

Embryo freezing, or embryo cryopreservation, involves freezing fertilized eggs, or embryos, with the intent to thaw them in the future and do an embryo transfer to achieve a pregnancy. At USF IVF, we freeze embryos that reach the blastocyst stage of development by the 5<sup>th</sup> or 6<sup>th</sup> day after egg retrieval during an IVF treatment. Embryo freezing is an established technology that has been carried out since the 1980s. The original technology used for embryo freezing is called “slow freezing”. Over the past decade, a newer process called “vitrification” has been developed. USF IVF uses vitrification technology exclusively. Historically, pregnancy rates with frozen embryos were lower than with fresh embryos, but with improved technology including vitrification this is no longer true and pregnancy rates rival, or exceed, those with fresh IVF. Embryo freezing most commonly occurs when there are additional embryos available after embryo transfer during a fresh IVF cycle. Embryo freezing also occurs when we perform trophectoderm biopsy for [preimplantation genetic diagnosis](#), while awaiting the results of the genetic analysis. Another indication for embryo freezing is for cancer patients, through our [Center for Fertility Preservation](#), who will be undergoing chemotherapy or radiation as part of their cancer treatment. Since chemotherapy or radiation can affect ovarian function, freezing embryos prior to starting chemotherapy or radiation provides a way for the cancer patient to become pregnant after she is cured.