General Information of the In-Vitro Fertilization Program
Dr. Pedro J. Beauchamp

FIRST TEST-TUBE BABY IN PUERTO RICO
Dr. Pedro Beauchamp with Adlin Román in his arms.

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introduction

The very first baby that resulted from the fertilization of an egg outside of the mother’s body was born in England in 1978. Since then, the treatment of infertility by in vitro fertilization (IVF) has become common practice. Large IVF centers have been established in England, Europe, Australia and the United States. The experience gained in all these centers has been rapidly shared with the rest of the medical community; making IVF an international effort and collaboration rarely seen in the history of medicine. Worldwide, several million babies conceived by this method have been born. According to 2014 statistics (www.cdc.gov/art), 208,786 women underwent this treatment that year, and of those, 57,332 (about 34%) became pregnant, giving birth to 70,352 babies. One and a half out of one-hundred (1.6%) babies born in the United States is conceived through in-vitro fertilization treatments. In the United States there are more than 460 clinics offering in vitro fertilization treatment. Our in vitro fertilization program was inaugurated in July of 1985; it was the 35th to be implemented in the United States, and the first in Puerto Rico and the Caribbean. The first patients were treated in September, 1985, and the first pregnancy in our program occurred in the second patient undergoing our treatment.

particulars of in vitro fertilization treatment

During a menstrual cycle, the ovary develops an oocyte to maturity. At the right time in the cycle, this oocyte is expelled from the ovary (ovulation) into the fallopian tube. Millions of sperm enter the vagina, but only five to ten thousand manage to ascend to the distal, or farthest, portion of the tubes where the sperm and the oocyte meet and fertilization occurs. The fertilized oocyte stays in the fallopian tube three days, dividing and developing into an embryo. After the third day, the embryo enters the uterine cavity (the womb), where it floats for another three days. In human beings, the embryo is implanted in the inner layer of the uterus six to seven days after ovulation.

The IVF technique basically substitutes the function of the fallopian tube in the laboratory. The events that normally occur in the fallopian tubes (oocyte fertilization and early embryo development) are performed at the laboratory because they cannot occur successfully in the woman’s tube. We bypass the normal process of reproduction so that the oocyte goes from the ovary to the in vitro lab instead of going into the fallopian tube. Once the oocyte has been fertilized (in three to five days) the embryo is placed in the uterus.
NORMAL REPRODUCTION

IN-VITRO FERTILIZATION

IVF Procedure

Insemination

Egg Aspiration

Embryo Transfer

Incubation
FSH
LH Surge
LH
Progesterone
Estradiol

FSH
LH Surge

Meds HCG Progesterone
which patients are candidates for this treatment?

In vitro fertilization is a widely-accepted treatment and is indicated to treat infertility in the following cases:

A. Irreversible conditions of the fallopian tubes. These include missing fallopian tubes due to surgery or previous tubal ligation (sterilization), severe tubal injury for which reconstructive surgery is not advisable, and, in those patients who have undergone reconstructive surgery, not becoming pregnant within one year after surgery. Adhesions or significant pelvic scars that affect the anatomy and prevent normal functioning and the collection of the ovum in the fallopian tubes are also indications for IVF.

B. Low sperm count in the male partner. As mentioned above, relatively few sperm reach the fallopian tube to fertilize an egg (5,000 to 10,000 sperm, although more than 50,000,000 enter the vagina). IVF allows us to use a small number of sperm to fertilize an egg because the sperm are placed in direct contact with the egg in a petri dish. For this method, the ideal is to have a total of at least 5,000,000 mobile sperm. In cases where the sperm count is lower than this, there is the option of injecting sperm directly inside the egg using the ICSI (IntraCytoplasmic Sperm Injection) technique, described below. In men with a zero sperm count in the ejaculate (azoospermia) but whose testicles contain sperm, the sperm can be extracted by testicular biopsy (testicular sperm extraction, TESE), and the egg can then be fertilized by the ICSI method.

