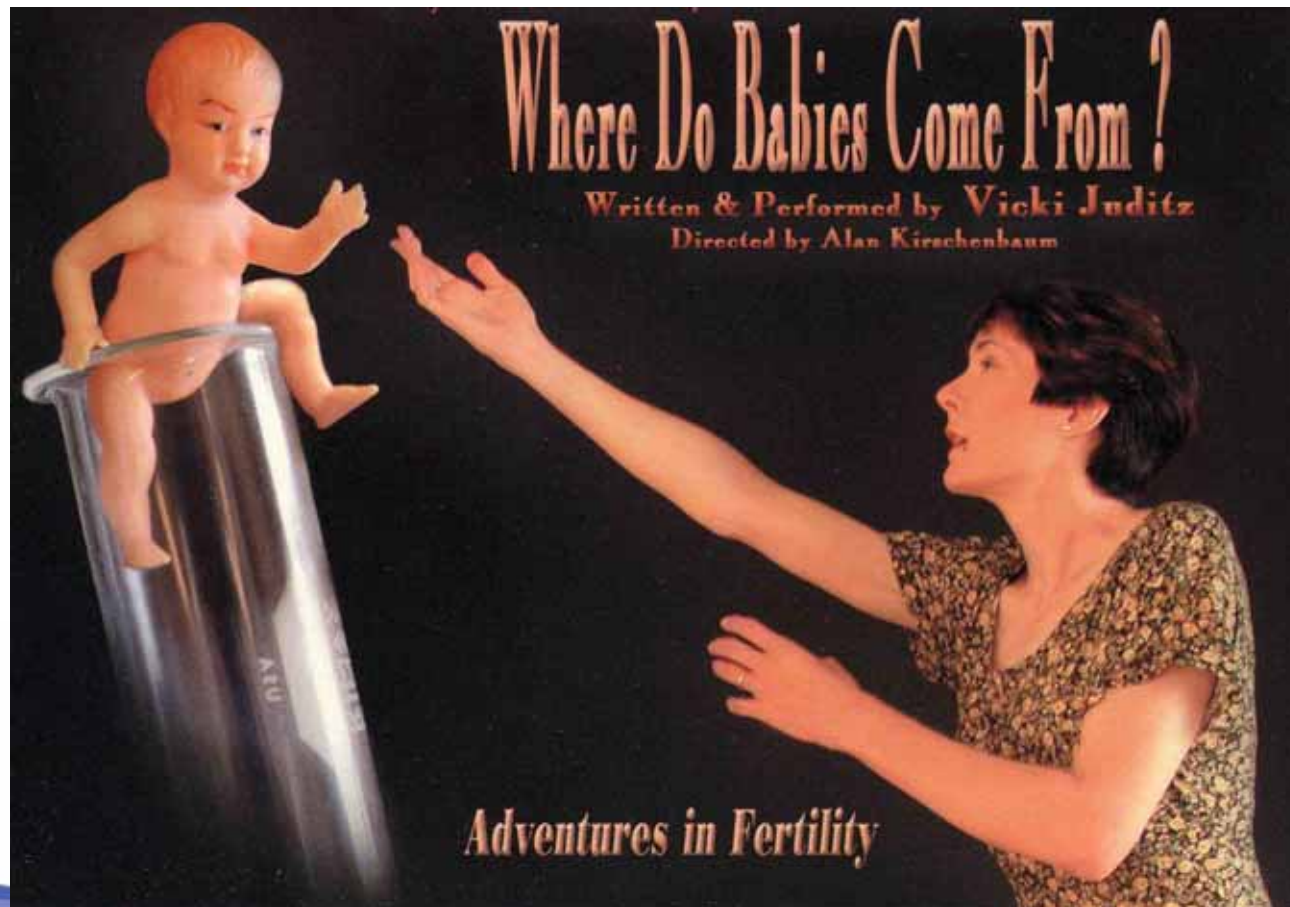


# The History of ART Nursing

**Gayle Norbryhn, RNC WHCNP**  
**FFP Nurse Educator**

# History of ART Nursing in UK & US



## The First ART Success Story

In 1978, Louise Brown became the first baby born using an advanced reproductive technology called *in vitro* fertilization.

