparation that were pure enough to demonstrate the existence of prothrombin in a simple thrombin generation experiment.

For nearly a century, thrombin generation could hardly be applied to the clinics, because of technical constraints. In this issue, that is meant to make our colleagues better acquainted with the new form of the old journal *Haemostasis*, we could think of no better subject than thrombin generation developed into a tool that can be applied in clinical diagnosis and surveillance of therapy.

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