WHAT GENETIC MATCHING OR PAIRING IN EGG DONATION PROGRAMME CONSISTS OF?

It consists of selecting a donor (oocytes or sperm) who doesn't share any of the mutations detected in the member of the recipient couple that will use its gametes. This way, we have the best genetic compatibility, increasing the chances to have a genetically healthy child.

Genetic diseases cannot be treated but can be prevented.

crea pioneers in reproductive medicine

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GENETIC MATCHING

Are we genetically compatible?

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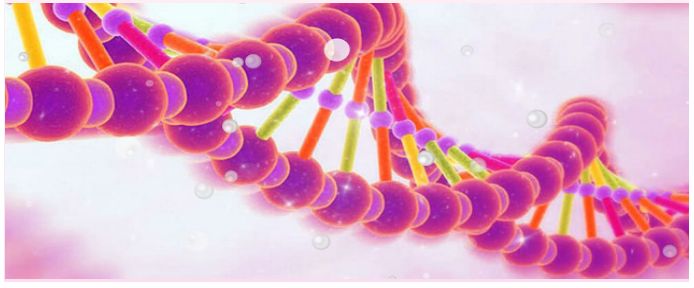
Genetic Matching

The incidence of genetic diseases in births is around a 1%, according to the WHO and it can be minimized performing a genetic study to the future parents

The aim of assisted reproduction has been evolving together with the techniques, we started by "improving gestation rate", then we passed to "avoid multiple gestations" and nowadays our aim is to achieve a healthy baby".

Recent studies reveal that most of the people are carriers of between three and five recessive genetic mutations. Some of these are especially frequent, such as the one related to cystic fibrosis (present in one out of 25 people) or spinal muscular atrophy (one out of 50). Being a carrier doesn't imply to suffer from the disease, neither to present any symptoms, nor for any symptoms to appear in some relative. However, should both members of the couple have the same gene's alteration there is a 25% risk that their children suffer from a very serious disease.



HOW TO KNOW IT?

Genetic matching tests allow knowing the mutations of each member of the couple and the risk of transmission to their descendants. With this information the couple receives genetic counselling to try to achieve a natural pregnancy or, on the other hand, they are advised to perform an assisted reproduction procedure that allows to study the embryos in laboratory and to implant only the one without the disease (pre-implantation genetic diagnosis).

Preconception Genetic Diagnosis tests study a variable number of diseases depending on each test. What is making the difference is the thoroughness through which each disease is studied that is, the level of mutations detection. At CREA Focus panel is performed, designed by Sistemas Genómicos, studying 7400 mutations in 299 genes of 363 hereditary diseases (322 autosomic recessive and 31 X-chromosome linked).

WHEN IS IT INDICATED?

- For all those patients with family history of genetic disease.
- For any couple with reproductive project willing to know the genetic risk of transmitting diseases to their descendants with the aim of protecting them.
- For those couples requiring donor's gametes (oocytes and/or sperm) to select the best donor/s to avoid transmission of any genetic disease. In the latter case, test is performed to the couple's member providing his gametes and to the donor. This is called genetic matching or pairing.