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CURRENT DEVELOPMENTS AND ISSUES: A SUMMARY

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BIRTH REGULATION

Mother to be tried as "drug-pusher" following birth of her cocaine-exposed infant

A Florida (U.S.) woman who gave birth to a cocaine-exposed baby in November 1988 has been jailed awaiting trial on felony drug charges.

The mother, Toni Hudson, 29, gave birth to a son who tested positive for cocaine exposure on a urine drug screen. The case was reported to the state child abuse registry and after investigation, the infant was placed in foster care.

Hudson was arrested in December and charged with child abuse and possession and delivery of a controlled substance to a minor. She is being held in the county jail.

In an interview with reporter Sarah Ahmann, Jeff Deen, the Seminole County Assistant State Attorney who is prosecuting the case, said that the mother is charged with "possession" of cocaine "in her system."

"Delivery," defined in the law as the transfer of drug from one person to another, is being applied to mean the placental transfer of the drug from mother to fetus, he said.

"It's a drug-pusher statute . . . [that has] never been applied in this way . . . [but] I think it fits," Deen told the reporter.

SARAH AHMANN. March 1, 1989. Mother to be tried for exposing fetus to cocaine. *Ob. GynNews.* 24(5): 1.

Laws against so-called "fetal abuse" may prove unconstitutional

Laws against "fetal abuse" which attempt to control pregnant women may be unconstitutional because they violate a woman's rights to due process and privacy, Martha A. Field, Professor of Law at Harvard Law School, said at the annual meeting of the American Society of Law and Medicine.

"Forced cesarean sections are the most common manifestation of movement toward greater control of pregnant women," *Ob. Gyn News* reported. " . . . Another potential area of enforced control of the mother concerns women who do not follow all of their physicians' orders during pregnancy."

In the widely publicized Pamela Rae Stewart case a California woman was prosecuted in 1987 for behavior that allegedly led to her son being born with brain damage and eventually dying. She was accused of using drugs during pregnancy, having sex with her husband contrary to doctor's orders, and disobeying her doctor's instruction that she come to the hospital immediately if bleeding began.

After this case, state legislators began to consider enacting explicit laws to control the woman during pregnancy, Field said.

While this legal development has not fully come to pass, Field said, "such laws have sufficient popularity–and the prosecutions, child removals, and even detentions of pregnant women are becoming sufficiently frequent—that it is not too early to prepare a defense against them."

Laws proscribing "fetal abuse" may prove unconstitutional. 1989. *Ob. Gyn News.* 24(2).

Teenage women paid a dollar a day not to become pregnant

Three Denver, Colorado (US) health and hospital clinics have participated in the Dollar-a-Day program that pays teens $7 each week they do not become pregnant. In addition, the women must attend one-hour group sessions one day a week.

The program was conceived by Jeffry Dolgan, Ph.D., Chief of Psychology at Denver's Children's Hospital.

"I thought if I could isolate a high-risk group –low economic, low education, low occupational achievement, and low aspiration–and document [the program'sl effectiveness, other areas could pick up the Dollar-a-Day project," Dolgan told *Ob. Gyn News.*

The program began in an Hispanic section of Denver.

It was necessary to overcome some cultural barriers to work effectively with this first set of women. "These kids really want these babies," Dolgan said.

The program is an attempt to delay a second pregnancy until these young mothers are older.

"This year a million teenage girls will become pregnant," *Ob. Gyn News* reported. "In 1983 it was estimated that each teenage pregnancy costs taxpayers $13,000-$ 18,000 a year for food stamps, welfare, and Medicaid. In contrast, the Dollar-a-Day program costs about $600 a year per girl, including administration and the dollar payouts."

The program has been compared with the subsidy that farmers receive not to grow crops.

DIANA COPSEY. 1988. Teens paid a dollar a day not to become pregnant. *Ob. Gyn News.* 24(8).

"Ovabloc" plugs for blocking fallopian tubes and sterilizing women may soon be available

Injectable silicon plugs for hysteroscopic sterilization will probably become available within the next two years, according to Franklin D. Loffer of the Phoenix Surgicenter.

The Ovabloc plugs are currently being marketed in Europe and are undergoing scrutiny by the U.S. Food and Drug Administration. The data look favorable, Loffer said at the annual meeting of the American Association of Gynecologic Laparoscopists.

The plugs have a preformed tip which is inserted into the tube. Then liquid silicon is injected inside and a dumbbell-shaped plug is formed at the other end.

Dr. Philip G. Brooks of the University of Southern California School of Medicine in Los Angeles cautioned that the hysteroscopic sterilizations take longer to perform than those done by laparoscopy, that they seem to have a higher rate of complications, albeit minor ones, and that the pregnancy rate is no better than for laparoscopic procedures – about 6 per 1,000.

Ob. Gyn News. February 1, 1989. Injectable silicon plugs for sterilization may be available soon. 24(3):9.

IN VITRO FERTILIZATION

Estranged U.S. couple battle over seven human eggs fertilized in IVF program

An estranged couple's battle over the control of eggs fertilized in an IVF program went to trial in State Circuit Court in Maryville, Tennessee August 7, 1989. At issue is whether Mary Sue Davis, 28, can seek implantation of the embryos, fertilized by her husband's sperm, to try to become pregnant. Mrs. Davis is a former service representative for a Knoxville boat dealer.

Her husband, Junior Lewis Davis, a refrigeration technician, says he has a right to control his own reproduction. He is suing for veto power over the use of the embryos. Davis, 30, says that for now he has no desire to become a father.

Meanwhile, the IVF physician involved, Dr. I. Ray King, is recommending that the frozen embryos

remain in his control. Later they would be donated anonymously to an infertile couple, he states.

Charles Clifford, Davis' lawyer, said: "The position of Junior Lewis Davis is that no disposition of the pre-embryo should be made until he and Mary Davis agree that their rights in this very unique material are joint and equal."

"Judge W. Dale Young must decide if the embryos deserve consideration as a potential child and therefore choose who would better serve the interests of a child, or if the embryos should be considered property and settled as in a regular property dispute," *The New York Times* reported.

John A. Robertson, a law professor at the University of Texas and a member of the American Fertility Society's ethics committee on the new reproductive technologies, testified at the trial that the case should be decided in favor of the one who would be hurt worst by losing: the husband. Mary Sue Davis, he said, can try another IVF program if she loses, which would be less of a burden on her than unwanted parenthood would be on Junior Lewis Davis.

The eggs, Mrs. Davis said shortly after the divorce suit was filed in February, were the result of years of surgery, tests and injections. They were her best chance of having a child, she added.

She had five tubal pregnancies after the marriage in 1979, she said, resulting in the rupture of one fallopian tube and the tying of the other. Then she entered the IVF program run by Dr. King of Knoxville at the Fertility Center of East Tennessee. Originally there were nine eggs. Two were implanted, unsuccessfully, before the marriage disintegrated.

Mrs. Davis underwent six unsuccessful IVF attempts.

"That ought to tell you how much I want to have a child," she said. "People say I could start all over again, but this takes a lot out of you, and my time is running out" *(New York Times,* April 22, 1989).

Clifford, her husband's attorney, said: "Our point is that nothing that Mrs. Davis has been through gives her the right to compel Mr. Davis to be a father, to deprive him of his rights. To tell Mr. Davis that he doesn't matter in this at a time when we are trying to make fathers equal partners to and responsible in the reproductive process is somehow not right."

When the custody, rather than property, approach is taken to the issue, commented Arthur Caplan, director of the Center for Biomedical Ethics at the University of Minnesota, ". . . the question is what greater right does Mrs. Davis have than Mr. Davis, since this kind of embryo can theoretically be implanted in any woman's uterus? We have some problems here."

In an editorial on the case, *The New York Times* commented: "Mrs. Davis has said she neither wishes to force anything on her husband nor take anything–child support included-from him . . . Mr. Davis says he is being 'raped of my reproduction rights,' and that the fate of the eggs 'is a joint decision.' And it is understandable that he might have strong feelings of fatherhood even in the absence of financial and legal obligations. However, there would be no joint decision involved if Mrs. Davis were pregnant and wanted to abort: the decision would be hers alone.