# Step toe, Edwards & Jean Purdy, 1<sup>st</sup> IVF Nurse



# The First IVF Baby



# The First IVF Baby

- Louise Brown born July 25, 1978 in Cambridge, UK
- Patrick Steptoe, MD & Robert Edwards, Ph.D.
- Jean Purdy, RN designed ET catheter
- Jean Purdy 1<sup>st</sup> illustration of blastocyst

- 104<sup>th</sup> attempt for Drs. Steptoe and Edwards
- Natural cycle – no stimulation
- Louise has a sister that is the 26<sup>th</sup> baby
- Louise was married in 2004 with Dr. Edwards in attendance
- 2007 Louise has a child of her own

# IVF in the US



**Howard Jones, MD**  
**Professor Emeritus**



**Georgeanna Jones, MD**  
**Professor Emeritus**

# IVF in the U.S.

- July 1978
- Drs. Howard & Georgeanna Jones
- Endowment for creation of “The Jones Institute for Reproductive Medicine”
- Lucinda Veek, embryologist

# IVF Arrives in the US

- 1981 Norfolk Clinic announces the birth of Elizabeth Carr
- 1981 – 1985 IVF Clinics open on the East and West Coast
- 1981 – 1985 the role of the Nurse Coordinator evolves

Cloudy, in 30s tonight;  
rain chance Tuesday  
Winter dress on page 44  
Monday, December 28, 1981

# THE LEDGER-STAR

Final  
edition

106th year, no. 124 -- 25 cents

Norfolk, Portsmouth, Virginia Beach, Chesapeake, Suffolk, Va.



## Test-tube baby born in Norfolk is first in U.S.

By TERRY CARTER  
and AMY GOLDSTEIN  
Ledger-Star Staff Writers

NORFOLK — America's first "test-tube" baby, conceived here last spring and transported into the mother's womb, was born this morning at Norfolk General Hospital.

It's a 3-pound, 13-inch girl, named Elizabeth Jordan Carr.

The Eastern Virginia Medical School, which began attempts at in vitro fertilization in February 1980, announced that the baby was born at 7:30 a.m. The girl and her parents were repaired during the, according to IVMS spokeswoman Yvonne Jones.

The mother is Judith Carr, a 30-year-old schoolteacher from Washington, Mass. The father, Roger Carr, is a 30-year-old mechanical engineer.

The baby was delivered by Cesarean section by Dr. Mason C. Andrews, chairman of the Department of Obstetrics and Gynecology at IVMS.

"The baby is in good condition," Andrews said. "This is just a symbol of the process, and I think a very happy one."

He said there were two people in the delivery team, and each was in disposable or "sterile" clothing. He also said he had special gloves. Dr. Andrews and Georgetown Jones, the obstetrician who has her specialties in in vitro effort.

"She's being treated as a normal newborn," said Dr. Fred Work, chief pediatrician at Norfolk General. He said Andrews do not anticipate the baby's developing any special problems.

"She will be a normal baby very well," he said. "She's already had her first feeding."

Andrews mentioned that the baby's

a small hospital conference room to examine the medical team and learn to experience.

The mother checked into the hospital at 2 p.m. Sunday, officials said. She was still sleeping at mid-morning after giving birth.

Officials said Mrs. Carr was pregnant with the program last Jan. 30, and a frozen egg from her ovary was fertilized with her husband's sperm in April 12. Two days later, officials said, the embryo had grown to four cells and was transferred into Mrs. Carr's womb.

Before entering the in vitro program, officials said, Mrs. Carr had five total pregnancies, and was in

tubes had been removed because of a recurring problem with total program use.

A crew from the British ITV network filmed the birth and is producing a non-fiction television documentary, including interviews with the parents and the medical team, for the British office of the Public Broad-casting Service.

The documentary's producers said in private, Peter Williams, made a error for five three years ago on the birth of the world's first "test-tube" baby in England.

"Mason Andrews had seen the film and liked it. That's why we're making the documentary," Williams said in 1978.

