INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps.

ProQuest Information and Learning 300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA 800-521-0600



O' the Tangled Webs We Weave, When First We Practice to Conceive Navigating the Online Commodification, Distribution, and Consumption of Donor Sperm

.

,

Janalyn Prest Department of Anthropology McGill University, Montreal November 2000 A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements of the degree of Master of Arts © Janalyn Prest 2000



National Library of Canada

Acquisitions and Bibliographic Services

395 Wellington Street Ottawa ON K1A 0N4 Canada Bibliothèque nationale du Canada

Acquisitions et services bibliographiques

395, rue Wellington Ottawa ON K1A 0N4 Canada

Your Sie Votre rélérance

Our lie Notre rélérance

The author has granted a nonexclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission. L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

0-612-70313-4

Canadä

TABLE OF CONTENTS

.

,

TABLE OF FIGURES	11
ACKNOWLEDGEMENTS	V
Abstract - English	vı
Abstract - French	'11
CHAPTER I INTRODUCTION - A CASE OF WEB WEAVING	1
CHAPTER 2 ARMCHAIR ANTHROPOLOGY AND THE COMMODIFICATION AND DISTRIBUTION OF GAMETES I	6
LIBRARY DAYS - FERTILITY & STERILITY	6
Images	7
Personification of gametes and embryosI	8
HYPELINKING@HOME.COM - FOLLOWING THE LINKS	4
Sperm Banks Online	8
California Cryobank	5
Cryogenic Laboratories4	13
Xytex	8
ONLINE SELECTION AND PURCHASE OF SPERM – INITIAL THOUGHTS	7
CHAPTER 3 FARTHER AFIELD – ASRM/CFAS '99 *	1
NETWORKING - ON THE FLOOR	4
Post-graduate preamble	6
Luncheons and the like	'7
TAINTED LOVE – THE TROUBLE WITH SPERM	0
SPERM BANKS: OFFLINE	3
On Knowing	6
ON KNOWING WHO	8
Sperm Banking - Some Second thoughts9	4

CHAPTER 4 CLOSING THE WEB	96
"Genetics: The Science that makes a Person"	96
Predictions and Choices	102
CHAPTER 5 MARKETING THE STUFF OF LIFE: ANTHROPOLOGICAL DISCUSSIONS	107
ONLINE NEGOTIATIONS IN KINSHIP	107
COMMODIFYING LIFE - AN ETHICAL QUANDARY	110
GIFTING OR COMMODIFICATION - EXCHANGE AND CONSUMPTION IN THE E-MARKETPLACE	114
The social life of alienated sperm	118
When is a commodity a gift? Rhetoric in theory and practice	119
CONCLUDING THOUGHTS ON NAVIGATING THE ONLINE COMMODIFICATION, CONSUMPTION, AND	
DISTRIBUTION OF SPERM	122
BIBLIOGRAPHY	128

.

,

' TABLE OF FIGURES

-

FIGURE 1: Personification of embryos: When the wall comes tumbling down	n 19
FIGURE 2: Personification of embryos: Only the best for your embryo	20
FIGURE 3: Deep play: Interpretive field trips	21
FIGURE 4: A tool of the trade: Reproductive tissue	25
FIGURE 5: Follow the mouse: Metaphoric specificity	26
FIGURE 6: Evolutionary marketing: Fertility & Sterility, from 1985-1995	30
FIGURE 7: California Cryobank print advertisement for website	31
FIGURE 8: Cryogenic Laboratories print advertisement for website	32
FIGURE 9: Xytex print advertisement for website	33
FIGURE 10: Home page of California Cryobank	36
FIGURE 11: California Cryobank donor catalogue excerpt	37
FIGURE 12a, b: Sample California Cryobank short donor profile	38-9
FIGURE 13: Fee schedule for California Cryobank	40
FIGURE 14: Home page of Cryogenic Laboratories	44
FIGURE 15: Cryogenic Laboratories donor catalogue excerpt	45
FIGURE 16a, b: Sample Cryogenic Laboratories short donor profile	46-7
FIGURE 17a, b, c, d, e: Cryogenic Laboratories D.A.D.S. TM donor profile	50-4
FIGURE 18: Fee schedule for Cryogenic Laboratories	55
FIGURE 19: Home page of Xytex	59
FIGURE 20: Xytex donor catalogue excerpt	60
FIGURE 21a, b: Sample Xytex short donor profile	61-2
FIGURE 22: Fee schedule for Xytex	64
FIGURE 23: ASRM annual meeting demographics	73
FIGURE 24: Exhibit hall floor plan – ASRM/CFAS'99	84

iii

Acknowledgements

I begin by recognizing the good fortune that I have had in the form of my committee members: Margaret Lock, Allan Young, and Alberto Cambrosio. Studying with each has been formative. Over the last several years, it has not been unusual for me to feel torn asunder, choosing between three very distinct theoretical positions. No doubt to the annoyance of all, I have questioned how I might selectively build a theoretical mélange – one that would be a form of bricolage. Synthesis, I was sure, would be my project.

This thesis, then, is surely a strange manifestation of this synthesis, leaving many questions unanswered, in fact, self-consciously unasked. Yet, in writing, I have become aware of just how deeply I have embodied their teaching in the form of standards and challenges set. What they have given me is an awareness of the different avenues of inquiry that are possible; of the methodological and epistemological quagmires that must be confronted on each research path; and of the tools essential for making one's way through. Difficult task masters at times, but ultimately, I am glad that they are mine.

The Department of Anthropology at McGill needs also to be acknowledged. There are few professors who have not had a hand in teaching me the basics of an anthropological framework throughout my undergraduate years and I thank them for their continued support. In particular, I want to thank Kristen Norget for her encouragement, openness, and the example that she provides. And my unending gratitude goes to Rosemarie Stano, Stella Zocalli, and Claudine Houston, for years of scrambling and hole filling on my behalf. They have been invaluable allies and have helped to tidy the paper trails that I seem so adept at producing.

In addition, I wish to thank the *other* members of the Department of Social Studies of Medicine: the historians, the visiting professors, and the students who have formed a community up on the hill. In particular, I want to thank the ever-shifting cohort of medical anthropology students at McGill. Faced with the common challenge of both situating themselves within, and having to situate, this anthropology of Western biomedicine, they have provided a network of friendship and intellectual challenge. I have benefited immensely from knowing June Kitanaka, Caroline Tait, Dominique Behague, Mary Ellen MacDonald, Sean Brotherton, Janet Childerhouse, Yasir Kahn, Ari Gandsman, and Stephanie Lloyd and Martha Poon (sociologist though she is).

Melanie Rock also fits within this category of peers, however, she has been much more than this. She has been confidant, coach, editor, colleague, and friend. I can't begin to repay her for the time and commitment that she has offered so freely and steadily. She has been, in fact, a 'rock'. Theo Diamantis, Ramona Ramlochand, David Bernier, and Elisa Shenkier have offered both ongoing encouragement and hands-on editorial and technical assistance. Melissa Malkin, Annabelle Combelic, Nicole LeFaivre and Mal McSpurren have walked me through days of uncertainty. I am forever grateful for their friendship.

,

My husband and my children, and our families, with their faith and their unconditional support, have made this thesis possible. Theo, Sebastien, and Cezanne have paid most heavily for this project, and their selflessness has been a sharp contrast to my own self-absorption. My children have gracefully grown to accept that their mother will *never* be finished with her 'hornework'.

This thesis has benefited from funding in the form of a training fellowship from the National Health Research and Development Program (NHRDP) of Health Canada, and a fellowship from le Fonds pour la Formation de Chercheurs et l'Aide a la Recherche (FCAR) of Quebec. The McGill Centre for Research and Training on Women (MCRTW) is to be thanked for the Hannah Gillet grant that facilitated my research efforts.

Abstract - English

Much of the public debate surrounding new technologies and techniques in assisted reproductive technology (ART) is caught up in the speculative nature of imagined futures of 'science-fictive' proportions. This thesis, by contrast, examines a 'naturalized' ART donor insemination, discussing the manner in which couples (and occasionally single women) construct distributive and kinship networks as they move through the processes of fertility treatment and the selection of donor sperm.

This thesis follows a marketing trail for sperm from scientific journal, to the web, to conference floor. In doing so it examines and contrasts the information that is offered by companies distributing donor sperm and drawn upon by those making selective choices. It argues that the process of donor gamete selection - as mediated by Internet technologies - is characterized by a juxtapositioning of two trends: 'eugenic' promise, and expansion kinship networks based on 'like kinds'. This paper strives to explore these desires, beliefs and motivations at play in the commodification, distribution and consumption observed in the online marketing and sale of gametes.

This thesis contributes to the body of anthropological theorizing on gifting and commodification, and kinship, by arguing that donor sperm – in the context of current exchange practices - challenges a dichotomous categorization of gift/commodity, and is best understood as a hybrid item of exchange. Following Appadurai, the commodity candidacy of donor sperm, and the context of its commodification is explored, noting the manner in which kinship networks are extended and negotiated in the process.

Abstract • French

La plupart des débats publics à propos des nouvelles technologies et techniques de reproduction assistées sont absorbés par la nature spéculative d'un avenir aux proportions « science-fictives ». Par contraste, ce mémoire examine une technologie de reproduction assistée « naturalisée » – l'insémination issue de don de sperme – et analyse les manières avec lesquelles les couples (et souvent des femmes seules) construisent des réseaux de distribution et des réseaux de parenté alors qu'ils évoluent à travers les étapes du traitements de fertilité et la sélection de sperme de donateur.

Ce mémoire poursuit des traces du marketing du sperme qui parcourent des périodiques scientifiques, la toile Internet et les planchers des salles de congrès. Ce mémoire étudie les informations qui sont proposées par les entreprises qui distribuent du sperme de donateur aux personnes qui considèrent l'insémination par don de sperme. Ces informations sont assujetties à une sélection par cette clientèle. Le processus de sélection de gamètes – tel qui médiatisé par les technologies de l'Internet – est caractérisé par une juxtaposition de deux tendances : une promesse eugénique et une expansion des réseaux de parenté construite sur des similitudes. Ce mémoire cherche à explorer les désirs, croyances et motifs qui soutiennent la marchandisation (*commodification*), la distribution et la consommation à travers les activités de marketing et de vente de gamètes sur Internet.

Ce mémoire contribue au corps de la théorisation anthropologique sur le don, la marchandisation et la parenté en avançant que le sperme issu de donateur – dans le contexte des pratiques d'échange actuelles – pose un défi à la catégorisation dichotomique don / marchandise et serait mieux interprété en tant qu'item d'échange hybride. Suivant Appadurai, la candidature du sperme de donateur au statut de marchandise, et le contexte de sa marchandisation sont explorés, en prenant compte des manières avec lesquelles les réseaux de parenté sont étendus et négociés dans ce processus.

Chapter 1 Introduction – A Case of Web Weaving

When individuals, or more often, couples 'shop' for donor gametes, what is it that they are seeking? What criteria are used to delineate their search? What does this practice of consumption enable? What relationships and realities are created in the process? Is it appropriate to think of the exchange of gametes in market terms? Or are gametes somehow exempt from commodity exchange – Are they alienable or inalienable gifts? These empirical and theoretical inquiries are the subject of this paper.

This paper takes as a case study an arena that is characterized by both tangible and ephemeral networks. In it, I will discuss the manner in which couples (and occasionally single women) construct distributive and kinship networks as they move through the processes of fertility treatment, and more specifically, the search for donor gametes. This paper focuses on the established market of donor sperm, recognizing that trade in donor eggs inspires vastly different political and ethical discussion¹.

As choices are made, futures are both created and refused. Despite the potentially prohibitive costs of fertility treatments, couples seek to reproduce themselves in a genetic calculus, wherein the goal is a child who will be a 'whole-as-possible' genetic sum of the

1

parents-to-be. For these actors, childlessness and adoption have, for the time being at least, been rejected as undesirable options. Infertility, defined as failure to conceive after twelve months of unprotected intercourse, presently afflicts one in six heterosexual North American couples, and is a major medical industry. Few insurance programs in North America will fund fertility treatments, viewing these treatments as elective. In Canada, public health insurance will not cover fertility treatments with the exception of reparative surgery for some conditions, such as blocked fallopian tubes. Despite lack of insurance coverage, the industry flourishes in pace with an ever-increasing demand for treatment. This is fuelled by the increasing numbers of couples experiencing difficulty in conceiving (due, in part, to delayed childbearing); a reduction in the number of children available for adoption as a result of the increased availability of abortion; increased financial resources and a lessening of stigmatization for unwed mothers (Modell 1999: 32), together with the growing armory of tools and techniques that are being developed, refined and deployed in the field of reproductive medicine.

Specialists in reproductive medicine are currently experimenting with such techniques as intracytoplasmic spermatozoic injection (ICSI) and cytoplasmic transfer. These new techniques, alongside advancements in cloning and stem cell therapeutics,

¹It is not within the scope of this thesis to address the parallels and divergences between these gamete markets. For discussion of some of these issues, see Haimes (1993), Ragoné (1994), Ragoné (1999), and Sauer (1992).

inspire a mix of promise and trepidation in onlookers. Much of the public debate surrounding assisted reproductive technologies remains caught up in the speculative nature of imagined futures of 'science-fictive' proportions (Squier 1994). It therefore becomes a useful exercise to examine a 'naturalized' assisted reproductive technology (ART).

Artificial insemination (AI) was the first animal husbandry technique to transfer into 'human husbandry'. The movement from AI into various *in vitro* fertilization [IVF] related techniques has been an incremental one (Clarke 1998). We have witnessed two generations of using these techniques to enable conception, beginning in Europe and North America, but quickly diffusing throughout much of the World. The 'taken-forgranted-ness' of AI and sperm donation in North American culture contrasts with the media attention that egg donations – with competition for these 'scarce resources' leading in some instances to bidding wars between clinics and the auction of 'Ivy League' and 'model' eggs - have recently garnered. However, AI and sperm donation are no more 'static' than other techniques or tools in this rapidly innovating field, nor is the manner in which they are commodified and distributed.

I approach the practice of donor sperm selection, purchase, and distribution via an unorthodox path, whereby the technology of the Internet becomes both a methodological tool and an object of inquiry. The Internet has both facilitated the processes of gamete selection and distribution and has delineated new parameters and boundaries of a practice that is premised on knowledge – on that which is knowable and that which is held as 'unknowable'. This thesis examines the manner in which information is either divulged or withheld, by individuals, sperm banks, clinics, professional organizations, and regulatory bodies and policy makers, and the justification for such policies. In addition, I examine and contrast the information that is offered by companies distributing donor sperm and drawn upon by those making selective choices. The information provided by sperm banks varies in its degree of 'scientific' soundness and its emotive power. And indeed, these informative offerings serve two separate, though often entangled purposes: to provide concrete biogenetic histories and psychological profiles. These 'histories', when combined, are constitutive of identities, which, as they are drawn upon in donor selection, are utilized as predictive indicators of the future identities of potential offspring.

In this thesis I argue that the process of donor gamete selection - as mediated by the Internet technologies, search engines and Fed Ex shipments emanating from modern day sperm banks - is characterized by a juxtapositioning of two trends. On the one hand, there is that hint of eugenic potential that the Assisted Reproductive Technologies (ARTs) embody, of 'designing a better baby', that has critics from the general public and within the field up in arms. And on the other hand, there is a striving towards expanded kinship networks based on 'like kinds', whereby the sought after child reproduces familiar and thus family like traits. At times these trends complement one another, but at other times they are at odds. The resulting tension gives rise to questions about how best to govern and understand these practices. Are we perched on the downside of that slippery slope that ends in genetic engineering and cloning? Should the development and deployment of these technologies be subjected to regulatory oversight or legislative policy? How do countries such as the United States and Canada make statements or wield control over practices that occur within the private market sector?

Some would argue that the selection decisions that are being made by couples shopping for donor sperm are no different from the decisions we make in selecting a mate with whom we will reproduce. Others evoke Darwinian arguments in support of the soundness and 'naturalness' of such selective tendencies. Who would consciously, and conscientiously, choose 'less' for a child? This immediately opens discussion of the societal and historical contexts in which such decision are made. What constitutes the 'best'? According to experts in the field, if one accepts the premise that donor profiles in highest demand are representative of a most desired commodity, then 'best' is a six foot four, blue eyed medical student². By examining these selective practices, we peer through the computer screen at the values and beliefs of a society. However, these measurings of worth and value are tempered by yet another phenomenon – that of kinship.

² Interview with sperm bank director Russel Bierbaum, Cryogenic Laboratories, Inc. September 28th, 1999. Toronto.

And herein lies the 'heart' of the matter: Couples may not choose a donor whose GPA falls far below average <u>because</u> they are seeking a below average intelligence donor. This same donor may make the final cut in the selective process because he loves his grandma, has black hair and plays the cello – like the selecting 'father'³. In such an instance the selective process can be seen to be informed by conflicting desires, and that the wish to see likeness embodied is of higher priority. In many ways, this tendency that runs counter to eugenic selection is the more interesting of the two trends. This window into present day notions of kinship and belonging sheds light on the manner in which advances in both understanding of genetics and ARTs feed into, and are reconciled with, North American kinship ideologies.

In Aristotle's time, laws governing both citizenry and inheritance required that a child be the legitimate descendent of a male citizen. Children were produced to continue the

³ Nomenclature is problematic throughout the field of ART. This is most evident in situations involving gestational surrogacy whereby the surrogate carries an embryo that originates from gametes of a commissioning couple. However, traditional surrogacy and Artificial Insemination by Donor (AID) still leave room for labeling and ambivalent designation of paternity. In fact, even the title of donor has been deemed inappropriate by some: "Language is very important in this discussion and the way in which language is used to confuse and to obscure what is going on, rather than its proper function to clarify and illuminate what is going on, is very disturbing. We're talking here about vendors as much as about donors. It seems to me if somebody gives you something, you call them a donor. If someone asks something in exchange for what they give you, you call them a vendor ... If you really want to buy and sell in the market for making babies, at least be so kind as to be candid about what you're doing" (Nigel Cameron, theologian and ethicist). The rhetorical power of designation of paternity and maternity, donor or vendor is of great significance to those involved and the meanings that are attached to the practice of donor assisted reproduction and is explored in chapter 4.

father's line, and were the property of their father. The importance of this notion of paternity can be seen in the following excerpt from Aeschylus' *Eumenides*:

"It is not the mother who begets the one called her child: she but nourishes the seed sown in her. The begettor is the man who fecundates her: she a stranger safeguards a foreign sprout, when the gods do not injure it" (Aeschylus *Eumenides*, 657 ff. Reproduced in Preus 1977: 67).

By contrast, the anthropological literature on the new reproductive technologies has centered primarily on the mother⁴, fastening on the image of the splintered body. For instance, gestational surrogacy, in which genetic and gestational contributions of two 'natural' mothers result in the birth of a child, wreak havoc on an unproblematized biology and have proven theoretically fruitful to anthropologists (Strathern 1991: 32). This research has demonstrated that there is no one guiding principle determining relatedness⁵. Ragoné reminds us that "both fertility and infertility are best understood as embedded in a series of social, historical and personal processes" (Ragoné 1998: 127). Which trajectory of descent will be emphasized, which idiom of relatedness called upon to justify belonging, will be shaped by those involved.

Blood, genes, gestation, wombs, semen, eggs and embryos: All that your average ART-conceived child might need to construct a family tree, provided that this

⁴ To name but a few: Bassen et al. (1994), Casper (1994), Cussins (1998), Franklin (1997), Ragoné (1998), Rapp (1995), Rowland (1992), and Strathern (1992).

⁵ See Cussins (1997), Franklin (1997), Ragoné (1998) and Strathern (1992).

information is available to him. Is this information a birthright or curse? In cases of 'simple' assisted reproduction involving donors or gestational surrogacy, we might accept evidence that suggests that openness is most conducive to the psychosocial health of the child, and that 'knowledge' empowers (Daniels 1995, Daniels and Lewis 1996). Here, a child might trace a genealogy, a bloodline, or a genetic network through 'relative' strangers and gestational intermediaries. But what of those hypothetical future sources of gametes, such as 'donated' ovarian tissue retrieved from cadavers and aborted fetuses, or the potential technology of maturing gametes from embryonic stem cell lines? A child might then trace 'descent' through one long dead or one never born. What will this knowledge yield? Speculation aside, we are presently witnessing a historical rewriting of adoption and donor gamete policies regarding privacy and confidentiality versus openness (Modell 1999; Franz and Haase 1999). How does this affect actual practices of donor gamete reproduction?

In contrast with previous ethnographic inquiry that has focused upon lived and embodied experiences of ARTs and the identities that they help shape (Casper 1994; Cussins 1996a&b, 1997, 1998; (Franklin 1997; Haimes 1994; Rapp1995, 1999; and Strathern 1992, to name but a few) this paper occupies itself with 'imagined' and projected identities. Even in instances where debate centers on the best interest of the child, these children live in the imagination the debaters. Without argument, these lives may become realized in instances when fertility treatment succeeds. However, what I wish to highlight is the place that these figurings occupy in the imaginations of the actors: the individuals, researchers, clinicians, technicians, theorists, bioethicists and policy makers of ART. These imaginings and the identities that they craft are of theoretical significance. They allow us to glimpse beliefs and understandings about societal values, genetic knowledge and heredity, and the usage to which such knowledge is put.

Ultimately this paper strives to explore desires, beliefs and motivations as they move the field of reproductive medicine forward. It is about the valuing of certain human attributes, certain persons, real or imagined, above others. It is about setting a value and indeed, a monetary price, on the materials and services that enable the realization of these imaginings. Most significantly, it is about the information itself - vested with differing values - on which these imaginings are based. Where does scientific knowledge intersect with these desires? Asking these questions, raising into relief these projects of genealogy, permits us to better see the place of the imagination and 'desire' in reproductive science (Daston 1998).

In a review of recent ethnographic research, George Marcus discusses the emergence of multisited ethnographies which have sought to adapt old ethnographic practices to complex objects of study by locating them in multiple sites of observation/participation that often cut across local/global and lifeworld/system dichotomies. Marcus suggests that multisited ethnographies may construct their subjects by tracking people, metaphors, plots/stories/allegories, lives, or conflicts. He claims that such research has yielded three methodological concerns: testing the limits of ethnography, weakening the power of fieldwork, and the loss of the 'subaltern' as a perspective (Marcus 1995). This has special pertinence for the anthropology of science and medicine, wherein the 'field' can extend from local practices to international networks of specialties; 'fieldwork' may begin with archival documents and extend to the laboratory, clinic or convention floor, often in very disparate geographic locations; and the anthropologist is caught in a reversal of roles, 'studying up' as it were, with all of the epistemological challenges that this entails. (See also: Gupta and Ferguson 1997; Martin 1997; Passaro1997).

This project began as an attempt to wander into another culture, that of the bench scientists, the clinicians and the technicians of reproductive medicine. Needing to familiarize myself with the terrain and dialect, I chose a localized study: one site – one journal. Perhaps not traditional in respect to anthropological fieldwork, this approach, nonetheless, proved a fertile source of insight and data. In 1998, I examined the official journal of the American Society of Reproductive Medicine (ASRM), *Fertility & Sterility*, for a term paper. While exploring the changes manifested in the journal around an editorial change, I became distracted - enrolled one might say - by the numerous advertisements that crowded the journal's front piece. There are few market competitors

that do not invest heavily in both print and web page advertising these days. As I discovered, reproductive medical instruments and reagents are no exception. Most 'interesting' to me, were the advertisements for sperm and the web sites to which these journal advertisements led me.