"A law professor from the University of Texas suggests that Mrs. Davis find herself another [sperm] donor. But in view of her medical history, and the emotional and physiological pain she has already encountered during the in vitro procedure, his good idea seems careless, even callous."

On September 21, 1989, Judge Young awarded temporary custody of the embryos to Mary Sue Davis, stating that the evidence led him to conclude that the embryos were "human beings existing as embryos."

"The court finds that human life begins at the moment of conception," he wrote.

The judge declared that the embryos were children, not property.

Journalist Ronald Smothers reported: "In effect, he treated the case like a typical custody dispute in which the overriding concern is in the best interest of the child. That is what Mrs. Davis had argued, saying that the case involved custody issues and questions related to a woman's right to choose whether to bring a pregnancy to term."

Judge Young declared: "From fertilization, the cells of a human embryo are differentiated, unique and specialized to the highest degree of distinction . . . [Thus] human life begins at conception."

Jana B. Singer, specialist in family law at the University of Maryland Law School in Baltimore, said that "the logic of the court's decision does have some disturbing implications for abortion rights and for reproductive rights."

By deciding that life begins at conception, the judge "went way beyond what was necessary to decide the case," Singer said.

In an interview with the Associated Press, Judge Young said: "The full focus of the court in the case of children is on what's in their best interests, not what mom wants, nor what dad wants, and not what the grandparents want."

RONALD SMOTHERS. April 22, 1989. Embryos in a divorce case: joint property or offspring? *The New York Times;* August 8, 1989. New divorce issue: embryos' status; *The New York Times,* August 11, 1989. Pre-born children or blastocysts? Ronald Smothers. September 22, 1989. Tennessee judge awards custody of 7 frozen embryos to woman. *The New York Times.*

Italian physician goes into hiding after arranging IVF birth in which a teenager gave birth to her brother

A 19-year-old woman gave birth to her brother, through IVF, to help her mother save her second marriage to a younger man. Dr. Severino Antinori, who practices at Rome's Nuovo Regina Elena Hospital, went into hiding after provoking a public controversy by arranging the surrogate IVF pregnancy.

"I made a suggestion to my daughter Giovanna that she bear my child," said the mother, who has been identified only as Manuela.

Dr. Antinori revealed the birth in November 1988, expecting to be congratulated for his precedent-setting work, Susan Jimison reported in *Weekly World News.* Instead, through days of front page headlines and television specials, the doctor was called upon to defend his actions while the family tried to explain that they had done nothing wrong.

The family said that the mother of three, Manuela, had fallen in love with Marco, a man 13 years younger than she. The couple wanted a child of their own but doctors warned Manuela that she would be unable to have another child.

"To save her relationship with Marco – who very much wanted his own child – Manuela asked her unmarried daughter Giovanna, 19, to carry her baby for her," Jimison reported. "Giovanna consented and Manuela's egg, fertilized by Marco's sperm, was placed in the womb of the teenager."

The baby boy was born in November 1988.

SUSAN JIMISON. December 6, 1988. Girl gives birth to her own brother. *Weekly World News:* 15.

British women pressured to "donate" eggs to IVF clinics, patients' organisations charge

Women seeking sterilization are being pressured by doctors in private hospitals to surrender their eggs to IVF programs, Jeremy Laurance reports in the *The Sunday Times* of London. Because of a severe shortage of donors, the women are being offered free sterilizations when they surrender eggs. The operation normally costs more than 600 pounds. The waiting list for sterilizations on the National Health Service (NHS) is two to four years in some areas, the Family Planning Association said, so the offer of a free private operation was "very persuasive."

Patients' organizations say the free operation amounts to a bribe. It could lead to exploitation, they assert.

The case of a woman who was told by a private Lister hospital said she could have a sterilization only if she agreed to surrender her eggs has lead to a call for an investigation of hospital practice.

"The woman was offered the operation in a private hospital in return for her eggs after a dispute between the gynaecologists and the health authority where she lived had halted NHS sterilisations," Laurence reports. "The woman's general practitioner has complained to her MP and this week her case is to be taken before the licensing authority that monitors the test-tube baby clinics."

The Lister hospital in west London has 120 couples waiting for egg donations, Laurance noted.

Sam Abdallah, consultant gynaecologist at the hospital, told *The Sunday Times:* "If a woman wants to donate eggs and that is her prime motive, but she also wants a sterilisation, we will do it free of charge. We are not offering free sterilisations in return for eggs."

But, Laurance pointed out, when a Sunday Times reporter called the hospital to inquire about sterilization, a secretary in the fertility clinic, without being asked, said: "If ladies are willing to donate their eggs, it's free." She said the cost would otherwise be 670 pounds.

The Bupa hospital in Manchester also offers free sterilizations to women who surrender their eggs. Said fertility clinic director Adrian Lieberman: "If a woman wishes altruistically to give up her eggs, we would be grateful."

Because of the hazards involved, egg donation is not comparable to sperm donation. The women are injected with hormones before the eggs are captured under general anesthesia. Some women suffer side-effects, Laurance points out.

Elaine Crook, 34, a hysterectomized woman who volunteered to donate eggs after hearing of the Lister hospital's desperation for donors, had to have daily hormone injections for 14 days, sniff a nasal spray every four hours, and visit the hospital twice for ultrasound scans, Laurance reported. Ten eggs were obtained from her by inserting a tube through the vagina under light general anesthesia.

Specialists told *The Sunday Times* that the egg shortage is getting worse because couples can now have all their eggs fertilised and the embryos frozen for their own future use. So they are reluctant to donate the eggs to others.

Commenting on the egg donation issue in *The Independent,* William Thompson, professor of obstetrics and gynecology at Queens University, Belfast, Northern Ireland, said: "What happens to these eggs? Those taken will be sold to someone else. It is then the business of the sale of a commodity. What will patients be charged? Someone will make a huge profit out of this."

JEREMY LAURANCE. May 14, 1989. 'Blackmail' at fertility clinics. *The Sunday Times;* CELIA HALL. May 5, 1989. Inducement offer to women for eggs 'unethical'. *The Independent.*

Most women undergoing sterilization unwilling to surrender eggs to IVF clinics, U.S. physician finds

Women undergoing laparoscopic sterilizations are apparently not a good group to approach for egg donation, even when they are compensated, Dr. Michael Feinman reported at the annual meeting of the American Association of Gynecologic Laparoscopists in Dallas, Texas.

"It seems there is no easy way to get donors," Feinman, of Albert Einstein College of Medicine, New York, said.

Ob. Gyn News reported: "The shortage of donated oocytes has recently become more acute because of the increasing number of centers that use them."

In late 1987, Feinman and associates began approaching women undergoing tubal ligation and asking them to donate eggs.

"Because the women have to undergo some risk by taking Pergonal to stimulate their follicles, a decision was made to offer them $500," *Ob. Gyn News* stated.

During a three month period, 194 women underwent laparoscopic sterilization. Of these, 153 were ineligible as egg donors because of age, pregnancy and other reasons. Of the remaining 41, only five were willing to donate their eggs.

"During the discussion that followed," the newspaper reported, "Dr. John J. Stangel of New York Medical College, Valhalla, said that despite the high percentage of reluctant individuals, sterilization patients are a good group to approach for egg donation because many have demonstrated previously that they are fertile."

Ob. Gyn News. February 1, 1989. Finds few sterilization patients willing to make oocyte donation. 24(3):5.

Nightmare of high-tech rape one example of the stress women experience in IVF program, Australian report reveals

The mother of an IVF baby has told researchers her biggest fear before implantation of the fertilized eggs was that doctors would make a mistake and use sperm that did not come from her husband, Peter Terry reported in *The Australian.*

The nightmare was described in a report prepared for the West Australian Health Department. Written by Sandra Webb of the department's epidemiology branch, the report is based on a detailed survey of 26 IVF mothers.

It found that 92% of IVF couples found the treatment stressful. Almost half described the stress as extreme.

"More than 80% of the women described their biggest worry as the long-term effects of the drugs they had to take," Terry reported. "But more than a third complained of their anxiety over the number of embryos the drugs made them produce and the experiments that might have been taking place on the discarded embryos.

