NIST BMD Seminar: Parathyroid hormone: from the great Indian rhinoceros to LCMS/MS

Event Type: IBBR Seminar Series
Contact Person: Nicole Tenly
Host: Lisa Kilpatrick/Mark Lowenthal

Event Info
Date: Jan 25 2022 - 10:00am to 11:30am
Location: Virtual

Details
Speaker/Presenter: Etienne Cavalier
Speaker Affiliation: Royal Belgian Society of Laboratory Medicine/University of Liege

Event Description:
Parathyroid glands, one of the tiniest organ of our body, have been first described in 1862 by Sir Richard Owen in a white Indian Rhinoceros. The first radioimmunoassay for parathyroid hormone has been published 115 years later by Rosalyn Yallow and Sol Bergson. In 2002, quantification of this hormone has remained problematic due to the lack of specificity of the antibodies used, circulating fragments and post-translational modifications of the peptide. Standardisation of PTH assays is one of the major terms of reference of the IOF-IFCC Committee for Bone Metabolism.

In this lecture, we will describe the evolution of PTH assays, the challenges of PTH determination and the new insights that recently emerged on PTH fragments, modified forms and standardization.