
4EU+ Summer Symposium of Applied Embryology

Leading university:	Charles University, Faculty of Medicine in Pilsen
Project leader:	Kateřina Grygarová
Participating universities:	Charles University, Heidelberg University, University of Copenhagen, University of Milan

The project builds on last year's successful summer symposium by expanding its interdisciplinary approach and bringing together students from medicine, biology, and the social sciences. Participants will gain hands-on experience with oocytes, sperm, and embryos, practicing key IVF techniques while also engaging with clinicians to understand fertility from conception through early childhood. Alongside lab work, seminars will explore mental health, societal pressures, and ethical questions surrounding reproduction, offering a comprehensive view of the challenges linked to declining fertility. Through practical training, expert-led discussions, and cross-disciplinary exchange, the symposium aims to connect students across all 4EU+ universities and foster lasting academic collaboration.

The goal of the symposium is to show that reproduction spans biology, medicine, psychology, ethics, and society. Students will gain practical IVF experience while exploring clinical and social dimensions of fertility through seminars addressing mental health, ethical dilemmas, and demographic change. The project broadens perspectives, strengthens collaboration, and supports interdisciplinary learning across fields and study levels.

Activities include introductory lectures, followed by small-group laboratory work with oocytes and embryos using immunocytochemistry. Students will continue ICC work on the second day and learn assisted reproductive technologies, including IVF, ICSI, and spermogram evaluation, with open lectures available to a wider audience. The third day centers on expert-led discussions about neonatal outcomes, fertility trends, mental health, and ethical issues in reproductive medicine. On the final day, students will compile their microscopy images into a collective book, concluding the symposium with a certificate ceremony and networking session.

Expected outcomes include a student-created microscopy book, certificates of completion, strengthened collaboration among 4EU+ universities, publicly available lecture materials, and a lasting interdisciplinary impact on participants' understanding of reproductive health.