"The treatment itself disrupted their daily lives; its chances for success were low; its high cost caused couples considerable financial worries . . . More than a quarter of the women who took part in the survey said they changed their attitudes toward their partners as a result of the IVF program and in the main those changes were negative."

PETER TERRY. May 24, 1989. Nightmare of high-tech rape haunts IVF programs. *The Australian.*

Congress releases survey revealing low success rates of U.S. IVF clinics

The overall IVF success rate for U.S. clinics in 1987 and 1988, when defined as the number of live births per stimulation cycle, was 10%. The rate for IVF was 9% and for GIFT 14%. Between 1987 and 1988 the "take-home baby rate" for IVF remained at 9%. The rate for GIFT rose from 11 to 16%. The total number of women enrolled in IVF clinics rose from 10,598 in 1987 to 13,597 the following year.

These findings of a national survey of IVF clinics were released at a Congressional House subcommittee hearing on IVF.

"The need for strict guidelines concerning the practices, ethics, and advertising of infertility clinics; a standard definition of clinics' 'success' rates; and stepped-up efforts by the Federal Trade Commission to investigate centers or individual physicians suspected of misrepresenting their success rates" were proposed at the Congressional hearing, Miriam E. Tucker reports in *Ob. Gyn News.*

The congressman holding the hearings, Rep. Ron Wyden (Democrat-Oregon), chairman of the House subcommittee on regulation, business opportunities and energy, plans to submit legislation that will require all IVF and GIFT laboratories to be subject to the same government regulation as are other medical labs.

Wyden released the results of an IVF clinic survey compiled from responses to questionnaires sent to 260 U.S. infertility clinics–all those believed to be doing IVF or GIFT.

Thirty-two clinics did not respond. Twenty-seven were no longer performing the procedures. Thirty-six were duplicates. One hundred forty six provided complete data for 1987 and 1988.

Physicians and government members at the subcommittee hearing differed over how to define success rates. Physicians preferred "deliveries per egg retrieval attempt." Government members wanted "live birth per stimulation cycle." The 1987 overall IVF success rate goes up two points – from 9% to 11 % – if the physicians' definition of success is used.

Dr. Martin M. Quigley of Cleveland, president of the Society of Assisted Reproductive Technology (SART), told the subcommittee that egg recoveries, rather than stimulation cycles should be used by measuring success rates, since 20-25% of stimulation cycles are terminated before egg recovery is made and are not as costly.

Dr. Richard P. Marrs, director of the Institute for Reproductive Research at the Hospital of the Good Samaritan, disagreed. He pointed out that each stimulation cycle costs $2,000, a significant amount.

Gary B. Ellis, Ph.D., director of a U.S. Office of Technology assessment study on infertility issues, commented: "Stimulation cycles, not egg retrievals, are important for patients. You have to start at the bottom of the staircase, not the middle."

The data on success rates were derived by counting as live births the percentage of continuing pregnancies at the time of the survey that were expected to result in delivery.

Of the 70 clinics with live births, the lowest success rate (live births per egg recovery) was 1.5% and the highest, 25.3%. Three clinics reported rates greater than 20%, and 16 rates greater than 15%. Nine clinics had rates lower than 5 %, and 20 rates lower than 8 %. The remaining 39 clinics ranged between 8% and 15%.

Many newer clinics have been telling patients their rates of clinical pregnancy per attempted egg recovery rather than mentioning live births because "it takes a few years to get a good track record" of producing babies, Dr. J. Benjamin Younger of Birmingham, Alabama, president of the American Fertility Society, told the subcommittee.

Ellis showed the subcommittee several examples of misleading advertising by IVF clinics in which various manipulations of numbers were used to exaggerate success rates. This, he said, has created a situation in which "the doctor/patient relationship is fast becoming a vendor/consumer relationship with the ethic 'let the buyer beware.'"

Ellis suggested that Congress direct the Federal Trade Commission to examine whether advertising of success rates at various infertility clinics is misleading, and if so, to issue regulations for standardizing the reporting of results.

The Federal Trade Commission, which is charged with truth-in-advertising enforcement, "has been absolutely sleepwalking on this issue," Rep. Wyden said.

Defining the main problem as the lack of regulation of IVF, Wyden said: "At present, there is virtually no professional or government oversight of this booming industry. Any practitioner can hold himself out as a fertility specialist."

According to Younger, because of the malpractice crisis, many former ob/gyns are now calling themselves "gynecologist and fertility specialists" with little or no additional training in infertility treatment.

At the hearing, Wyden promised that he would try to promote funds for infertility and IVF research. He expected to find bipartisan Congressional support for the funding, he said.

MIRIAM E. TUCKER. 1989. Congress eyes possibility of regulating infertility clinics; releases results of success rate survey. *Ob. Gyn News*.24(8):l.

If IVF fails, try ZIFT, German researchers suggest

Zygote intrafallopian transfer (ZIFT) is an alternative for women in whom

previous IVF attempts have failed, according to Dr. Miklos Hamori and associates of the In Vitro Fertilization Clinic in Wurzburg, Federal Republic of Germany.

The clinic performed ZIFT in 42 women in whom artificial insemination and at least one IVF attempt had failed.

For the ZIFT technique, IVF is performed and fertilized eggs in the pronuclear stage are transferred to fallopian tubes by laparoscopy. ZIFT allows tubal transport of the embryos to the uterus.

In Hamori's sample, 12 of the 42 women became pregnant, two with twins. There were two spontaneous abortions at 9 and 11 weeks gestation.

The advantage of ZIFT is the opportunity to screen and eliminate abnormally fertilized eggs. Hamori and associates maintain (Fer-til.Steril. 50:519-21. 1988).

Zygote Intrafallopian Transfer 'alternative' when IVF methods fail. 1989. *Ob. Gyn News.* 24(8).

When IVF success rate rises, GIFT may be phased out, specialist says

The IVF success rate is expected to match or exceed that of GIFT in the near future through improved laboratory and culture techniques and this, according to Dr. Alan Trounson, will signal the phasing out of GIFT.

With IVF, embryos are created in the laboratory. None are created in GIFT as the egg and sperm are inserted directly into the fallopian tube.

Trounson, director of the Centre for Early Human Development at Monash University, was speaking at the annual Biological Sciences Symposium organised by the Family Planning Federation of Australia in Bellarat, Victoria.

The administration of gonadotrophin releasing hormone (GnRH) by minipumps for ovulation induction can be a satisfactory way of treating anovulation due to deficient gonadotrophin secretion, he said. The use of GnRH agonists and antagonists will simplify IVF treatment and increase the success rate, he believes.

Trounson predicted an increase in pregnancies arising from cryopreserved embryos and, when the problems with egg freezing are solved, with unfertilised frozen eggs. He also predicted an increased interest in surrogacy for women without functioning uteri along with the introduction in IVF of the diagnosis of chromosomal and genetic errors to reduce embryonic wastage and the occurrence of miscarriage and birth defects.

Recent advances in microinsemination techniques will likely increase the probability of assisting infertile men, Trounson said, adding: "Unfortunately, these techniques involve the female partner in IVF even though she may have no particular infertility problem herself. This situation must involve a substantial commitment between the partners and the need for each to recognise this commitment."

Professor Roger Pepperell of the ob/gyn department at the University of Melbourne told the conference that the use of clomiphene citrate, GnRH and bromocriptine, alone or in combination, virtually guarantee that a woman can be made to ovulate, providing there are follicles remaining within the ovaries.

All forms of ovulation stimulation, with the exception of that believed with bromocriptine, have the potential to cause ovarian over stimulation which, as well as causing multiple pregnancies, can lead to large ovarian cysts, haemoconcentration, ascites and even death, he said. He stressed the importance of monitoring.

TREVOR ROBBINS. March 24, 1984. IVF trend increasing; Therapy to stimulate ovulation. *Australian Dr Weekly:40.*

New report reveals low IVF success rate in Australia

IVF in Australia and New Zealand has a success rate of only 8.3%, lower than the popularly held figure of 15% which is arrived at by counting clinical pregnancies rather than live births after IVF. The 8.3

figure is calculated as the success rate of one hundred treatment cycles commenced.