C. Untreatable cervical factor. Patients with cervical mucus problems who have not responded to the usual medical treatment or to intrauterine insemination.

D. Endometriosis. Patients who have not become pregnant after medical or surgical treatment for pelvic endometriosis.

E. Long term, persistent, or unexplained infertility (without an apparent cause), despite standard medical treatment.

Other patients who can benefit from this technique are:

F. Couples with a family history of a genetic disease and those who have already had a child with a chromosomal or genetic anomaly, and who want to avoid giving birth to a baby with this particular condition. These couples are candidates for Preimplantation Genetic Diagnosis (PGD). It is possible to diagnose chromosomal or genetic abnormalities in the embryos before transferring them to the mother. Women whose age predisposes them to chromosomal abnormalities can also benefit from PDG and IVF.

G. Candidates for egg donation. Patients diagnosed with ovarian failure, premature menopause, or dysfunctional eggs can receive donated eggs and become pregnant.

H. Patients with an absent, abnormal or dysfunctional uterus are candidates to have their embryos carried to term by a surrogate mother.
**how is the treatment administered?**

In vitro fertilization is carried out in five main steps:

1. **Ovarian stimulation.**

   In a natural cycle, the ovary usually produces one mature egg. A higher number of oocytes increases the success rate of the treatment. For this reason, it is necessary to over-stimulate the ovaries to produce three or more mature eggs. The patient is given a course of various fertility medications to stimulate the ovary to produce multiple mature eggs. The medication regimen is individualized: depends on the specific conditions of each patient, such as her ovulation status, presence of one or both ovaries, and the pretreatment small follicle count, her age, and her hormone levels at the beginning of the menstrual cycle. Most patients receive human menopausal gonadotropic hormones (hMG, Menopur injections) and/or follicle-stimulating hormone (FSH, Follistim, Gonal-F, Bravelle) for an average of ten [10] days [8-12]. The average patient (under 40 years of age, with two ovaries) will produce eight to ten [8-10] oocytes. Many patients also receive a pituitary agonist (Lupron injections) or a pituitary antagonist (Cetrotide, Antagon). These drugs are given in addition to hMG and FSH, and are started one week before menstruation or on the second day of the menstrual cycle. The purpose of Lupron is to shut down (inactivate) the pituitary gland so that the ovary can better respond to hMG and FSH, and to synchronize follicular development and prevent premature ovulation. Today, clomiphene citrate (Serophene or Clomid) or letrozole (Femara) is not used as frequently as before in IVF because these drugs produce fewer mature eggs.

2. **Monitoring follicular development.**

   The response of the follicles (immature eggs in the ovary) is assessed through **blood tests** (estradiol, FSH, LH, progesterone) and **ultrasound**. The hormone levels in blood indicate whether the follicles are developing properly. The ultrasound examinations tell us the number, size, position, and degree of maturity of the follicles. Monitoring is important to determine when the follicles have reached adequate maturity. When the follicles are mature, the patient receives an injection of hCG (Novarel, Pregnyl) to induce the ovary to ovulate (that is, expel) these eggs in 36 to 40 hours.
3. Retrieval of eggs from the ovary (IVF-ASP).

One or two hours before ovulation (34 to 35 hours after the hCG injection), the eggs are extracted directly from the ovary. Since the ovaries are normally situated one or two centimeters (half an inch to an inch) behind the vaginal wall, the follicular aspiration method used most often is the ultrasound-guided transvaginal technique. This is an out-patient procedure that takes place in the doctor’s office under intravenous sedation. It takes 15 to 30 minutes. A special needle is inserted through the vaginal wall towards the ovary, guided by vaginal ultrasound.

Follicles are aspirated one by one. The follicular fluid and the cumulus [the mass of cells containing the microscopic egg] are removed.