Advertisements drawn from *Fertility & Sterility*, and their Internet counterparts, demonstrate the manner in which sperm is imagined and vested with personality through a rhetoric of 'promise', torn between established scientific understandings of inheritance and genetics, and an ongoing popular discourse of trait inheritance. Human gametes and embryos are also vested with personality within the discourses of reproductive medical research and clinical practice. In a productive tension, discourses of heredity are played against one another, as the scientific content of the journal is juxtaposed with a more 'popular' representation of trait inheritance found in the advertising content, wherein the reader is presented with a preconceptive rhetoric of promised identity.

Striking images and provocative narratives of gamete and embryo identities appear in these advertisements. Imaging technologies and the imagination invest these 'commodities' with futures, pasts, and complex identities. Such representations in turn serve to shape relational identities for the reader, as they are invited to subjectively engage with these embodied images of ART success. Cryopreservation facilities advertise sperm donor profiles, creating genealogies, ethnicities, genders, personality types, occupational inclinations and purchasing potential for their 'products'. The 'synechdochal' gamete is thus 'personified'. Twenty-three chromosomes - derived from a 'whole', the donor – are projected as a potential 'whole', the child-to-be. Donor histories become transposed through time to become predictive futures.

Meanwhile, the 'tools of the trade' - culture mediums, micro-manipulation tools, and IVF software - are juxtaposed with snapshots of the finished product, the happy, healthy infant. While these advertisements are addressed to the scientists, technicians and clinicians that comprise the journal's readership, these plays of investment of identity in gametes and embryos are constructed to appeal to, and ultimately be conveyed to, a patient/consumer population.

I was struck by the two seemingly contradictory discourses of heredity to be found within the pages of *Fertility & Sterility*. However, I soon realized that this juxtaposition of 'science' and 'fantasy' was in no way specific to this particular venue. Further investigation revealed that a plethora of popular and academic predictions for twentieth century medicine and technological development were also engaged in this practice of imagining futures⁶. Cloning has indubitably raised the most recent and spectacular public response. Potential germ cell alteration and genetic engineering have

⁶ Scientific American, Time, Discovery, Utne Reader, The New Yorker, and doubtless others have published special features, in some instances, entire issues, on what the future may bring. Anthologies such as Cyborg Babies, Cyborgs and Citadels, Reproducing Reproduction and others in press have considered the potential import and impact of advances in genetic and reproductive technologies. Similarly, the work of Donna Haraway has been primarily concerned with future potentialities and imaginings surrounding science and technology.

evoked the specter of eugenics. Will we be able to customize our offspring, or clone headless 'spare parts'? Lines of research being pursued in behavioural genetics and embryonic stem cell research, for instance, seem to suggest that these potentials are realizable; and in the near future. While reading popular media depictions of turn of the millennial behavioural genetics, it became evident that the seemingly naïve projections of aspiring parents shopping for donor gametes might not be quite so parochial. Is hatred heritable (*Oxford Encyclopedic English Dictionary*)? Which behavioural traits might we consign to genetic determinism? Can we understand a propensity to happiness, greed, or inquisitiveness to be *inherent* in the genetic code of a gametic donor (*Scientific American*)?

While genetic testing for heritable disorders or genetic dispositions is handled with calculations of 'risk' and 'probability', opening debate as to how 'certain' is a 'likelihood' and 'what', precisely, is knowable (Lock 1997; Lock 1998; Rapp 1995; Rapp 1999) - the discourse surrounding donor gametes and trait inheritance takes on a decidedly different tone. Here a 'popular' discourse of heredity reigns for the greater part unchallenged, catered to, and even humored.

I fear a methodological weakness as I begin this analysis. Without extensive interviewing of a representative readership, any analysis of the images that I present may reveal more about my own subconscious workings than the intentions of the advertisers, or of their reception. However, I find reassurance in Ludmilla Jordanova's *Sexual* *Visions*. As a historian seldom able to consult a representative readership outside of textual form, she is more comfortable proceeding with interpretation of contemporary images. She writes:

"Medical advertising for drugs in a variety of 'in-house' publications offers a roughly modern equivalent [to the wax models of Hunter and Smellie]... Although such advertisements may seem a bizarre form of evidence, they give us access to the same features of medicine that we have examined... between the eighteenth and twentieth centuries - common assumptions about sex, gender, health and illness, social roles and the languages that mediate between these areas" (Jordanova 1989: 143).

Jordanova sees these acts of reading as miniature versions of larger cultural dynamics and more specifically, the forms that they take within a medical arena, recognizing that these images are not simply reflections of an existing cultural status quo:

"The advertisements reinforce mental structures that practitioners have previously acquired from their education, clinical practice, and social experience. At the same time, these images help to shape their mental worlds, through aspects of the imagery that powerfully convey cultural constructs" (Jordanova 1989: 145).

What are our beliefs and understandings about genetic information and heredity?

What information is understood to be archivally coded in the chromosomes of the gamete donor? More importantly from an anthropological standpoint, what do those embarking on assisted reproduction with donor gametes or embryos believe can be known? And what do they attempt to do with this perceived knowledge? The values, the sanctions, the venues, and the actors in these evaluations and exchanges are socially, politically and historically situated. The advertisements, web pages, editorials, news articles, and interviews upon which this thesis is based represent, in part, the imaginings and context

⁷ of donor selection and usage of potential trait selection technologies.

•

Chapter 2 Armchair anthropology and the commodification and distribution of gametes

Library Days - Fertility & Sterility

The journal that launched this project warrants its own brief history and introduction. *Fertility & Sterility*, the American Society for Reproductive Medicine (ASRM)'s flagship journal, has established a leadership position internationally among related medical-scientific journals since its origination in 1950⁷. In July 1997, Dr. Roger Kempers ended twenty-two years as editor and passed the reigns of control of the journal to new Editor-in-Chief, Dr. Alan H. DeCherney. And in April 1997, the journal moved from Rochester, Minnesota, to the New York office of Elsevier Science, Inc., its new publisher. With the clout of Elsevier Science, Inc., and the editorial presence of DeCherney, *Fertility & Sterility* was to become even more 'competitive' in the world of scientific publishing. The inaugural editorial of DeCherney merits extensive quotation:

"Oh, how the world has changed. In 1989, the philosophy of the day was based on the film Field of Dreams: 'If you build it, they will come'. Times have changed, and in 1997, the philosophy we espouse is from the film Jerry Maguire: 'Show me the money'. This, too, is the tale of our Journal, *Fertility & Sterility*: the field has changed, and it has become more competitive. Changes have occurred in the

⁷ Of the 56 obstetrics and gynecological scientific journals worldwide, *Fertility & Sterility* is second only to the British journal *Human Reproduction* when ranked by impact factor, according to the Journal Citation Reports of the Institute for Scientific Information.

world of publishing, and, specifically, in the world of reproductive endocrinology publishing. Although no one admits to reading USA Today, it has a high subscription rate and has changed the format and publication style of newspapers throughout the world. Therefore, we too must change"

DeCherney wrote that: "the Editor-in-Chief of *Fertility & Sterility* has a sacred charge. Through the literature the field advances, ideas are consummated and careers are established" (DeCherney 1997: 7). He was certain that the changes that he was to introduce to *Fertility & Sterility* would change the way it would be read, subscribed to, and cited.

Images

During the twenty-two years in which Kempers was editor, the journal had seen little change in appearance. Perhaps the most noticeable change in 'post-DeCherney' *Fertility & Sterility* was the dramatic increase in advertising and a shift in advertisement placement. While the overall percentage of the journal committed to advertising significantly increased, more importantly, advertisement placement shifted the masthead, table of contents, and first article further into the journal. The reader must often wade through some 20 pages of full-page glossy advertisements in order to locate the table of contents. Another series of advertisements are inserted between the table of contents and the first page of the journal proper. It is in this first section of advertising that we see the most impressive use of color and imaging techniques. Perhaps this is what DeCherney had in mind when he spoke of increased revenue and the new wave of publishing. Lynch has written that authors select and prepare the images that illustrate their scientific articles with an eye to particular audiences. He suggests that it is the popular journal that tends to be 'glittery, glossy color, richly textured and naturalistic'.

"Due to budgetary constraints on color illustrations, pictures in specialized journals tend to be small, black and white, graphic, and densely surrounded by text and equations. Beyond these economic considerations, scientists express aesthetic preferences for subdued imagery and a distaste for the 'glitter' they associate with vulgar appreciations of science" (Lynch 1991: 211).

However, if we are to believe DeCherney - the times, they are a changin' – some specialized scientific journals, inspired by the economic successes of publications such as USA Today, are revising their 'aesthetic' preferences.

Personification of gametes and embryos

Advertising, by its very nature, invites interpretation. Their success depends on "plays upon commonsense images that are practically banal. They depend on easy decoding" (Jordanova 1989: 149). Reproductive technologies (ARTs) seem tailor-made subjects for marketing ploys. Leafing through the pages of advertising, I was often convinced that these particular advertisements were crafted explicitly as symbolic anthropology fieldtrips. Who else would delight in ads in which embryos are shielded from culture shock (Figure 1), or personified and vested with emotions and personality traits (Figure 2)?



Figure 1 Personification of embryos: When the wall comes tumbling down.



Figure 2: Personification of embryos: Only the best for your embryos.

A personal favorite required analytical assistance from a number of scholars from multidisciplinary backgrounds (Figure 3). I suspect that this difficulty in decoding was not a failure on the part of the ad designers to present a commonsense image. The ejaculatory trajectory was easily grasped by all. Rather, it was the culturally specific references to (as it turned out) football teams that flummoxed the analysts. Football imagery tends to be lost upon Europeans and Canadians (or at least most that I consulted). The messages encrypted in the glibness, however, should not be overlooked. Here is a promise of able-bodied donors, college and university boys, one and all. Here is diversity, an expansion of choice.



Figure 3: Deep play: Interpretive field trips.

Thus, the clinicians, reproductive endocrinologists, genetic counselors and mental health counselors, who comprise the journal's readership, are invited to select a sperm bank for their practice, or to direct their clients⁸ to the bank itself. The advertisements outline the distinctive and 'superior' offerings that clients are searching for: most often mentioned are 'thorough' screening programs, 'high quality' samples, wide selection and availability, donor anonymity, and contrastively, donor openness, and the types of information (donor profiles) available. The journal advertisements act as one conduit that channels the client, via the clinician, to the market place.

Clients, whose infertility has been traced to the gametes of either partner, are often confronted with the necessity of seeking gamete or embryo donors if they are to continue in their efforts to conceive. In many cases, both in the United States and in Canada, those embarking on fertility treatment have already entered a private health care system and have begun to pay for the services and treatment that they receive. However, it is at the point in their trajectory when purchasing 'reproductive materials' that an unfamiliar marketplace is entered (see Cussins 1996). While many are unaccustomed to

^b Recognizing the methodological implications of selecting one moniker over another, I have chosen to refer to those individuals or couples who seek fertility treatment and select and purchase donor gametes as 'clients', rather than 'patients' or 'recipients'. This is reflective of my focus on the commodification and distribution of gametes and the nature of these exchanges in private market-place medicine. When quoting from interviews or gathered data I utilize the terminology found therein.

thinking of human gametes or embryos (or gestational services) as commodities, and many exhibit an apparent discomfort with this commodification, this 'stuff of life' is indeed vested with value and exchanged (Appadurai 1986, Pfaffenberger 1992).

Clients must ultimately 'shop' for a donor. The first successful insemination with frozen human semen took place in 1953. Since then, over 200,000 births have been reported using cryopreserved semen. It is now estimated that approximately 30, 000 children are born each year through AI procedures. Donor sperm is used both in large fertility clinics and individual gynecological offices. In this highly diverse and unregulated field, each clinician or reproductive endocrinologist (RE) determines the role that they will play in this process. Clinics may have their own donor program in which they act as middleman in the collection and exchange of gametic materials. In other instances, clients are directed to sperm banks with which the clinic has established an exchange relationship. Counselors may, or may not be available to guide the client/patient through the selection process depending on the clinic in question. In addition, local restrictions on the selection process and the types of parameters that will be included in the search criteria exist and vary from clinic to clinic. Clients may also be expected to select a sperm bank, and ultimately, the donor sample, independent of clinician guidance. And finally, many treatment cycles may utilize known donor sperm, thus raising distinct concerns and practices. Infertility support groups, chat rooms, and hearsay are other paths by which one is lead to the online gamete marketplace. I discuss

these latter cases later in this discussion. For the time being, however, I invite the reader

to follow my trajectory as I traversed the web...

Hypelinking@home.com - Following the Links

"It is difficult to convey the feelings of intense interest and suspense with which an Ethnographer enters for the first time the district that is to be the future scene of his field-work . . . one is on the lookout for symptoms of deeper, sociological facts, one suspects many hidden and mysterious ethnographic phenomena behind the commonplace aspect of things" (Malinowski 1992: 51).⁹

It is difficult to convey my initial impressions and emotional responses as I

followed intended paths from the advertisements in *Fertility & Sterility* to the listed web sites. What, on paper, inspired a smile (Figure 4) unnerved me as it became clearer that the guise of a smiling, healthy child was invoked to sell the 'tools of the trade' – whether culture mediums, micro-manipulation tools, and IVF software or sperm. Following the 'mouse' (Figure 5), one is introduced to the market.

Needless to say, besides web sites there are many other such conduits and filaments to be found. These sperm banks utilize the convention floor in the same manner that pharmaceutical companies parade their wares at the annual gatherings of such organizations as ASRM and the Canadian Fertility and Andrology Association (CFAS), purchasing exhibit space to direct practitioners in the field to their products. (The trade

⁹ I came upon this quote several months after having first drafted this thesis. I was immediately comforted by the assurance that, indeed, the web site differs little from a traditional field site, at least in terms of emotional engagement, awe and sense of discovery.

show floor, with all of its bells and whistles, is scene three in my saga. Stay with me, for

the time being, in the land of PDF files).

,



Figure 4: A tool of the trade: Reproductive tissue.
Short donor profiles available on the World Wide Web, Free, Just by accessing our website, www.cryobank.com

The response³ incredible. In the first year, people have downloaded over 75,000 of our profiles! And the rate keeps growing.

Now people can take that first important step in the prevacy of their own home or office. No cost, no pressure. No need to use the valuable time of medical professionals at this early stage

Were known workheide for the quality

of our donors. Now we're known for it on the World Wide Web



1019 Gayley Ave. Los Angeles, CA 90024-3425 1 800 231-3373 www.ceyobank.com

Figure 5: Follow the mouse: Metaphoric specificity.

Within this marketplace, one is quickly impressed by the varieties and quantities of information made so readily available to the client in their home. My initial entry into the arena of the e-market in sperm left me, however, less than calm. Unlike those who have come to the stage in their fertility treatment where they have begun a search for donor gametes, I had followed this path, laid out on paper, out of curiosity. I was an innocent. I must confess that it had never really crossed my mind that there really had to be a process and a mechanism by which and through which gametes 'changed hands', as it were. I was familiar with issues of commodification of gametes, about debates concerning the purchasing of eggs, and why this might differ from a historically established practice of donor insemination. I had read extensively the anthropological, sociological, and bioethical writings on the new reproductive technologies that have proliferated over the last twenty years. But the 'reality' of this e-commerce market, as virtual and ephemeral as it was, surprised and unnerved me. This was commodification in the 'flesh' – no abstracted theory here! Heebie-jeebies, discomfort and ill ease were my uncensored responses.

Months later, I recall my initial forays, aided by hyperlinks and power searches. I can describe the numbers of donors available at each of the banks, offer up donor profiles, and compare and contrast the services that each of the banks provides. But what is lost is the sense of scope that clients must contend with, regardless of their stage in fertility treatment. Clients who open a link to a sperm bank, or to several of those available online, are there to make a choice and a purchase. According to what criteria
will that choice be made? This most certainly varies according to individual motivation
and circumstance. Studies that have addressed this question will be discussed in chapter
3. The following section discusses, more specifically, the information provided by sperm
banks and the manner in which these virtual e-markets interface with the prospective
client.

Sperm Banks Online

Between 1985 and 2000, as more banks began to offer donor services, marketing took on more importance, and sperm bank advertisements became more visible and more competitive in trade journals such as *Fertility & Sterility*. In the mid-eighties, advertisements were rare and those that did appear were straightforward utilitarian statements directed solely at the clinician, listing assay types, antibody testing, utilization instructions, medium of delivery (straw or cervical cup), size of vials (1.0 or 0.25 ml), and sperm motility (20 million per unit or higher). It is not until 1993 that client-centered features begin to appear: donor health, medical, and psychological profiles; and genetic counseling services (See Figure 6 for examples of advertisement evolution over this period of time in *Fertility & Sterility*). Nonetheless, the marketing message was still targeted directly to the clinician:

"Since the beginning, our goal has been to adhere to the highest of standards, both technologically and ethically. Although we are now one of the largest sperm

banking laboratories, our primary commitment remains quality and excellence". [Advertising copy from California Cryobank, *Fertility & Sterility* 59 (4) (1993)].

By 1996 California Cryobank, had gone 'online' at www.cryobank.com (Figure

7). It wasn't until late in 1997, however, that a new advertising campaign was launched

boasting of over 75,000 downloaded donor profiles in the first year:

"Guess what we brought to the Internet? Now people can take that important first step in the privacy of their own home. No cost, no pressure. No need to use the valuable time of medical professionals at this early stage. We're known world wide for the quality of our donors. Now we're known for it on the World Wide Web". [Advertising copy from California Cryobank, Inc. *Fertility & Sterility* 62 (11) (1997)].

In 1998, the Internet and website begin to be advertised as a marketing feature and tool for Cryogenic Laboratories, located at <u>www.cryolab.com</u> (Figure 8). That same year, Xytex launched its web site, at <u>www.xytex.com</u> (Figure 9), and began advertising in *Fertility & Sterility* – as relative latecomers to this particular advertising venue.



Figure 6: Evolutionary marketing: Advertisements for sperm banks, as observed in Fertility & Sterility, from 1985 –1995.

. -

We help make life a little easier.



For over 20 years, California Cryobank has been making the donor insemination process easier, for you and your patients. We offer the largest selection of anonymous donors and minority donors available, so your patients will find just the right profile. And to assist with the selection process, we provide full-time donor matching and genetic counseling to personally answer questions. But most importantly, our quality standards are extremely high, in fact, of the very few sperm banks in the nation accredited by AATB, three are ours. Give us a call at 800-231-3373 and we'll send you free patient information brochures. California Cryobank, making life a little easier.



Figure 7: California Cryobank print advertisement for website.



Figure 8: Cryogenic Laboratories print advertisement for website.

	rcryglab.com
CU now provides united and some sectors in the internet. Visit our site and you'll fin	to vitat datar micromonon provide We've also included on-drec company and order torne. Id our filler states And best of al, they are available to a user-instally, cary-o
ing with CHIT STATE and CHINE HOLE	All completely access former that i test and desembled.
	CBVOCENIC
	LABORATORIES
-91	LABORATORIES
- 9 1	44 Lexengton Avenue North + Roseville, NN 55113 Voice, 612 469 6200 Fax, 612,469 0569
CJ Affiant Helmit	C.N.IQCCEINIC ABORATORIES 44 Lexanton Avenue North • Roseville, AN 55113 Voice, 612,469 8000 Fax, 612,499 0969 Toll from 682,482,2785 E-mail: cryolabure@aol.com

Figure 9: Xytex print advertisement for website.

What follows below are introductions to California Cryobank, Cryogenic Laboratories, and Xytex, based upon information gathered on-line in the early stages of my research. Having resituated myself from one library locale to another, moving from the journal stacks and *Fertility & Sterility* to a computer station several feet away, I had effectively changed fieldsites. In the following chapter, these banks 'reappear', as I once again shift localities and these preliminary accounts are supplemented with information from interview materials and data gathered on the convention floor at the Joint 1999 Meeting of the American Society for Reproductive Medicine (ASRM) and the Canadian Fertility and Andrology Society (CFAS).

The banks that I discuss below are three of the largest commercial sperm banks in North America. I have selected these banks – with their flamboyant print advertisements and their strong on-line market presence – in part, because they are 'average'. Many smaller banks exist, some serving 'fringe' clientele, such as the Repository for Germinal Choice (a sperm bank that promotes the distribution of sperm of 'superior' donors, for the 'good' of society) and the Genius Sperm Bank (only lists donors who exceed certain IQ measurements). However, my intention is not to survey the extremes of a range of gamete services, thus replicating the 'speculative projections' of many of the ethical debates (Strathern 1992: 59). But rather, I have chosen to focus this inquiry on services and practices that may be see as representative, and on established market norms. For each of the three profiled sperm banks I will introduce the reader to the web site, navigating from the homepage to the types of information and services that are provided, then the donor catalogues and sample donor profiles, and finally the fee schedules. Printouts of these interfaces are included for each bank below. Unless otherwise specified, all quotes are taken from the sperm banks' web sites.

,

California Cryobank

California Cryobank was founded in 1977 by Cappy Rothman, an urologist and andrology specialist, and Charles Sims, a pathologist and laboratory director, and claims to have the world's largest selection of donors, shipping semen samples to 50 states and 30 countries (Figure 10: California Cryobank homepage). It is one of a handful of sperm banks that is accredited by the American Association of Tissue Banks (AATB). (The AATB is a non-profit, scientific, peer-group organization that facilitates the provision of transplantable tissues including sperm, and carries out programs of inspection, accreditation, and certification of tissue banks and personnel). In addition, California Cryobank meets the licensing requirements of the States of New York and California with the New York State standards currently being the most stringent in the industry and meets the standards of the Clinical Laboratory Improvement Amendment of 1988 (CLIA).

Donors selection is facilitated by the donor catalogue which gives information concerning racial and ethnic background, physical features, occupation and schooling, and blood type (Figure 11). From the catalogue, clients are directed to the donors who meet their initial criteria of choice. The most unique feature of California Cryobank donor profiles - available for free on the web site – are the handwritten entries responding to inquiries (Figure 12). The long profiles, 20 pages in length for \$11 US

CALIFORNIA CRY@BANK, IN	C.		
	arder marke	Welcome!! to the CR https://www.de http://wwww.de http://wwww.de http://www.de http://www.de http://	California YOBANK Ismis Crystestik with-site! Ismis to testy you novigeto it will direct you to a weetlik ou will see the table that lat in up for our services or menu of additional builders at you are building for:
		ganna the second second	
	If you would and already Donor #: If not	ike to purchase a long profile or y know the donor identification r , you can do quick search here in the 'Donor Search' tab for fu	r get a free short profile umber, enter it here:] Get Profile , or click above Ill search.
	Anu		
		Search	

Figure 10: Home page of California Cryobank.

.

				CIONS	I			
Californ	ia Cryobenk		Donoi	Catalog	Last Updat	ed: 11/13/	2000 09	:53:
Racial Color Code	Occupation	Height	Weight	Hair Texture	Hair Color	Eye Color	Skin Tone	Yea
WHITE	Chiropractor	5-11	195	Wavy	POLISP RUNGARI Brown	Brown	Oive	8
WHITE	Film	5-10	130	Wavy	Black	Brown	Olive	9
WHITE	Pharmacy	5-09	138	Wavy	Strawberry Blond	Blue	Fair	С., с. с. В
642 YELLOW	ICI Biology	Asian 5-11	No	Ng-17-	KOREAN Black	Brown	B+ Medium	Chri 4
WHITE	English	5-10	150	No. Wavy	Blond	ENGLISH Mazel	Fair	1 1
657	Anthropology, English	Two-or mor 5-09	Yes 140	Na Surata	JAPANESE: GERM Brown	Hazel	O+ Medium	Non 5
YELLOW	Classical Science, English	5-09	130	Straight	Dark Brown	Brown	Fair	3
YELLOW	Liw	5-11	185	Straight	Black	Brown	Medium	3
RED	international Relations,	5-06	130	Curty	Dark Brown	Brown	Dark	3
YELLOW	Political Science	5-10	190	Streight.	Black	Brown	Medium	3
YELLOW	Life Sciences	6-00	170	Straight .	Black	Brown	Medium	4
WHITE	Business	5-09	190	Wavy	Black	Brown	Medium	4

Figure 11: California Cryobank donor catalogue excerpt.