"It slightly over-estimates the success rate throughout the nation because not all in vitro fertilisation units reported the number of cancellations before the stage of oocyte retrieval "egg collection," Margaret Rice writes in *Medical Observer.*

The report on IVF statistics was jointly published by the National Perinatal Statistics Unit at the University of Sydney and the Fertility Society of Australia.

The GIFT success rate is 16.2.

When only those treatment cycles reaching the stage of egg retrieval are considered, the success rate for IVF rises to 9.5 per 100 treatment cycles and to 17.4 for GIFT. Dr. Paul Lancaster, director of the National Perinatal Statistics Unit, believes this is a more practical measure of the program's success than consideration of the treatment cycles commenced.

"The new measurement system acknowledges that it often takes each woman more than one treatment cycle to achieve a successful IVF or GIFT pregnancy, and that the number of cycles of treatment offered to each woman will vary from unit to unit," Rice points out.

The report entitled "IVF and GIFT Pregnancies, Australia and New Zealand. 1987" examined the most recent data from all 18 IVF patients in Australia and two in New Zealand. It includes information about births up to September 1988.

Success rates varied markedly at centers across the country, the report showed. The pregnancy rate per 100 cycles reaching the stage of oocyte retrieval varied between 2 and 15 in individual centers. The rates after GIFT ranged from 12.6 to 30.3 per 100 cycles in various centers.

The report notes: "The incidence of major congenital malformations was 2.2% after IVF and 3.1% after GIFT. Among the IVF births, there was an excess of infants with spina bifida and with transposition of the great arteries. Among the GIFT births, the served number of infants with major urinary tract malformations was greater than expected."

The report also noted the higher incidence of ectopic pregnancy, spontaneous abortion, preterm delivery, low birth rate and perinatal death among IVF and GIFT pregnancies than among infants naturally conceived.

There were 920 pregnancies, 819 clinical pregnancies, and 753 births in the 1987 IVF cohort. There were 548 GIFT pregnancies, 516 clinical pregnancies and 445 births.

MARGARET RICE. March 17, 1989. IVF birthrate down, or is it? *Medical Observer:* 26-27.

Infertility drugs may lead to early menopause, editor of book on women's experience of reproductive medicine states

"More and more women are finding that infertility drugs lead to early menopause, some women ceasing menstruation as early as 30," Dr. Renate Klein, editor *of Infertility: Women Speak Out About Their Experiences of Reproductive Medicine* (Pandora Press, 1989), said in an interview with the *Geelong Advertiser's* Slavka Brdar. No one has done a study on it yet, but it makes sense when you consider that women are supposed to produce one egg a month and fertility drugs make them ovulate up to 49 times in one month.

"Few people realise that Clomid, the most popular fertility drug, causes enlarged and ruptured ovaries, ovarian cysts and other serious side-effects," she added.

"New procedures and techniques are being discovered all the time with no thought to the possible effect it may have on the women or children involved in five or ten years time. The advances in IVF inevitably lead to embryo experimentation which is a big research interest but requires a constant flow of eggs."

Dr. Klein said of her book: "I hope a lot of people read this book and realize

that it is not just about a few hysterical women who are upset about not being able to have a baby. Doctors have tried to make it look like the failures are only a few unfortunate cases when the truth is the reverse – very few women go through IVF unscathed and fewer still produce healthy babies."

In the Klein book, Kirsten Kozolanka relates how her infertility treatment started with one Clomid pill.

"... I knew other women who had started with this small dose of Clomid, but swiftly progressed onto a steeper drug regiment. They took Pergonal to ripen more than one egg, a shot of a hormone to release the egg on schedule, Premarin to control the quality of their cervical mucus, Progesterone suppositories to keep the level of that hormone high. They were monitored constantly through blood tests and endless ultrasounds. Sometimes they were also artificially inseminated by a frozen sample of their partner's sperm just to coax things along ... They too had started with five small tablets."

SLAVKA BRDAR. July 26, 1989. Reproductive medicine: exploding myths of a "failed technology." *Geelong Advertiser* (Australia).

Bombay groups concerned with the misuse and abuse of women for scientific development meet to discuss reproductive and genetic engineering

Various organizations in Bombay, all concerned with the misuse and abuse of women for scientific development, met March 12, 1989 as part of the International Women's Day celebrations to discuss the implications of reproductive and genetic engineering, particularly in India.

Chayanika Shah of the Forum Against Oppression of Women, which is organising the workshop, explained why reproductive and genetic engineering were favored for discussion over other burning issues: "The NRT [new reproductive technology] is as vital an issue as any other today and we need to take it up urgently before it is too late. The rampant sex determination tests, indeed a form of NRT, are only an indication of what is to come. Reproductive engineering is also aimed at women. It is, therefore crucial to oppose such destructive technology. Hence the decision to debate it."

Twelve IVF births are said to have taken place in India. "As Shah rightly pointed out," Saroj Iyer wrote in *The Times of India,* "what has been kept a closely guarded secret is the number of failures behind the 12 successful IVF births claimed. How many times does a woman undergo IVF for one successful pregnancy and live baby? What is the ratio of the total number of women who start the IVF programme to actual live births?"

In another article in *The Times of India* critical of IVF, Malini Karkal points to the many low birth weight babies born in India who have a poor chance of growing into physically and mentally healthy adults and to the poor health of many Indian women.

Dr. Indira Hinduja, an IVF practitioner who delivered India's first IVF baby in 1986, is well aware of the poor health of Indian women and of the problems they face, Karkal wrote. She quotes Dr. Hinduja as saying: "In our country tuberculosis is a major cause of infertility by causing irreparable blockage of the fallopian tubes."

Karkal comments: "Tuberculosis and other infections are incapacitating a large section of our population. A doctor suggesting a diversion of huge investments in treating infertility is not only being cruel to the public but is also doing injustice to his professional learning."

Meanwhile, Dr. Hinduja has moved on to GIFT, described by writer Uma Prabhu in *Bombay Weekly Magazine* as "a more sophisticated, sure-fire technique of embryo transfer." She quotes an "elated" Dr. Hinduja saying: "I ventured into trying the GIFT method because I found that the success rate in in vitro was very low. My first GIFT patient is due in

December. So far her pregnancy is normal. All the same, I'm keeping my fingers crossed."

Prabhu writes: "Although not much research has been done, Hinduja feels that the chances of abnormalities in a baby thus conceived are absolutely the same as in an ordinary pregnancy." No studies were cited in support of Dr. Hinduja's "feeling."

SAROJ IYER. March 5, 1989. Whose life is it anyway? *The Times of India;* MALINI KARKAL. February 26, 1989. *Values or technology?;* UMA PRABHU. June 22, 1987. Fertile concept: a new technique of embryo transfer for sterile couples. *Bombay Weekly Magazine.*

Public relations firm explains how it sells IVF to the public for its client, the company IVF Australia

The public relations (PR) firm Creamer Dickson Basford organized a "birthday party" for the 168 test-tube babies conceived by IVF in Australia as part of a public relations strategy for promoting the business of its client. According to an article in the trade journal *PR Week,* Creamer Dickson Basford began working on IVF in Australia in autumn 1987.

There were two main communication challenges, senior account executive Nancy Mensch stated: making people realize that IVF is no longer experimental and presenting IVF in Australia as one of the leaders in IVF.

PR Week reported: "The success story of IVF was thus presented (and is still being presented) to both childless couples themselves and to their doctors – a major source of referrals – many of whom knew little about IVF, apart from its test tube tag, which makes it sound much more clinical, less personal experience than is really the case."

The occasion of the 10th anniversary of the first IVF birth in England, the second birthday of IVF Australia and the start of spring provided an opportunity "for an event that could present the reality of IVF – and its greatest success stories – to as wide an audience as possible."

The public relations firm invited the parents of the 168 test tube babies, the babies themselves and the press to a "birthday" party at the Tavern on the Green in New York City's Central Park. The party was planned as a buffet to give parents and journalists a maximum opportunity to interact.

"We wanted the national press to have an opportunity to see what IVF was about in real terms and to provide them with a hundred human interest stories, and we wanted the specialist medical press to see what new advances had been made in IVF," senior account executive Mensch told *PR Week.*

The party was timed for mid-morning on a Wednesday, *PR Week* reported, "not so early that out-of-town guests couldn't make it but early enough for the press to get maximum play from the story, in mid-week so the story could run on over the next few days ..."

