ReproUnion

Implementing a new research paradigm: Five Challenges leading the way

Reproductive challenges currently affect 16-25% of all couples in the Nordics. Every 5th man never becomes a father, and every 10th woman has no or fewer children than she had hoped for. Infertility has been recognized as a disease by the WHO, but despite revolutionary developments in the techniques for assisted reproduction, the success rate per treatment, is still below 30%.

ReproUnion is introducing a new research and innovation paradigm within reproductive medicine in Greater Copenhagen. The regional universities and hospitals are joining forces with leading international research institutes and companies, to solve five major global reproductive challenges, which are of great individual and social concern.

More than 50 professors and researchers in the ReproUnion partnership collaborate across borders and disciplines to drive research in the underlying reasons and optimized fertility treatments. The partnership also works on preventive initiatives to ensure that the society and young people are equipped with the right information to make informed choices about family planning.

ReproUnion is working on ambitious research strategies, because we want to meet current and future demands of preventing, managing and treating infertility. Through collaboration with national and international experts, we are seeking complementary competences, to the ones already existing in Denmark and Sweden!



Challenge 1: Improve human male fertility

We want to increase the understanding of how lifestyle, environmental and genetic factors affect male fertility. The goal is to develop preventative measures and specialized treatments.



Challenge 2: Optimize reproductive health outcomes

We want to develop new, cheaper and more efficient assisted reproductive techniques. The goal is to reduce societal costs and to minimize the strain women are exposed to during assisted reproduction.



Challenge 3: Secure female ovarian function

We work to secure female ovarian function with the long-term goal to create a human ovarian organoid within a ten-year period. This includes improving the collection methods of oocytes from small antral follicles.



Challenge 4: Prevent infertility-related morbidity

We are investigating how infertility can function as an early marker of common major diseases, which could be prevented through early preventative measures.



Challenge 5: Raise fertility awareness

We examine the personal, sexological, social and intercultural barriers that cause young people to postpone family building beyond the years when they are biologically most fertile. We work to raise the awareness of reproductive health among individuals, the public and decision makers.





Celebrating a decade of Repro collaboration

ReproUnion has developed a unique structure for cross-border collaboration, which positions Greater Copenhagen as a leading region in the effort to overcome infertility. In 2020 we celebrate the 10-year anniversary of the Repro Collaboration, which in total has attracted $\[mathbb{E}\]$ 13.8 million of EU funding. In 2019 ReproUnion was among the six finalists for Athena Priset, which acknowledges best practice in clinical research in Sweden. And the year before the project was among the five finalists for the RegioStars Award "Creating better access to public services". In 2013 ReproHigh took home the first $\[mathbb{D}\]$ resund Award, as the best cross-border project within health research and treatment.



ReproUnion milestones ReproUnion attracts € 7.7 million of EU funding This was the largest amount the EU had ever fund-Fostering the next generation ed to a healthcare project in Greater Copenhagen. of reproductive scientists The amount was matched with regional and private ReproUnion initiated 24 cross-border research profunding with a total budget of € 15.4 million. jects with the funding of PhDs and postdocs. And it continued to support the ReproYoung network. Renewed access to specialized fertility treatment across the border 2017 Reaching 3500 fertility consultations The Patient Mobility Agreement (signed in 2013) was After years of support from ReproUnion the fertility renewed between the Capital Region of Denmark councelling was ready to stand on its own feet when and Region Skåne in Sweden. The agreement makes the ReproUnion project period ended in 2018. The it possible to treat Swedish men with non-obstructive councelling started at Rigshospitalet in 2011 and azoospermia in Denmark and to preserve fertility in continued to expand with advisors in Malmö, Holbæk, females undergoing cancer treatment. Hvidovre and Herlev. https://youtu.be/6vSDi4ltzgw Regional fertility action plan is launched ReproUnion Infertility With insights gained from ReproUnion, the Capital Cohort & Biobank (RUn-In-CaB) Region of Denmark presents infertility as a key area Patient recruitment is initiated to establish RUn-Inof attention for the Regional prevention strategy. the CaB with 5000 infertile couples in Denmark and Sweplan also suggests raising the number of assisted den. This will be one of the largest infertility cohorts fertility treatments paid by the public health service. in the world and the biobank will enable new research on the reasons and risk factors for infertility.

The Partnership

ReproUnion is a cross-border collaboration between Denmark and Sweden within the area of reproductive medicine. The project is funded by EU Interreg Öresund-Kattegat-Skagerrak (ε 3.32 million), Region Skåne (ε 1.12 million), Capital Region of Denmark (ε 700,000), and Ferring Pharmaceuticals (ε 1.5 million). Important goals for the partnership are to engage more key persons from international leading research environments and companies and establish long-term collaboration agreements with them as well as to identify sources of private and public funding. The partnership stands ready to bring reproductive research to the next level and look forward to connecting with new companies and research partners.