-

				Donor#: JEII
		DONOR PF	ROFILE	Dam: 1 1291 99
Year of Birth: 197	14		Place of Birth: _	Princeton, NJ
Racial Group/Color D Caucas	Code: ian/White	Black/Black	k 🗆 Asi	ian/Yellow Other/Red
Ethnic Origin/Ances	iry: Mol	ner: <u>English</u>	Welsh r	atter: English Ger
Religion Born into: Donor:	theran	Mother:	theran	Father:
If Jewish:	Ashkenazi	Sephardic	C Orien	
Height: <u>Le 2"</u>	Weight:	<u>190</u> Ey	re Color:	M Hair Color: lern
Hair:	Heir Type:		Corrective Lense	6 :
Li Balding			lics tes □ No	Blood Type O POSI
C Thin	ET ANNAA			
Thin Average	Straight			/
Thin K Average Thick	Straight			7
Thin Average Thick Bone Structure:	Straight	🗇 Mediu	um 23ti	/ Large 🗌 Very Large
Thin Koverage Thick Bone Structure: Are you predominat Other distinguishing	Straight	Tight-handed	um 23 i Lieft-handed h nose, etc):	Large 🗆 Very Large
Thin Kaverage Thick Bone Structure: Are you predominat Other distinguishing	Straight	Mediu right-handed s, deft chin, Romar	um 23 i left-handed n nose, etc):	Large
Thin Kaverage Thick Bone Structure: Are you predominat Other distinguishing Skin Characteristics Freckles:	El Vvavy Straight El Small ely: 23 features (dimple	Mediu right-handed s, cleft chin, Romer None	um 23 t left-handed n nose, etc): 25. Few (Large Dery Large ambidextrous
 Thin Average Thick Bone Structure: Are you predominal Other distinguishing Skin Characteristics Freckles: Very fair (little to Fair (akin will text) B. Medium (light or Olive (pigmentation) Dark (unexpose) 	I Straight Straight Straight I Small ely: 25 I features (dimple in lightly on sun ex plor but will tan m tion of unexposed d skin)	Mediu right-handed s, cleft chin, Romer None None Sn sun exposure) oderste to dark) takin) Light Tan	um 23 i ieft-handed nose, etc): 25. Few (25. Few (Denk Tan (Ange Very Large ambidentrous
Thin Average Average Thick Bone Structure: Are you predominat Other distinguishing Skin Characteristics Freckles: Very fair (little to Fair (skin will te Medium (light of Otive (pigmenta Dark (unexpose)	Straight Straight Straight Small ely: 25 i features (dimple nightly to tan o hightly on sun ex blor but will tan m tion of unexposed d skin)	Mediu right-handed s, cleft chin, Romer None None None Son sun exposure) oderste to dark) takin) Light Tan EDUCATIONAL Su (circle highest leve	um 23 i left-handed n nose, etc): 25. Few (25. Few (Dark Tan (ACKGROUND rel stained)	Large Very Large ambidextrous Limples Many Many Moderate Dark Brown Black
Thin Average Average Thick Bone Structure: Are you predominat Other distinguishing Skin Characteristics Freckles: Very fair (little to Fair (skin with ter Medium (light of Otive (pigmenta Dark (unexpose High School	I Straight Straight Small ely: 25 i features (dimple constitutes (Mediu right-handed s, cleft chin, Romer None None None sun exposure) oderate to dark) takin) Light Tan EDUCATIONAL Bu (circle highest lev 3	Im 23 i I left-handed n nose, etc): 28. Few (28. Few (10. Light (10. Dark Tan (ACKGROUND rel stained) GPA: <u>3.4</u>	Arge Very Large ambidextrous
Thin Average Average Thick Bone Structure: Are you predominat Other distinguishing Skin Characteristics Freckles: Very fair (little to Fair (skin will be S. Medium (light of Otive (pigmenta Dark (unexpose) High School College/University	I Straight Straight Small ely: Si features (dimple in lightly to tan on hightly on sun ex- plor but will tan m tion of unexposed d skin) 1 2 1 2 1 2	Mediu right-handed s, cleft chin, Romer None None None Sn sun exposure) oderate to dark) takin) Light Tan EDUCATIONAL Bu (circle highest lev	Im 28 i I left-handed I nose, etc): 28. Few (1) 28. Few (1) 28. Few (1) 28. Few (1) 28. Few (1) 28. Few (1) 28. Few (1) 29. F	Arge Very Large ambidextrous Amples Many Moderate Dark Brown Black
Thin Average Average Thick Bone Structure: Are you predominal Other distinguishing Skin Characteristics Freckles: Very fair (little to Fair (skin will te Medium (light of Otive (pigmenta Derk (unexpose) High School College/University Mejor Aree	I Straight Straight Straight Small ely: 25 features (dimple in ability to tan on hightly on sun ab blor but will tan m tion of unexposed d skin) 1 2 1 2 1 2 of Study:	Mediu right-handed s, cleft chin, Romer None None None Sn sun exposure) (posure) oderate to dark) (skin) Light Tan EDUCATIONAL Su (circle highest lev 3 4 4	Im 23 (Innose, etc): 28 Few (Dark Tan (ACKGROUND rel stained) GPA: <u>3.4</u> GPA: <u>3.5</u>	Arge Very Large ambidextrous Amples Many Moderate Dark Brown Black
Thin Average Average Thick Bone Structure: Are you predominal Other distinguishing Skin Characteristics Freckles: Very fair (little to Fair (skin with ter Medium (light of Otive (pigmenta Dark (unexpose) High School College/University Mejor Aree Post Graduate	I Straight Straight Straight I Small ely: DS I features (dimple in lightly on sun ex- plor but wilk tan m tion of unexposed d skin) 1 2 1 2 of Study: L 1 2	Mediu right-handed s, cleft chin, Romer None None Sn sun exposure) (posure) oderste to dark) takin) Light Tan EDUCATIONAL Su (circle highest lev 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Im 23 i I left-handed nose, etc): 28. Few (1) 28. Few (1) 29. Few	Large Very Large ambidextrous Imples Many Moderate Dark Brown Black I. B.A. B.S.



.

Sample California Cryobank short donor profile.

PERSONAL CHARACTERISTICS (Place describe in some detail.)

Main simulations: I am akan at math. The taken calculus. I also like to build or assemble this in an artist **Mechanical Sk** that planed by an conts enion ANC_ Athletic Skills: Favorite sport is weight-lift. atte Ma TEAM What is your favorite sport? _______ What languages do you speak? on. Hobbie Stmes 6 Kina. Werd iting Describe your artistic abilities: tistic of my isin arts hievenent sth TID KS What are your favorite foods? clase Charolate Manas will. <u>na ik</u> Ohni AKCh. What is your fevorite color? <u>ATELA</u> lion Do you like animals? If so, which is your favorite? _ 1150 <u>Ltaly</u> V. would you like to travel and why? To wh and the works architerture would temole vilacas Eviditist would you describe your person How SUCCE ni differen. do e? How do you : e vourself in te well-Kn enalish ortessa LA.A Marsita unites main tain training. and weish shaol bи lating. ciah Donor #: 3271 -2-CC8-001, 2/1/85

Figure 12b:

Sample California Cryobank short donor profile

CALIFORNIA CRY@BANK, IN	A Structure is a d'Attreated by the Structure grant of a station of Torown Banks NC.	
	$\mathcal{F}_{\mathrm{rec}} = -\frac{1}{2} \left[\frac{1}{2} \left[1$	
-bolice eperm Bankins	SERVICE & FEE SCHEDULE	
FAQ / Fees	DONOR SEMEN SERVICES	
Rectrice	ICI (Intracervical Insemination) Prepared Donor Specimen	175.00
Rerotat	IUI (Intrauterine Insemination) Prepared Donor Specimen	210.00
Den New New New	Donor Selection Consultation- each 1/2 hour- by appointment only	40.00
ontant Lis Three et Logico	Genetic Counselor Consultation- each 1/2 hour- by appointment only	65.00
outra Base g	Donor Profile - short- first 6 short profiles per month are free each additional short profile	5.00
Surg Bland Sinking	Donor Profile - long	11.00
and the statements of	Donor Profile - long (from website)	9.00
	Fax fee (short profiles only - 2 pages - Within U.S.)	1.00
	Donor Audio Tape	25.00
	Donor Reactivation Fee	Please call ext. 46
	Same Day Account Set-Up	100.00
	Change of Order Fee *	50.00
	Order Cancellation Fee *	100.00
	* Fee is charged if cancellation or change of order is made on the shipment, or if order is changed more than one time.	same day of
	LIQUID NITROGEN TANK SHIPPING & PIC	KUP
	Client Pickup - Client Return	10.00
	Local Tank Deposit - required for client pickup-client return	100.00
	Client Pickup - Courier Return	20.00
	Same Day Shipping or Pick Up processing fee	30.00
	Local Delivery Please call	Please call ext 58
	Standard Overnight Delivery (2-way) delivered by 5:00 p.m. the next business day within the continental U.S.	Please call ext. 58
	Priority Overnight Delivery (2 way)- delivered by 5:00 p.m. the next business day within the continental U.S.	Please call ext 58
	Priority Overnight Delivery - Alaska/Hawaii/Puerto Rico/Canada (2 way)	Please call ext 58
	International Tank Deposit (Refunded when the tank is returned)	500.00
	International Delivery	Please call ext 58
	Saturday delivery fees are higher. No major holiday deliveries. Su available in selected areas.	inday deliveries

Figure 13: Fee schedule for California Cryobank.

-

(See Figure 13 for fee schedule), are medical and genetic family histories soanning three generations. It is "strongly recommended" by the bank that clients review long profiles on all donor choices prior to making a final selection. It is worth noting that the short profiles contain no medical information. The fifteen-minute long audiotapes, available for \$25 US, are, according to California Cryobank:

'intended to benefit clients who want to hear the donor's voice as they answer specific questions such as: What is your favorite college class and why? What characteristics do you admire in others? In yourself? How do you like to spend your free time? What was one of the most memorable events in your life or your greatest achievement?"

California Cryobank suggests that "some may want to save the tape for their child to hear at some time in the future". Through the use of these handwritten missives and audiotapes, California Cryobank attempts to bring character to their faceless donors.

In addition, California Cryobank offers two types of consultation services: donor selection consultation at \$45 US per half-hour, and genetic consultation at \$65 per halfhour. The donor selection counselor offers two distinct services: they will identify three donors that fulfil the clients "Donor Matching Questionnaire", wherein the most important qualities sought in a donor are listed, or they will provide a photo matching service. Clients submit photographs of the person they would like to have matched - often the client, their male or female partner, or family members. Staff will then 'match' these photographs to no more than six donors that the client has selected, based on physical resemblance. According to California Cryobank, approximately 60% of clients request the latter service. The genetic counseling service offers to look at the donor and client's family medical histories. California Cryobank will provide additional genetic testing upon request, for additional charge. The counseling appointment is estimated to take about one hour, thus costing 130\$ US.

California Cryobank claims to have established its "Policy of Openness" in an attempt to balance concerns regarding the right to privacy and confidentiality on the part of the sperm donor, the mother, the parenting father, and the child, on the one hand, and the 'real and legitimate needs on the part of the child to know about his or her biological heritage', on the other. Emphasis is placed on the essential nature of mutual consent in breaking anonymity, and the assertion is made that "semen donors and recipients should not be asked today how they might feel about such a sensitive and complex issue 15 to 30 years from now."

Cryogenic Laboratories

"Access to donor information is what my clients really want, and nobody delivers like Cryogenic Laboratories" (physician testimonial)

Cryogenic Laboratories states that 'they have recognized that 'the more information you have about potential donors, the more confident you are in your choice". (Figure 14: Cryogenic Laboratories homepage) To this end they provide a collection of information services:

"Patients use these donor selection resources in their own way. Some feel confident selecting a donor with just the catalog. Others may choose to use every resource. The choice is yours. There is no right or wrong way to choose. It's all in finding the level of information with which you feel comfortable. We want to assist you in maintaining control".

Clients can download the monthly catalogue of donors, (Figure 15), or define search parameters that will narrow the selection of donors by a number of criteria, such as race, religion, height, eye or hair color, and years of schooling. Clients can then browse an unlimited number of short donor profiles. The two-page donor and medical history summaries are compiled as "lively narratives" by staff members and present clients with the donor's "likes, dislikes, hobbies, skills, education, and general philosophies". Cryogenic Laboratories claims that these "easy-reading" documents help patients "visualize" the donor (See Figure 16).



Figure 14: Home page of Cryogenic Laboratories.

Derk		9 Line	2	ging	ŝ			Ald	a l	-	Ţ	ş	Ę	ŧ	Z	Ę	2		ş	Ì	ş		ę	ŝ		E	Τ		Ι	ļ		2	5	g
Brown; Lie Light; Dk	INTERESTS	Sporta/Trave/Reac	Sports Munic/Skili	Fishing/Cooking/Rea	Sports/Reading/Mit	Sporte/Music/Reed/1	Art/Sporta/WHIn	Music/Travel/Photog	Sporte Reading Whi	Beechell Fishing M	Bestatoki/Ausio/	Sports/Reading/BC	Red/Ar/Computer/S	Spota/Reding/Fa	Sports/Cemping/Tin	Sportari Milling	Sporta-Musio/Read	Pieno/Bporte/Tra	Music/Basherbell/G	SponsiAntMusic/Th	Geology/Computer/l	Runs renovation but	MusicWater Std	Readingrithinghair	Socier/Reading	Music/Running/Sk	Running Sport	AthetoeReadh	Reading	CertBroedceet	Karata/Cooldin	Samp Gerten	Sperts/Moethor	WINKIGHTCHURCH
· Photo Match; Bln= Blande; Brn= 1	EDUCATIONIOCCUPATION	MDMedical RandenVPhysician	MDMedical Resident/Physiclen	BA Mechanical Engineer	BA /Adventisting	AVSales marketing representative	MBAAteetth Care Administration	MD/Physician	MD/Medical Resident/Physician	BA Medical Bluderi	MDAtedical Resident/Physician	HS/Student - Criminal Justice	AMIsiticating business owner	MBAManegemenVAgriculturel Sci	BA. Medical student	BA/Businese/Industrial Design	BA/Graduals student	BA /Orad student/Mach. engineer	BA Medical student	JCALemyer	MA./Computer Science	MA /Vocational Trainer	BA / Archinect	BA /Computer Network Mgr	BA. Medical Student	BA Medical Student	BA Alaw Shudeni	BA /Law Student	BA /Technicien	BA.Mhiter/Tex Prep	AABootcheaper	MA /Economic Consultant	VoTechMaintenance	AATransportation
ADS; & = Ne	BONE SIZE	Med/Lenge	Smanned	MediLarge	Medium	Medium	Medium	Molium	SmaMed	SmanMed	Medum	Medium	MediLarge	Medilarge	Medium	Smarthed	SmarMed	Medium	Medium	Medium	Medium		Medium	MedLarge	Medium	Medhum	Medium	Medium	Medium	Neetum	Ĩ	Liber	E SAN	Environ
10 °N = 0	WEIGHT	200	155	200	185	200	180	190	145	185	185	170	190	105	150	175	180	165	180	185	160	240	136	230	180	2	9	105	155	8	120	ŝ	170	152
ilable; 🛛	НЕЮНТ	5	5'10 ⁻	6.3	5.10	62	62	.1.9	5'11"	60 ⁻	5	5.10	2.9	6.7	9.8	8. 0 -	6.9	-D.9	9.G.	6'11"	58	- 7.9	8.7	Ъ.9	5.6	7	5	5	-1.9	5:10	54	51	2	5.10
specimens ava	COMPLEXION	Fairfilled	Medium	Medium	Medhum	FairMed	Medium	Medum	FakiMed	FairMed	Medium	Medkum	Medium	Medium	Medium	FamMEd	FairMed	Medium	Medium	Med/Derk	Medium	a de	Neđium	Та С	Međium	Medium	Medum	Medium	Medium	Medum	Medum	F BK	Tek T	Modwm
re-Washed :	EYES	Blue	Brown	Blue/Green	Hazel	Blue	Hazel	Brown	Bite	Bhe	Brown	Brown	Bhe	Blue	Green	Hazek/Brwn	Hazet	HazeVDNe	Brown	Brown	Brown	Brown	-	Brown	mon	Bom	3	Way		mon	Biue	Harel	3	Brown
strictions; #- P	HAIR	BrownStraight	Dk BrinGurly	Bionde/Straight	Dk Bm/Straighi	BlondeWarry	Dk Brithwayy	BrownWary	Li Brn/Straight	BlondeWery	Dh. Brittery	Dh BrwShnight	Brownway	BrownWery	Dk BmCuty	Dk BmWery	BrownCurly	BiondeWery	BlackCurly	Inch/Brown Cur	DK BmWwy	BrownCuty	BlondeWavy	BlackCurly	BrownWavy	Brown/Biraight	BiondeMinny	BrownCurly	Red/Straight	BrownStraight	Brem/Straight	BrownCurly	Auburtheny	Dit Bruffcinkry
aphical m	BLOOD TYPE	O Pos	O Pos	8 Pos	A Neg	A Pos	AB Pos	APos	O Pos	A Pos	0 Pos	A Pos	O Pos	O Pos	O Pos	A Poe	B Neg	O Pos	O Pos	O Pos	A Pos	O Neg	A Pos	A Pos	A Pos	0 Pos	8 0	AB Pos	A Pos	0 Pes	0 Pos	A Pos	A Pos	A Pos
nor subject to geogr	PATERNAL ETHINIC ANCESTRY	Intel Franch	Scothsh/German	German/English	Swedtah	Gem/English/French	Polleh	Norweg/English/Inteln	SootBeh/Canadian	Germen	GermaniAmmentan	English/Franch	French	Germ/Censele/Dutch	GerrantEnglish	Hungerien	HehiGemen	Meh	African American	African American	Balvadoran	Attioen/Europeen	British/Scottish	Aftean .	Mexicen	Hungerlen/hish	Poteh	LatianUanish	Insh/Scottah	Noreagian	Scottleh/Enghish	English	Iris//Scotleh	Alto-American
d Inventory; + = Do	MATERNAL ETHNIC ANCESTRY	Irish	Irish/Icetandic	Finnish	Polish/Hungarian	Scottleh/Irish	nadati	English/German	Irteh/English	frah	Germen	Gernan	Scottish/English	German/Canadian	German	EnghaMSpenish	Scottieh/English	English/Lithuanian	AtroAmFrench/Eng	Afficen American	English	African/European	Scottish	African	IrlaMFrench	C REA	Czech	Latvian/Jawish	English/Bwedish	German	German	Scottish	Swedish/Norwegian	Afro-American
- Limiter	RACE	Cauc	Ceuc	Cauc	Ceuc.	Cauc	Ceuc	Ceuc	Ceuc.	Cauc	UB UB	Ceuc	Ceuc	Cauc	Cauc	Cauc	Cauc	Ceuc	Black	Black	Cauc.	Black	Cauc.	Black	Cauc	Cenc	Cauc	Cauc	Cauc	Cauc	Cenc	Cauc	Cauc	Black
lions:	DONOD Cl	C618	E133	F100	FF77	1-10-1	19HH	M115	P222	P410	R630	S107	SSee	1323	1502	T886	11BA	W423	2374	2846	91	162	230	245	204	274	279	281	1039	1047	1131	1611	1140	1107
revio	300:	10.	10,	10	101	10.	101		10.	10.	40.	19 0 •	10	10.	401	801	90		1 Q A	10	•	۶.		•	•	•	4	۲.		ŀ	•	:	•	



.

Cryogenic Laboratories donor catalogue excerpt.



ABORATORIES

2 1 7 5 5

Denor Profiles are available from Cryogenic Laboratories, Inc. at no charge. Please limit requests to six denor profiles par patient.

1944 Lexington Avenue North Roseville, Minnesota 55113 612/489-8000 Fax 612/489-8989

DONOR PROFILE

1124



Ruggedly handsome with brown wavy hair and a few freckles, this donor is a striking individual. He is a 39 year old father of two sons, happily married and quite successful. He has a Medium to Dark complexion sometimes passing for an Italian although his descent is that of 1/2 German and a mixture of Irish, French, Scot and English. He has hazel eyes and no distinguishing features. He is moderately near-eighted and his build is medium to large at 5"11" and 180 pounds. He prefers to spend his free time with his family, and playing and watching sporting events. His personality can be described as outgoing, happy, energetic, humorous and sensitive. He is a well adjusted optimistic leader as is evidence by his employment as a supervisor of security.

His important goals in life include the well-being of his family, having their needs and wants fulfilled and to be considered a success by his wife and children. His B.S. degree was in Park and Recreation Administration (Business Administration) and although his mathematics skills are very good, he really doesn't enjoy math. He describes his mechanical skills by stating, "I have two sons and nothing comes assembled!" He loves team sports such as football, basketball and baseball and his favorite sport is volleyball. He does not have any significant musical or artistic skills, his favorite foods are Italian and steak and he considers Florida the best place to travel because of his family and the weather. (Note: Most Minnesotans say this during January and February).

He feels that he has a special gift to share with infertile couples and in no way is this meant to sound conceited or pompous. Rather he is a concerned, stable family man who gives a message to potential donor offspring - Everyday is a gift and live life to its fullest. This donor's specimens are geographically restricted within the St.Paul-Minneapolis area, Central lowa and Mt Pleasant SC.

Figure 16a: Sample Cryogenic Laboratories short donor profile.

144 Lexington Avenue North	• Rosevi	ile, MN 55113 •	612-489-8000 FAX: 612-489-898
Donor ID:1124		Сгус	ogenic Laboratories, Inc.
Conors are not accepted if reater than one percent to randparents, aunts, uncle onditions to be present in Medical History	a history of one or (offspring. In evalu s, cousins, siblings his family. See CO	more of the conditions ating the donor, refere and children. The don MMENTS below for a d	in the list below poses a risk of nces to family included parents or indicated the following efinitive explanation.
Allergies	Epilepsy	Muscular Dystrophy	Stroke
Color Blindness	Migraine	Myasthenia Gravis	Heart Attacks
Deafness	Giaucoma	Parkinson's	Congenital Heart Problem
Blindness	Goiter	Psoriasis	Cleft Palate or Lip
Undescended Testicles	Gout	Ulcers	Retinoblastoma
Diabetes	Hermaphroditism	Varicose Veins	Alcoholism
Juvenile Arthritis	Hemia (Inguinal)	Cirrhosis	Emotional Disturbance
Hemophilia	Hypertension	Cryptorchidism	Mental Retardation
Cataracts	Club Foot	Mental Iliness	Blood Disorder (Anemia,etc.)
Cancer (Leukemia, etc) X	Dyslexia	Kidney Disease	Convulsive Disorders
Cystic Fibrosis	Emphysema	Lymphedema	Dislocated Hip (Congenital)
Eczema	Jaundice	Drug Use	Other Physical Anomalies
Anti-CMV Reactive (IgG) X	Tay Sachs	Sickle Cell Anemia	Thalessemia
Comments : CANCER: Mater	mal Aunt, Leukemia, a	ige 67	
	Medical H	istory Provided by:	

Figure 16b: Sample Cryogenic Laboratories short donor profile.

-

These profiles can be downloaded free of charge from the web site. Also available free of charge is a Patient Education video entitled "Choosing Parenthood Through Donor Insemination", that introduces the client to Cryogenic Laboratories staff, facilities, and the process of donor selection.