All staff present at the party were trained in dealing with the media, according to the trade journal.

"The media were notified a month before," *PR Week* stated, "reminded once more a week ahead and then contacted again. With each release, the excitement of the event was stressed. TV reporters were told what great photos it would produce, radio people were told that the sound would be fantastic."

The account team at Creamer Dickson Basford used facsimile transmission to ensure that information was distributed efficiently.

"The results speak for themselves," *PR Week* stated. "Eight TV news teams turned up, and two radio teams. There were 36 publications represented, ranging from *New York Post* and *Life Magazine* to *Bride's Magazine* and *Family Circle.* Pick-ups included a front page of *USA Today,* the front of the Metro section of the *New York Times, Newsweek, Life,* and most of the major TV stations."

Evidence of similar public relations strategies can be seen frequently in the

major media. For example: – *The Washington Post* ran a Mother's Day story headlined "test-tube babies reunite at home base" along with a photograph of a crowd of mothers holding their test-tube babies and standing behind IVF physicians Dr. Maria Bustillo and Dr. Joseph Schulman. The story began: "Like the other proud parents at the gathering, Greg and Kathy Roseberry were showing off their baby. 'He looks just like a real baby,' some people say. Or, 'He looks so normal,' said the father of 4-month-old Greg, Jr. 'They think he was in a lab for nine months or something.' The Roseberrys were among the 12 couples who gathered yesterday at the first annual reunion hosted by the Genetics and IVF Institute in Fairfax (Virginia, USA) to celebrate their children, all of whom are 'test-tube' babies made possible by the clinic's work."

"He's 'Daddy' of them all!" ran the *Sun-Herald* headline over the photograph of IVF practitioner Ian Craft surrounded by a host of men holding their test-tube babies. The story read in part: every child in the picture above can thank the man in the centre for the gift of life itself. And "Every mother there can thank the man for her happiness. The children and their mothers were among 40 test-tube babies who joined Professor Ian Craft last week at a celebration party at the Cromwell Hospital in London. Professor Craft headed the medical teams whose techniques brought the children into the world. He made sure, too, that he was in charge at every birth and on hand to congratulate each joyful mother. Last week Ian Craft surveyed his great 'family' with pride while their parents swapped stories of heartbreaking years of infertility."

A U.S. magazine displayed a full-page photograph of parents holding aloft their babies, all conceived in vitro at the Eastern Virginia Medical School. The parents, with their babies, had returned to the clinic in Norfolk, Virginia for a party. IVF practitioners Drs. Howard and Georgeanna Jones stand in the foreground of the photograph with Howard holding Elizabeth, 3, the first U.S. test-tube baby.

In a relatively low-budget public relations tactic, the Fertility Center of New York, the company headed by Noel P. Keane that rents contract mothers to customers, sent out a card to its mailing list with a photograph of small children at a birthday party – cake in the foreground and balloons in the back. The card read: "We're Celebrating 300 Birthdays! Our 300th surrogate baby was born in August, 1989."

New Zealand Times has reported on the publicity campaign of IVF practitioners at Auckland's National Women's Hospital: "Of the 15 test-tube babies born in New Zealand, only two have been photographed publically with their parents. The others have met a glare of media hype nestled in the arms of the doctor who helped conceive them, Auckland's Freddie Graham," Linda Clark wrote. Parents liked keeping the children anonymous "and as for Graham, publicising the programme's successes has proved a powerful way to lobby. In December 1983, when the first two pregnancies were announced, grabbing public interest was vital if the in vitro fertilization programme was to get off the ground."

At that time, IVF was a research project only. But, Clark reported, 'in a slickly produced public relations plug," the three leaders of the IVF program announced to the media that two women had become pregnant and that IVF was now a going concern. The hospital board had little choice but to follow along, committing itself to paying for the IVF.

"Six months later, New Zealand's first test-tube baby girl was featured in newspapers up and down the country, nursed by Graham and described as his 'pride and joy,'" Clark wrote. "... Since then there have been more babies and more photo sessions. And not once have Graham and his colleagues missed the chance to crusade on behalf of their clinic."

But, as it developed, the clinic could not meet the demand for its service which Graham and his colleagues in a sense created.

"The bottom line is that the Hospital Board regards infertility as a low priority and is not willing to put more money into it," Graham explained to Clark.

Auckland Hospital Board chairman Frank Rutter said his board does not regard infertility as a top priority. When all their hospitals were experiencing shortages in money and staff, life-saving and life-preserving services had to take priority, he said. If there is money to be spent on infertility, he added, he would like to see more of it directed towards prevention.

PR Week. April 4–10, 1988. Something to celebrate; RUTH GLEDHILL. February 3, 1985. He's 'Daddy' of them all! *Sun-Herald;* JOEL GARREAU. May 10, 1987. Test-tube babies reunite at home base. *The Washington Post;* LINDA CLARK. March 9, 1986. IVF unit caught in publicity web. *New Zealand Times.*

EMBRYO RESEARCH

Controversy erupts in Australia over embryo testing in IVF program

The IVF watchdog committee of the government of Australia's state of Victoria gave Monash University scientists permission to test human IVF embryos for possible birth defects before implantation in women. This set off a public controversy leading to a decision by the Victoria Minister of Health to impose a moratorium on the experiments.

Only months before the approval, state officials had issued public assurances that no experiments would be conducted on human embryos beyond the stage of syngamy, when the genetic material from the sperm and egg fuse together about 20 to 22 hours after fertilisation begins. Syngamy occurs right before the first cell divides to form two cells.

Under the approved research plan, embryos found to have genetic defects would be destroyed. The scientists believe their experiments would lower the possibility of IVF babies being born with Down's syndrome or other abnormalities and lessen the incidence of abortions. The tests could be used to identify sex-linked diseases.

Legislation regulating IVF provides that experiments on human embryos must be approved by the Standing Review and Advisory Committee on Infertility chaired by Professor Louis Waller. On January 19, 1989, the committee gave that approval.

Six months earlier, the committee had approved the testing of 20-hour-old (presyngamy) human embryos for chromosome defects. The latest decision approved the testing of four-cell embryos, about two days old, that have taken longer than normal to fertilise and that scientists believe may carry genetic defects.

The director of Monash's Centre for Early Human Development, Dr. Alan Trounson, said that if, during the course of the experiments, the technique were found to detect chromosomal defects in embryos, it would be introduced into the IVF clinic "as soon as possible," pending advice from the Waller Committee.

The centre would then be the first in the world to offer embryo biopsy for routine clinical use, Calvin Miller reported in *The Herald* (January 16, 1989).

To biopsy an embryo, scientists remove one cell from a four-celled embryo without destroying it. They inspect the cell under a microscope for genetic damage. If it is normal, they implant the remaining three-celled embryo into the woman. Tests on animals have reportedly shown that the three remaining cells have a good chance of survival.

Scientists would reportedly biopsy the embryos only of those couples at risk of producing an abnormal embryo.

The experiments initially would detect abnormal chromosomes and other abnormal cell characteristics. Later experiments would detect abnormalities at the molecular level – in the genes.

"They would be world firsts that would revolutionize reproduction technology as applied in infertility clinics," Calvin Miller wrote (January 17, 1989).

The law in Victoria stipulates that IVF can only be used for infertile women. Trounson said the law was a handicap because only infertile women could benefit from embryo biopsy. The procedure, he said, could decrease the number of terminations in fertile women at risk of bearing a child with hereditary defects.

Senior researcher Dr. Leanda Wilton pointed out that embryo biopsy would detect only those genetic defects being looked for so scientists would not know whether the embryo was normal in other respects.

"The Monash proposal is a remarkable development in embryo diagnosis," Professor Waller said. "It's part of helping infertile couples establish families."

The embryo experiments, he added, could help prevent the discarding of embryos which doctors believe are unsuitable for implantation but actually are normal (Miller, January 1, 1989).

But community and ethics groups reacted angrily to news of the experiments. IVF critics asserted that genetic analysis of embryos gives scientists too much control over inherited traits. As the technology develops, parents will be tempted to select embryos for superior characteristics, they state.