In rare cases, when the ovaries are located very high in the pelvis, far from the vaginal wall and not accessible by transvaginal aspiration, follicular aspiration can be done by laparoscopy (a technique that utilizes a flexible fiberoptic instrument passed through a small incision in the abdominal wall). This procedure is done on an out-patient basis at the hospital. It requires general anesthesia or deep sedation, and takes about one hour. In addition, follicular aspiration by laparoscopy allows us to examine the pelvic anatomy and the condition of the pelvis [diagnostic laparoscopy] and to perform GIFT (gamete intrafallopian tube transfer) and ZIFT (zygote intrafallopian tube transfer).
4. Fertilization of the eggs in the laboratory.

After the eggs have been obtained from the ovary, the male partner must provide a semen sample. Sperm are prepared to enable them to fertilize eggs. Depending on the maturity of the eggs, they may be inseminated on the same day or the next morning. Usually, fertilization of the egg occurs within the first 18 hours after insemination; by the second day, the egg has already divided in two, four, or more cells (embryo stage).

In some cases it is necessary to inject the sperm directly inside the egg. This technique is called intra-cytoplasmic sperm injection (ICSI). This procedure is done in cases where the sperm count or sperm motility are very low; when the zona pellucida (protein layer around the human egg) is very thick; when a high percentage of egg fertilization is not expected; when there is prior experience of inadequate egg fertilization, and in cases of infertility without apparent cause. Once the eggs are obtained at the laboratory, one sperm is injected inside the cytoplasm of the egg through microneedles.

Only completely mature eggs can be injected. Usually, two out of every three injected eggs are fertilized and continue their cell division. The percentage of pregnancies achieved with the method is about 50%, similar compared to standard laboratory insemination.
5. Embryo transfer (ET).

Successfully fertilized and divided embryos are transferred to the mother. This transfer takes place **three to five days** after follicular aspiration. It is done at the doctor’s office, and since it is a painless procedure, it requires no anesthesia. It consists of depositing the embryos inside the uterine cavity through the cervix (the neck of the womb or entrance to the uterus) through a very fine catheter (plastic tube). It is not necessary to dilate the cervix. The patient remains in absolute bed rest until she is released one hour after the transfer. On the third day, the embryos usually have six (6) or more cells; on the fourth day, they are in the morula stage, and on the fifth day they are in the blastocyst stage. If there are three (3) or fewer embryos with good characteristics, they are usually transferred on the third day. If there are more embryos, or if the embryo development is to be assessed through the final stages, the embryos are transferred on the fourth or fifth day. The goal of prolonged incubation is to allow nature to select the embryos with the best potential to produce a pregnancy. The purpose of this later transfer is to maintain or increase the probability of a pregnancy by transferring fewer embryos and reducing the risk of a multiple pregnancy. It is recommended that **a maximum of two (2) blastocysts** be transferred on the fifth day, depending on patient’s age.

**It must be emphasized that not all the eggs obtained are mature enough (66-75%), not all mature eggs become fertilized (66-75%), and not all fertilized eggs (embryos) reach blastocyst stage. One of every four (25-33%) fertilized eggs has the genetic potential to reach the blastocyst stage and produce a pregnancy.**

Before transfer, the embryos (except blastocysts) undergo a procedure to reduce the thickness of the zona pellucida (the protein layer around the embryo). This procedure (**Assisted Zona Hatching, AZH**) entails making an opening in this zone to help the embryo come out of this surrounding layer, thereby increasing its probability of implantation in the uterus.

After the follicles are aspirated and the embryos transferred, hormone treatment with **progesterone** (progesterone in oil, Prometrium, Crinone, Endometrin) is initiated, usually, to prepare the endometrium (inner layer of the uterus) to receive the embryos and facilitate implantation.
6. Cryopreservation (embryo freezing).

