

# **Intergenerational influences on behavior and cognition**

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Emerging evidence indicates that paternal exposure to certain environmental factors can result in phenotypic alterations in subsequent generations, possibly due to the inheritance of epigenetic modifications that are induced in the paternal germ line. The Ehninger lab explores, in mice and humans, the effects that specific intrinsic and environmental factors may have on the paternal epigenome and addresses to what extent these epigenetic changes are inherited to subsequent generations to influence behavioral and physiological phenotypes. Here, I will present recent findings that revealed intergenerational influences of advanced paternal age, as well as paternal dietary factors on physiological traits in the offspring generation in mice.