Dr. Robyn Rowland, senior lecturer in women's studies at Deakin University and a leading IVF critic, told the *Geelong Advertiser* that the embryo testing plan was "only the tip of the iceberg" and forecast moves to genetic engineering and manipulation. As a feminist, she said, she was concerned that the research and scientific study was controlled by men with little interest in the wishes of women. The research, she said, would eventually fall into the hands of commercial interests. Scientists were originally allowed to experiment on embryos up to 20 hours old, but the period was now being extended, she pointed out.

"They have their foot in the door and they will push and push to continue experimentation," she said.

The Right to Life Association announced it was considering a court action to stop the experiments. "Monash is undertaking a selective breeding program and it's an affront to human dignity," Acting President Mary Pretty said (Miller, January 20, 1989).

Nick Tonti-Filippini, the director of bioethics at St. Vincent's Hospital in Melbourne, said January 17 that without government intervention, embryo biopsy could eventually lead to social engineering – the destruction of embryos because of their sex, eye, or hair color. "This is the major issue in IVF – the developing of the genetic control of human embryos," he said. "We have been saying all the way along that this is what IVF is about."

The proposed experiments, he said, would have grave implications for disabled people.

"Disabled people in the future might be regarded as those who escaped screening and a selective destruction process," he said.

National Party Senator Julian McGauran called on Waller to resign: "Professor Waller's committee's decision to approve genetic testing on two day old human embryos is not only in flagrant disregard of the legislation but is also an example of his utter desire to hand over unlimited powers to the scientists. Under Professor Waller's leadership the IVF scientists have been allowed to stretch their activities to the outer limits of the law and even beyond the law" *(The Express,* January 24).

In an editorial January 20, *The Australian* called on the Victorian government to overrule the Waller Committee and disallow the embryo biopsies. It stated: ". . . It is but a tiny step from 'discarding' an embryo because of a defect to discarding it because it has the wrong sex, or in due course the wrong hair colour, or some other allegedly

undesirable physical characteristic. Will we eventually reach a situation where female embryos are routinely destroyed because parents prefer sons to daughters, or vice versa? ... Is parenthood to be understood in the future as a quest for a physically perfect child? What about the status of handicapped people? Are they to be seen merely as unfortunate mistakes which somehow survived an as yet imperfect screening process?"

Responding to the editorial, reader Mark Radnor of Aldgate, South Australia wrote: "We all seem to spend so much of our time in trying to better the lot of the human race yet so many people of your conviction feel that genetic improvement is somehow a sacred cow, not to be touched. Genetic improvement of the human race is the biological equivalent of Columbus' voyage –while you hold that the earth is flat and we will sail off the edge of the world."

In another letter that same January 30, Dr. Simon McCaffrey, an obstetrician-gynecologist at Liverpool Hospital in Sydney, wrote *The Australian:* "The public acknowledgement by doctors involved in the recent delivery of [IVF] quadruplets and quintuplets in Perth that both couples had been offered selective termination of several of their infants in utero to enhance the chances of survival of those remaining exemplifies the totally utilitarian approach which reproductive scientists are applying to their trade.

"Coupled with this was a proposal by Monash University scientists to split early human embryos. Chromosomal faults could be identified ...

"The above examples only reinforce the view that the National Health and Medical Research Council's self-regulative recommendations that research and experimentation should be administered by 'advisory' bodies consisting mainly of medical and scientific experts to be completely fatuous."

The Herald editorialized January 18: "Scientists who move too far ahead of the public risk a negative backlash which could rebound on themselves. If the resulting public debate became sufficiently emotive, for the sake of one battle they could lose the war."

Trounson defended the embryo biopsy procedure, saying it had nothing to do with genetic selection.

"It's just a means of returning some discarded embryos back to the patients," he said. "These are embryos which are normally thrown away or discarded so you would think ethically ... it would be very much in the community's interest to do studies like this." (Doudle, January 18, 1989).

"Along with researchers in England, scientists at the Clayton centre (Monash Medical Centre) have played a leading role in pioneering the technique, which could reap big financial returns for local IVF researchers," Michael Pirrie reported in *The Age* (January 17, 1989). "If the biopsy tests prove accurate and do not harm healthy human embryos, the technology could be marketed worldwide for use by infertile as well as high-risk fertile couples with a family history of genetic disorders. Women who have conceived naturally could have their early embryos flushed from their bodies, examined in the laboratory through biopsy and later returned to the womb if the embryo is healthy, according to local IVF experts."

The Victoria Premier, Mr. Cain, said January 21, 1989 that Victoria would not allow genetic engineering, cloning or any "Brave New World stuff," but would consider the experiments on the two-day old embryos. The Government had previously said it would not permit experimentation on embryos older than 22 hours (Mullaly, January 21, 1989).

Cain said the embryo biopsies were not experimentation for research. It could be argued, he said, that tests to ensure that embryos were normal and fit to be implanted were similar to tests to check for abnormalities during pregnancy.

Premier Cain appears to have changed his position on embryo experimentation. In May 1988, he had written to Roman

Catholic Archbishop of Melbourne Sir Frank Little assuring him that there would be no experimentation on human embryos beyond the stage of syngamy (about 20 to 22 hours after fertilisation begins).

In his letter, the Premier said the standing committee did not have the power to approve human embryo research beyond syngamy.

"In this understanding of the position, Mr. Cain was confirming views stated publicly by the Health Minister, Mr. White, and this was stated by the Premier in the letter," Michael Pirrie reported in *The Sun.* (January 20)

In 1988, Health Minister White said publically that approval would not be given for experiments on human embryos older than 20 hours as he did not believe that the community would tolerate such research.

Robyn Dixon and Michael Pirrie reported in *The Age:* "Members of Mr. White's staff now say, however, that he was referring to embryos specifically created for research, and that experimentation could be done on embryos at a more advanced stage of development if they were 'spare' or leftover embryos in an IVF clinic."

But some MPs involved in the 1987 parliamentary debate (which produced legislative amendments allowing research on embryos up to but not beyond 22 hours after fertilisation begins) told reporters Dixon and Pirrie that they believed the time restrictions applied to all embryos used in research.

"The Opposition spokeswoman on industry, technology and resources, Mrs. Marie Tehan, said no distinction was drawn in the parliamentary debate between spare and experimental embryos, and it was generally believed that the 22-hour cut-off applied to all embryos that might be used in research," Dixon and Pirrie reported.

Tehan added that she believed that the community and other parliamentarians involved in the debate would be concerned if the Government used a technical legal point to override the spirit and intent of the amendments (January 24).

In the spring of 1989, Caroline Hogg, the new health minister replacing White, imposed a moratorium on the embryo biopsy experiments, calling for a review of the human-embryo research legislation. Two members of Waller's committee resigned in protest at the moratorium.

Monash University IVF researchers decided to boycott the parliamentary committee responsible for approving human embryo research. Professor Carl Wood explained that although the scientists had no quarrel with the committee, they felt it was the only way they could express their frustration with the government's moratorium on their embryo experiments.

Trounson said a key staff member involved in the project was applying for work overseas to continue the research. He told *The Age's* Philip McIntosh that with the loss in personnel and funding, the embryo screening technique might never be developed in Melbourne.

He added: "The longer the delay the greater the number of normal embryos will be lost, as all embryos associated with delayed fertilisation are discarded in IVF clinics throughout the world" (April 12, 1989).

Asked by the state for his opinion on the legality of the proposed embryo experiments, Solicitor-general Hartog Berkeley, QC, supported the Waller committee's decision. He argued that experiments could be performed on embryos older than 22 hours if the embryos were "spare." Despite this pronouncement, the controversy over the experiments continued unabated.

The solicitor-general's advice "prompted criticism that there would be a strong temptation to harvest larger numbers of eggs than normally required from women patients on IVF programs by using potentially harmful fertility drugs to provide banks of spare embryos for research scientists," Pirrie reported (April, 5, 1989).

Referring to the resignations of the two Waller Committee members, both known supporters of embryo research, ethicist Tonti Filippini commented in *The Age* (May 9, 1989): "Their resignations and the level of angry comment that followed indicates that the researchers regard this issue as extremely important, though they have maintained that they merely want to test a group of embryos that would otherwise be discarded to save those that are normal. But the number of embryos that might be 'saved' by this means is extremely small."