In many cases the ovaries have had an excellent response to drug stimulation, and many eggs and embryos are obtained. Ideally, the maximum recommended number of embryos is transferred to the uterus, depending on their stage of development and on the conditions of the woman (Table 6). Additional embryos may be frozen and stored for a definite time (up to 5 years) in liquid nitrogen. Only embryos with good characteristics and a high viability potential are frozen. The advantage of freezing embryos is not having to use all the embryos in one treatment cycle, and reducing the risk of multiple pregnancies present when many embryos are transferred. If the patient does not become pregnant during the in vitro treatment cycle, the embryos may be subsequently thawed and transferred to her uterus without the patient having to go through the whole in vitro process again. If the patient becomes pregnant, the embryos can be stored until the couple desires another pregnancy. The couple can also donate their eggs or embryos to an infertile couple to facilitate a pregnancy.

what are the chances of success?

The chances of success of in vitro fertilization depend on many factors. According to 2014 statistics reported to the Centers for Disease Control (CDC) by the 460 in vitro fertilization clinics in the United States and published in the Assisted Reproductive Technology National Summary, 34% (57,332) of the patients undergoing IVF became pregnant, and 70,332 babies were born. These global figures include all IVF clinics and do not specify the patients’ age or the presence of male infertility issues. We know that the percentage of pregnancies in patients over 34 years of age progressively decreases compared to that in younger women. Men with decreased sperm counts and/or motility also have less success than those whose tests are normal. The effect of older age and low sperm count is additive. Today, thanks to technological advances, clinics with ample experience such as ours have achieved an average pregnancy rate of more than 50% per attempt at IVF (Tables 3, 4 and 5). Please refer to www.cdc.gov/art for more information.

In the vast majority of patients (98.5% or more), one or more eggs can be obtained from the ovaries. In patients with a decreased ovarian response, it may be necessary to postpone treatment until the next cycle (12.5% of cases). Most mature eggs (75%) are fertilized and become embryos. An average of 25-33% of embryos becomes blastocysts. The probability of pregnancy depends partly on the number of embryos transferred to the woman. It is best to transfer two embryos in order to achieve a higher percentage of pregnancies. However, the more embryos transferred each time, the higher the chance of a multiple pregnancy (Tables 3, 4 and 5). The probability of congenital abnormalities in babies produced with this technique is not higher than in the general population. The overall incidence of miscarriage is 18%, and increases with the patient’s age (under 34 years = 12%, at age 40 = 28%, and it reaches 60% at the age of 43).
Table 1 General Statistics by Age (PRFC 2010-2014)

<table>
<thead>
<tr>
<th>Patient Age</th>
<th>Pregnancy Rates (%)</th>
<th>Live Birth Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 35</td>
<td>69</td>
<td></td>
</tr>
<tr>
<td>35-37</td>
<td>54</td>
<td></td>
</tr>
<tr>
<td>38-40</td>
<td>47</td>
<td></td>
</tr>
<tr>
<td>41-42</td>
<td>32</td>
<td>31</td>
</tr>
<tr>
<td>≥43</td>
<td>30</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

Table 2 Pregnancy and Live Birth Rates for ART Cycles Using Fresh, Nondonor Eggs or Embryos, by Age of Woman

- Pregnancy Rate
- Live Birth Rate
- PRFC (2007-14)
**Table 3** Puerto Rico Fertility Center Pregnancy Outcomes 2007-15  
Age < 40  **Day 4-5 Transfer** Morulas and Blastocysts

<table>
<thead>
<tr>
<th>Number Morula &amp; Blastocysts Embryos Transferred</th>
<th>Number Patients</th>
<th>Number Pregnancies (%)</th>
<th>Pregnancies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 (single)</td>
</tr>
<tr>
<td>1</td>
<td>60</td>
<td>29 (48%)</td>
<td>23</td>
</tr>
<tr>
<td>2</td>
<td>443</td>
<td>312 (70%)</td>
<td>208</td>
</tr>
<tr>
<td>3</td>
<td>1053</td>
<td>67 (64%)</td>
<td>71</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>608</strong></td>
<td><strong>408 (67%)</strong></td>
<td><strong>268</strong></td>
</tr>
</tbody>
</table>