Like California Cryobank, Cryogenic Laboratories does not release photographs of their donors, instead providing their own donor matching services called the D.A.D.S[™] Donor Profile, for a 'nominal' \$24 U.S. per profile (Figure 17), and Photo Assisted Donor Selection (offered free of charge). (See Figure 18 for the Cryogenic Laboratories fee schedule). The D.A.D.S[™] Donor Profile is a five page document that provides the client with a 'medical/genetic summary', including "ancestral background, physical characteristics, health history, personality traits, and much more . . . The highest level of non-identifying Donor information that Cryogenic Laboratories can provide".

Cryogenic Laboratories states that the company strongly believes that donor information should be non-identifiable, but recognize that it is "socially advantageous" to match for general physical traits such as hair and eye color to better 'blend' the child with the parents appearance. However, the line drawings that are provided in the D.A.D.STM Donor Profile leave much to the imagination. To counter this shortcoming, staff, through the Photo Assisted Selection Service, compare photographs of "the individual you would hope for your offspring to resemble" and rank the resemblance of six selected donors. 'Recipients', as they are referred to in the Cryogenic Laboratories' literature, are required

to submit a form requesting this service that cautions:

"Offspring conceived from using CLI Semen Donors, chosen through Photo Assisted Donor Selection, may exhibit characteristics including, but not limited to: abnormalities/variation relating to appearance and/or features of the newborn including, without limitation, ethnic or racial variation, skin color, eye color, hair color, facial features and/or abnormalities related to these structures or to any other internal or external structure".

The average Cryogenic Laboratories donor is said to be 29.3 years of age and is required to be a high school graduate. Donors are reported to come from the Upper Midwest, Midwest, East Coast and the Southern United States, in addition to a number of Canadian donors. Restrictions are applied to insure that no more than one pregnancy per 100,000 population will be permitted per geographical location to reduce the risk of consanguinity. They are "bright, intelligent and personable - the kind of people you want to be a friend, neighbor or associate". Cryogenic Laboratories characterizes the relationship between the staff and donors as warm, sincere, personal, and caring. Along with the 'lively narrative' descriptions - such as: "Donor 1192 likes watermelon, the color purple and cats. His message to donor progeny would be "I love you and have a good life'. He states in his profile that he 'would be receptive to meeting donor recipients and offspring if the situation were ever to arise" - these are further attempts to offer a full rounded identity, and to give a face to the deliberately faceless donor, demonstrating a tension between policy and recognized emotional needs of the client and offspring.

CRYOGENIC	Laborator	res, Inc.		Donor Portfolins are available Cryogenic Laboratories, Inc your patients. The cast is \$1 donor requested.
1944 Lexington Aven	e North •	Rozville, MN 551	13 •	612-489-8000 FAX: 612-489-89
	Data		Solartian]
		Donor Port	folio	
		Vedneeday, Octobe	r 18, 1995	
Donor ID: 1124	7		Сгус	genic Laboratories, In
Specimen Preparatio] Available: Standard et	of Pre-Meehed		
Geographic Restrictic	n: Twin Cities, Central	iowa, Mt Pleasar	t SC. Sacrament	o CA
• •				•
Physical Features	Г			S'A
General				
Race: Caucasian	Blood Type:	0	Rh Factor: Rh	
Maternal Ethnic Ance	^{stry:} German/French	P	atemal Ethnic And	estry: Scottish/English
Height 71 Inches	Weight: 180 P	ounds (lbs) Bo	ne Size: Medi umi	Large
Eye Color: Hazel	- Predominant Har	id: Right	, Complexia	n: Medium
Allergies?: No	Specify:	-	••••	
Teeth Condition: Goor	Exercise: R	equiarty		
Hair:				
Color: Brown	Texture: Wavy	Condition of Hai	T: Donor's: Male Sibling's: Father's:	Thick Thick Thick
Comments : Donor's darker	complexion is medium medium.	m although it may	appear, at times	, to be a shade toward a
Distinguishing Charac	teristics		 	
Freckles: None	Location:			
Dimples: No	Cleft Chin: No			
Other				
Vision				

•

Figure 17a: Cryogenic Laboratories D.A.D.S. ™ donor profile.

Donor ID : 112	4		Cryogenic Laboratories
Hearing			
Hearing Normal	Abnormal : N	formal	
If Abnormal, Sp	ecify:		
Family History			
Domestic Status	: Married		Religious Preference: Childhood: Christian
Blood Siblings:	Male: 2	Female: 1	Currently - Christian
Multiple Familial	Births : No	Relation of Births :	
Children Father	md:2		
Male Children	2 #1	Known Additional Preama	incles : >5
Female Childre	а.0 то	tal # of Decenarios : >7	
		ial in or recyclaritics r	
Educational His Post-	High School	Years Degre	e Earned Occupation
Educational His Post- Donor:	High School	Years Degre Bachelors	e Earned Occupation Security Supervisor
Educational His Post- Donor: Mother:	High School) 4 0	Years Degre Bachelors High School	e Earned Occupation Security Supervisor Homemaker
Educational His Post- Donor: Mother: Father:	High School ' 4 0 0	Years Degre Bachelors High School High School	e Earned Occupation Security Supervisor Homernaker Salesman
Educational His Post- Donor: Mother: Father: Highest Degree E Future Occupation Subjects Enjoye	High School 4 0 0 amed :Bachel h Goals : Cust	Years Degre Bachelors High School High School Kors Specify : Busi comer service in securi	e Earned Occupation Security Supervisor Homernaker Salesman mess Administration by industry. Subjects Enjoyed Least
Educational His Post- Donor: Mother: Father: Highest Degree E Future Occupation Subjects Enjoys Math	High School 4 0 0 amed :Bachel n Goals : Cust 24 Most	Years Degre Bachelors High School High School Kors Specify : Busi omer service in securi	e Earned Occupation Security Supervisor Homernaker Salesman mess Administration ty industry. Subjects Enjoyed Least Math
Educational His Post- Donor: Mother: Father: Highest Degree E Future Occupation Subjects Enjoys Math	High School 4 0 0 amed :Bachel n Goals : Cust 2d Most	Years Degre Bachelors High School High School Kors Specify : Busi Iomer service in securi	e Earned Occupation Security Supervisor Homernaker Salesman mess Administration ty industry. Subjects Enjoyed Least Math
Educational His Post- Donor: Mother: Father: Highest Degree E Future Occupation Subjects Enjoys Math	High School 4 0 0 amed :Bachel n Goals : Cust	Years Degre Bachelors High School High School fors Specify : Busi omer service in securit	e Earned Occupation Security Supervisor Homernaker Salesman mess Administration ty industry. Subjects Enjoyed Least Math
Educational His Post- Donor: Mother: Father: Highest Degree E Future Occupation Subjects Enjoys Math	High School 4 0 0 amed :Bachel n Goals : Cust	Years Degre Bachelors High School High School Kors Specify : Busi Iomer service in securi	e Earned Occupation Security Supervisor Homernaker Salesman mess Administration ty industry. Subjects Enjoyed Least Math Natural Science
Educational His Post- Donor: Mother: Father: Highest Degree E Future Occupation Subjects Enjoye Math Natural Science Social Science Arts Communication	High School 4 0 0 amed :Bachel n Goals : Cust 2 	Years Degre Bachelors High School High School fors Specify : Busi omer service in securit	e Earned Occupation Security Supervisor Homernaker Salesman mess Administration ty industry. Subjects Enjoyed Least Math
Educational His Post- Donor: Nother: Father: Highest Degree E Future Occupation Subjects Enjoys Math Natural Science Social Science Communication Languages	High School 7 4 0 0 amed :Bachel n Goals : Cust 2 Most	Years Degre Bachelors High School High School fors Specify : Busi pomer service in securi	e Earned Occupation Security Supervisor Homernaker Salesman mess Administration ty industry. Subjects Enjoyed Least Math Natural ScienceX Social ScienceX Communication
Educational His Post- Donor: Mother: Father: Highest Degree E Future Occupation Subjects Enjoys Math Natural Science Social Science Arts Communication Languages Computers	High School ' 4 0 0 amed :Bachel n Goals : Cust 2 Most	Years Degre Bachelors High School High School fors Specify : Busi omer service in securit	e Earned Occupation Security Supervisor Homemaker Salesman mess Administration ty industry. Subjects Enjoyed Least Math Natural ScienceX Social ScienceX Social ScienceX Communication Languages

Figure 17b: Cryogenic Laboratories D.A.D.S. [™] donor profile.

-

Cryogenic Laboratories, Inc. Donor ID: 1124 Skills and Abilities Math.....Above-Average Specify : Specify : Specify : Musical (Instrumental)...... Average Specify : Musical (Vocal).....Average Specify : Language (Written)...... Average Specify : Language (Verbal)..... Average Specify : Artistic (Theater)...... Below-Average Specify : Artistic (Drawing/Painting)...Below-Average Specify : Other Skills : Use of Leisure Time : Preferences Pets.....No Opinion Specify : Music.....No Opinion Specify : Team Sports.....Like Specify : Volleyball/Football/Basketball/Baseball Individual Sports......No Opinion Specify : School.....Like Specify : Goals/Ambitions/Plans/Feelings Initiate Own Business/ Own Boss.. Public Service...... Decent Wage Level..... Help People..... Politics..... Good Job.....X Travel God/Religion..... Become Financial Success..... X Independance..... Immediate Family X Marriage/Family/Kids.... Social Acceptance..... To be Happy..... Improve Environment.... Financial Security.....

Figure 17c: Cryogenic Laboratories D.A.D.S. ™ donor profile.



Figure 17d: Cryogenic Laboratories D.A.D.S. ™ donor profile.

Donor ID : 1124		Сгус	ogenic Laboratories, In
Donor Motivation			
This Donor Would:		Donor's Motivation:	
Participate Without Reimburse	ementUndecided	Family Infertility Experier	ю е
Participate Without Anonymity	Undecided	Cenetic Departing for Dec	
Meet With Recipient Couple	No	Genesic ponation for Pro	
Meet With Donor Offspring	No	Financial Reward	
		Assist Anonymous Infert	ile Couples X
		Other Motivation :	
Medical History Donors are not accepted if a hist incent to offspring. In evaluatin incent so offspring. In evaluatin incents and children. The donor i definitive explanation.	tory of one or more of thing the donor, references r indicated the following	e conditions in the list below to family included parents, g conditions to be present in in	poses a risk of greater than one randparents, aunis, uncles, coul is family. See COMMENTS below
Medical History Donors are not accepted if a hist ercent to offspring. In evaluation blings and children. The donor is definitive explanation.	tory of one or more of th ng the donor, references r indicated the following Epileosy	e conditions in the list below to family included parents, g conditions to be present in f	poees a risk of greater than one randparents, aunis, uncles, cous is family. See COMMENTS below Stroke
Medical History Donors are not accepted if a hist incent to offspring. In evaluation bolings and children. The donor definitive explanation. Aliergies	tory of one or more of th ng the donor, references r Indicated the following Epilepsy	e conditions in the list below to family included parents, g conditions to be present in f Muscular Dystrophy Myzsthenia Grzyis	poses a risk of greater than one randparents, sumis, uncles, coul is family. See COMMENTS below Stroke
Medical History Donors are not accepted if a hist ercent to offspring. In evaluation blings and children. The donor is definitive explanation. Allergies Color Blindness	tory of one or more of th ng the donor, reference r indicated the following Epilopsy Migraine	e conditions in the list below to family included parents, g conditions to be present in f Muscular Dystrophy Myasthenia Gravis Parkinson's	poees a risk of greater than one randparents, aunis, uncles, cous is family. See COMMENTS below Stroke
Medical History Donors are not accepted if a hist incent to offspring. In evaluation adefinitive explanation. Allergies Color Blindness	tory of one or more of the ng the donor, referenced r Indicated the following Epilopsy Migraine Glaucorna	e conditions in the list below to family included parents, g conditions to be present in f Muscular Dystrophy Myasthenia Gravis Parkinson's Psoriasis	poses a risk of greater than one randparents, aunts, unles, cout is family. See COMMENTS below Stroke
Medical History Denors are not accepted if a hist encent to offspring. In evaluation blings and children. The denor definitive explanation. Allergies Color Blindness Blindness Undescended Testicles	tory of one or more of the ng the donor, references r indicated the following Epilepsy Migraine Giaucoma Goiter Gout	e conditions in the list below to family included perents, g conditions to be present in f Muscular Dystrophy Myasthenia Gravis Parkinson's Psoriasis Ulcers	poses a risk of greater than one randparents, same, uncles, cour is family. See COMMENTS below Stroke Heart Attacks Congenital Heart Problem Cleft Palate or Lip Retinoblastoma
Medical History Donors are not accepted if a hist ercent to offspring. In evaluatin iblings and children. The donor definitive explanation. Allergies Color Blindness Deafness Blindness Undescended Testicles Diabetes	tory of one or more of the mothe donor, references r indicated the following Epilopsy Glaucorna Goiter Gout Hermephroditier	e conditions in the list below to family included perents, g conditions to be present in f Muscular Dystrophy Myasthenia Gravis Parkinson's Vicers Varicose Veins	poees a risk of greater than one randparents, aunts, uncles, coult is family. See COMMENTS below Stroke Heart Attacks Congenital Heart Problem Cleft Palate or Lip Retinoblastoma Alcoholism
Medical History Denors are not accepted if a hist intercent to offspring. In evaluation addinitive explanation. Allergies Color Blindness Deafness	tory of one or more of the ng the donor, references r Indicated the following Epilopsy Giaucoma Goiter Gout Hermaphroditiern Hermia (Inguinal)	e conditions in the list below to family included parents, g conditions to be present in f Muscular Dystrophy Myasthenia Gravis Parkinson's Psoriasis Ulcers Varicose Veins Cirrhosis	poees a risk of greater than one randparents, aurite, uncles, could is family. See COMMENTS below Stroke Heart Attacks Congenital Heart Problem Cleft Palate or Lip Retinoblastoma Alcoholism Ernotional Disturbance
Medical History Donors are not accepted if a hist ercent to offspring. In evaluation idefinitive explanation. Aliergies Dearness Blindness Undescended Testicles Juvenile Arthritis Hemophilia	tory of one or more of the ng the donor, references r indicated the following Epilopsy Giaucoma Goiter Goiter Hermaphroditiern Hermia (Inguinal) Hypertension	e conditions in the list below to family included perents, g conditions to be present in f Muscular Dystrophy Myasthenia Gravis Parkinson's Psoriasis Ulcers Varicose Veins Cirrhosis Cryptorchidism	poees a risk of greater than one randparents, sams, uncles, cous is family. See COMMENTS below Stroke
Medical History Donors are not accepted if a hist increat to offspring. In evaluation increat to offspring. In evaluation indergies and children. The donor definitive explanation. Aliergies	tory of one or more of the ng the donor, references r Indicated the following Epilopsy Glaucoma Goiter Gout Hermaphroditiem Hermia (Inguinal) Hypertension Club Foot	e conditions in the list below to family included parents, a canditions to be present in f Muscular Dystrophy Myasthenia Gravis Parkinson's Parkinson's Varicose Veins Cirrhosis Cryptorchidism Mental liness	poses a risk of greater than one randparents, aurite, uncles, could is family. See COMMENTS below Stroke
Medical History Denors are not accepted if a hist encent to offspring. In evaluatin blings and children. The denor definitive explanation. Allergies Color Blindness Deafness Blindness Undescended Testicles Diabetes Juvenile Arthritis Hemophilia Cataracts Cancer (Leukemia, etc) X	tory of one or more of the ng the donor, references r Indicated the following Epilepsy Giaucoma Goiter Gout Hermaphroditiem Hermia (Inguinal) Hypertension Club Foot Dyslexia	e conditions in the list below to family included perents, g conditions to be present in f Muscular Dystrophy Myasthenia Gravis Parkinson's Parkinson's Parkinson's Varicose Veins Cirrhosis Cryptorchidism Mental illness Kidney Disease	poees a risk of greater than one randparents, same, uncles, coust is family. See COMMENTS below Stroke
Medical History Donors are not accepted if a hist benges and children. The donor definitive explanation. Aliergies	tory of one or more of the donor, references ing the donor, references indicated the following Epilepsy	e conditions in the list below to family included parents, g conditions to be present in f Muscular Dystrophy Myasthenia Gravis Parkinson's Parkinson's Psoriasis Ulcers Varicose Veins Cirrhosis Cryptorchidism Mental illness Kidney Disease Lymphedema	poees a risk of greater than one randparents, aunia, unclea, ecua is family. See COMMENTS below Stroke
Medical History Donors are not accepted if a hist intercent to offspring. In evaluation billings and children. The donor definitive explanation. Aliergies	tory of one or more of the ng the donor, references r Indicated the following Epilopsy Giaucoma Goiter Gout Hermaphroditiern Hermia (Inguinal) Hypertension Club Foot Dyslexia Emphysema Jaundice	e conditions in the list below to family included perents, g conditions to be present in f Muscular Dystrophy Myasthenia Gravis Parkinson's Parkinson's Parkinson's Parkinson's Parkinson's Varicose Veins Cirrhoeis Cirrhoeis Cirrhoeis Kidney Disease Lymphedema Drug Use	poees a risk of greater than one rendparents, aante, uncles, coust is family. See COMMENTS below Stroke

Figure 17e: Cryogenic Laboratories D.A.D.S. TM donor profile.

.



Fees and Payment Policies

How Are Services Paid For?

Your physician decides who will be billed for our services. In many cases, the patient is billed directly, in which case they are responsible to pay for all charges at the time of service using Visa/Mastercard, personal check or money order. Other services ordered by the patient such as D.A.D.S. TM (Data Assisted Donor Selection) Portfolios, videos, etc., will be paid by VISA/Mastercard at the time of order. We do not bill insurance companies nor accept assignments.

Fee Schedule

Charge per Insemination (LLL) Standard (0.8cc)	\$170
Pro Mashad (0 fee)	\$170 \$105
Fre-washed (U.SCC)	9180
Shipping (prepaid round-trip)	
Local (Medical Courier)	\$ 50
Federal Express	
Standard Overnight (by 4:30 PM next day)	\$110
Priority Overnight (by 10:30 AM next day)	\$130
First Overnight Air (by 8:00 AM next day)	\$160
Same Day Air Ship	\$265
International Fees (varies by location)	
CLI Priority Service	\$75
Change of Order (Day of Shipment)	\$ 50
Order Cancellation (Day of Shipment)	\$100
Cryovial Return	
Return of unthawed cryovials for future shipment to same patient	\$ 75
Other CLI Services Available	
Donor Profile/Health History	N/C
Photo Assisted Donor Selection	N/C
D.A.D.S. TM Donor Profile	\$ 24
	each
Patient Education Video (plus postage)	\$28



Donors are requested to commit for a minimal period of one year and undergo medical screening and "life style assessment". Cryogenic Laboratories states that there is no independent corroboration of any of the personal or medical/genetic history provided by the donor. They assure clients, however, that the bank screens and tests all donors in accordance with AATB standards, and conforms to New York State Regulations, and ASRM guidelines. Cryogenic Laboratories screens donors to ascertain whether they are cystic fibrosis carriers. A disclaimer is made stating that CF screening is not exhaustive or conclusive (over 400 known mutations) but reduces the probability of the donor being a CF carrier to approximately 1%. Tay-Sachs tests are conducted on donors of Jewish or French Canadian ancestry; Sickle Cell testing of donors with Black African ancestry; B thalassemia and ∂ - thalassemia testing of Mediterranean or Southeastern Asian and Philippino ancestry. Additional chromosomal analysis is available upon request for an unspecified additional charge. CLI recommends that recipients obtain genetic counseling prior to donor insemination, including appropriate carrier testing for genetic disorders. However, Cryogenic Laboratories do not provide these services.

Recipients are asked to acknowledge that there are no guarantees in testing and reproduction. The bank "cannot be held responsible for the physical or mental characteristics of any offspring conceived as a result of using the Specimens". In addition, the recipients are required to: "release the company, its employees and the donor from liability and responsibility "of any nature whatsoever for complications of pregnancy, childbirth, or delivery; the birth of any abnormal child; the genetic, hereditary, or hereditary tendencies of such offspring; or any other adverse consequences that may arise in connection with the Recipients' use of the Specimens" (Cryogenic Laboratories Informed Consent document).

Cryogenic Laboratories states that it has a strict policy of donor anonymity and confidentiality, in accordance with "present legal statutes and standards", but recognizes the "genuine desires of the adult child to retrieve knowledge concerning his/her biological legacy". Donors are asked to respond to questions concerning their motivation for participating in the program and their willingness to meet offspring (see Figure 17e: D.A.D.S.™ sample profile).

Xytex

"Doctors recognize Xytex for its superior semen quality. But patients are looking for more than a vial of sperm or basic information when they select a donor. They are looking for traits they would like to see in their children. That's why patients around the world are choosing Xytex donors."

Xytex goes even one step further to meet client demand (Figure 19: Xytex homepage). In addition to the traditional Donor Profiles - as are featured by the banks previously described - and supplemental donor profiles - containing 'donor essays and social and educational information on the donor and his family'. Xytex claims to be "changing the face of donor insemination" by providing clients with actual 'visual' images of the donors through Photofiles, Babyfiles, and Videofiles. There is no need for handwriting samples, or staff-composed narrative descriptions as many of the donors who appear in the Xytex catalogue are no longer faceless (Figure 20). However, following industry recommendations as presently embodied in ASRM standards, names addresses and social insurance numbers of donors are not released. Xytex follows current trend by "agreeing in principle" to ascertain donor interest in meeting upon the request of adult children. How this might be handled in practice is left undiscussed.

Xytex makes an unlimited number of short donor profiles available free of charge as downloadable PDF files (Figure 21).

Having a baby through donor insemination requires you to make important decisions that affect your life and those of generations to come. We will do everything possible to make this a positive experience.

Our services compliment the many medical options offered by your licensed medical professionals. While we coordinate our services through them, we are always available to answer questions or concerns you have. Reproduction is a very personal matter and we respect your desire for privacy. The information you share with us is held in the strictest confidence, unavailable to anyone other than your professionals without your express permission.

This site is only an introduction to our services. Please feel free to <u>contact</u> us, so that we may provide resources that respond to your unique needs.

SCROLL DOWN TO SEE WHAT'S NEW ON OUR SITE!!

NEW!! XYTEX TISSUE SERVICES

Semen and embryo storage services provided by Xytex subsidiary.

DONOR INSEMINATION FORUM

An area where professionals can exchange thoughts and ideas.

KEY PERSONNEL

Board of Directors, Medical Advisory Board, and Key Xytex Personnel.

DONOR EVALUATION How we evaluate and

test our donors

BECOMING A XYTEX DONOR

Overview of requirements for becoming a Xytex donor. <u>GENETICS</u> The science that makes a person.

DONOR

Xytex donor

FEE SCHEDULE

Summer 2000 fee schedule, effective June 1, 2000.

THE XYTEX DONOR

Basic information about our donors.

XYTEX OVERVIEW Our licenses and guidelines.

INFORMATION OPTIONS How to obtain donor information, photos, etc.

SCREENING GUIDE

screening guidelines.

Figure 19: Home page of Xytex.