The world's first "test tube" baby, also a 3-pound, 13-inch girl, was born July 26, 1978 in Oldham, England. The birth was the culmination of 10 years of experimentation and research by Dr. Patrick Steptoe, one of Britain's leading gynecologists, and Dr. Robert Edwards, a Cambridge University physiologist.

Last month, Steptoe said 30 in vitro babies had been born this year in England and Australia.

Karen Corrigan, spokeswoman for Norfolk General Hospital, said today that "We are all excited and happy. Everybody is happy and excited and thrilled."

Earlier this month the Ledger-Star journal carried an article about the first American woman to give birth to a test-tube baby. The woman, who lives in the West Coast but was not identified at her request, had been treated at the Oregon-Edwards clinic in England.

*'This is just a symbol of the process, and I think a very happy one.'*

— Dr. Mason C. Andrews

arrived at IVMS by her gynecologist.

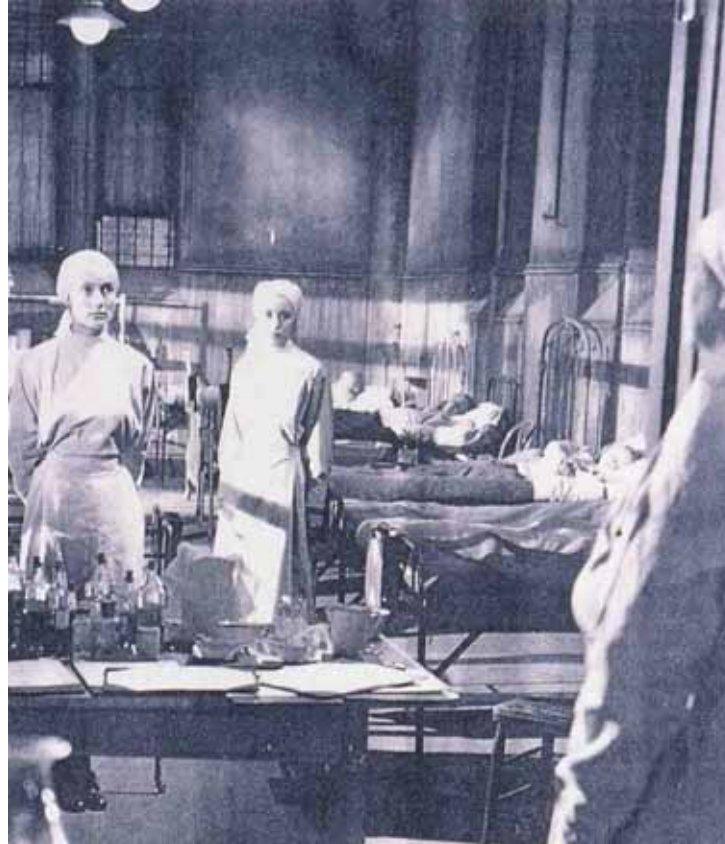
Three other women have been fertilized at the IVMS in vitro clinic and have not yet given birth, Jones said. The clinic failed in attempts to in vitro programs 41 women in 1981 but was successful in two of 31 attempts this year.

Earlier this year, the clinic began accepting as many as three eggs at a time from the mother to increase chances of conception. Fertility drugs increasing hormones are used to increase the number of eggs the woman produces each month.

# Elizabeth Jordan Carr



The early IVF Coordinators were eager for information and education. No formal REI training in schools of nursing



# How It Started

- Medication – Pergonal
- No patient injection teaching tools
- Abdominal ultrasounds
- No agonists initially
- Abdominal retrievals on call to LH surge
- Laboratory research
- No frozen embryos led to donor egg

Coordinators want to separate “Fact from Fiction” What is the source of Pergonal? Why is it costly?



The rumor about the convent is proven true.....



