

共催:新学術領域研究「配偶子産生制御」 国際共同研究加速基金

Stem cells, RNA modification and the immortal lineage.

Dónal O'Carroll, Ph.D.

Chair of Stem Cell Biology, Head of Institute for Stem Cell Research, Associate Director Centre for Regenerative Medicine, University of Edinburgh, Scotland, UK

> 平成28年2月22日(月)11:00-山手3号館2階共通セミナー室

The integrity of the genome transmitted to the next generation intrinsically relies on cells of the germ line. Processes that ensure germ cell development, genomic stability, and reproductive lifespan are essential for the long-term success of a species. We are interested in characterizing spermatogonial stem cell (SSC) populations that support fertility as well the regenerative capacity of



the testis throughout adult life. In addition, we tackle fundamental questions regarding the mammalian male germ line and heredity from an RNA perspective. Specifically, our research explores the contribution of non-coding RNA and RNA modification pathways within germ cell development as well as testicular homeostasis/regeneration. Our research objectives focus on the contribution of these emerging pathways on the underlying circuitry of self-renewal that underpins the SSC, as well as the coordination of the various cellular/differentiation processes of spermatogenesis.

Seminar will be given in English.