Graup Danor	Code No.	Race Ethnic Origin	Hair Color Texture	Eye Color	Sidn Tane	Blood Type	Height Weight	Occupation	Interests Page 1 Religion
FL 818	NEW	Hapanic Puerto Rican	Dark Brown Straight, Fine	Dark Brown	Medium	0+	5'9' 205 ibs	Law Enforcement	Scube Diving, Weight Lifeng Protestant Computers
.FL 376	•	Hispanic/Spanish, Irlah Puarto Rican, Native Amer	Dark Brown Straight	Dark Brown	Olive	0+	518 175 Ros	Film Maker	Gulter, Drawing, Reading, Roller Bleding
FL 433	1P	Asian Filipino	Black Straight	Dark Brown	Olive	0+	5'9" 145 Ibs	Engineer	Running, Lacrosse, Bilding Calholic Rollerblades.
FM 563	· Q	Ceucasian/Spanish Insh, French, English	Dark Brown Straight	Light Brown	Medium	0+	6"1" 200 lbs	Management	Cycling, Art, Archery, Music Calholic
FM 878	Q	Caucasien Germen, Scottish, Irish	Medium Brown Straight	Light Brown	Medium	0+	6"3" 230 ibs	Marketing/ Production	Sparts, Valurdeer Wark Presbyterian
FM 126	ιP	Caucasian Insh, Raisn	Dark Brown Wavy	Light Brown	Medium	0+	670" 180 ibs.	Accounting Software Devp.	Soccer, Trumpet Catholic
FM '	NEW	Laotian/ Chinese	Black Straight/Thick	Black	Light Brown	0+	610" 165 Ras	Student	Weightlifting, Drawing, Raising Animals
GL 326	e e	Caucasien/German Russien	Med. Brn./Gray Wavy, Thick	Light Brown	Medium	A•	5'9 %" 140 ibs	Chiropractor	Music, Foreign Filme, Lit. Jewish
GL ' 154		Asian Tawanese	Black Straight	Dark Brown	Madium	٨.	5°10° 155 ibs	Altorney	Reading, Music, Termis, Episcopalian Rumm
GI. 1 168	,	Hispanic/Spanish French, Mexican	Black Wavy, Thick	Dank Brown	Olive	A+	5°10" 240 lbs	3 yrs college Court Interpreter	Fistung, Swimming, Jogging
GL '		Caucasian Irish, Scottuch	Dark Brown Straight, Thick	Light Brown	Fair	A+	5'9" 180 ibs	Student	Sports, Rugby, Faatbell, Gal Methodist: Running Frelemit
GM * 190		Caucasian German	Dark Brown Curty	Brown	Medium	٨.	60" 160 856	Meteorologist	Honiculture, Model Trains, Methodist Racquelball
3M 1 273	*	Caucasian English, French	Dark Brown Thick/Straight	Dank Brown	Medium	A+	6"1" 175 tbs	Musician	Baas Guitar, Bicycling, Politics, Art
3M * 74		Caucasian Mixed European	Dark Brown Straight	Light Brown	Medium	٨٠	61" 179 Has	Student Pub.Rei./French	Sports, Reeding, Cooking Baptist Foreign Languages
5 M *	•	Caucasan/English German, Scotlish	Dark Brown Straight	Light Brown	Medium		6"2" 190 Abs	Industrial Designer	Fishing, Auto Restoration Presbyterien
im · 42	e	Caucasian Mixed European	Medium Brown Straight, Thick	Dank Brown	Medium	A •	6"1" 190 lbs	Architect Intern	Running, Football, Skydivini Christian
5M . 165		Caucasian Swedish, English, Weish	Dark Brown Straight	Light Brown	Medium		610" 160 lbs	Student	Licensed plot, Vol. Search - Protestant Rescue Air Forc-
4L 1 139 :	inis are Straws	Caucasian/English Japanese, Asian	Dark Brown Straight	Brown	Medium	8+	510" 195 Ibs	Milwnght Maintenance	Hunting, Fishing Beptist

Figure 20: Xytex donor catalogue excerpt.

.

	Dond	or Listing		
Donor Information		Addition	Additional Profiles Available	
Donor ID Number:	BGM9459			
Birthdate:	09/06/79			
Physical Appearance		View Comple	View Complete Donor Profile (\$10 US)	
Race:	Caucasian	Sorry, N	Sorry, No PhotoFile available.	
Ethnic Origin:	Scottish/HungarianI	Sorry, N	- Sorry, No BabyFile available.	
Skin Tone:	Fair			
Hair Color:	Medium Brown			
Hair Type:	Wavy Thick	Height:	6'3"	
Eye Color:	Blue	Weight:	240	
Personal Information				
Occupation:	Student/Car Salesman	Education:	2nd year College/ Finance	
Marital Status:	Single	Children:	0	
Religion:	Catholic	Interests:	Reading, Playing Sports, History	
Comments:	**LIMITED AVAILABILITY** Donor has only unwashed units. The medical and social history information contained in this profile was provided by the donor and cannot be verified for accuracy.			
Maternal Medical History				
Family Member:	Mother	Age:	49	
Health:	Good	Age at Death:	Age at Death:	
Health Problems:	No known medical problems.			
Family Member:	Grandfather	Age:		
Health:		Age at Death:	83	
Health Problems:	Alcoholism, Stroke			
Family Member:	Grandmother	Age:		
Health:		Age at Death:	65	

Figure 21a: Sample Xytex short donor profile.
Family Member	Uncle	Age:	55	<u> </u>		
Veelth:	Cood					
	Good	Age at Deata:				
Health Problems:	No known medical problems.					
Family Member:	Aunt	Age: 53				
Health:	Good	Age at Death:				
Health Problems:	No known medical pro	oblems.				
Family Member:	Aunt	Age: 47				
Health:	Good	Age at Death:				
Health Problems:	No known medical pro	oblems.				
	Patern	al Medical History				
Family Member:	Father	Age:	51			
Health:	Good	d Age at Death:				
Health Problems:	No known medical pro	No known medical problems.				
Family Member:	Grandfather	Age:	84			
Health:	Fair	Age at Death:				
Health Problems:	Cataracts					
Family Member:	Grandmother	Age: 80				
Health:	Fair	Age at Death	Age at Death:			
Health Problems:	No known medical pro	oblems.				
Family Member:	Uncle	Age:	48			
Health:	Good	Age at Death	Age at Death:			
Health Problems:	No known medical pro	blems.	<u>an an a</u>			
	Sibling	g Medical History				
Family Member:	Half Sister	Age:	15			
Health:	Good	Age at Death	:			
Health Problems:	No known medical pro	blems.				

Figure 21b: Sample Xytex short donor profile.

-

The donor essays included in the Supplementary Donor Profile, which sells for \$10 US, range from a paragraph to five pages in length, and offer information on the donor's background, hobbies, and more often than not, include a personal message to the client or future offspring. According to Xytex, this profile includes:

"a wealth of medical and social information about the donors and their families. If you want to know how many people in the donor's family have blue eyes, whether the donor is artistic or whether he has dimples, you may want to order a Supplemental Donor Profile".

The Photofile, introduced in 1994, sells for \$35 US per donor, and consists of three 4" by 6" head shots. "When I was uncertain about which donor to select I got the photofiles, that made me feel secure in my selection" (Xytex client testimonial). The Babyfile, which is an 8" by 10" photograph enlargement, became available in 1996 and costs clients - "who have concerns about how their baby might look" - \$35 US. The Videofile joined the ranks of information services in 1997. Including a long profile, the Videofiles, approximately ten minutes in length - "not only provide you with a glimpse of the donor's appearance, but they reveal a bit of the donor's personality as well" - can be purchased for \$100 US. In addition, Xytex offers a photo matching service as visuals are not available for all donors. Staff members select a number of donors that 'match submitted photographs for the client to choose from photo-matching services and 'follow-up phone consultations' are provided for \$50 US. While not all donors participate in these voluntary options, approximately 10% of the current donor listing offer at least

Effective July 1, 1999	1100 Emmett Street Augusta, GA 30904 www.xytex.com
Donor Information Short Donor Profiles	First Five Fre
Long Donor Profiles	\$10.00 Eac
PhotoFile	\$35.00 Eac
BabyFile	\$35.00 Eac
BabyFile/PhotoFile Combination	\$55.00 Eac
VideoFile	\$100.00 Eac
Photo Matching Service	For Evaluation.
Cryopreserved Semen Xytex Unwashed Units	\$150.00 Eac \$185.00 Eac
Inseminators	\$10.00 Eac
Shipping And Handling Two-Day Delivery By 5:00 p.m. Priority Overnight Delivery By 12:00 p.m. Saturday Delivery By 5:00 p.m. Overnight Delivery By 10:30 a.m. Alaska/Hawaii Two-Day Service By 5:00 p.m. Local Delivery Canada And Other International Shipments UPS Overnight Letter (U.S. Only)	\$110.0 \$130.0 \$180.0 \$180.0 \$180.0 \$140.0 \$140.0 \$140.0 Please Ca Please Ca Please Ca

Figure 22: Fee schedule for Xytex.

one of these features (See Figure 22 for Xytex fee schedule). "Thanks to Xytex, when it is time to talk to my child about his father I will have lots of information and the pictures sure will be a big help" (Xytex client testimonial).

This bank also features 'Xytex 30 semen samples'. These specimens are guaranteed to contain a minimum of 30 million motile sperm per millimeter, which exceeds ASRM recommendations and other bank averages of 25 million per millimeter. Xytex limits their donors to 20 reported family units worldwide, after which the donor is retired ¹⁰. In such instances, Xytex will attempt to 'reactivate' the donor for this limited instance.

Xytex advertises licensing and accreditation by New York, Maryland, and Georgia State licensing, and claims to meet Health Canada and ASRM standards. Xytex, however, is not an AATB accredited tissue bank. Xytex makes the following disclaimers concerning screening and testing:

"The medical and social history information contained in this profile was provided by the donor and cannot be verified for accuracy" and "While each candidate is screened, he is not tested specifically for all of the following diseases ...Screenings are not as accurate as lab tests for specific diseases and conditions. According to experts there are more than 5000 genetic abnormalities that can affect humans. Diagnostic testing exists for only a handful of these abnormalities and it is very expensive. Comprehensive testing, therefore would make donor

¹⁰ This policy was recently publicized as a Canadian couple sought a retired donor for a second child. This case is further discussed in Chapter 3.

insemination inaccessible to most people. Xytex tests donors routinely according to ASRM guidelines, and additionally, based on the ethnic backgrounds of individual donors¹¹".

Xytex offers one other unique service: the Patriarch[™] System. In addition to encouraging recipients to keep a file of all information provided, Xytex states that the company has, since its inception in 1975, preserved donor cells to be used as "genetic records". There are no genetic counseling services offered by Xytex, though clients with "specific genetic concerns" are invited to "request and pay for" additional donor testing.



¹¹ Like Cryogenic Laboratories, Xytex screens donors of African descent for sickle cell trait, donors of Jewish descent for Tay-Sachs, and donors of Mediterranean descent for thalassemia.

Online selection and purchase of sperm - Initial thoughts

One of the more troubling features of the online selection of sperm and choice is the unmediated manner in which individuals navigate the information offered. While required to release banks from liability and indemnity, recipients are left to seek counseling services independently, or to pay additional fees for telephone counseling provided by the individual bank. There is however, no mechanism or structure in place that guarantees that this counseling is made available. With the potential of unmediated selection of donors comes an unmediated interpretation of probability and risk. I do not wish to suggest that the provision of professional counseling services eliminates the problems and ambiguities that are inherent in the interpretation of genetic tests. The extensive ethnographic work of Rayna Rapp, who has spent years working with the professionals and individuals whose lives are shaped by such testing, has well demonstrated this fact (Rapp1995; 2000). However, the imbrication of biogenetic and personal histories, and unchecked marketing, as witnessed in the online marketing and purchase of sperm is especially problematic.

In addition, California Cryobank addresses the possible option of home insemination. While requiring a physician's signature on the 'Authorization of Semen Release Form', thus ensuring that the client is under a physician's care, the bank will ship samples to the home address of the recipients, thus removing the physician from the insemination process in what be seen as a radical 'de-medicalization' of an assisted reproductive technology. And - in an unusual reversal of referral trends enabled by the Internet technology – when clients begin their search for donor gametes with the sperm bank, rather than through physician or clinic - the California Cryobank client relations department can refer clients to physicians in their area who are registered with the bank.

For \$175 US plus shipping charges, clients - be they small fertility clinics or individuals - can select, order and receive same day semen samples. These figures vary only minimally from one sperm bank to sperm bank to another. While utilized ancillary services may cause final costs to fluctuate, it would appear that competitive sperm pricing is not a factor in market competitiveness. Rather, sperm banks focus on the information and services they provide to differentiate themselves from competitors.

Which sperm bank offers the most complete screening programs? The most extensive donor profiles? What is "known" about these donors? We are confronted with the question of how the information contained in donor profiles - favorite foods, religion, leisure pastime, and love of chipmunks, "What I want to be when I grow up"¹² - might be transmitted to the potential child. Genetically? Here we witness a marked contrast



¹² While donors may range in age from 18 to 45, many donors are university students and donors are routinely asked to answer questions similar questions to that posed above. Refer to the California Cryonbank donor profile and marketing for the Xytex Videofile interviews.

between scientific and popular notions of inheritance. A trend to biological determinism in some genetic research, particularly surrounding behavioural genetics, is an important exception from this rule.

Information concerning race, ethnicity, and family medical histories are no less problematic. All three sperm banks discussed above categorize their donors by 'ancestry and 'ethnic origin'. For example, California Cryobank Donor #2187 claims Belgian and Iranjan descent, whereas Donor #2336 is a blend of English, French Canadian, Canadian, Scottish and German ethnic descent. However, this is the only sperm bank that utilizes ethnic diversity as a 'quality control measure', listing its donors by racial division, and color coding its specimen vials accordingly. (Semen from Caucasian donors is stored in vials with white caps, black/African American donor semen is shipped in black capped vials, semen donated by Asians is shipped with a yellow cap, and all other donors, such as Native Americans, Hispanics or 'mixed', are coded with a red cap). Race is a social construct that is mapped onto social roles and relations that are culturally and historically situated. That these groupings are maintained, and played with is both witness to the cultural salience of racial typing in North American society and the deference paid to the desires of the clients seeking these wares.

Perhaps the most puzzling aspect of this enterprise is the scope and power that is granted a popular discourse of trait inheritance; the most revealing is the seemingly naive faith these aspiring parents bring to their search for a donor who 'embodies' all that they might hope for in a child, *their* child. Embedded in these deliberations over which sperm to purchase, are assumptions and beliefs, desires, fears and hopes, and weighings of value, both in economic and moral terms. These preconceptive imaginings measure cost and gain in a self-consciously, calculated fashion. The identities crafted for these gametes are both descriptive and prescriptive, as these descriptions do not exist solely in the realm of the imaginary. Scripts of identity both reflect and shape lived experiences. Some may carry the weight of prophecy and prayer, as gametes are presented as synechdochal precursors of future persons. However, as Corson and Mechanik-Braverman point out, in an editorial calling for mandatory gamete registries, in reality these profiles are mere 'snapshots in time" (1991).

Questions concerning donor motivation - be it for remuneration, to assure genetic reproduction of self, or to help a childless couple achieve pregnancy – and willingness to meet recipients or offspring, are of theoretical interest as they problematize conventional definitions of gifts and commodities. What social and biogenetic linkages are created through the exchange of gametes? What rights and obligations are bound up in the gift/sale of sperm? Does the declared motivation of the donor shape the nature of the object of exchange? These questions are revisited in greater detail in the following Chapter 4.

Chapter 3 Farther Afield – ASRM/CFAS '99 *

*(Conjoint Annual meeting of the American Society for Reproductive Medicine and the Canadian Fertility and Andrology Society. Toronto, Ontario, Canada. September 25-30, 1999).

ASRM (the original publisher of *Fertility & Sterility*) started out as a clinical society organized to address the needs of gynecologists and urologists working in the field of infertility. Its current profile is certainly very different. Although physicians still compose the major portion of the membership, the uniqueness of the organization is in the wide range of interests and expertise of its members, who now include basic researchers, nurses, mental health professionals, and a large group of clinical reproductive scientists. Reflective of the economic changes in reproductive medicine, a new breed of members, medical administrators and office managers have also joined the roster. Nearly one third of members are from outside the United States. Ninety-eight countries are represented in ASRM. This international composition of its membership makes ASRM conventions a crucial nexus for the dissemination of new knowledge and practices within the field.

It was while leafing through the pages of *Fertility & Sterility* that I first discovered announcements for the 1999 ASRM/CFAS Joint Annual Meeting to be held in

Toronto. Earlier conference highlights and program supplements had comprised part of the data that I had previously sifted through in my analysis of the journal proper. I interpreted this as a unique opportunity to supplement my library efforts with faces by following the journal's readership to its annual ritual gathering: Go to the watering hole, as it were. This was a very different approach from cornering the scientists in their native labs as I had originally set out to do. However, this conference represented another element of scientific culture that interested me.

My first hurdle to overcome was that of membership itself. How was I to gain entry? In fact, membership was a simple act of paying a registration fee of \$135 US and I was welcomed within the 'Associate Member, Resident, Fellow, Medical Student or Team Member' category. I identified myself as Janalyn Prest, Graduate Student (MA), of McGill University. This was to be clearly displayed on my name badge which conference goers were cautioned to wear at all times. Those without proper identification and authorization would be asked to leave the conference center. (I was later to observe that this access was visibly policed in only two contexts: at the luncheons that were included in the postgraduate program and entry to the exhibition hall).

In 1999, the joint conference attracted 3750 registrants, and 161 exhibiting companies (Figure 23). These numbers have remained relatively constant over the past ten years with the notable exception of the 1998 conference, located in San Francisco,

ASRM MEMBERSHIP AND ATTENDEE DEMOGRAPHICS

The demographics of the American Society for Reproductive Medicine's membership reveal that the majority of members are equally distributed across the age range of 31 to 55 years. The fact that the Society attracts and retains a large group of young physicians and other health care professionals indicates continued growth for the future.

					1011.0				
	1991	1992	1993	1994	1995	1996	1997	1998	1999
Andraiogy	65	121	126	103	107	126	67	189	123
Embryology	-	-	-		-	•	-	463	386
Endocrinology & Reprod Endo	567	857	736	728	570	686	746	987	712
Family Practice	1	5	3	12	4	2	1	34	14
Gynecology	110	148	162	137	84	133	100	733	227
Infertility	139	232	235	239	218	317	331	423	648
Internal Medicine	3	4	6	17	8	6	8	18	7
Laboratory Technology		-	218	189	165	186	176	121	71
Nurses	247	293	283	423	349	373	267	346	251
OB/GYN	1325	872	1077	8 83	840	931	685	1,254	368
Paraprofess/Unidentified Special	ty 294	297	137	148	251	317	147	1,123	569
Psychology/Psychiatry	13	51	63	39	32	8	40	94	15
Pediatrics	-		1	10	1	3	2	8	7
Pathology	2	7	3	13	4	5	3	12	4
Research	123	210	169	186	198	253	192	209	182
Mental Health			31	33	29	45	20	27	79
Urology	60	108	121	101	98	109	92	105	81
Veterinary Medicine	4	6	2	14	5	7	3	5	6
Reproductive Endo & Infer Fellow	5	•	-	-	-	•	-	310	
Attendance	2,953	3,211	3,373	3,275	2,963	3,508	2.900	6,461	3,750

ANNUAL MEETING REGISTRATION SPECIALTY

The following table presents the growth in the number of registered professonal attendees and technical exhibits:

	Professional	Exhibiting	
Year	Registrants	Companies	Location
1988	2199	114	Atlanta, GA
1989	2732	114	San Francisco, CA
1990	2876	92	Washington, DC
1991	2953	126	Orlando, FL
1992	3211	138	New Orleans, LA
1993	3373	138	Montreal, Quebec, Canada
1994	3275	144	San Antonio, TX
1995	2963	140	Seattie, WA
1996	3508	151	Boston, MA
1997	2900	162	Cincinnati, OH
1998	6461	182	San Francisco, CA
1999	3750	161	Tornto, Ontario, Canada

AMERICAN SOCIETY FOR REPRODUCTIVE MEDICINE FUTURE MEETING DATES

October	21-25, 2000	San Diego, CA	October	16-20, 2004	Philadelphia, PA
October	20-24, 2001	Orlando, FL	October	15-19, 2005	Montreal, Quebec, Canada
October	12-16,2002	Seattle, WA	October	21-25,2006	New Orleans, LA
October	11-15, 2003	San Antonio, TX	October	13-17, 2007	Washington, D.C.

Figure 23: ASRM annual meeting demographics.

California where attendance figures approached 6500¹³. The theme of the 1999 conference in Toronto was "Milestones of the Century", featuring plenaries on cloning; embryo culture; and telematics, robotics, and microtechnology in the 21^a Century. CFAS President, Arthur Leader told conference participants that the conference aimed to "stimulate, educate and entertain." The star attendee turned out to be Dr. Roger Gosden who, during the conference, announced to the scientific community and media his success in cryopreservation and subsequent ovarian tissue grafting resulting in a pregnancy. He simultaneously made public his decision to leave Britain to join the McGill Centre for Reproductive Medicine. This acquisition of 'the greatest reproductive medical researcher' of the day was seen as a major coup for McGill by many of the Conference attendees, who were quick to congratulate *me* for *our* success upon noting my nametag declaring McGill affiliation.

Networking - On the floor

It was with trepidation that I first entered the Toronto Convention Centre, which housed the ASRM/CFAS conjoint Annual Meeting '99. I had begun by feeling grateful that the meeting was being held serendipitously nearby, and that rather than longing to have the opportunity to listen to and speak to these varied professionals 'informants' from around the world, here they were, coming to me, en masse. It all seemed too good to

¹³ Nearly 15% of the 335 infertility clinics reporting to the Society for Assisted Reproductive Technology

be true. But as I walked through the doors on the first day of registration, two days before the conference grand opening gala, I saw the catch: Even with my nametag, it was clear that I was not one of them! As my goal was to slide through the meeting halls, seminars and debates observing and participating, I realized that I needed to blend in. I needed a suit, a more restrained hairdo, and my conference tote bag. Perhaps the conference tote, in and of itself, may have done the trick, but the faces around me were predominantly male, and some years my senior.

This was a meeting of acquaintances, of friends and colleagues. These meetings act as one of the nodes in an often intangible network of professionals, scattered across both geography and practice, from the Middle East, Asia, South America. From reproductive endocrinologists and veterinary scientists, to mental heath caregivers, this is a group who cite, collaborate and compete. This becomes a field site, brief in time, but concentrated in intensity and focus. I found that the professional conference is a valid and invaluable ethnographic venue.

The weekend post graduate seminars filled the two days leading up to the conference proper, which began with a circus extravaganza – no, really - and a six course dinner. This I opted out of, knowing that I would never be able to resist a Geertzian 'thick description' of the scientists at play. They filed in the next morning, for 6:30 AM

⁽SART) in 1997 year are located in California, perhaps explaining such an increase in attendance figures.

symposia and 8:00 AM meetings, some fresher than others, recounting their tales of late night cavorting.

Post-graduate preamble

I quickly understood that 'speaking the native tongue' was imperative. And so I revised my plans of sitting in on seminars such as "Taking ART to the Year 2000: Theories and Solutions for Current Laboratory Practices or Special Topics" or "Assisted Reproductive Techniques for the 21st Century". Instead, I found my place in "Management of Genetic Information: Implications for Nursing Practice": a course designed to introduce nurses to the techniques, the dilemmas, and the ethics of genetic testing. The women with whom I attended this two day session asked the questions I needed answered, and welcomed my own. And while I was disappointed that I had to accept that the session on the standardization of laboratory plastics was out of my league - I would be unable to ask the 'right' questions – this seminar presented me with more than enough opportunity to poke, probe and ponder.

In this session, the nursing practitioners and I were introduced to some of the basic techniques and principles of genetic testing – polymerase chain reaction (PCR), Southern blots, karyotyping, single gene and autosomal disorders, and linkage analysis. As one presenter phrased it: "genetics has usurped the place of biology as the science of nursing training." This forum provided me with the opportunity to question a panel of

reproductive clinicians from several different fertility clinics and sperm banks, raising some of the issues that had arisen during my online investigation of sperm banks. I draw on this material in Chapter 4.