408 Total pregnancies: 268 Singles (66%), 123 Twins (30%), 17 Triplets (4%)

**Table 4** Puerto Rico Fertility Center Pregnancy Outcomes 2011-15  
Age < 35  **Day 4-5 Transfer** Morulas and Blastocysts

<table>
<thead>
<tr>
<th>Number Morula &amp; Blastocysts Embryos Transferred</th>
<th>Number Patients</th>
<th>Number Pregnancies (%)</th>
<th>Pregnancies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 (single)</td>
</tr>
<tr>
<td>1</td>
<td>22</td>
<td>13 (59%)</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>138</td>
<td>107 (78%)</td>
<td>66</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>163</strong></td>
<td><strong>122 (75%)</strong></td>
<td><strong>79</strong></td>
</tr>
</tbody>
</table>

122 Total pregnancies: 79 Singles (65%), 41 Twins (34%), 2 Triplets (2%)  

**Table 5** Puerto Rico Fertility Center Pregnancy Outcomes 2011-15  
Age 35-39  **Day 4-5 Transfer** Morulas and Blastocysts

<table>
<thead>
<tr>
<th>Number Morula &amp; Blastocysts Embryos Transferred</th>
<th>Number Patients</th>
<th>Number Pregnancies (%)</th>
<th>Pregnancies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 (single)</td>
</tr>
<tr>
<td>1</td>
<td>18</td>
<td>9 (50%)</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>111</td>
<td>74 (67%)</td>
<td>55</td>
</tr>
<tr>
<td>3</td>
<td>8</td>
<td>6 (75%)</td>
<td>2</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>137</strong></td>
<td><strong>89 (65%)</strong></td>
<td><strong>62</strong></td>
</tr>
</tbody>
</table>

89 Total pregnancies: 62 Singles (70%), 25 Twins (28%), 2 Triplets (2%)
### Table 6  American Society of Reproductive Medicine
**Recommended limit for Embryo Transfer Guidelines 2013**

<table>
<thead>
<tr>
<th>Day ET</th>
<th>&lt;35</th>
<th>35-37</th>
<th>38-40</th>
<th>41-42</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-3 (2-8 cells)</td>
<td>2 *</td>
<td>3 *</td>
<td>4 *</td>
<td>5</td>
</tr>
<tr>
<td>4-5 (Morula-Blastocyst)</td>
<td>2 *</td>
<td>2</td>
<td>3 *</td>
<td>3</td>
</tr>
</tbody>
</table>

* Favorable Prognosis: consider transfer one less embryo  
  (First IVF, Previous pregnancy, Good embryo quality, Excess available for freezing)  
  (eSET<35 years)

### Table 7  2013 National Statistics Pregnancy Rate Woman Age >40

<table>
<thead>
<tr>
<th>Age (Years)</th>
<th>Pregnancy Rates (%)</th>
<th>Live birth</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>25</td>
<td>17</td>
</tr>
<tr>
<td>41</td>
<td>21</td>
<td>13</td>
</tr>
<tr>
<td>42</td>
<td>16</td>
<td>9</td>
</tr>
<tr>
<td>43</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>44</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>&gt;44</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>
**History of our In Vitro Fertilization Program in Puerto Rico**