"From the reported figures, 3% of embryos are late fertilisers and hence suspect. Approximately 10% of these are expected to be genetically normal and hence transferable. The live birth rate per transferred embryo is approximately 3.5%. Thus, in conclusion, approximately one embryo in 10,000 might be 'saved' by this process, not allowing for any damage that might occur."

"The fuss being made by the resignations and the reported boycott of the committee by the scientists would not seem to be warranted unless there was much more at stake than the chance of saving less than one embryo in 10,000. The teams ordinarily accept a loss rate greater than 97%. One can only conclude that the embryo biopsy experiments have far more significance than the scientists' public explanation would lead us to believe."

CALVIN MILLER. January 16, 1989. IVF doctors seek tests on embryos. *The Herald;* MICHAEL PIRRIE. January 17, 1989. Committee approves testing of embryos for defects. *The Age;* ROSEMARY MULLALY. January 21, 1989. Cain orders IVF legal check on embryo test. *The Australian.* SANDRA OLSEN. January 19, 1989. Designer babies in pipeline–expert. *Daily [Sydney] Telegraph;* CHRISTOPHER DOUDLE. January 18, 1989. Embryo plans labelled 'baby engineering.' *The [Adelaide] Advertiser;* SID MAHER. January 18, 1989. Warning on checks for embryo defects. *The Courier-Mail;* CALVIN MILLER. January 17, 1989. Tests on IVF embryos 'serious mistake.' *The Herald;* CALVIN MILLER. January 20, 1989. IVF committee split on embryo experiments decision. *The Herald;* January 18, 1989. Protest at move to test embryos. *The West Australian;* CLAIRE HEANEY. January 19, 1989. Feminist's 'designer babies' warning. *Geelong Advertiser;* IAN MUNRO. January 21, 1989. Embryo tests: new row flares. *The Sun;* January 20, 1989. Victoria's genetic engineering problem. (Editorial). *The Australian;* MARK RADNOR and SIMON MCCAFFREY. January 30, 1989. IVF eroding human values. (Letters to editor). *The Australian;* January 24, 1989. IVF boss should resign, says MP. *The (LaTrobe Valley) Express;* January 18, 1989. Ethics and IVF. (Editorial). *The Herald;* ROBYN DIXON and MICHAEL PIRRIE. January 24, 1989. Older embryos may still be tested. *The Age;* DEBORAH STONE. January 20, 1989. Embryo testing ruling touches off IVF row. *The Australian;* MICHAEL PIRRIE. March 23, 1989. IVF committee member quits over tests ban. *The Age;* PHILIP MCINTOSH. March 31, 1989. Another embryo scientist quits over research row. *The Age;* April 5, 1989. The embryo enigma. *The Age;* MICHAEL PIRRIE. April 1, 1989. IVF committee backs Hogg on moratorium decision. *The Age;* PHILIP MCINTOSH. April 12, 1989. IVF move an 'act of desperation.' *The Age;* NICHOLAS TONTI-FILIPPINI. May 8, 1989. More at stake than one embryo in 10,000. *The Age.*

Embryo screening experiments proceed in Britain

Researchers at London's Hammersmith Hospital will soon be trying out an experimental technique to screen two-day-old embryos for a faulty gene before implanting them in women's wombs. Eggs will be removed from the woman, fertilized with sperm in the IVF procedure, and the resulting embryo will be screened.

Professor Robert Winston, head of fertility studies at Hammersmith, said the new genetic amplification tests in which a

cell is removed and checked for defects had already been carried out on about 400 embryos in the laboratory, but none had yet been implanted in the woman after being screened. The report on these experiments in *Australian Dr. Weekly* did not state how the 400 embryos had been obtained.

Embryo checks for IVF. March 31, 1989. *Australian Dr. Weekly.*

Scientists reporting tales of secret experiments on excess embryos from IVF programs

IVF practitioners are stockpiling more than 200,000 frozen human embryos in clinics across Europe.

"Numbers are heading for the millions because of the absence of controls over IVF clinics, and scientists are reporting tales of secret experiments on excess embryos," Calvin Miller reports in *The Herald* (Australia).

Deputy director of legal affairs of the Council of Europe Dr. Fritz Hondlus told Miller the embryo stockpiles were a matter of "great urgency" and characterized IVF practice as out of control in the European clinics.

Rumors were circulating among scientists that embryos had been specifically created for research, Hondlus said. He added: "Because there are no controls, our worry is that no one knows exactly what is going on. The figure of 200,000 embryos is credible, but we have no absolute proof. Numbers already could be greater."

The 23-member Council of Europe wants to introduce uniform legislation for all reproduction technology and surrogacy, Hondlus said.

A Melbourne IVF doctor who told Miller he wished to remain unnamed, said 5000 to 10,000 human embryos could be stored among the 18 IVF clinics around Australia.

John Fleming, director of the Southern Cross Bioethics Institute in Adelaide, Australia, called on the state and federal governments to require all IVF clinics to make public disclosures on the numbers of frozen embryos.

CALVIN MILLER. January 23, 1989. IVF 'out of control' as European embryo stockpiles grow, *The Herald.*

People in the future will want from IVF clinics, not just children, but healthy children, IVF clinic scientific director says in reporting on genetic testing of embryos

Preimplantation evaluation of embryos in IVF may soon be possible, Gary D. Hodgen, Ph.D., said at a program on fetal disorders organized by Columbia University College of Physicians and Surgeons and Sloane Hospital for Women in New York.

Within as little as four to six years, it may be possible to test embryos with diseases caused by a single gene defect. This would be useful not only for infertile couples, but also for fertile couples at high risk of producing babies with genetic disease, said Hodgen, professor and scientific director at Jones Institute for Reproductive Medicine, Eastern Virginia Medical School, Norfolk, Virginia. "What people will want from us in the decades ahead are not just children, but healthy children," Hodgen said.

One of the biggest obstacles to the use of preimplantation evaluation, he said, was the financial one. He pointed out that most insurance policies do not cover IVF. The price of three IVF cycles is about $15,000 and this does not include any genetic testing.

If insurance companies decided or were forced to offer coverage for IVF, preimplan-tation genetic screening may become financially feasible, Hodgen said.

He added: "It may be difficult to see that preimplantation genetic diagnosis is financially feasible. But 10 years ago, you would have had difficulty saying that in-vitro fertilization would be practical."

In its report on Hodgen's speech, *Ob. Gyn News* listed other obstacles to the use of preimplantation evaluation: the DNA from the embryo would have to be obtained without compromising survival

of the embryo; the DNA would have to be amplified so it can be tested; the entire process of biopsy, DNA amplification, genetic testing and transfer of normal embryos would have to be done within the "window" of implantation.

Ob. Gyn News. March 1, 1989. Pre-implantation screen of embryo may be possible. 24(5):3.

REPRODUCTION INDUSTRY

U.S. medical products company gives "get-pregnant-or-else"guarantee to customers

Fertil-A-Chron Inc., of Deer Park, New York has decided to guarantee conception through use of its computerized fertility indicator within six months or refund purchasers their money.

The announcement was made in a company press release adorned, in its left corner, with a stork in the form of a computerized print-out and the logo: "Fertil-A-Chron: Meet the computer that can get you pregnant."

The company began marketing its Bioself 110 Fertility Indicator in late 1988. The product is a computerized, hand-held device based on the basal body temperature (BBT) principle of ovulation detection. It gives the customer a daily indication whether she is in a fertile or infertile part of her monthly cycle. It costs $145 plus $10 for shipping and handling.

Fertil-A-Chron press release. July 20, 1989. "Get-pregnant-or-else" guarantee announced by Fertil-A-Chron Inc.

PREVENTABLE INFERTILITY

Infertility due to sexually transmitted diseases said to cost $64 billion a year

To date, infertility has been only treated, not prevented, even though the estimated total annual cost of infertility due to sexually transmitted diseases (STDs) is approximately $64 billion, but the yearly price for prevention of STDs is $335,000, according to Dr. Masood A. Khatamee of New York University School of Medicine. The estimated overall cost for a single incident of pelvic inflammatory disease and later treatment for infertility was $36,325, Dr. Khatamee reported *{International Journal of Fertility,* 33:246-251, 1988).