Luncheons and the like

As with the nametags, prepaid tickets to the roundtable luncheons were fastidiously scrutinized. However, once past the gatekeepers, I quickly discovered that I was able to 'shop' for the roundtable most relevant to my research. Low turnout meant that I was able to fill an empty seat and join in the conversation. I confess that I had been disappointed when I had received my registration packet in the mail and realized that of the 180 roundtables that I had ranked as instructed (5 per day, in order of preference), I had received only my fifth choice for each day. Nevertheless, the first that I attended proved interesting. Entitled "Diagnosis of major depression in infertility and ART patients", the round table brought together mental health professionals, all women, who treated patients suffering from major depression and other serious mental disorders while undergoing treatment for infertility. This was no simple discussion of the self-esteem and frustration issues documented by researchers who have studied infertility programs (See, for example: Cusssins 1996 a, 1996b, 1997, 1998; Edwards et al. 1993; Franklin 1997). Rather, these were frightening tales of crisis intervention, the ethics and pragmatics of medicating and/or hospitalizing women against their wishes, intervention in IVF treatment protocol and a long discussion about preferred 'scripts' (prescriptions of antidepressants). I refrain from further describing the content of this particular roundtable discussion, as it was indeed tangential and my understanding of psycho-pharmacological treatment negligible. Yet the emotional tone of the case studies brought forward for discussion and advice was striking, and underlined the personal and social implications of fertility treatments.

On day two I found myself assigned to join a roundtable facilitated by Cappy Rothman, entitled "Post-mortem sperm recovery". Morbid curiosity aside, I was most interested in meeting Dr. Rothman, who I had already "encountered" on the web pages of the California Cryobank, of which he is the founder and Medical Director. I located his table, and quickly did an about turn, ready to bolt back into the exhibit hall for shelter. The ten gathered at the 'post-mortem sperm retrieval table' were men, and all appeared to be over sixty years of age. The previous day I had no conflict as I explained my presence as an observer to the roundtable group, an anthropology graduate student who was there to better understand their professional practices and experiences. The mental health professionals were welcoming and included me in their discussions, answering my questions, taking my presence in stride. With the Rothman group, I immediately anticipated a problem. Age, gender, and professional boundaries stood in the way. I found myself incapable of sitting down and explaining myself to the gathered men and requesting that they explain themselves, their motivations and their practices to me!

I retreated and discreetly located another roundtable entitled "Donor Conception: Psychological aspects". It was the group that I had originally selected as my first choice for the second day, and equally as important, I felt comfortable seated in their midst. The group consisted of eight women and one man. Spotting two empty places, I asked if I might join them and was invited to do so. Once again, I identified myself and presented my reasons for being there. The group was lead by an American psychologist, Patricia Mahlstedt and was comprised of infertility counselors, psychologists, sociologists and clinical researchers. During the discussion, Mahlstedt drew upon a number of studies that she had published over the years on donor conception. Conversation centered on international standards and regulation of donor gamete conception, donor motivation, the psychological and legal ramifications of 'third party conception', and current trends in disclosure. Business cards and study references were exchanged, initiating contacts that would later be pursued.

The one man present revealed that his interest was more personal than professional in this instance. Though a doctor working in reproductive medicine, he had selected this particular roundtable because he had donated sperm on a number of occasions during his years as a medical student. Recent debates surrounding egg donation and sale had lead this man to reflect on his own experience as a donor. In what manner is sperm donation different from egg donation? How did *he* feel about the possibility of having offspring who might wish to contact him? Why were we so certain thirty years ago that there would be no psychological ramifications to sperm donation? Why were men not counseled then and why do they so sporadically receive counseling today? Did *he* have unresolved psychological conflict that should be addressed?

These conversations, as with the information gathered at the post-graduate seminar, inform later discussion of issues that I have identified surrounding donor selection. Before turning this discussion however, I return to the exhibit hall and to conversations on the floor.

Tainted Love - The trouble with sperm

,

In July 1999, Health Canada had issued a news release stating that: "Preliminary findings of Health Canada's investigation of the 49 sperm banks indicate that a number of them have shown deficiencies in testing and are non-compliant, in varying degrees, with the Semen Regulations as defined in the *Food and Drugs Act.*" Semen samples dating back to 1996, when the Semen Regulations in question came into effect, were quarantined. The Health Department statement declared that "a most precious commodity" had not been properly screened¹⁴.

¹⁴ As Health Canada stated, the 49 clinics showed <u>varying</u> degrees of 'non-compliance'. Tests not performed, or not routinely performed, included those for the detection of hepatitis B, hepatitis C. HTLV I/II, HIV-II, CMV, chlamydia, neisseria gonorrhoea, ureaplasma urealyticum and mycoplasma hominis. In some instances the problem was lack of testing, in others irregular testing, and in yet others utilization of testing methods which were at variance with existen t Canadian Semen Regulations.

Many of the implicated clinics imported their semen samples from American suppliers, with a substantial number utilizing the products and services of Xytex. After demonstrating its compliance with the Health Canada testing standards, Xytex had been cleared to restart semen shipments. However, it was estimated at the time that approximately 1000 couples remained in conceptive limbo, either waiting for sperm, or because the sperm that they had previously purchased remained in quarantine. One such couple brought their story to the *Globe and Mail* (September 11th, 1999), which published a two page article on the issue, and the relative anonymity that sperm donation had enjoyed ended in a media scandal just weeks prior to the Toronto conference.

The Jones (an assumed name) had successfully conceived with donor sperm. It was their desire to use sperm from the same donor, for which they were paying storage fees, to conceive a "fully biological sibling to their son". However, under Health Canada regulations, the Jones were "barred indefinitely from using the semen samples they painstakingly chose to father their children". The Jones contacted other couples who had purchased sperm from this particular donor to ascertain if they would be willing to provide them with a sample. None, it turned out, had samples that they were willing to 'spare' or 'share'. At the time of the conference, Xytex was attempting to contact the donor (retired from 'service' as many sperm banks will only use a donor for two years) for 'reactivation' and the appropriate testing.

David Towles, Director of Public Relations for Xytex, was happy to point out that they were the only American sperm bank to meet al. I of the Canadian standards. Other sperm bankers, such as Russel Bierbaum of Cryogenic Laboratories, commented that the testing methods required by the Canadian guidelines for ureapalsma urealyticum and mycoplasma hominis were not 'gold standard' and were, in fact, inferior to the tests being done by the American Banks, Cryogenic Laboratories included. In effect, Health Canada would be asking that a less efficient testing method be utilized to obtain comparable results. The Cryogenic Laboratories and California Cryobank representatives also pointed to the fact that while Xytex had met Health Canada's regulations, it was not accredited by the AATB, a recognition of which these other banks could boast. Some Canadian critics suggested that Health Canada's initiative had little to do with the actual risks posed to those women impregnated with donor sperm during the time period in question, but was a pre-emptive reaction to public response to the tainted blood scandal (Globe and Mail, September 11th, 1999).

While many sperm banks are voluntary members of the Society for Assisted Reproductive Technologies Registry (SART) and thus are subject to standards for donor screening, storage, and procedures, no two programs are identical. In Canada, from June 1996, semen for assisted reproduction fell under the authority of the Food and Drugs Act and the Processing and Distribution of Semen for Assisted Reproduction Regulations. This regulation referenced the CFAS Guidelines for Therapeutic Donor Insemination, which, say the drafters, were intended to be used as such: guidelines, and not regulation. As of March 2000, as a follow up to the 1999 investigation, the Health Canada *Directive on Therapeutic Donor Insemination* came into effect, under the auspices of the Therapeutics Product Program of the Health Protection and Foods Branch of Health Canada.

The 2000 revision included recognition of the tests originally targeted as noncompliant, along with the addition of several new testing requirements. This means that while some of the quarantined samples may qualify for release under the new Directive, some may now fail to meet the newly set standards. In the pipeline is a "Special Access Regulation" designed to provide recipient couples in special circumstances (couples like the Jones) access to quarantined semen samples. Once again, with a Federal election called for November 27th 2000, pending legislation on reproductive technologies is tabled. The Jones will have to continue their wait for their 'sibling' semen ¹⁵.

Sperm banks: Offline

Seven commercial sperm banks were featured amongst the exhibitors at the conference in addition to a number of private infertility clinics (See Figure 24 for a map of the exhibition hall and booth placements).

¹⁵ Personal communication with Health Canada representative responsible for the Semen Regulation dossier, September 2000.







Three of these banks namely Xytex, Californian Cryobank, and Cryogenic Laboratories advertise in Fertility & Sterility, and have been introduced above. The sperm quarantine and the media coverage that it had recently garnered provided one focus of debate for the marketing forces of the banks on the floor to rally around.

Other comparisons centered on what types of information were available about donors, and the moral implications of the usages to which this information could be put. For instance, while Towles and fellow boothmates at Xytex highlighted the actual visual information available on their donors, other banks stated that banks that did not respect donor anonymity were crossing a tenuous line that threatened to encourage superficial decision making. Many sperm bank representatives voiced ambivalence towards identity release. At the Xytex booth, visitors were invited to watch a video of a television documentary on the subject ("Test Tube Dads", BBC, August 1998). In it, Xytex donors spoke of their experiences, their views about revealing their identity through visual mediums such as photographs, baby photos, and video files described earlier. Towles noted that while this particular video had not been intended for American release to reduce the likelihood that recipients would identify donors, it had already aired on several different occasions on American television. In what might be characterized as a typical Xytex response to 'exposure', Towles did not seem overly dismayed, as the television piece played continually through the three days of the conference and was central to the Xytex booth display. Marketing strategies that focus on 'how much' and 'what sorts' of

information are available are premised upon the understanding that these are features or services desired by the client. This next section examines this 'desire' for information from the client perspective.

On Knowing

Based on voluntary reporting from fertility clinics across Canada, Health Canada estimates that 3,500 children are born per year through assisted insemination. In the United States, the figures for donor insemination are 30,000 children born per year (Klock and Maier 1991). The practice of donor insemination is characterized by the tension that exists between the need to know and the need to conceal. At stake are issues of access to information and privacy between offspring, donors and couples. Sperm banks such as Xytex, which emphasize the variety and extent of information available on their donors embody this ultimate tension. One Xytex client stated:

"I originally planned only to use donors who had agreed to be 'identity release', but I later found a donor that I felt a strong connection to at a sperm bank that does not have an identity release program. What they do have are photos of the donor, either adult or baby. My donor has just a baby photo, but he looks so much like many of the children in our family so I felt more comfortable with him than a complete unknown paper description".

The traditional policy of anonymity, in some cases institutionalized in law, for sperm donors is being followed for increasingly common egg and embryo donation. There have been calls for mandatory registries in the United States and in Canada, where briefs on international regulation of gamete donation are being prepared for the Federal Government. Before fading into legislative obscurity, the proposed Bill C-47, based on recommendations forwarded by the Royal Commission on the New Reproductive and Genetic Technologies (NGRTs), called for a regulatory body to maintain information registries on donor/offspring and to track the short and long term effects of the NRGTs on the women who use them and their children. Sweden, Austria, Switzerland, Germany, New Zealand, and one Australian state have already legislated identity-release as a mandatory element of donor insemination programs (Franz and Hasse 1999: 19). In these countries, DI offspring have right to obtain identifying information concerning the donor upon reaching the age of maturity.

There are convincing arguments for and against openness and information exchange concerning conception with donor gametes. Shirley Pratten, a founder of the New Reproductive Alternatives Society, in British Columbia, suggests that "children born from donor insemination may end up in 'genealogical bewilderment' because they can never know who gave them their genetic material". Children born from these interventions in conception are more than miraculous technological achievements. They are a maturing cohort of individuals who are beginning to demand to know where they 'came from'.

Following Foucault, Daniels (1995) points out that 'knowledge is power'. However, adult ambivalence towards gamete and embryo donation is based in part on fears that children born of these donations and technologies may be marginalized and stigmatized. For the most part, studies have provided evidence that points to the fact that secrecy is more likely to be experienced by the child and families involved as psychosocially damaging (Becker 1994; Daniels 1995; Fisher 1994; Haimes 1993, 1996). This has contributed to an emphasis on 'the interests of the child' and a 'paternalistic or maternalistic protectionist' attitude with regard information access. "All the reports - those variously recommending the provision of no, some, or all information - indicated their recommendations reflected an over-riding concern with the best interests of the child is culturally and historically embedded, and can not be seen as a touch stone for a universal 'ethic' on which to base practice.

On Knowing Who

In a *Fertility & Sterility* editorial, Corson and Mechanik-Braverman worried that "even the most well-meaning programs have yet to address fully the implications of the type of information they gather on their donors, how this information ultimately will be disseminated to either recipient parents or offspring, and considerations about long term storage" (1998). During the roundtable on donor conception, I was introduced to a sperm bank that is attempting to address these exact concerns, by Johanna Scheib, a researcher affiliated with the bank. Although the Sperm Bank of California was not one of the original 'sites' that I investigated and did not have a booth on the exhibit floor, I include it in the following discussion as it is directly linked to the trajectory of my inquiry. The Sperm Bank of California is unique in several ways: it was the first non-profit sperm bank in the United States, and has had a donor identity-release program in place since the bank was founded in 1982, prompted by client request¹⁶. In addition, it takes as its mandate "supporting family diversity, and our mission has always been to serve those individuals who have been historically undeserved or shut out by the sperm banking industry – single women and lesbians". Of the approximately 850 children conceived from the Sperm Bank of California semen samples over the past eighteen years, more than half have been born to lesbian couples.

Donors participating in the Sperm Bank of California identity-release program agree to allow the organization to release their identifying information to offspring upon reaching the age of majority (18 years of age). In addition, donors who select to remain anonymous give the organization authorization to contact them in the future on behalf of the 'adult child'. At this point in time, the donor may chose to continue to remain anonymous or agree to have his identifying information revealed.

¹⁶ Only one other identity release DI program in North America presently exists, Pacific Reproductive Services, though as we have seen, many sperm banks are expressing a willingness to attempt to obtain additional information from donors upon request.

Scheib is in the process of designing the protocol for identity disclosure as the first of the children born through the clinic will shortly be turning eighteen years of age. According to Scheib, some of the issues to be addressed are the role that the sperm bank in should play in coordinating and facilitating donor-offspring contact and identifying potential concerns and difficulties. As a follow up to our meeting, Scheib forwarded me the clinic information, and upon publication, the results from a study which she had carried out on donor insemination and disclosure¹⁷. In this paper, Scheib et al. review existing studies and report the results of two new studies in which the authors determine how donors were chosen in the Sperm Bank of California donor insemination program based upon reports by the recipients and analysis of selection choices. "Even with increasing availability of information, however, little is known about how recipients choose sperm donors or what information is important to them. No published studies have addressed this issue directly". (Scheib et al. 2000: 50). Their findings suggest that donor selection is based upon the donor's physical attributes, health history and personality or character. They note an increased demand for more information on donors and credit this to three factors: 1) a wish to have a healthy child and anticipate what the child will be like; 2) a desire to match physical and psychological characteristics with

¹⁷ Scheib et al. "Choosing Between Anonymous and Identity-Release Sperm Donors: Recipient and Donor Characteristics". Reproductive Technologies10 (1) 2000: 50-58.

those of the non-genetic parent; and 3) to be able to offer information concerning the donor to the child at a later date.

In their study, the authors found that over 85% of recipients used physical attributes when choosing a donor, over 70% used character descriptors, 60% mentioned health related issues, and a third used height as a selective criterion. In a similar study, Klock et al. found that couples stated that they were most concerned with medical issues followed closely by the future child's physical and personality resemblance to the partner or herself. A New Zealand study conducted by Purdie et al. suggests that while medical history was important to some of the 53 couples interviewed, many more were concerned with the availability of information that would describe the donor 'as a person'.

The Scheib et al. study also supports the claim that matching donors to the nongenetic parent serves functions beyond concealing non-genetic relatedness. While 74% of the couples included in the study were lesbians, these couples still expressed a strong preference for matching. The authors suggest that 'matching' 'enhances feelings of affinity' between the non-genetic parent and child. 'Matching' may also serve to simplify everyday interactions with strangers and acquaintances that might otherwise question the nature of the relationship between parent and child, regardless of sexual orientation.

80% of the study participants intended to tell offspring about the circumstances of their conception, and the authors suggest that while the link is not perfect, the increased demand for information on the donor seems to be driven in part by trends in disclosure (2000: 51). 98% of those selecting identity-release donors gave 'giving the child an option' as the reason behind their choice while only 2% reported wanting this information for potential medical reasons (2000: 54).

Another interesting finding of the Scheib et al. study was that 28% of recipients reported another factor that contributed to donor selection: positive or negative impressions. The Sperm Bank of California staff often provides informal impressions of donors when helping clients with donor selection. This practice is not unique to the Sperm Bank of California, but is common to banks that offer photo-assisted selection services, and claims of warm and personal relationships with donors – "men you would like to have as a neighbor or colleague" - often appear in marketing materials.

Studies have pointed to difficulties in communicating the circumstances of conception to donor offspring when little or no information is available about the donor (Scheib et al. 2000, cf. Cook et al., Mahlstedt and Greenfield). The Sperm Bank of California attempts to address these concerns by offering a family registry called the Family Contact List, in addition to its donor registry. Families make a written request to be placed on the list, and when two or more families who have used the same donor appear on the list, the Sperm Bank of California makes it possible for them to contact one another. After several years of collecting names, the Sperm Bank of California has had its first match, and reports the contact as a success. The mother's have been maintaining email contact – communicating about their children and reasons for selecting the

common donor. They have voiced their intention to exchange photographs and maintain contact. These preliminary experiments in weaving networks of kin out of partial genetic linkages may be seen as tenuous extensions of fragile social structures. Similar projects are central to a number of consumer groups and online community boards grappling with 'genealogical bewilderment'.

Pratten's New Reproductive Alternative Society is but one consumer group of its kind that has come together to offer support, self-help, advocacy and to lobby for political change. Franz and Hasse write that: "While individual voices may be discounted as not representative of the silent majority, more organized groups have begun to impact public opinion (1998: 9). They point to the influence of adoption advocacy groups' efforts to lobby for access to information concerning genetic heritage. As has been the case with adoption - with trends towards a greater openness and access to information - changes in gamete donation policies have been driven largely by the voices of consumers, recipient parents and donor offspring alike.

As is the case with donor sperm selection and distribution, Internet technology has been a major facilitator of this process. The organization Single Mothers by Choice (SMC), has started a program similar to the Sperm Bank Of California Family Registry called the Sibling Registry, in an effort to link mothers of offspring conceived from sperm from the same donor. Below are some of the comments that have been shared on the SMC e-mail list concerning the sibling registry: "You don't know how much your child will want to know when he/she is older. All children and people are different. I have no desire to know my son's father, but I know I could not make that decision for him. I will not encourage him, but I want the information available if my son wants it when he is old enough."

"Frankly, the idea of finding half siblings neither of whom knows the father is kind of – well weird to me but to each his own."

"I am joining the registry for two reasons: I have a 'no' donor so my daughter will NOT be able to find out who he is. I am sure that she will have issues about this. Letting her contact siblings if they agree, when she is eighteen is, I feel, some comfort when doing a 'roots' thing. And if, god forbid, she has a medical problem, it will be important to know if there are any matching donors – a half sibling is more of a likelihood than a non-family member (e.g. kidneys, bone marrow, etc.)."

Similar efforts to find information concerning donors or half-siblings appear on community boards on web sites such as "Baby Corner", where a group of donor offspring born between the mid-1940s and 1950s have recently joined forces in an attempt to locate biological fathers and/or half siblings in the UK. Without mandatory gamete registries, donors, parents, offspring and implicated family members are left to their own 'devices' - just one of which is the Internet registry - as they construct genealogies, linkages and networks, and to create meaning from the circumstances and relationships in which they find themselves entwined.

Sperm Banking - Some Second thoughts

Several themes from my initial online research reappeared on the conference floor, in particular, concerns surrounding what can be 'known' about donor sperm. The

debate surrounding the sperm quarantine highlighted one level on which sperm banks attempt to differentiate themselves to market advantage; that of standards of testing and screening of donors and semen samples. A second level of competitive marketing is directly aimed at the client faced with donor selection. The studies that have been discussed imply that much of what clients are looking for when it comes to donor selection is premised on 'likeness', as is evidenced by a strong tendency towards matching the non-genetic parent. Growing trends in the popularity of 'identity release', openness, and disclosure suggest that this is not motivated by the intention of concealment of this knowledge. Rather, 'matching' is a project aimed at creating affinity, familiarity and ultimately family. Donor selection, seen in this light, is less about selecting the 'best' as it is about selecting 'like kinds'. In addition, genealogical projects such as those that aim to link donors, recipients, offspring, and donor siblings are vivid examples of the manner in which the techniques and technologies of ART can be utilized to extend and negotiate kinship networks. And with Internet technologies facilitating both the selection and distribution of donor sperm, and the creation of 'virtual' communities of relatedness, the 'family tree' seems likely to be replaced by the 'web of kin'.

Chapter 4 Closing the Web

The last chapter addressed issues of safety in screening procedures and notions of 'likeness' and 'kind' as they arise in the marketing and selection of donor sperm. These concerns were raised in seminars, in conversation, and in public debates over the six days that I observed and participated in the ASRM/CFAS joint conference. Before proceeding to discussion of this material in the following chapter, I would like to revisit the tension that exists between scientific and popular discourses of heredity. I do this by returning to the Internet, coming full circle and closing the web that has been my field.

"Genetics: The Science that makes a Person"

Xytex welcomes visitors to its web site with the following message: "Xytex Corporation – Making Dreams Come True." In the year following the ASRM/CFAS conference in Toronto, Xytex made a new feature available on its website; a document entitled *A Thoughtful Conception*. This 36-page document is available only online in the form of a downloadable PDF file that can be viewed on the computer screen but cannot be printed - an artifact of online publishing. In this document, Xytex clients are offered a primer course in genetics – 'what every parent needs to know' before embarking on IVF treatment. With headings such as "Legacy", "Building Cells", "Sex", "Genetic Expression", and "Decision Time", the reader is walked in lay terms, through the complexities of present scientific genetic knowledge.

If clients are 'shopping' primarily for 'likeness', and secondarily for health as indexed by the medical/genetic histories of donors, how does this relate to the marketing strategies of commercial sperm banks online? One set of answers to this question comes from this document. I quote extensively from this document as I wish to draw upon it as a 'straw man' for analytical purposes..

A Thoughtful Conception is an exercise in negotiating the ambiguities that characterize the practice of marketing gametes, the dissemination of information in the form of bio-genetic and personal histories, and the considerations that go into the selection of a donor. With the online publishing of this document, Xytex has upped the information *ante*, becoming *the* bank with the visuals *and* the genetic science. This document could be understood in several lights: as a branding strategy – 'The Bank of Information'; as an educational tool that stands in the place of genetic counseling; as a disclaimer – 'We Never Promised You a Rainbow'; and as a promise – 'Here is the Science that Makes *Your* Baby'. The document begins:

"A new baby inspires wonderment! Look at those eyes and tiny fingers. Will she have her grandmother's empathy, her father's wit? Will he share the family's dexterity? What will this child make of life?"

And continues on to state that:

97
"Observation demonstrates that a mixture of both nature and nurture is at work in every successful creature, though the respective mechanisms and contributions often remain a mystery . . . This document is intended to stimulate thought about the relationship between nature and nurture in human development. In explaining some of the ways nature and nurture affect people even before conception ... it is written for persons pondering the occurrence of certain traits. And most importantly, it is written for persons who are thinking about using assisted reproductive technology, whether using a sperm or egg donor, using a surrogate mother, or using in vitro fertilization."

The document's authors make an effort to situate concerns about genetic inheritance and the occurrence of traits within centuries of "preoccupation with family blood lines". They suggest that this once took the form of desiring children to "marry well" in recognition of the fact that traits were inheritable. Nothing new then, about these desires to understand and select the best for our offspring. The authors naturalize and normalize processes of selection. "Pregnancy serves as a filter removing genetic mistakes from the reconstituted fetal genome ... about half the embryos and fetuses known to be lost during miscarriage in the first trimester of pregnancy have chromosomal disorders, while only about two persons per 1 000 have a chromosomal disorder."