- **9/85**: First in vitro fertilization (IVF) in Puerto Rico *
- **5/86**: First birth from IVF in Puerto Rico, the Caribbean, and Central America *
- **6/86**: First GIFT birth *
- **5/87**: First ambulatory transvaginal follicular aspiration *
- **8/88**: First birth from combined IVF and GIFT *
- **3/90**: First birth of twins from IVF *
- **10/92**: First birth from IVF in the Lesser Antilles *
- **4/93**: First triplets born from IVF
- **6/93**: First birth from egg donation *
- **1/97**: First quadruplets born from IVF
- **3/97**: First birth from IVF with ICSI
- **8/97**: First birth from frozen embryos
- **11/97**: First birth from IVF with TESE
- **12/98**: First birth in Venezuela from IVF with ICSI conducted in Puerto Rico *
- **11/01**: First birth from IVF with donated frozen embryos *
- **2003**: First and only IVF program in Puerto Rico approved by the Joint Commission *
- **3/05**: First birth from IVF in a surrogate mother *
- **12/05**: First birth from IVF by transmyometral embryo transfer *
- **10/08**: First IVF pregnancy with preimplantation genetic diagnosis (PGD)*
- **10/13**: First triplets born from frozen embryos*

*First case reported in Puerto Rico*
Our Mission

To provide infertility services using state-of-the-art technology and the most highly qualified professionals to help couples achieve their cherished dream of having a baby.

Why Us?

Why Should You Choose the Puerto Rico Fertility Center?
Vast experience. We are the pioneers in the field of infertility in Puerto Rico since 1985. Our clinic has been responsible for thousands of babies born in Puerto Rico and the Caribbean. Dr. Beauchamp is certified by the American Board of Obstetrics and Gynecology and the American Board of Reproductive Endocrinology and Infertility Division. Dr. Lloréns is certified by the American Board of Obstetrics and Gynecology and is an active candidate for the Board’s certification in infertility. Our In Vitro Fertilization (IVF) Center was the 35th one established in the United States and the first one Puerto Rico and the Caribbean. Ours is the only In Vitro Fertilization (IVF) program that operates in an Outpatient Surgery Center accredited by the Puerto Rico Department of Health. It is also the only IVF program accredited by the Joint Commission for the Accreditation of Medical Facilities.

Our IVF lab is the only one that offers:
- Two full-time biologists
- One scientific consultant/director.
- A roster of lab personnel with the most experience and the highest number of certifications on the island.
- Computerized semen analysis for the most precise and reliable results.

Our Center has no need to “schedule” IVF cases. Our nurses and embryologists are always accessible to our patients, to clarify any doubts and answer questions about their treatment. Our Center is equipped with five ultrasound machines featuring the highest available resolution, which produce the detailed images needed for monitoring follicular development and the evolution of a pregnancy. Our medical office has its own, in-house Clinical Lab, managed by a medical technologist certified by the Puerto Rico Department of Health, to carry out hormonal analyses without delay. Our Center also has a Pharmacy License, which allows patients to obtain their prescribed medications right away and at the most economical cost. Our Center offers the widest array of available infertility treatments. We combine state-of-the-art technology with professional, personalized and individually-tailored treatment. We are known for our results, as well as our warmth, understanding and dedication to our patients.

Compare our statistics at:
http://apps.nccd.cdc.gov/art/fct.aspx?
curriculum vitae

Pedro J. Beauchamp M.D., FACOG, FACS, REI
Board-Certified in Reproductive Endocrinology and Fertility

Dr. Pedro J. Beauchamp was born in San Juan, Puerto Rico, in September, 1951. He studied at the Colegio San Ignacio de Loyola and graduated with honors in 1969. From a young age he had an interest in biology and reproduction, winning a Science Fair award for a project on chicken embryo development. He completed his undergraduate course work in three years, graduating Magna Cum Laude from Boston College. In 1976 he graduated from the School of Medicine of the University de Puerto Rico where he obtained his Medical Doctor degree Magna Cum Laude, finishing sixth in his class. He specialized in Obstetrics and Gynecology at the prestigious Johns Hopkins Hospital in Baltimore, Maryland. From 1980 to 1982 he received formal training in reproductive endocrinology and infertility at the Hospital of the University of Pennsylvania, one of the most renowned worldwide in this sub-specialty. During his residence and fellowship, Dr. Beauchamp studied with nine professors who became presidents of the American Society for Reproductive Medicine (formerly the American Fertility Society), the most prestigious American organization in this branch of medicine.

