

Titel:

Design and Development of the Male Fertility Gene Atlas

Abstract:

The Male Fertility Gene Atlas (MFGA) is a public platform for collecting and integrating data about epigenetic/genetic causes of male infertility. Its development is part of the scope of the DFG Clinical Research Unit (CRU) "Male Germ Cells: From Genes to Function" and it aims to provide access to all CRU OMICS data on male infertility. Formal requirements for the MFGA have been acquired through three interdisciplinary workshops with experts in the domains of computer science, biology, and medicine. The agreed upon basic functionality includes viewing a list of all available data, retrieving detailed information, and filtering based on gene(-lists), variant identifiers, cell or tissue types, and phenotypes. A prototype of the MFGA with data of ten publications including GWAS, RNA-Seq, Single cell, and WGBS, is already available and additional publications are currently being processed and will be added to the MFGA soon. In order to validate the implementation and to identify with additional features, an evaluation phase will follow.