The authors distinguish between two types of inheritable traits are distinguished, those that lie along a continuum, such as height, skin color, or musical talent, (even health and longevity), and those that are absolute – such as right handedness and albinism. They continue, separating 'good' traits from 'bad': "Except for lethal alleles, it is difficult to attribute 'value' to a gene, to say that a gene is good or bad, right or wrong". The authors recognize that most, if not all, genetic traits, whether good or bad, are affected by the environment, and in addition, that both genes and the environment are effected by randomness. "We have long been intrigued by appearance, personality, and skills – Complex traits that may have many genetic components, in addition to environmental components and therefore impossible to separate. There is much about genetic inheritance that is beyond control, being a statistical chance."

Then, beginning with Mendelian genetics, the document takes the form and style of an introductory textbook on genetics. The reader is taught about alleles, dominant and recessive traits, the distinction between phenotype and genotype. And while Mendel's principles can be used to explain single gene traits, such as height, skin color, intelligence and behavior are complex traits with environmental and multi-factorial genetic determinants. They write: "Genes provide the capability to have a trait; environment enables the expression of the trait." This is surely a laudable service that is being offered the Xytex client. Here, indeed, is genetics: the science that makes the person.

So, where is the 'hype'? Where is the tension that I have suggested exists between scientific and popular discourses of heredity present in the online marketing and selection of donor sperm? We have read of the efforts made: to find likeness and familiarity; to have information available to facilitate disclosure of the circumstances of conception to offspring and provide them with a rounded 'picture' of the person who helped to give them life; and even a trend towards the desirability of identity release donors. This surely is about building ties and crafting networks of 'kind' and 'kin'. Where is that 'hint of eugenics', that trend towards 'designing a better baby' that I juxtaposed with a trend to expand kinship networks in the introduction of this paper? The conclusion of A *Thoughtful Conception* brings the reader back to the tone in which the document began. I quote at length:

"Genetic science now enables people to predict the chance that their next child will have certain characteristics. It is becoming increasingly possible to make certain that a child will actually have specific characteristics.

Most parents give their babies and children the very best resources they can offer, from pediatric care throughout childhood to nutrition, schools and neighborhoods. These offspring are deeply loved, and showered with gifts from family. One of the most important gifts from parents is a genetic heritage. Genetic heritage can be planned rather than left to happenstance. Genetic knowledge and procedures to act upon this knowledge are now available to enhance the personal lives of parents and their offspring.

Advances in genetics and reproductive medicine are reported widely by journalists. Sometimes the reports of these advances ask questions about the ethics and morality of using this knowledge. Fortunately, a genetics counselor is skilled in helping people work through such concerns so that persons can have answers appropriate to their own values and beliefs.

Human attitudes change with time. Just as experience and maturity change a person's attitudes and concepts. At one time, the use of anaesthesia to facilitate childbirth was condemned as being immoral. Perhaps the important point is that people are told about available options. At one time, certain kinds of knowledge were considered 'forbidden' or 'dangerous' for everyday people. Also, in the past, governments would make important decisions about who would be allowed to reproduce. Most cultures have transcended such beliefs, giving all individuals the right to make reproductive choices. People rejoice that genetics has given us new, usable knowledge. This knowledge will brighten human lives."

Will this child have her grandmother's empathy? Her father's wit? After all of the

nature/nurture distinctions, after all of the discussion about complex traits and multi-

factorial genetic propensities, after all of the 'science' the reader is still left with a promise.

A Thoughtful Conception offers the promise of the predictive and prescriptive powers of genetic science. Parents can be selective and they can be reasonably certain. They can use "genetic knowledge and procedures to act upon this knowledge to enhance" [their personal lives and those of their beloved offspring]." Or at least, they will be able to do so in the very near future, provided governments and ethical moralizers don't interfere with the natural-, god-, and free-market-given reproductive choice that each individual should be free to exercise. "People rejoice that genetics has given us new, usable knowledge. This knowledge will brighten human lives."

Can the knowledge and the technologies that this science has to offer be used to predict and even engineer future forms of life? Is this eugenics or is this family building? On one level, it is tempting to agree with the document's authors. Bioethicists can be quick to walk the 'primrose path' to unthinkable and undesirable futures. And media accounts of advancements in reproductive technologies and genetics are, more often than not, prone to these same flights of fancy. Recent media accounts concerning trait selection and genetic engineering suggest that we are approaching manipulative measures of eugenic proportions. Be it *Frontline* documentaries, *Scientific American* Special Millennial editions, or ASRM plenary debates on cloning and genetic manipulation by George Annas and John Robertson¹⁸, all suggest that as a society we are on the edge of technological ability to alter the course of evolutionary history. Specters of Mary Shelley's *Frankenstein* and Aldous Huxley's *Brave New World* haunt such discussions. We have looked at the empirical studies that have asked what individuals involved in the process of donor selection say is important when making their choice. We can also look at what researchers and clinicians that work in the field of reproductive medicine have to say on the subject.

Predictions and Choices

Three distinct, yet imbricated technologies are implicated in this discussion: trait selection, pre-implantation genetic diagnosis and genetic modification – be it 'treatment' or 'engineering'. Whether any or all of these technologies might constitute 'eugenics' is conditional on the historical and cultural perspective and individual moral standpoint that is brought to the question. Below I draw on remarks made by researchers and clinicians at the ASRM/CFAS conference in Toronto, in an effort to better situate the Xytex document.

In the past physicians commonly selected sperm donors for patients, and in some clinics, this is still the case. However, a competitive market in fertility treatment has fundamentally altered this dynamic. As is evidenced by the Internet market in sperm,

^{*} These two colleagues give a conference-circuit show of 'bioethical debate' that is promised to entertain.

individuals and couples often initiate the process of donor selection unmediated by physician or medical intervention or guidance. Many of the physicians with whom I spoke expressed a concern that the online selection of sperm donors is promoting genetic determinism, with clients overestimating the role that genes ultimately play in who we become. In the words of one fertility doctor:

"When we see people going onto the Internet and choosing their sperm donor, their egg donor, by looking at a profile of this person and picking them for certain attributes, even intellectual or creative attributes, the word "eugenic" springs to mind. Whether or not you should pick the genetic traits for your future children off the Internet, I have major doubt about the wisdom of that. It's a great way to market your program. It's a great way to sell sperm, perhaps, in a sense, egg donation. But it takes the human drama out of it, which is part of medicine. When you come into an office and you meet the people that are really doing the work, and they have the real life experience of having worked with hundreds, if not thousands of couples and donors, to me, that has a lot of importance. Much more than what you can ever convey off an Internet page.

Whether it's sperm or egg, these are real human beings that are giving their gametes, sperm or eggs. They have attributes and they have flaws. It's hard to give people an adequate representation of these people as people. Increasingly, the patients are asking for that. They want to get a feel for who these men and women are. That's a positive thing, but you can take it to lengths that are not necessarily so positive and somewhat absurd if you start believing that certain traits are destined genetically to be in the offspring. So, to me, the eugenics involved is more or less a pseudo-eugenics."

Like the Xytex document, the technology of pre-implantation genetic diagnosis

seems to dangle a promise of the eventual elimination of disease. Is this practicable or likely in the near or distant future? If any particular disease were to be eradicated, the diagnostic procedures would have to be utilized by all, and any embryos that were afflicted would have to be destroyed. The diagnostic procedures involved in preimplantation genetic diagnosis are presently limited and costly, and only a limited number of diseases can be treated or avoided in this way. With such seemingly insurmountable fiscal, practical, and moral challenges to overcome, the imagined day without disease remains a distant vision.

Another concern expressed by some physicians in the field is that inherent in the development of technologies of pre-implantation genetic diagnosis or genetic modification that promise potential health benefits lies the risk that these same technologies will be used to give children other kinds of non-health related enhancements, such as increased memory or cognitive abilities if and when the genetic contribution to each is understood. Once again, geneticists express concern that the general public often fails to realize that possessing a gene for a certain trait increases the probability of, but cannot guarantee, its expression. While the Xytex document explicitly provides this caution, the online marketing of donor sperm is characterized by a blurring of boundaries between information provided for marketing purposes on the one hand, and scientific information on the other. Referring to this phenomenon, one physician accused the commercial banks, and the physicians that head them, of fostering a misplaced faith in genetics:

"This is where the commercial side of our field and the medical side clash. Because physicians never delved into that type of sales and that type of marketing before. But when you're competing with commercial groups who compete on that level, they don't have to be responsible genetically. They don't have to be responsible medically. They're portraying a product, and this product happens to be a human being. But if you're a physician doing the same work, you know when you're crossing over those boundaries of what is reasonably good medical care and what is sales, and it never feels good."

In addition, the utilization of pre-implantation genetic diagnosis and genetic modification, be it for health or non-health related traits, threatens to extend an already deeply entrenched imbalance evidenced in the waiting rooms of fertility clinics, where the majority of North American patients are white, middleclass couples. The basic marketplace mentality that currently characterizes the field of reproductive medicine risks greatly exacerbating the gap between those who can afford certain treatments and those who cannot.

In summary, the genetic and reproductive medical clinicians with who I spoke claim that at this point in time, trait selection technologies, pre-implantation diagnosis, and genetic modification do not approach 'eugenic' efforts. And indeed, if those who are selecting for traits are ultimately shopping for a 'better baby', they will not be getting their money's worth. The predictive power of practices of trait selection, as witnessed in the online selection of donor sperm, does not lie in what parents are able to know about future offspring. Instead, society might choose to examine what this practice might indicate about future patterns of desire and consumption when advances in preimplantation genetic diagnosis and genetic modification become more effective and more widely available – for there is little doubt that they will. And when these technologies are developed and deployed it will be in and through fertility clinics and their pre-existing

frameworks and networks of practice.

,

-

Chapter 5 Marketing the Stuff of Life: Anthropological Discussions

In the proceeding chapters I have asked the reader to follow as I retraced my trajectory from journal, to the World Wide Web, to conference floor, and finally back online. This final chapter addresses some of the theoretical and ethical issues that have been raised by the data that has been presented and situates this research within anthropological theorizing on kinship, commodification and gifting.

Online Negotiations in Kinship

"Welcome to the exciting world of reproductive technologies . . . where families are created". (www.thespermbankofca.org)

"We have these confused identities and new forms of family, but we don't deliberately create them very often. In this instance, we are creating them and we are creating them within a private, market-driven industry." (George Annas, Boston University of Public Health)

"You know, family trees, genealogies are very interesting. Go to the old graveyards and you see generations of people who have lived and were born and have died in a locality. Grandparents, grandchildren, the death of little children, the death of their elderly people. This is the human condition. Ultimately, on one level [donor assisted reproduction] is the same thing. You have a home and you have a baby and you have parents. But we have split apart the genetic and the carrying of the child and the social parenting of the child in a way which has profound consequences. Here we are looking not at procreation and the continuity of the human race through genealogy as witnessed in records in the graveyards." (Nigel Cameron, Trinity International University)

Fears that ART options are moving society away from the unity of genetic parenting, birth parenting, and social parenting are ubiquitous. Much of the concern over donated sperm and ova is premised on the assumption that 'true' parentage has a biological base. Such conceptions of the family de-emphasize the relationships that constitute kinship as a social institution. Cussins assures us that 'high-tech' interventions are not necessarily antithetical to affiliation and identity, as many have maintained. Her fieldwork in IVF clinics has shown that ART procedures are "one means through which patients claim or disown bonds of ancestry and descent, blood and genes, nation and ethnicity" (Cussins 1998: 40). While gamete and embryo donations test the boundaries of the family in a variety of ways, they also provide the opportunity for the assertion and the reinforcement of particular family models.

While the women, and less commonly, the men who utilize ARTs have been questioned about their concerns and beliefs about identity of offspring (for example: Mahlstedt and Probasco 1991; Purdy et al. 1994; Sauer 1996), many critics have insisted that it is crucial that these questions be asked from the point of view of the child. They fear that through the active 'designing' of families, situations are created "where there are curious fault lines built into the very identity existence of the children" (Cameron).

In response to these lines of thought, Haimes (1994) has asked: "if identity is derived from genealogical and thus genetic relationships, what happens to that notion of identity when these relationships are no longer located within an accessible and discrete family unit and history, but have instead to be sought by penetrating the boundaries of other families?" She concludes that concern over the impact of donated gametes and gestational surrogacy on the family and personal identity is misplaced, because neither the concept of family nor that of personal identity has a fixed meaning.

Like Cussins, she emphasizes that concepts of genetics, family and identity are fluid constructions that can be called upon to 'do' genealogy. Children who trace their origins through these technologies face many of the same challenges that have confronted others in the past, for instance the illegitimate or adoptive offspring. These negotiations are not specific to the technologies involved, but are aspects of social life. Many will ask; Who is father? Who is mother? Who is a sibling? How am I connected to these people? Genetically, pragmatically and emotionally? And many have attempted, and will continue to try to represent these complexities in tidy normative models. As we have seen, the Internet becomes yet another technique that can be utilized as a vehicle to extend kin networks and as a medium for community building.

The marginalization and stigmatization that is feared by parents of children conceived through donor gametes or gestational surrogacy differs in both form and degree from similar concerns surrounding legitimacy, divorce, and adoption. These deviations from a normative family have also been interpreted as threatening a moral and social order, as they too challenge familial boundaries and histories (Ragoné 1999; Layne 1999; Modell 1999). However, donor gametes and gestational surrogacy cross an additional line that is drawn quite firmly in the sands of North American morality: that between donation or sale of bodies, their parts, and their capacities.

Commodifying life – an ethical quandary

Important debate surrounds the question of whether or not the exchange of gametes or surrogacy services constitute the commodification of persons and relations. How one positions oneself in this debate can have significant ethical and policy implications. Bill C-47 would have outlawed the buying and selling of eggs, sperm, embryos and surrogacy in Canada. "It was felt that the building blocks of life should not be bought and sold", explained Monique Charron, a policy analyst with Health Canada (*Southam News*). While the common practice of buying semen is widely taken for granted, other reproductive and biomedical exchanges (such as egg and embryo donation, surrogacy, organ, and fetal tissue donation) have met with a mixed and uncomfortable reception (Daniels and Lewis 1996).

Canadian scholars of medical sociology and history, health economics, bioethics, and health policy often compare the Canadian public health care system to that of the United States. While aware of the methodological usefulness of this comparison I remain reflexively wary of a constant temptation as an anthropologist of medicine to 'other' 'American Medicine'. This aside, it cannot be debated that American medicine is largely market driven. However, fertility treatment, uncovered by nearly all public, individual, and group insurance plans as an elective treatment in <u>both</u> Canada and the United States, rendering it subject to market forces. As Annas puts it:

"The whole world of assisted reproduction has been described aptly as kind of Wild West. But I'd go further than that. I think it's the Wild West kind of mated with American commerce and modern marketing." (Annas 1999)

This situation has led to questions about whether the market is necessarily the right model to regulate the field of reproductive medicine. Market models function on the principle of 'supply and demand', assuming that a balance will be established. However, when the commodity in question is gametic material essential for conception, and conception itself has become a limited and pricey commodity, what will create limits or limit creativity? Will it be scarce resources, clinical limitations, scientific research, personal ethic or desire, professional self-regulation, or legislation?

In the United States, while the market price for sperm is relatively standardized at approximately \$175 and donors are usually compensated \$50 per sample, there presently exists a highly competitive market in eggs. Pricing wars between clinics have raised prices from between \$2,000 to \$4,000, up to prices between \$5,000 to \$10,000, and in instances that have made media headlines to \$25,000 to \$50,000, problematizing claims that egg donors are just being compensated for their inconvenience. Annas comments:

"The question is whether we should be doing that or not? Whether we should be "commodifying" eggs. It's a tough question in a country that commodifies everything. But actually we have some limits in this country. We don't commodify organs. It's actually a federal crime to sell your kidney, for example,

111

or to sell any organ in your body, except your blood, your sperm or your eggs." (Annas 1999)

In this statement a clear distinction between 'types' of bodily donations is presented. If we set aside the fact that neither blood nor gametes are organs, we might assume that gametes like blood, are renewable resources and thus have been left 'unlegislated'. However, this is not the case for the egg, as the number of eggs that each woman possesses decreases with age and is, in fact, finite. Clearly, this is not the only distinction that can be drawn between sperm and eggs in explanation of why they are so often perceived to be of different orders of meaning and value. Practicalities of retrieval, a history of medicalization of female reproductive processes, and issues of gender all enter into the fray.

Cameron has raised the point that the gamete, be it egg or sperm, is a 'genetic body part' and the problematic is one that begins with the question of how society understands the body and its commodification:

"Once we get into buying and selling body parts for the purpose of making babies, we find ourselves moving rapidly into the notion that children are chattel because we've designed them, we've bought the pieces to make them up. We do not regard body parts as being consumables, as being consumer items. We regard them as being part of the bodily integrity of those who possess them, which is why we speak in terms of donation." (Cameron 1999)

If clients are shopping for 'likeness' rather than 'superior genetic building blocks' does this make donor sperm more amenable to analysis in terms of 'the gift' versus 'the commodity'? As one fertility counselor asks: "Why can't we look on this as a wonderful gift, like blood donation or organ donation? We need to raise the social status of the sperm donor" (*Globe and Mail*, September 11th, 1999).

And here I wish to switch tack. In my discussion of the commodification of persons, body parts, and relations that is laid out above, I have drawn upon the concerns and commentaries of two well known bioethical commentators on reproductive technologies. George Annas is a bioethicist and Chair of the Health Law Department at Boston University School of Public Health. Annas is also the ethical advisor to ASRM and a regular contributor to Fertility & Sterility editorials. Nigel Cameron is a theologian and teaches bioethics at Trinity International University. Both have commented extensively in publication, in live debate and on television and video, proclaiming their views on the commodification of procreative abilities, gametic materials, and the resultant child. In fact, the quotes that I have drawn upon come from a Frontline documentary entitled Making Babies (1999). In the words of the producers, this documentary sets out to "examine the reproductive medicine revolution which is bringing children to those unable to reproduce naturally, but also is raising troubling questions about the safety of experimentation, the commercialization of reproduction and, the changing nature of the family." Alongside this type of media commentary that often draws on these 'expert' views, bioethical discourse such as this characterizes a popular interpretation of the issues and societal values at hand. Much as I have used the Xytex

document as a 'straw man', I use bioethical commentary as a foil, arguing that an anthropological perspective provides a more theoretically nuanced framework against which the online market in gametes can be understood. I turn now to anthropological theorizing on the commodification of the body specifically, and more generally to 'the great gift/commodity divide'.

Gifting or Commodification - Exchange and Consumption in the e-Marketplace

I begin by first outlining the definitional boundaries and theoretical significance of the categories of 'gift' and 'commodity'. In doing this, I draw on Thomas' synthesis of the work of Gregory, and Weiner. Following Thomas (1991), I argue that the dichotomous conceptualization of gift/commodity elides the 'hybrid' statuses that are often assumed by goods and services, in this instance, the marketing, selection, distribution, and consumption of donor sperm. Here the approach proposed by Appadurai and Kopytoff in *The Social Life of Things* (1986) becomes theoretically useful. A processual analysis of the 'social life' or 'cultural biography' of a commodity better illuminates the historical and cultural contingencies that shape the online market of sperm.

Thomas has conveniently 'cystallized' Gregory's theory on commodities and gifts into a set of oppositions that I replicate below. I refer back to these distinctions in my discussion of the marketing, distributive, and 'consumptive' practices of the online market in sperm.

Commodities	<u>Gifts</u>
Alienable	Inalienable
Independence	Dependence
Quantity (price)	Quality (rank)
Objects	Subjects

Gregory saw the gift as being characteristic of clan-based societies in which objects were inalienable, moving between individuals who were "entangled in an array of rights and obligations." Gifts were valued according to rank, or status. Their exchange was fundamentally an exchange between subjects. By contrast, he saw commodities to be a feature of class-based societies. Commodities could be priced and their exchange was ultimately an item-to-item exchange of objects of equal value. Thus, commodity exchange neither created nor expressed social linkages between transactors: the commodity was alienable.

Private market sperm banks are unquestionably selling a commodity. It is most certainly the fruit of some man's labor, for which he is financially compensated. He is alienated from the product of his labor. The ultimate consumer of this product has full ownership – as the Jones of the *Globe & Mail* headlines stated: "We bought it – it's

115

ours!"). Once consumed, the product (hopefully) becomes a child and thus inalienably the property of the consumer. The link between the producer, and the product and its consumer are actively and intentionally severed. While this model might describe earlier practices of sperm donation and distribution it is, however, an inadequate depiction of current practice. Rather, sperm, as it is currently marketed online, takes on many of the trappings of the gift.

As acknowledged by Thomas, Weiner added subtlety to analysis of the gift by building upon the concept of 'inalienability', as an indissoluble bond between the giver and the gift with significant economic, social and ideological implications. By focussing on the products of female labor and women's control of the distribution of items such as cloth, Weiner demonstrated the manner in which women, through complex strategies and networks, were able to 'keep-while-giving'. By holding certain items partially inalienable, controlling or limiting their circulation, women were able to fulfil the obligation to give, yet increase wealth and status.

Weiner wrote: "The primary value of inalienability . . . is expressed through the power these objects have to define who one is in a historical sense. The object acts as a vehicle for bringing past time into the present, so that the histories of ancestors, titles, or mythological events become an intimate part of a person's present identity" (Weiner 1985, in Thomas 1991: 23). This is a fitting description of sperm and current marketing strategies wherein the revelation and internalization of information becomes part of the process. Not only is the 'quantity' of information a selling feature, but also the 'kind' of information, be it video interview or genetic testing, which serves to connect the donor and sperm in a manner that extends beyond the moment of exchange. Biogenetic and psychological profiles of donors bring 'past time into the present'; yet the sperm itself is valued, exchanged, 'consumed'. While in most cases, the purchase of donor sperm through a commercial bank will not entail a social relation between the donor and the recipient and offspring, the information made available about the donor is drawn upon by parents and offspring, becoming an intimate part of a potential personal identity. Synechdochal precursors, mythical ancestors, genealogical fictions – even in cases where the donors identity remains anonymous, sperm as it is currently marketed online, is seemingly 'inalienable'.

Returning to Gregory's classifications, a commodity is defined as alienable, independent, its value is determined by quantity and price, and is characterized by object relations. By contrast, the gift is defined as inalienable, dependent, its value is premised on quality and rank, and is characterized by subject relations. How are we to conceptualize an exchange object such as donor sperm, which seems to sit on the 'gift/commodity' fence?

117

The social life of alienated sperm

Rather than trying to understand donor sperm as an object with a fixed set of definitional features that make it amenable to classification as either gift or commodity, it seems most useful to consider sperm as an object with a 'social life' (Appadurai 1986), or 'cultural biography' (Kopytoff 1986). To balance what he characterizes as an exaggeration and reification of the contrast between gift and commodity in anthropological writing which he credits to an "oversimplified view of the opposition between Marx and Mauss", Appadurai begins by positing his own definition of 'commodity'. He writes: "Let us start with the idea that a commodity is anything intended for exchange" (italics in original) (Appadurai 1986: 9). He goes on to outline "the commodity situation in the social life of anything in which its exchangeability for some other thing is its socially relevant feature" (italics in original) (1986:13). Central to this notion of 'commodityhood' are the commodity phase, the commodity candidacy, and the commodity context of the object in question. Extending Kopytoff's argument that objects move in and out of the commodity state, Appadurai examine the symbolic, classificatory and moral standards and criteria by which an object is judged eligible for commoditity status in any given social and historical context. These criteria, combined with the particular social arena, or commodity context of exchange, form the nexus of "temporal, cultural and social factors" that characterize the commodification of a

particular object at a given point in its biographical trajectory (1986: 15). Most useful for my argument, is his discussion of "commodities by diversion, objects placed into a commodity state though originally specifically protected from it" (1986: 16). Appadurai emphasizes that these diverted commoditites are marked by a pronounced sense of risk and moral ambiguity.