The Centers for Disease Control, Atlanta, has warned that infections caused by *Chlamydia trachomatis* are the most prevalent and damaging STD, affecting an estimated 3 to 4 million U.S. citizens. If young people used condoms, Khatamee states, almost half of all infertility could be eliminated, resulting in huge savings of money and emotion.

"In one study of 105 patients tested for the presence of *Chlamydia* antibody, 31.5% had some degree of antibody reaction," *Ob. Gyn News* reported. "In another in a New York City abortion clinic, 70% of sexually active women tested positive for colonization of the cervical canal by *Ureaplasma urealyticum* and *Mycoplasma hominis."*

Khatamee attributed the increased need for infertility treatment to five major factors: sexually transmitted disease and pelvic inflammatory disease; endometriosis; contraception technology – oligo-ovulation from oral contraception, and infection and infertility from use of IUDs; adoption shortages and an increase in the child-bearing population.

Infertility due to STD costs '$64 billion' a year. 1989. *Ob. Gyn News* 24(1):36.

SURROGACY AND TRAFFIC IN WOMEN

Bride trade scandal exposed in China

"Miss X," a PhD candidate at Shanghai University with influential connections, was kidnapped from her university dormitory and sold as a bride to a farmer three times her age for $800.

"Miss X was the victim of one of the increasingly brazen bands of bridesellers who kidnap young girls," Louise Branson reported in *The Australian.* "Confined until

now to the countryside, they are becoming bold enough to venture into the cities."

There were no telephones in the village and little transport to enable the woman to escape. Friends and colleagues in Shanghai attempted to locate her. Police notified federal security agencies in Beijing who turned up nothing.

Nine weeks after her capture, she was tracked down through an anonymous letter to her college adviser.

"For every Miss X from the city, hundreds of thousands of illiterate country girls are tricked or abducted by bride sellers every year and never heard from again by their families," Branson wrote. "Some gangs specialise in supplying young brides to invalids. Even if they did find their way back home, they would be rejected as 'soiled.'"

LOUISE BRANSON. Growing bride trade scandal exposed. *The Australian.* April 24, 1989.

Physician who conducted sex detection tests appointed to committee to monitor misuse of the tests; resigns following women's protests

A physician in Bombay, India who conducted prenatal sex determination tests to detect female fetuses that were ultimately aborted and who was appointed to a State Vigilance Committee to monitor misuse of the tests, resigned from the committee following protests from women's organizations.

The physician, Dr. Hema Purandare, who had a clinic in Bandra, Medical Genetics and Research Laboratory, said she "used to" perform the tests (amniocentesis and chorion villi biopsy) but refused to answer further questions.

Her appointment was condemned by the Forum Against Sex Determination and Sex Pre-Selection Techniques, comprised of female activists, concerned citizens, and physicians. The Forum spear-headed a three-year campaign against the tests and their misuse for sex determination. Following that campaign, the state government passed a law banning sex determination tests and strictly regulating their use for detection of genetic abnormalities.

The central government has followed the lead, circulating a draft of central legislation against the tests, which are conducted in almost every part of India, and setting up State Vigilance Committees. The implementation of the law was hampered by delay in its enforcement.

"The Forum, however, drew attention to the lack of any representation from persons involved in the campaign in the committees," *Indian Express* reported. "The Forum's criticism centered around the fact that none of the committee members had taken a clear stand on the issue, a crucial fact given the strong medical lobby supporting the tests."

The report of a government committee to draft Central legislation banning sex detection tests leading to female feticide must be cleared by the Union cabinet before it can be introduced in Parliament. In the meantime, the Goa Government already introduced a bill in the State Assembly in April while neighboring Gujarat (which witnessed a plethora of clinics offering prenatal diagnostic tests after the passage of a law banning sex detection in Maharashtra) is also drafting a law.

In the report for a Central legislation, the law provision meting out punishment for a woman undergoing such a test has been retained. Some committee members believe that such a punishment – a small fine – was a "token" one and would act as a deterrent. The Forum Against Sex Determination and Sex Pre-Selection maintains that the woman is more often acting under family pressure to undergo the test.

"Apart from Governments of Gujarat and Goa, those of Madhya Pradesh, Kerala, Arunachal Pradesh, Himachal Pradesh, Manipur, Mizoram, Meghalaya, and Tripura have expressed willingness to have a Central legislation," Geeta Seshu reported in *Indian Express.* "The Governments of Karnatak, Orissa, Tamil Nadu

and Uttar Pradesh have responded by stating that the matter is under their consideration while Andhra Pradesh, Assam, Bihar, Haryana, Jammu and Kashmir, Punjab, Nagaland, West Bengal, Rajasthan and Sikkim, have yet to reply to the committee's draft legislation."

Indian Express. January 29, 1989. Sex detection tests doc quits panel; GEETA SESHU. June 19, 1989. Draft of Central law on sex tests ready. *Indian Express.*

PREVENTABLE INFANT DEATHS

Fund cuts force units dealing with the health of Aboriginal children to shut down

A Perth [Australia] research unit that has commanded worldwide attention for its work in child health is closing because of lack of funds. Much of the recent work of the gastroenterology and nutrition unit of the Princess Margaret Child's Medical Research Foundation has involved the health of young Aborigines. This has included the rate of infection, birth weight, and growth.

The director of the unit, Professor Michael Gracey, has won acclaim for his work on diarrhoeal disease and malnutrition in children.

"The real tragedy is that 18 years of skills and expertise is likely to be lost and this work into Aboriginal health will stop," Gracey told reporter Cathy O'Leary. "It is disastrous because this is the only work of its kind in Australia and the health of Aborigines is clearly the worst of any single group of people in Australia. There are still many things we have yet to learn and at the moment the health of young Aboriginal mothers is a disgrace and low-birth weight in their babies is double the rate of the rest of the community."

Aboriginal leader Ken Colbung said the unit's research was playing a large role in improving the health of Aboriginal children.

Gracey said the foundation's board of management had told him of the decision to halt funding.

CATHY O'LEARY. February 1, 1989. Fund cuts force child unit shut. *The West Australian.* P. 8.

PRENATAL DIAGNOSIS

Gene amplification allows prenatal diagnosis of cystic fibrosis

First trimester prenatal diagnosis for cystic fibrosis is possible using gene amplification, according to Dr. Carolyn Williams and associates of St. Mary's Hospital Medical School in London.

"Villus tissue was obtained at nine weeks' gestation from a woman who had given birth to a previous child with cystic fibrosis," *Ob. Gyn News* reported. "The DNA was amplified using the polymerase chain reaction technique, and a probe was used to determine whether a DNA polymorphism found in most patients with cystic fibrosis was present, the investigators say in a letter to the editor *(Lancet* II:102-103, 1988). The fetus was found to be heterozygous for the abnormality, so highly unlikely to be affected."

Prenatal diagnosis of cystic fibrosis by DNA amplification. 1989. *Ob. Gyn News.* 24(1):11.

Indications expanding for use of new fetal assessment test, U.S. physician reports

Indications for the use of percutaneous umbilical blood sampling (PUBS) are expanding, Dr. Jeffrey C. King said at an ob. gyn conference presented by Georgetown University School of Medicine, Washington, D.C. Worries about the procedure's safety have proven unfounded, he said.

Ob. Gyn News reports that in PUB a specimen of fetal blood is taken from the umbilical cord under ultrasound guidance and used to assess the fetus for suspected genetic, hematologic, and other problems. The test, first described in 1982, is usually done late in pregnancy.

"Before PUBS is undertaken," *Ob. Gyn News* states, "a neuro-muscular

blockade, usually d-tubocurarine or pancuronimum bromide, may be administered to the fetus intramuscularly or intravenously to paralyze the fetus who could otherwise move, perhaps hitting the needle and lacerating the cord. As a rule, the fetus stops moving within 25 seconds of the I-V."

A review of the procedure in 1,600 women in 10 centers worldwide showed that the risk of fetal loss is 1.5% per patient tested or 1.9% for each procedure.

Ob. Gyn News. February 1, 1989. Percutaneous umbilical blood samples. 24(3): 1.