

# Cancer Treatments Can Affect Your Ability to Have Children

University of Florida  
Reproductive Medicine



The reproductive endocrinology and fertility specialists in the UF College of Medicine Department of Obstetrics and Gynecology have joined a national network of physicians and researchers who are addressing the needs of young cancer patients. The Oncofertility – the study of fertility for those with cancer – Consortium is an interdisciplinary initiative supported by the National Institutes of Health to explore the reproductive future of cancer survivors. The Consortium will use human tissue research to determine how reproductive capability in cancer patients might be preserved, and how to expand options for young men, women and children diagnosed with cancer or other serious diseases. The consortium has undertaken a number of diverse projects and established core resources that reach across several disciplines.

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*Protecting Life,  
Preserving Hope*

## You Have Cancer...

With the diagnosis comes a new vocabulary: surgery, chemotherapy, radiation, and recovery. If you are interested in becoming a parent, cancer can add another word to your vocabulary: infertility. However, thanks to extraordinary research collaboration by the University of Florida College of Medicine Obstetrics and Gynecology Department, an answer to fertility issues related to cancer treatment may be close at hand.

*Compromised fertility for cancer patients may soon be coming to an end. Oncofertility has led to several breakthroughs that offer protection for the lives and preservation of the hopes of dozens of cancer patients.*

### Before Therapy

#### For Women

**Embryo Banking:** Eggs are matured with use of injectable hormones, removed, fertilized *in vitro* (outside the body) with sperm, frozen and stored.

**Egg Freezing:** Eggs are matured with use of injectable hormones, removed, frozen and stored.

**Ovarian Tissue Cryopreservation:** Requires an ovary be removed and frozen.

**Ovarian Suppression:** Medications administered during cancer treatment to reduce the risk of infertility.

**Ovarian Transposition:** surgically displacing the ovaries prior to radiation therapy to minimize damage.

#### For Men

**Sperm Banking:** Semen is collected, frozen and stored.

**MESA, PESA:** When the passageway is blocked, sperm can be obtained above the level of the block, frozen and stored.

**Testicular Sperm Extraction:** Testicular tissue is obtained through an open biopsy, frozen and stored.

### After Therapy

#### For Women

**Testing Your Fertility:** Certain blood tests, possibly in conjunction with ultrasounds, can be used to assess your fertility potential.

**Ovulation Induction and Assisted Reproductive Technologies:** Eggs are matured with the use of oral or injectable medications and released to be fertilized *in the body or removed and fertilized outside the body (in vitro)* with sperm. Embryos are then transferred to the patient or frozen and stored.

**Oocyte Donation:** Eggs from a comprehensively screened donor are matured, removed, and fertilized with the husband's sperm outside the body. The embryos are transferred to the patient, who will carry the pregnancy.

**Gestational Carrier:** If it is determined that it is not safe for a woman to carry a pregnancy, another woman can carry the patient's pregnancy for her, although the embryo is from the patient and her partner.

#### Adoption

#### For Men

**Testing Your Fertility:** Can be done through a semen analysis and blood testing.

**Assisted Reproductive Technologies: (*In Vitro Fertilization and Intracytoplasmic Sperm Injection*):** Even with just a few sperm, the eggs from the wife are matured and removed and then the individual sperm can then be directly injected into the egg to assist with fertilization.

**Donor Sperm:** Sperm from a comprehensively screened donor can be used for insemination or assisted reproductive technologies.