In these terms, donor sperm traded in the online market can be seen to be at a particular point in its life history. In the social arena that is fertility treatment and the mediating virtual e-market that is enabled by the Internet, sperm exists in a commodity phase. Here it is vested with value due to historically specific circumstances of demand and desire. Advancements in fertility treatment and the subsequent increase in the number of fertility treatment programs, alongside the Internet technologies that facilitate the selection and distribution of donor sperm, create the conditions that set the stage for the diversion of sperm from its customary exemption from commodity candidacy. The temporal quality of the commodity trajectory of sperm is likewise exemplified by the manner in which donor sperm problematizes a dichotomous understanding of 'inalienability', as is currently witnessed in trends towards identity release.

When is a commodity a gift? Rhetoric in theory and practice

Why does the exchange of sperm, as it is so manifested in the online market, selection, purchase and distribution that has been described in this research lead to

uneasiness, as I have confessed it does in myself. Is it the distribution and consumption of a bodily substance that transgress boundaries of corporeality (Miller on consumption in Thomas 1991: 25)? Is it simply that, diverted from its customary path, sperm attains an unsettling status? Perhaps statements such as that of Charron — that these tens of million sperm per vial are the 'building blocks of life' — are central to understanding this discomfort.

In a recently published anthology entitled *Transformative Motherhood*, anthropological theorizing on the nature of the gift and commodities is revisited ¹⁹(Layne 1999). The contributors explore the rhetorical usages to which 'the gift' is put, through a series of empirical studies of non-normative mothering. In her forward to the collection, Rapp begins by asking if "the rhetoric of gifts exchanged in kinship relations transform the cultural oppositions set up between matter and spirit, love and money, social solidarity and market contract in current U.S. culture." Conceptualizing the exchange of sperm as 'gifting' then becomes a rhetorical device that negotiates the ambivalent moral and mobile status of the item by masking the 'intentionality' of the exchange, effectively moving it from the profane to the sacred. As Rapp points out: "the gift is at once a

¹⁹ There has also been a renewed anthropological theorizing of commodification, in particular, the commodification of body parts. For example, Das (2000) and Lock (1997, 2000) have drawn upon commodification in their analysis of the cultural meanings attached to organ donation.

resistance to the utilitarianism of the market and a masking of it. The imbrication of market and non-market exchanges is continuous" (1999: xv).

Modell's research on open adoption policy and Ragoné's study of gamete donation and surrogate motherhood are especially pertinent to my research. In the case of open adoption, the gift in question is not only the gift of a child, but also the gift of a network of relations and an extended web of kinship (Rapp refers to these parents as 'kinship entrepreneurs'). I would suggest that the online market in donor sperm is yet another social arena wherein participants "use gifting discourse to elevate the value of their child-centered exchange", though in this instance, the exchange is gamete-centered and the child is a potentiality. The whole endeavor of selection and purchase is premised on the hope that one will provide the twenty-three chromosomes needed — the half of a whole — which becomes a child who becomes kin. And as this thesis has shown, complex social relations extend outward from this child as identity release programs and registries grow in popularity.

Concluding Thoughts On navigating the online commodification, consumption, and distribution of sperm.

In her discussion of the *Glover Report on Reproductive Technologies*, Strathern theorizes about the 'enterprising up' of kinship, wherein (reproductive) "choice has become the privileged vantage from which to measure all action" (Strathern 1992: 36). She argues, however, that this freedom to chose is illusionary. "Prescriptive consumerism dictates that there is no choice but to always exercise choice; its other side is prescriptive marketing. Culture is being enterprised up" (1992:38).

Curiously, as an allegory for 'Enterprise Culture', Strathern draws upon a suggestion made by Howard (1988), that the hypertext might provide a new and fruitful tool for ethnographic writing. At the time, hypertext was still a foreign notion for many. Howard suggested that hypertext would allow a user to navigate "a variety of pathways through nested information such that a reader of hypertext is constantly presented with branches of information to explore and must make a series of choices while [so] exploring" (Howard 1988: 305, in Strathern 1992:41). Strathern takes Howard to task for overestimating the choice offered in hypertext: the navigator has no choice but to push a button; and therefore the pathways that the reader follows are predetermined by the

author. "The reader's choices are made against the background of the author's prior ones" (1992:42). She asserts that the ability to navigate pathways places all information on par.

Strathern's critique is presented as an 'exercise in cultural caricature" (1992:43), as an exaggeration of the 'Enterprise Culture's' obsession with unlimited consumer choice and unlimited information. She chooses Howard's hypertext as an allegoric representation of disembodied pure choice. I present it, however, as a marker of the changes that have been wrought over the past decade. The Internet has had a marked effect on how consumers shop, how communities are built, how information is disseminated and consumed, and on how connections are made, by consumer and academic alike. Fundamental to my thesis is the premise that the paths and linkages that can be made among individuals have grown exponentially with the introduction of Internet technologies and the World Wide Web. I agree with Strathern's observation that the website and hypertext are authored, and within the text and interface of each site, choice can be prescriptive, and even curtailed. Which button gets pushed becomes a virtue of marketing, design, and programming. Speaking of marketed items in general, but more specifically of the marketing of reproductive options, Strathern writes: "They are designed for selling, made to specifications that anticipate consumer wants, presenting back to the consumer 'choice' in the form of a range of products out of which choice can be visibly made' (1992:38). Chapter Two of this thesis, in comparing the

websites of three sperm banks, has attempted to demonstrate this very thing. These are marketing tools from start to finish.

The Internet has furnished society with seemingly unlimited branches of information to explore, and an increase in options for the 'connective mind' to engage with. Culture has certainly been 'enterprised up.' However, the navigator is not confined to one site, or to the hyperlinks that the web editor provides. While these links are constitutive of connections and community, as evidenced by the community boards and registries that one can often access from sperm bank pages, they are just one of many trajectories that can be followed.

This thesis is proof of this. I began by finding my own elliptical way to the web. Surprised at the direction that my own navigating took, I am left pondering what I have, in fact, discovered. Although caught in a web of prior connections (the journal, research interests), I cannot claim to have traced any path but my own. I cannot claim an epistemological vantage point from which to pronounce on either the motivations and desires of the clients who shop for donor sperm, or the potential eugenic usages of trait selection, pre-implantation genetic diagnosis, or genetic modification. I can only describe the paths that I have followed and what I have there observed. Certainly, as Martin (1997) might have it, the metaphor of the web offers vast potential for theorizing distributive and kinship networks that are witnessed in the online commodification, distribution, and consumption of donor sperm. In Chapter Two, I attempted describe the online market place to which individuals and couples undergoing fertility treatment (who have cause to resort to donor sperm) are introduced. This, like any other market place, is characterized by marketing strategies and 'selling features.' One of the most salient of these features drawn upon by those making selective choices is 'information,' be it in the form of personal or biogenetic histories, donor essays, baby photos, audio or video tapes, or even identity release programs. Chapter Three describes the manner in which clients who have used donor sperm and donor sperm offspring are coming together via the Internet, in most cases independent of the commercial sperm banks with which they have dealt (the Sperm Bank of California being an exception).

Donor sperm selection – as mediated by Internet technologies – appears to juxtaposition two trends: one of eugenic promise, and another of extended kinship networks based on like kinds. Following the web, I questioned the nature of the criteria on which selective decisions were being made. Subsequent attendance of the ASRM/CFAS conference permitted me to flesh out these inquiries by listening to and speaking with sperm bankers, ethicists, fertility counselors, and physicians in reproductive medicine. These accounts, in turn, are used to dialogue with concerns and issues raised by the commodification, distribution, and consumption of donor sperm.

This thesis argues that donor sperm – as it is situated in the context of current online marketing practice – challenges dichotomous categorization as gift or commodity,

and is best understood as a hybrid exchange item. However, while recognizing the rhetorical use to which the 'gift' is put by participants in the exchange of these ambiguous items, anthropologists must remain reflexively aware of the rhetorical use to which we ourselves put theories of the gift, commodities, commodity candidacy, hybridity and the like. Much as participants in child-centered exchange use the rhetoric of gift to elide the presence of the market, I draw on processual analysis and hybridity to explain a deeply felt cultural ambivalence to the exchange of bodies, their parts, and their capacities.

Strathern has also suggested that cultural metaphors of body and machine, once held in opposition, are now merging as human lives are increasingly engineered through 'technonatural' processes. Using 'imagined futures' to hypothesize on the potential power of biotechnology's role in the 'culturing' of the future, Strathern projects that as the unpredictable transmission of characteristics (the genetic roulette of trait selection) is transformed into a predictable process through genetic modification, individuals will have at their disposal the means to determine genealogies. She suggests that "new procreative possibilities — fertilization in vitro, gamete donation, and maternal surrogacy — challenge us to reconstrue notions of identity and kinship" (Strathern 1995).

Those who strive to construct genealogies in the 21st century — that is, now are already confronted with both new resources for the negotiation of heredity and descent; and new tools for the construction of genealogies and personal histories. They may be challenged by legislative silences or conversely, with a flood of information as registries are opened or linkages created through the efforts of those seeking 'roots'. The meanings that are attached to these new identities and situations are culturally and historically specific. The Internet is a newcomer to the genealogical toolbox and — as both a market for gametes and venue for family reunion — may yet supplant the family tree. The Internet also becomes both a new methodological tool and a new field site for the anthropologist.

,

Bibliography

Appadurai, Arjun

1986 "Introduction: Commodities and the Politics of Value". In *The Social Life of Things: Commodities in Cultural Perspective*, A. Appadurai, ed. Cambridge: Cambridge University Press.

"ASRM 2000, 56th Annual Meeting of the American Society for Reproductive Medicine. Abstracts of the Scientific Oral and Poster Sessions, Program Supplement". *Fertility & Sterility* 74, (3S).

Bassen, Gwynne, Margaret Eichler, and Abby Lippman, eds.

1994 Misconceptions: The Social Construction of Choice and the New Reproductive and Genetic Technologies. Toronto: Voyageur Publishing.

Becker, G.

1994 "Metaphors in Disrupted Lives: Infertility and Cultural Constructions of Continuity". *Medical Anthropology Quarterly* 8 (4): 383-410.

Berkowitz, Johnathan M.

1999 "Sexism and Racism in Preconceptive Trait Selection". *Fertility & Sterility* 71 (3): 415.

Casper, Monica J.

1994 "At the Margins of Humanity: Fetal Positions in Science and Medicine". Science, Technology, and Human Values 19 (3): 307-323.

Cambrosio, Alberto, and Peter Keating

1993 Exquisite Specificity: The Monoclonal Antibody Revolution. New York: Oxford University Press.

Clarke, Adele

1998 Disciplining Reproduction: Modernity, American Life Sciences, and the "Problems of Sex". Berkeley: University of California Press. Corson, S.L., and A. Mechanic-Braverman

1998 "Why We Believe there should be a Gamete Registry". Fertility & Sterility 69 (5): 809-11.

Cussins, Charis

- 1996a Technologies of Personhood: Human Reproductive Technologies. Doctoral Dissertation. Ann Arbor, Michigan: UMI Dissertation Services.
- 1996b "Ontological Choreography: Agency through Objectification in Infertility Clinics". Social Studies of Science 26: 575-610.
- 1997 "Quit Sniveling, Cryo-Bady. We'll Work Out Which One's Your Mama!". In Cyborg Babies: from Techno-Sex to Techno-Tots. Robbie Davis-Floyd and Joseph Dumit, eds. New York: Routledge.
- 1998 "Producing Reproduction: Techniques of Normalization and Naturalization in Infertility Clinics". In Reproducing Reproduction: Kinship, Power, and Technological Innovation. Sarah B. Franklin and Helena Ragoné, eds. Philadephia: University of Pennsylvania Press.

Das, Veena

2000 "The Practice of Organ Transplants: Networks, Documents, Translations". In Living and Working with the New Medical Technologies: Intersections of Inquiry. M. Lock, A. Young and A. Cambrosio, eds. Cambridge: Cambridge University Press.

Daston, Lorraine

1998 "Fear and Loathing of the Imagination in Science". *Deadalus: Science in Culture* 127 (1): 73-95.

Daniels, Ken R.

1995 "An Examination of the "Best Interest of Children" in the Field of Assisted Human Reproduction". *Eubios Journal of Asian and International Bioethics* 8.

Daniels, Ken R., and Gillian M.Lewis,

1996 "Donor Insemination: The Gifting and Selling of Semen". Social Science & Medicine 42 (11): 1521-36.

DeCherney, Alan H.,

1997 "A Face Lift". Fertility & Sterility Vol.68, No.1: 6-7 (July).

Doniger, Wendy, and Gregory Spinner

1998 "Misconceptions: Female Imaginations and Male Fantasies in Parental Imprinting". Deadalus: Science in Culture 127 (1): 97-129.

Edwards, Jeanette, Sarah Franklin, Eric Hirsch, Francis Price, and Marilyn Strathern, eds.

1993 Technologies of Procreation: Kinship in the Age of Assisted Conception. Manchester: Manchester University Press.

Fertility & Sterility 67 (1) - 74 (8).

http://www.asrm.com/profession/fertility/fspage.html

Fisher R, Peek J.

1994 "Giving up Anonymity - Socializing Gamete Donation". European Society for Human Reproduction and Embryology. Brussels, Belgium: European Society for Human Reproduction and Embryology.

Franklin, Sarah

- 1997 Embodied Progress: A Cultural Account of Assisted Conception. London and New York: Routledge Press.
- 1999 "Dead Embryos: Feminism in Suspension". In Fetal Subjects and Feminist Positions, Lynne Morgan and Meredith W. Michaels, eds. Philadelphia: University of Pennsylvania Press.

Franz, Sherry, and Jean Haase

1999 "Gamete Donation: An International Update". Unpublished brief prepared for Health Canada.

Globe and Mail

"Making Baby in a Petri Dish". (November 16th, 1997).

"Frozen assets: 'We bought it . . . it's ours'". (September 11th, 1999).

Gupta, Akhil, and James Ferguson, eds.

1997 Anthropological Locations: Boundaries and Grounds of a Field Science. Berkeley: University of California Press.

Gupta, Akhil, and James Ferguson

1997 "Discipline and Practice: The Field as Site, Method and Location in Anthropology". In Anthropological Locations: Boundaries and Grounds of a Field Science, Akhil Gupta and James Ferguson, eds. Berkeley: University of California Press. Haimes, Erica.

- "Issues of Gender in Gamete Donation". Social Science and Medicine 36 (1): 85-93.
- 1996 Changing Families, Changing Identities. International Sociological Association.

Haraway, Donna

1997 Modest.witness@Second.millenium. Femaleman©.Meets.Oncomouse™. Feminism and Technoscience. New York: Routledge.

Hartouni, Valerie

1997 Cultural Conceptions: On Reproductive Technologies and the Remaking of Life. Minneapolis: University of Michigan Press.

Jordonova, Ludmilla

1989 Sexual Visions: Images of Gender in Science and Medicine Between the Eighteenth and Twentieth Centuries. Wisconsin: University of Wisconsin Press.

Keating Peter and Alberto Cambrosio

2000 "Real Compared to What?' Diagnosing Leukemias and Lymphomas." In Living and Working with the New Medical Technologies: Intersections of Inquiry. M. Lock, A. Young and A. Cambrosio, eds. Cambridge: Cambridge University Press.

Kemper, Roger D.,

- 1997a "A Change in Publishers." Fertility and Sterility Vol.67, No.4: 615 (April).
- 1997b "The Journal and the Journal and the Journal." Fertility & Sterility 67 (6): 996-997.

"IFFS Surveillance '98".

1999 Fertility & Sterility, 71 (5) Supplement 2.

Layne, Linda L., ed.

1999 Transformative Motherhood: On Giving and Getting in a Consumer Culture. New York: New York University Press.

Layne, Linda L.

1999 "The Child as Gift: New Directions in the Study of Euro-American Gift Exchange". In *Transformative Motherhood: On Giving and Getting in a Consumer Culture*. Linda L. Layne, ed. New York: New York University Press.

Levi-Strauss, Claude

1969 The Elementary Structures of Kinship. Boston: Beacon Press.

Lock, Margaret

- 1996 Encounters with Aging: Myths of Menopause in Japan and North America. Berkeley: University of California Press.
- 1997 "Transcending Mortality: Organ Transplants and the Practice of Contradictions" Medical Anthropology Quarterly 9 (3): 390-393.
- 1998a "Breast Cancer: Reading the Omens". Anthropology Today 14 (4): 7-16.
- 1998b Perfecting Society: Reproductive Technologies, Genetic Testing and the Planned Family in Japan". In *Pragmatic Women and Body Power*, M. Lock and P. Kaufert, eds. Cambridge: Cambridge University Press.
- 2000 "On Dying Twice: Culture, Technology and the Determination of Death". In Living and Working with the New Medical Technologies: Intersections of Inquiry. M. Lock, A. Young and A. Cambrosio, eds. Cambridge: Cambridge University Press.

Lock, Margaret and Patricia Kaufert, eds.

1998 Pragmatic Women and Body Power. Cambridge: Cambridge University Press.

Lock, Margaret, Allan Young, and Alberto Cambrosio, eds.

2000 Living and Working with the New Medical Technologies: Intersections of Inquiry. Cambridge: Cambridge University Press.

Lynch, Michael

1991 "Science in the Age of Mechanical Reproduction: Moral and Epistemic Relations Between Diagrams and Photographs". *Biology and Philosophy* 6: 205-226.

Malinowski, Bronislaw

1922 Argonauts of the Western Pacific: An Account of Native Enterprise and Adventure in the Archipelagos of Melanesian New Guinea. London: George Routledge & Sons, Ltd.

Mahlstedt, P.P. and K.A. Probasco

1991 "Sperm Donors: Their Attitudes towards Providing Medical and Psychological Information for Recipient Couples and Donor Offspring". Fertility & Sterility 56: 747-53.

Marcus, George

1995 "Ethnography in/of the World System: The Emergence of Multi-Sited Ethnography". Annual Review of Anthropology 24: 95-117.

Martin, Emily

1997 "Anthropology and the Cultural Study of Science: From Citadels to String Figures". In Anthropological Locations: Boundaries and Grounds of a Field Science, Akhil Gupta and James Ferguson, eds. Berkeley: University of California Press.

Mauss, Marcel

1967 The Gift: Forms and Functions of Exchange in Archaic Societies. New York; Norton.

Michaels, Meredith W. and Lynne M. Morgan

1999 "Introduction: The Fetal Imperative". In Fetal Subjects and Feminist Positions, Lynne M. Morgan and Meredith W. Michaels, eds. Philadelphia: University of Pennsylvania Press.

Modell, Judith S.

1999 Freely Given: Open Adoption and the Rhetoric of the Gift". In *Transformative* Motherhood: On Giving and Getting in a Consumer Culture. Linda L. Layne, ed. New York: New York University Press.

Morgan, Lynne M.

1999 "Materializing the Fetal Body: Or, What are those Corpses Doing in Biology's Basement?" In *Fetal Subjects and Feminist Positions*, Lynne M. Morgan and Meredith W. Michaels, eds. Philadelphia: University of Pennsylvania Press.

Morgan, Lynne M., and Meredith W. Michaels

1999 Fetal Subjects and Feminist Positions. Philadelphia: University of Pennsylvania Press.

Myers, Greg

1982 "Social Construction in Two Biologists' Articles". Writing Biology: Texts in the Social Construction of Scientific Knowledge. Madison: University of Wisconsin Press.
Passaro, Joanne

1997 "You Can't Take the Subway to the Field!': 'Village' Epistemologies in the Global Village". In Anthropological Locations: Boundaries and Grounds of a Field Science, Akhil Gupta and James Ferguson, eds. Berkeley: University of California Press.

Petchesky, Rosalind Pollack

1987 "Foetal Images: The Power of Visual Culture in the Politics of Reproduction", In *Reproductive Technologies: Gender Motherhood, and Medicine*, Michelle Stanworth, ed. Minnesota: University of Minnesota Press.

Pfaffenberger, Bryan

1992 "Social Anthropology of Technology". Annual Review of Anthropology 21: 491-516.

Purdy, A., J.Peck, V. Adair, F. Graham, and R. Fisher

1994 "Attitudes of Parents of Young Children to Sperm Donation – Implications for Donor Recruitment". Human Reproduction 9(7): 1355-58.

Ragoné, Helena

- "Incontestable Motivations" In Reproducing Reproduction: Kinship, Power, and Technological Innovation, Sarah B. Franklin and Helena Ragoné, eds.
 Philadelphia: University of Pennsylvania Press.
- 1999 The Gift of Life: Surrogate Motherhood, Donor Gametes and the Construction of Altruism". In *Transformative Motherhood: On Giving and Getting in a Consumer Culture*, Linda L. Layne. ed. New York: New York University Press.

Rapp, Rayna

- 1995 "Risky Business: Genetic Counseling in a Shifting World", In Articulating Hidden Histories: Exploring the Influence of Eric R. Wolf, J. Schneider and R. Rapp, eds. Berkeley: University of California Press.
- 2000 "Extra Chromosomes and Blue Tulips: Medico-Familial Interpretations". In Living and Working with the New Medical Technologies: Intersections of Inquiry. M. Lock, A. Young and A. Cambrosio, eds. Cambridge: Cambridge University Press.

Raymond, Janice G.

1993 Women as Wombs: Reproductive Technologies and the Battle Over Women's Freedom. San Francisco: Harper San Francisco.

Research Studies of the Royal Commission on New Reproductive Technologies 1994 New Reproductive Technologies: Ethical Aspects. Ottawa: Canadian Communications Group - Publishing.

Rock, Melanie

2000 Discounted Lives? Weighing Disability when Measuring Health and Ruling on Compassionate Murder". Social Studies of Medicine 51:407-17.

Rowland, Robyn

1992 Living Laboratories: Women and Reproductive Technologies. Bloomington/Indianapolis: Indiana University Press.

Sauer, Mark V.

1923 "Indecent Proposal: \$5,000 is not 'Reasonable Compensation' for Oocyte Donors". Fertility & Sterility 71(1): 7.

Scheib, Joanna, Maura Riordan, and Phillip R. Shaver.

2000 "Choosing Between Anonymous and Identity-Release Sperm Donors: Recipient and Donor Characteristics". *Reproductive Technologies* 10 (1): 50-58.

Scientific American

1999 "Your Bionic Future: How Technology Will Change the Way You Live in the Next Millennium". Special Issue 10 (3).

Strathern, Marilyn

- 1992 Reproducing the Future: Anthropology, Kinship, and the New Reproductive Technologies. New York: Routledge.
- 1995 "Future Kinship and the Study of Culture". Futures 27 (4): 423-435.

Squier, Susan Merrill

1994 Babies in Bottles: Twentieth-Century Visions of Reproductive Technology. New Brunswick/New Jersey: Rutgers University Press.

Thomas, Nicholas

1991 Entangled Objects: Exchange, Material, Culture, and Colonialism.

Time

1999 "The Future of Medicine: How Genetic Engineering Will Change Us in the Next Century". Special Issue. 153 (1): 26-71.

Van Dyke, Jose

1995 Manufacturing Babies and Public Consent: Debating the New Reproductive Technologies. New York: New York University Press.

Weiner, Annette

1992 Inalienable Possessions: The Paradox of Keeping-While-Giving. Berkeley: University of California Press.

Young, Allan

1996 The Harmony of Illusions: Inventing Post-Traumatic Stress Disorder. Princeton: Princeton University Press.

.