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“The molecular mechanisms of mammalian sperm maturation regulated by lumicrine signaling”

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開催形式：ハイブリッド（南館大会議室 ＆ Microsoft Teams）

Summary:
Spermatozoa produced in the testis become functionally mature in the epididymis for their full competence. A recently unveiled regulatory mechanism for sperm maturation is lumicrine, a secreted signalling system. In lumicrine signalling, testis-derived lumicrine factors go through the male reproductive tract to the epididymis and act on the epididymal luminal epithelium to promote its differentiation. The molecular entities of testis-derived lumicrine factors are secreted proteins produced inside seminiferous tubules. Mice lacking testis-derived lumicrine factors possess deficient epididymal differentiation caused by impaired lumicrine signalling. These mutant animals are male infertile, because the ejaculated spermatozoa are unable to ascend into the oviduct, because of impaired sperm maturation. How lumicrine regulates epididymal function for successful sperm maturation and male fertility will be introduced in this seminar, based on the presenter’s recent findings.