
Regular Wednesday IMG seminar



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“ToAIERance and SpAIREmiation: two distinct processes with a common regulator”

The Autoimmune Regulator (AIRE) found in the thymus, has been studied in the context of central tolerance where it functions as a nuclear transcriptional modulator. Aire is responsible for the expression of tissue-restricted antigens in specialized thymic cells that prevent autoimmunity. Remarkably, we recently observed that sterility in mice is linked to a lack of Aire expression in testes. We have compiled unambiguous evidence that supports a non-immune role of Aire in spermatogenesis. We discovered that Sertoli cells, which critically support spermatogenesis, are an exclusive source of Aire in testes. In the absence of Aire, the process of spermatogenesis is spatially disordered resulting in markedly reduced and malformed sperm. The subject of this talk is to put forth some of data we have recently generated in regards to mechanism(s) in which Aire expression in Sertoli cells influences male fertility.

The seminar will be held

on Wednesday 14th June 2023 at 15:00

in the Milan Hašek Auditorium at IMG

(Institute of Molecular Genetics of the Czech Academy of Sciences, Vídeňská 1083, Prague 4)