In 1982, upon completing his fellowship on infertility in Pennsylvania, he joined the faculty of the IVF team of the University of Texas at Houston. This was the fourth program in the United States to begin to offer treatments, and the third to obtain pregnancies. In Houston, Dr. Beauchamp was directly responsible for the first triplet birth in the United States and for the conception of the first IVF baby born in Argentina. Dr. Beauchamp’s work in Houston focused on what today is known as GIFT (gamete intrafallopian tube transfer) and TET (tubal embryo transfer).

In January, 1985, Dr. Beauchamp returned to his birthplace, Puerto Rico, and established his reproductive endocrinology and infertility practice in Bayamón, as well as the first in vitro fertilization program on the island. The first IVF patients were treated in September, 1985. The second patient in the program became pregnant and gave birth, in May, 1986, to the first IVF baby in Puerto Rico, Central America and the Caribbean. In June, 1986, the first baby was born in the GIFT program; the first baby produced by a combination of IVF and GIFT was born in August, 1988. Up to that moment, follicular aspiration and fallopian tube transfer were all conducted through laparoscopy. Dr. Beauchamp, abreast of the newest medical advances of the times, conducted his first ultrasound-guided transvaginal follicular aspiration on 17 May, 1987.

Based on the success, simplicity, and savings offered by this technique, after this date Dr. Beauchamp continued offering the IVF program on an out-patient basis at his office. Dr. Beauchamp and his team were responsible for the birth of the first twins in Puerto Rico in March, 1990; triplets in April, 1991; quadruplets in May 1992; and the first baby born from an egg donation in June, 1993. The first IVF births in
the Lesser Antilles (such as St. Thomas, St. Croix, St. Marteen, St. Kitts, Tortola, Anguilla, among other places) and the first IVF with ICSI birth in Venezuela are the result of the work of Dr. Beauchamp’s team in Puerto Rico.

Dr. Beauchamp has been certified by the American Board of Obstetrics and Gynecology since 1983, and in 1984 was the first Puerto Rican to receive a diploma from the American Board of OBS-GYN’s Division of Reproductive Endocrinology and Infertility. It is worth noting that twenty-five years later, fewer than 950 physicians have obtained that certification in the United States. He has been a Fellow of the American College of Obstetrics and Gynecology since 1984. Dr. Beauchamp has been a member of the Board of Editors of prestigious medical journals such as La Revista Latinoamericana de Fertilidad y Esterilidad and the Journal of Human Reproduction and Genetics. He has been a Fellow of the American College of Surgeons since 1988, and was director of the scientific program of the Puerto Rico chapter in 1999, and President of the Puerto Rico Chapter in 2011-2012. Additionally, he has been the delegate for Puerto Rico of the Latin American Federation of Sterility and Fertility Societies (Federación Latinoamericana de Sociedades de Esterilidad y Fertilidad, FLASEF) since 1986.

Dr. Beauchamp’s CV includes more than 50 publications and presentations on his specialty in medical journals and conferences. He has received numerous awards and distinctions throughout his career. In February, 1987, he received the Guanín Prize from the then Governor, the Hon. Rafael Hernández Colón, and the Sales and Marketing Executives, which is awarded to individuals who have best represented the image of Puerto Rico in the island and abroad. Since the inception of the “Doctor’s Choice Award” of the Revista Buena Vida in 1985, Dr. Beauchamp is the only Reproductive Endocrinology and Infertility specialist that has annually received this distinction, awarded by his colleagues as one of the most outstanding physicians in his field in Puerto Rico. Dr. Beauchamp is a member of several medical societies, including the prestigious American Society for Reproductive Medicine, of which he has been a member since 1980; attending every annual conference since. He was a founding partner of the Society for Assisted Reproductive Technology (SART), an organization that guides the practice of IVF in the United States; the Society of Reproductive Surgeons, and the Society for Reproductive Endocrinology and Infertility (whose indispensable requirement is to have passed the infertility board exams). His IVF program was among the first 35 founded in the United States. Since his establishment in Puerto Rico, he has helped thousands of infertile couples to achieve a much-hoped-for pregnancy. In the last few years, he has obtained a pregnancy rate that is at least 20% higher than that obtained by American programs.