The first OPU's were done by laparoscopy and lasted about two hours



The first portable incubators depended on cleavage (nurse's) Suction was usually syringe or wall suction

# Networking Landmarks: ART Nursing

- 1985 eight nurses meet at the Chicago conference and express a need for Nursing Education
- 1986 Serono listens and the first IVF Coordinator's Conference is held in Houston
- 1986 First Nursing Abstracts are presented
- 1987 Serono sponsors the First Nursing IVF Post Graduate Course is presented at ASRM/World Congress in Norfolk, Virginia
- 1989 First Sub-specialty certification exam for Nurses in Reproductive Endocrinology is offered by NAACOG
- 1990 Nurse's Special Interest Group ASRM
- 1990- Present Serono continues to support Nursing Education via Symposia
- 1992 FNCE New Nurse Preceptorship Program/ Ended 2005
- 2004 Jean Purdy Award
- **2007 First International Nurse's and Mental Health Professional's Meeting Brazil!**

# Technological Innovations Impacting the IVF Coordinator

- Ultrasound Guided OPU (abdominal transducer)
- Vaginal Ultrasound Guided OPU
- ICSI
- Egg Donation
- Gestational Surrogacy
- PGD
- Oocyte Cryopreservation

# Once again Nurses' uncover "Fact vs. Fiction" "Where does recombinant come from?"

- A Chinese hamster ovary cell is used and coded genes are inserted



# Changes Affecting Nursing Care & Patient Education

- 1976 Pergonal IM
- 1976 Progesterone IM (off label)
- 1986 Agonist SC (off label)
- 1986 Vaginal Progesterone (off label)
- 1986 Metrodin IM
- 1996 Fertinex IM/SC
- 1997 Gonal F SC
- 2001 Gonal F Multidose SC
- 2001 Ovidrel SC
- 2001 Cetrotide SC
- 2001 Crinone Vaginal Application
- 2004 Gonal F RFF Pens
- 2005 Luveris SC

# International Breakthroughs in ART

## Australia

- 1983 Frozen Embryo Baby
- 1984 Donor Egg Baby

## United States

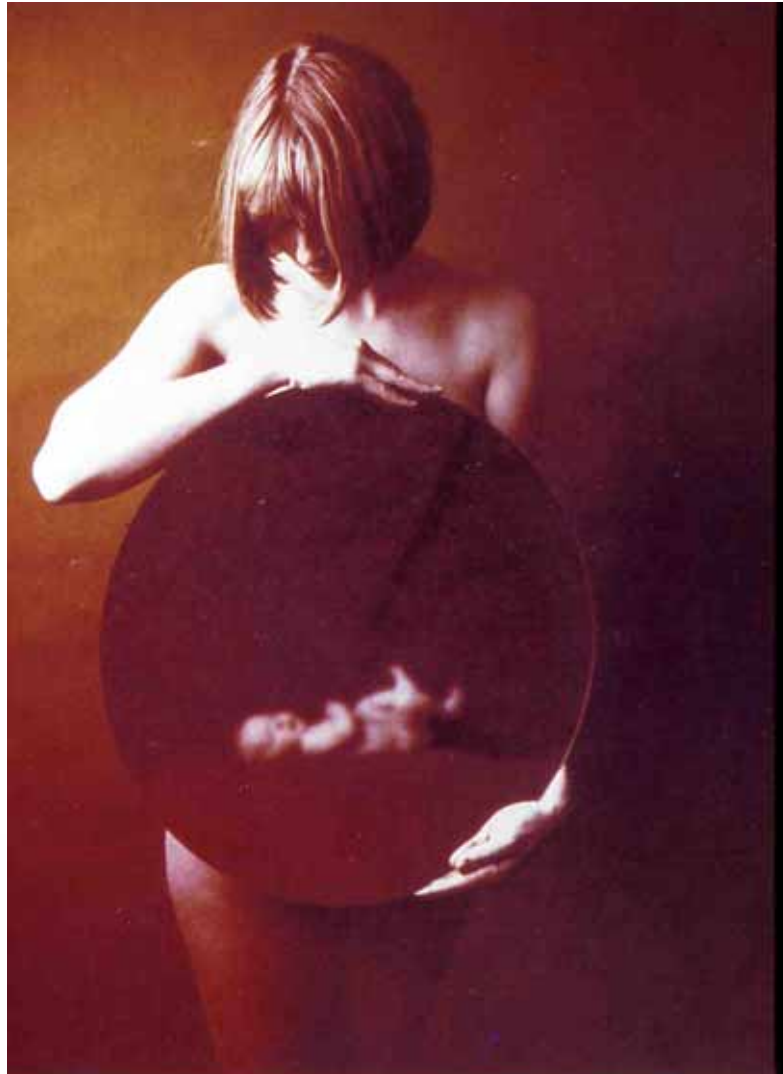
- 1984 Frozen Embryo Baby
- 1984 Donor Egg Baby
- 1988 GIFT
- 1993 ICSI
- PGD
- 2006 Live Birth Oocyte Vitrification