Dr. Pedro J. Beauchamp is one of the highly regarded specialists in reproductive endocrinology and infertility in the United States, Central America, and the Caribbean. He was one of the pioneers in the field of infertility, and specifically of in vitro fertilization.
Amaury J. Lloréns-Martínez received his MD degree from the Universidad Central del Caribe in 1994. Later he studied obstetrics and gynecology, doing an internship at the Caguas Regional Hospital of the University de Puerto Rico, and a residency at the San Juan Municipal Hospital, where he graduated in 1999. Dr. Lloréns was the first graduate from this residency program to be accepted and to complete formal training and receive a post-doctoral research fellowship in Reproductive Endocrinology and Infertility. In 2002 he completed a fellowship at the New Jersey-UMDNJ, and returned to Puerto Rico to join Dr. Pedro Beauchamp’s team.

During his fellowship, Dr. Lloréns focused his research on factors that affect endometrial growth. Normal growth of the endometrium, the inner layer of the uterus, is critical for the implantation of a pregnancy. He also researched the effect of exogenous gonadotropins during fertility treatments on pregnancy. These issues were presented at the 2001 and 2002 conferences of the American Endocrine Society and at the Society for Gynecological Investigation in 2002, and were published in the scientific journal Fertility and Sterility in December, 2004.

Dr. Lloréns is an associate member of the American Society for Reproductive Medicine, the American College of Obstetrics and Gynecology, and the American College of Surgeons. He is a member of the medical staff faculty of Hospital San Pablo, San Juan City Hospital and of the San Juan Health Centre. Dr. Lloréns is certified by the American Board of Obstetrics and Gynecology and is an active candidate for the Boards of Reproductive Endocrinology and Infertility. He is a professor in the Department of Obstetrics and Gynecology of the San Juan Municipal Hospital, Universidad Central del Caribe School of Medicine, and the University of Puerto Rico School of Medicine.

Dr Llorens has been selected by his peers to receive the Doctor’s Choice Award in 2010, 2013 and 2016. The Puerto Rico House of Representatives recognized him in his field as “Outstanding Specialist in Infertility”.

Amaury J. Lloréns-Martínez M.D., FACOG, FACS, REI
Reproductive endocrinologists:
Pedro J. Beauchamp MD, FACOG, FACS
Amaury J. Lloréns MD, FACOG, FACS

Biologists:
Carlos Acevedo MS
Elena González MS
Juan Correa Ph.D., HCLD

Nurse coordinator:
Margarita Crespo RN, BSN

Nurse:
Jessika Nieves RN, BSN
Vilmarie Ocasio, ADN

Medical technologists:
Judith Pérez MS, MT

Assistants:
Ana Dietrich
Kathy Ocasio
Carmen Arrieta Lloréns

Anesthesiologists:
Antonio Mattei MD
Benjamín Muñiz MD

Live Birth Rates - Fresh Embryos
% of transfers resulting in live births

National Average

*PRFC National Ranking based on 460 clinics

Source: fertilitysuccessrates.com
Habla la primera bebé “in vitro”

Al cumplir hoy 17 años Adlin Marie Román rompe el silencio

Marisol niega que corra para un cargo

La insólita historia del asalto al jefe de la Policía

Se gradúa de noveno grado a los 97 años

THE FIRST TEST-TUBE BABY SPEAKS OUT Today, on her 17th birthday, Adlin Marie Román breaks her silence.

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