# Current Practice

- Many meds and delivery techniques
- Teaching tools
  - CD's, DVD's, websites, printed instructions, demonstration kits
- Vaginal ultrasounds
- Vaginal retrievals
- Laboratory advancements
  - Pre-implantation genetics (PGD)

# What's Next ?

- Continued laboratory advancements
  - Oocyte freezing
- Oral medications
- Stem cell research for specific diseases
- Fertility Preservation



“When love and skill work together expect a Masterpiece”. Ruskin

# Our Common Goals!



# Nursing Roles

- **Infertility Clinic Roles**
  - a. **Staff Nurse**
  - b. **OR/RR Nurse**

# Nursing Roles

## •Case Management Roles

- \* Patient care management
  - \* Orientation
  - \* Testing
  - \* Medications
  - \* Cycle Management

# Nursing Roles

- **Program management examples**
  - IVF Coordinator**
  - PGD Coordinator**
  - IUI Coordinator**
  - New Pt. Coordinator**
  - DE/DI Coordinator**

# Nursing Roles

- **Education Roles**
  - \* **Education Coordinator**
- **Managerial/Financial**
  - \* **Referrals/Insurance Coordinator**
  - \* **Office Manager**

# Nursing Roles

- **Managerial Nursing Roles**
  - \* **Clinic Coordinator**
  - \* **Nursing Director**
  - \* **COO (Chief Operating Officer)**
  - \* **CEO !!!**

# Nursing Roles

- **Nurse Practitioner**
  - \* **Case Load**
  - \* **Procedures**
  - \* **Physicals**
  - \* **Initial Work-ups**
  - \* **Satellite Clinic/Independent**

# Nursing Roles

- **Pharmaceutical Sales and outreach**
- **Nurse Educators (FFP)**

**Provides outreach to the IVF clinics, research coordination, CEUs, educational programs, Journal Clubs, Newsletters**

- \* **Pharmacy Companies Nurse Liaison (Schraft's, IVP, Village)**

# Nursing Roles

- **Pharmaceutical Sales**
  - \* **Increased need for knowledgeable sales reps**

# Nursing Roles

- **Equipment Sales and Service**
  - \* **IVF equipment**
  - \* **Media**
  - \* **Catheters**
  - \* **Incubators, etc.**

# Nursing Roles

- Entrepreneur Roles
  - Author
  - Consultant-to the industry
  - Independent Practitioner
  - Holistic Health (ND, Homoeopathic)
  - Acupuncture
  - Chinese Medicine
  - Speakers Bureau

# Nursing roles

- **Author**
  - \* **Article (Newsletters)**
  - \* **Magazine Article**
  - \* **Pamphlets**
  - \* **Books**
  - \* **Web Sites**

# Nursing Roles

- **Community Outreach**
  - ASRM membership
  - Specialty society outreach (SART/NPG)
  - RESOLVE and AIA
  - Nursing school outreach

# Nursing Roles

- **Infertility is a young field. We are the pioneers of the way we want infertility patient care to be directed, managed & coordinated. It is up to us to make a difference in the lives of our patients as they search for parenthood.**

*“ Our goal for care is to make your patient experience both positive and nurturing. Whether you achieve a pregnancy and birth of a child, choose adoption to build your family or decide to remain childfree, we hope to provide nursing expertise and the emotional support you need during this stage of your life.”*

